BOOK FASTENINGS AND FURNISHINGS

AN ARCHAEOLOGY OF LATE MEDIEVAL BOOKS

CHARLOTTE L. HOWSAM

A THESIS SUBMITTED FOR THE DEGREE OF

DOCTOR OF PHILOSOPHY

UNIVERSITY OF SHEFFIELD

FACULTY OF ARTS AND HUMANITIES

DEPARTMENT OF ARCHAEOLOGY

JANUARY 2016

ABSTRACT

Throughout the late medieval period, books were an integral part of religious monastic life, and yet such objects have received little attention from an analytical archaeological perspective, despite the significant quantity of metal book fittings recovered from archaeological sites. This thesis explores the archaeological collections held by English Heritage together with published excavation reports, investigating late medieval book fittings, dating between the mid-eleventh and mid-sixteenth centuries, which have been archaeologically recovered from English monastic sites. This work presents the first typology of these artefacts and considers in detail the many and varied forms of late medieval book fittings. In order to contextualise and give a clear understanding of this material, this study investigates late medieval book production, monasticism, and the types of books housed within monasteries and the locations in which they were used and stored. This research goes on to examine the wider social and cultural contexts of book fittings within late medieval monastic society using pictorial and documentary evidence, and extant late medieval bookbindings and library catalogues, in conjunction with the archaeological material. The themes explored include the types of books on which book fittings were used, the influences of different monastic orders, their geographical distribution and the significance of their deposition, particularly as part of the Dissolution of the Monasteries. By undertaking these methods of investigation, it has become clear that, within the catalogue, different forms of book fittings and styles of decoration were more commonly used in certain regions and by particular monastic orders, and that significant numbers of books were destroyed and their fittings disposed of during the Dissolution in the 1530s both on and away from monastic sites. This research brings together both archaeological and historical approaches to the study of late medieval book fittings, creating an innovative and broad-based study of this particular form of material culture so leading to a new insight into the archaeology of late medieval books.

ACKNOWLEDGEMENTS

TABLE OF CONTENTS

LIST OF FIGURES

Photographs of book fittings held in the English Heritage collections are reproduced in this thesis with the permission of English Heritage. All images are referenced using the English Heritage accession number, which can also be found in the catalogue provided in this work. Images of book fittings held in the collections at the Museum of London Archaeological Archive are reproduced with their permission. All images are referenced in the text using the artefacts' site code and accession number.

I would like to acknowledge that the photographs of bindings of manuscripts held in the British Library, London, have been made available under a Creative Commons CC0 1.0 Universal Public Domain Dedication. All images are referenced in the text and in the bibliography using the British Library's reference number and website. Line drawings of fittings from manuscript bindings have been drawn by the author.

I would also like to acknowledge the use of images of manuscripts housed in the Huntington Library, San Marino, California, the New York Public Library, and the Beinecke Rare Book and Manuscript Library, New Haven, Connecticut, which have been made available online to researchers. All images are referenced in the text and also in the bibliography using the libraries' reference number and website. Finally, permission to reproduce photographs of manuscripts held in the library of Hereford Cathedral is also gratefully acknowledged.

LIST OF TABLES

LIST OF MANUSCRIPTS AND PRINTED BOOKS

BAMBERG

Staatsbibliothek

    MS Patr. 5

BERLIN

Kunstgewerbemuseum

    Inv.-Nr. F 345

    Inv.-Nr. K 4817 a

BRUSSELS

Bibliothèque Royale

    MS IV.III

CAMBRIDGE

Corpus Christi College

    MS 139

Jesus College

    MS 34

Trinity College

    MS 105

    MS 290

    MS R.14.45

    MS R.17.1

University Library

MS Ee.4.20

CHATSWORTH, DERBYSHIRE

Collection of the Duke of Devonshire

    Bolton Abbey Accounts

CHICAGO, IL

Newberry Library

    Medieval Manuscript Fragment 53

    Medieval Manuscript Fragment 58

    MS 8

    MS 16

    MS 20.1

    MS 23

    MS 25

    MS 33.1

    MS 52

    MS 75

    MS 79

    MS 80

    MS 82

    MS 102.2

MS 104.5

MS 121

DUBLIN

Trinity College

    MS 360

DURHAM

Cathedral Library

    Hunter MS 100

    MS B II 18,

    MS B IV 4

    MS B IV 5

    MS B IV 7

    MS B IV 14

Dean and Chapter Library

    MS B.II.34

    MS B.IV.46

Dean and Chapter Muniments

    Misc. Charter 7143

University Library

    MS Cosin V ii 6

EDINBURGH

National Library of Scotland

    Adv MS 19.2.1

GRAZ

Universitätsbibliothek

    MS 26

    MS 86

    MS 141

    MS 2067/1.2

    MS 382

HEREFORD

Cathedral Library

    MS L. VIII. 6

    MS O. III. 12

    MS O. IV. 6

    MS O. V. 5

    MS O. VII. 5

    MS P. I. 13

    MS P. IV. 14

LEIDEN

Universiteit Bibliotheken

    MS Vulcanianus 46

LEIPZIG

Universitätsbibliothek

MS 78

MS 453

MS 556

MS 1502

Rep. II. 170

LONDON

British Library

    Add. MS 10064

    Add. MS 12023

    Add. MS 22285

    Add. MS 22573

    Add. MS 23931

    Add. MS 24686

    Add. MS 28626

    Add. MS 30024

    Add. MS 37049

    Add. MS 37665

    Add. MS 42555

    Add. MS 45025

    Add. MS 46203

    Add. MS 46204

    Add. MS 47967

    Add. MS 62132 A

    Add. MS 63077

    Arundel MS 155

    Cotton MS Claudius E IV

Cotton MS Cleopatra B XIII

Cotton MS Faustina C XII

Cotton MS Galba E IV

Egerton MS 2204

Egerton MS 2733

Egerton MS 2902

Egerton MS 2908

Egerton MS 3031

Egerton MS 3034

Egerton MS 3772

Egerton MS 3776

Harley MS 273

Harley MS 1498

Harley MS 1766

Harley MS 2373

Harley MS 3601

Harley MS 3915

IB.55119

IB.55193

Royal MS 2 A X

Royal MS 2 B VI

Royal MS 5 E XXII

Royal MS 6 E VI

Royal MS 12 E XIV

Royal MS 14 E I (pt. 1)

Royal MS 20 A IV

Sloane MS 416

1 INTRODUCTION

1.1 OUTLINE

The objective of this research has been to undertake an archaeological investigation into late medieval book fittings, dating between the mid-eleventh and mid-sixteenth centuries, which have been archaeologically recovered from English monastic sites. Given their organic composition, books rarely survive deposition archaeologically; the exception is if they were deposited in waterlogged contexts. The elements of books with the potential for greater recovery are the metal book fittings, and these have been found on a large number of archaeological sites. The major impetus behind this research has been that, despite the significant quantity of book fittings recovered from archaeological sites, and monasteries in particular, to date this form of material culture has received little attention from academics, especially archaeologists. Despite the available archaeological data for late medieval book fittings, no comprehensive catalogue or contextualised study has been carried out on this class of artefact. Consequently, this research brings together both archaeological and historical approaches to the topic, producing an innovative and broad-based study of late medieval books and their fittings.

1.2 AIMS

This research has had two principal aims. The first has been to record and classify the late medieval book fittings held in the national archaeological collections of English Heritage, which primarily derive from large scale Ministry of Works excavations on monastic sites in England. A significant number of artefacts are currently recorded as being probable book fittings. However, it has been the view of English Heritage that book fittings have been incorrectly identified in their database and that there are large quantities of other mounts, fittings, unclassified copper-alloy objects and objects currently classified as strap-ends that are actually types of book furniture (S. Harrison, *pers. comm.*). To provide analogous support, this material has been supplemented with similar artefacts found in published excavation reports of further monastic sites as they are also often incorrectly identified and generally receive little attention in the publications. In order to classify this body of material, a

comprehensive typology of late medieval book fittings from English monastic sites has been created for the first time. The second key aim of this research has been to undertake a contextualised study of the collated material. A full analysis of this unexplored material provides the opportunity to gain a better understanding of the nature and use of late medieval book fittings. The forms and functions of different types of fittings used are explored, as are the materials and methods of manufacture, and the various techniques and styles of decoration. Using contemporary documentary and pictorial evidence and extant bindings, this analysis of the archaeological material has been considered in its wider social and cultural contexts, taking into consideration the types of books on which they were used, the influences of different monastic orders, their geographical distribution and the significance of their deposition. By undertaking these methods of investigation, it has been possible to create a new insight into this particular form of material culture, leading to an authoritative and definitive knowledge of the archaeology of late medieval books as a whole.

1.3 TERMINOLOGY

When considering the late medieval book and its fittings, it is important to examine the correct terminology. As discussed in more detail in Chapter 3, throughout the late medieval period the principal format of books was the manuscript, literally meaning 'handwritten' (Brown 1994, 81; Robinson 2008, 47). As the technology of book production developed throughout this period, so did the format of books. By 1450 the printed book was created with the invention of movable type and the printing press (Evenden 2010, 93). Early printed books produced before the turn of the sixteenth century are typically known as *incunabula* (Latin for 'in the cradle' or 'origins') (Brown 1994, 72). As this research demonstrates, metal fittings were used on manuscripts throughout the late medieval period and they were occasionally used on printed books. Within English monasteries, book collections generally contained manuscripts, but it was not uncommon for some collections to include a small number of printed books from the second half of the fifteenth century (Irwin 1966, 138). The organic nature of late medieval books has meant that only the metal fittings tend to survive archaeologically. As a result of this, it is difficult to determine archaeologically if fittings were used on manuscript or printed books. Given the predominance of manuscripts in monastic book collections, the likelihood is that the

vast majority of book fittings were once used on manuscripts rather than printed books. Also, the archaeological contexts from which fittings have been excavated, if suitably dated, can also provide some insight into the nature of the books on which the fittings were used. Nevertheless, for this research to avoid confusion and maintain accuracy, the term 'book' is used generically for any format of book from the later medieval period and the terms 'manuscript' and 'printed book' or '*incunabulum*' are used to specifically describe the format of a book when it is known.

The terminology associated with book fittings themselves is also an important consideration for this research. As examined in more detail alongside the typology presented in Chapter 2, developments have been made in more recent years to specify and use key terms to distinguish book fittings and their functions. Within this research the terms 'book fittings', 'book fixtures' and 'book furniture' are used generically to refer to the metal objects attached to late medieval bookbindings. The most significant advancement in terminology is the use of the term 'fastening' to identify fittings that were attached to book covers with the function of securing the book closed and 'furnishing' to describe those that were attached to bindings to protect the covers from wear and damage (Szirmai 1999; Dürrfeld 2000; Gullick and Hadgraft 2008; Adler 2010). It is these two important terms that have been adopted for this research to distinguish between the two key functional types of late medieval book fittings.

The 336 artefacts studied for this work have been collected from 47 monastic sites located in England. The geography of the material has been considered initially in terms of northern, central and southern England. For the purposes of this study, the northern area of England essentially comprises those areas lying north of a line between the Dee and the Humber estuaries. The central area comprises those areas south of that line and north of a line between the Severn estuary and the Wash, and the south comprises those areas below that line.

It is also necessary to note here that throughout this work, for ease of identification, catalogued book fittings referred to in the text and in the illustrations are in bold italics, for example *1*.

1.4 A REVIEW OF PAST STUDIES AND AN OVERVIEW OF THE MATERIAL

"The history of the book offers a distinctive form of access to the ways in which human beings have sought to give meaning to their own and others' lives" (Barnard *et al*. 2008, iii). In order to develop a clear, in-depth understanding of the true role of the book, however, a detailed archaeological study of late medieval books, particularly focusing on the fittings of books from this period, is required to further expand upon our knowledge. There have been various approaches applied to study and understand the nature of the book, including historical and codicological methods (see Gruys 1972; Delaissé 1976; Barnard *et al*. 1999-2012; Finkelstein and McCleery 2013), and yet, traditionally, little attention has been given to the book as a form of material culture itself, especially by archaeologists. The archaeological investigation into book fittings offers an innovative approach to the study of the late medieval book by applying an interdisciplinary method to the study of a class of artefact that is often found in the archaeological record.

The aim of this review has been twofold. First, to demonstrate that an interdisciplinary approach to the study of the late medieval book is necessary, and second, to illustrate that a major type of material culture, specifically book fittings, is highly underestimated in previous investigations of the late medieval book. It examines the different approaches that have been applied in recent years to the study of the book, considering the debates surrounding the definitions and applications of palaeography, codicology and archaeology. It also reviews the more recent studies that have been completed on late medieval bookbindings and their fittings, whilst also considering broader studies on the wider social and cultural contexts of books and monasticism in late medieval society. Following on from these reviews, the nature of the available material, from surviving late medieval manuscripts to archaeologically-recovered book fittings, is addressed. This evaluation illustrates that an interdisciplinary method of investigation into late medieval book fittings is an innovative and broad-based approach leading to a better understanding of the material culture of books and their cultural significance in late medieval society.

1.4.1 An archaeology of the book?

Numerous studies on book history, palaeography, codicology and the archaeology of the book offer varying attitudes to the study of the book (see Gruys 1972; Delaissé 1976; Dürrfeld 2000; Derolez 2003; Finkelstein and McCleery 2013). This section reviews these differing methods of investigation and exemplifies that an interdisciplinary approach is in fact a most effective method for a comprehensive analysis and interpretation of the late medieval book.

Finkelstein and McCleery (2013) offer an up-to-date guide to the field of book history providing an introduction to the development of the book and print culture with discussions on the history of the book, orality to literacy, literacy to printing, authors, authorship and authority, printers, booksellers, publishers, agents, readers and reading, and the future of the book. This field of investigation considers the development and cultural significance of the book throughout history rather than the book as a material object in itself. For the study of the more physical aspects of the book, one can turn to the fields of palaeography, codicology and archaeology; however, the definitions and applications of these terms have long been contested.

'Palaeography', from the Greek *palaiographia* (meaning 'ancient writing'), is "the study of the history of scripts, their adjuncts (such as abbreviation and punctuation), and their decipherment" (Brown 1994, 92) through the reading of handwritten texts and documents often with the aim of dating and localising undated manuscripts of unknown origin (Delaissé 1976, 77; Derolez 2003, 1). However, scripts are only one important element of a book that can tell us about its history. In his palaeographical study of Gothic manuscript books, Derolez (2003, 10), for example, recognises that alongside the analysis of the scripts within medieval manuscripts, the other physical characteristics of such books must also be studied.

'Codicology', as defined by Brown in *Understanding Illuminated Manuscripts: a Guide to Technical Terms* (1994, 42), is "the study of the physical structure of the book". It is considered that the examination of a book's structure allows the interpretation of its method of construction and its place of origin, and can aid in the reconstruction of its original form (Brown 1994, 42). Derolez (2003, 9-10) considers the relationship between palaeography and codicology. It is stated that palaeography is a specialised field within the broader discipline of codicology as it investigates only one aspect of a book's composition, specifically the script, whereas codicology encompasses

the study of all physical elements of the manuscript book (Derolez 2003, 9-10). In his study, Derolez (2003), for the most part, offers a purely palaeographical study of Gothic manuscripts from the twelfth to the early sixteenth century. A codicological approach, however, is used to summarise the physical features of the manuscript in the late Middle Ages, briefly discussing the materials, structure, layout, decoration and binding (Derolez 2003, 31-45).

For the study of the nature and history of the book, Delaissé (1976, 81-2) believes that the term 'palaeography' is misleading as it applies to the study of only part of the book, namely its writing. Delaissé (1976, 82) also feels that 'codicology', a term created to encompass a wider scope than palaeography, is still limited to texts and scripts and excludes the history of the book. It is argued that all material aspects need to be studied in relation to each other in order to understand the historical significance of medieval books, an approach that has been defined as the 'archaeology' of the medieval book (Delaissé 1976, 79). In his study *Towards a History of the Medieval Book* (1976), Delaissé (1976, 79) defines an archaeological method of study as comprising the recording and analysis of all material data concerning objects of the past and subsequently their interpretation in order to determine the time and place of their manufacture. It is argued that this archaeological approach should be applied to the study of medieval books where all the material techniques involved in their production, in particular text, decoration and illustration, can be examined and interpreted in order to understand the historical significance of the book (Delaissé 1976, 79).

In *Codicology or the Archaeology of the Book? A False Dilemma*, Gruys (1972) discusses differing scholarly ideas concerning the meaning and methods of palaeography, codicology and the archaeology of the book. It is argued that, whilst there are differences in terminology when studying the book as a cultural phenomenon, such an investigation requires a multidisciplinary approach (Gruys 1972, 90). In his discussion on codicology versus archaeology, Gruys (1972) describes codicology in both its strictest and broadest senses. The basic principles of codicology in the strict sense are summarised as comprising: "a. a highly detailed description of the physical aspects of the object investigated; b. a synthesis based on this description which outlines the material evolution of the codex; and c. a confrontation of this evolution with the actual contents of the item in question, its text or illustration" (Gruys 1972, 104). It is argued that "old books *are* archaeological 'finds' and codicology – in the strictest sense – *is* archaeology" (Gruys 1972, 90). In its wider sense, codicology is

considered to be the study of the complete history of the manuscript, which includes the investigation into its inclusion in libraries and catalogues, its economic and technological developments, and its contexts as a cultural phenomenon (Gruys 1972, 104).

It is clear that different approaches to the study of books can be made depending on the particular aims of the investigation. Palaeography is used purely for the analysis of scripts whereas codicology, and archaeology, are used for the analysis of the physical characteristics of books, not just the written word, in order to understand the wider social and cultural contexts of this type of object. The slight nuances attached to these terms by different scholars have caused much debate. Gruys (1972, 104) argues that Delaissé's archaeological method of investigation leads to codicology in its wider sense; however, Delaissé (1976, 82) believes that codicology "does not evoke the historical consequences of the method as archaeology does". From these differing attitudes, it is evident that an interdisciplinary approach must be applied to the study of the late medieval book, where all elements of the book are observed and analysed and subsequently interpreted in conjunction with other forms of evidence to further understand the cultural significance of the book in the late medieval period.

In reviewing the debates concerning the method of studying the book, whether it is codicology or archaeology, it is evident that scholars such as Gruys (1972) and Delaissé (1976) are limited by the evidence they have used, namely existing manuscripts. Both Gruys (1972) and Delaissé (1976) consider manuscripts to be 'archaeological finds' and both feel that, for a comprehensive study, one must analyse all the physical elements of the book, from its scripts and illustrations to sewing structures and bindings, in order to interpret its wider historical significance. However, in their efforts to define the codicological or archaeological study of books, Gruys (1972) and Delaissé (1976) fail to recognise that extant books are not the only form of material culture that can enhance our understanding of the structural aspects of books and their wider social contexts. As will become clear in the following section, which reviews recent studies that have utilised book fittings, the analysis and interpretation of this type of material culture is an important, yet largely unexplored, approach for the study of the book.

1.4.2 Previous studies on late medieval bookbindings and their fittings

One of the main aims of this research has been to analyse late medieval book fittings that have been recovered through archaeological excavation. Although archaeological research into bookbindings is thought to be a neglected area (Szirmai 1996, 162), a small number of studies, particularly on the Continent, that discuss and analyse medieval bookbindings and their fittings have been published recently. This section reviews these studies in order to demonstrate how the in-depth analysis of late medieval book fittings is crucial for a greater understanding of how these artefacts, and books in general, were used within contemporary society.

The history of the 'costume of the book', in other words the aesthetics of historical bookbindings, has long inspired scholars (Szirmai 1996, 144). The decoration of bindings was the subject of early studies in England, such as those of Weale (1894-8), which were to be followed by scholars for a century to come (Szirmai 1999, ix). Focusing on the styles and designs of decoration, however, meant that the material and structural elements of bookbindings were neglected. As the twentieth century experienced new codicological and archaeological approaches to studying books (see Gruys 1972; Delaissé 1976), a new generation of scholars began to consider the more physical characteristics of bookbindings (see Dürrfeld 1996; Szirmai 1999; Gullick and Hadgraft 2008; Adler 2010). However, the greatest problem faced by scholars of bookbindings, and in particular those of medieval bindings, is the paucity of original material and the often degraded condition of the bindings that have survived (Gullick and Hadgraft 2008, 96-7). Whilst completing a guide to surviving books from medieval libraries, Ker (1964, xxi) commented on the situation regarding original medieval bindings, stating that "there is much to regret. The British Museum, the Cambridge University Library, most cathedral and college libraries, and most of the big private collectors of the past have rebound their collections wholesale, and often surely quite unnecessarily, in the seventeenth, eighteenth and nineteenth centuries"; the twentieth century could also be added here as medieval collections were still being rebound or at the very least bindings being restored or repaired (Gullick and Hadgraft 2008, 97). In terms of late medieval book furniture, even less evidence survives *in situ* as fittings have often been lost or replaced (Gullick and Hadgraft 2008, 105). Nevertheless, through the ardent work of binding scholars, recent studies have attempted to observe and interpret the changes and differences in bindings and

understand them in their wider social context.

One of the first comprehensive and informative studies on medieval bookbindings is by Dutch binding historian Szirmai (1999). *The Archaeology of Medieval Bookbinding* (Szirmai 1999) traces the evolution of the physical structure of the book in codex form from its invention in the first centuries of Christianity to the end of the sixteenth century. Szirmai creates a number of typological entities that are defined by the occurrence of a set of physical characteristics, which are partly confined within geographical and chronological boundaries. This work is limited in view of the "lack of adequate primary research" (Szirmai 1999, xi). However, the research is still based upon a careful examination of a considerable number of medieval bindings from all over Europe, offering a solid foundation from which to expand our knowledge of the techniques of medieval bookbinding. Szirmai's (1999) research encompasses all stages of bookbinding, from the sewing of the bookblock to the covering of the boards with fastenings and furnishings, and the history of bookbinding from the Eastern Mediterranean heritage of the codex to the medieval codex in Western Europe. Considering book fittings in particular, the nature of such artefacts found on late medieval manuscripts comprises a relatively small proportion of Szirmai's work. The author is limited by the available evidence and whilst he illustrates the more common types of fittings that are found on books during the late medieval period, Szirmai largely uses evidence from manuscripts that have survived on the Continent, particularly from the Netherlands, Germany and Italy. Given that Szirmai's research addresses all the techniques involved in bookbinding, extant manuscripts are the most important source of evidence from which the author is able to analyse the changes and developments in materials and techniques involved in this craft. Although the analysis of surviving manuscripts in their original bindings is crucial for understanding, for example, the methods of sewing and board attachment, focusing on this type of evidence limits the author's ability to provide a comprehensive discussion on book fittings. As fittings were often lost, removed or replaced at a later date, while sewing and boards would more likely remain largely intact, extant manuscripts can only offer a partial understanding of the furniture that was once attached to the covers of books.

Dürrfeld (1996; 2000) has also recently published work on German book fittings expressing the importance of studying this type of material culture as part of the historiography of bookbinding. In her analysis of German book fastenings, Dürrfeld (1996) attempts to construct the chronology of different types of fittings found on

German printed books of the late fifteenth, sixteenth and seventeenth centuries. The various types of fittings found on such bindings of this period of study are discussed in chronological order with some consideration of the possible reasons for the changes in form and decoration (Dürrfeld 1996, 273-4). In order to achieve this, the author examined 133 German books that retained their contemporary bindings and were fitted with complete or incomplete fastenings (Dürrfeld 1996, 273). This study is restricted by the type of evidence utilised and the presumptions made by the author. It is based on the presupposition that the fastenings are of the same provenance as the bindings onto which they were mounted and that the fittings are dated on the basis of the date of publication of the book to which they were attached (Dürrfeld 1996, 273). By making these assumptions the study is limited in its efficacy as books were not always bound at the time of production or in its place of origin and book fittings could be added at a later date. Despite the limitations of this study, it does demonstrate the potential of a typological study of such artefacts. In a later study, Dürrfeld (2000) highlights the importance of applying several approaches to the study of book fittings in future research. By simultaneously examining different types of evidence, namely written and pictorial sources, archaeological finds and, of course, the bindings themselves, Dürrfeld (2000, 308) suggests that it will then be possible to establish the date and provenance of book fittings and subsequently use this information in the dating and localising of bindings and, thus, of manuscripts and early printed books.

The recent series *The Cambridge History of the Book in Britain* (Barnard *et al.* 1999-2012), although largely a historical study of the book, does consider the physical characteristics of bookbindings. In chapters on book production, materials and manufacturing techniques, each of the seven volumes in the series has a section dedicated to bookbinding. Volumes I: *c.*400-1100 (Gameson 2012), and in particular, II: 1100-1400 (Morgan and Thomson 2008) and III: 1400-1557 (Hellinga and Trapp 1999), which encompass the period of this research study, provide informative yet restricted discussions on medieval bookbindings. In Volume I, Gullick (2012, 296-308) discusses the various types of bindings found in England, from the earliest produced in the seventh and eighth centuries to those manufactured up to the end of the eleventh century. Developments in bookbinding styles and techniques are explained, taking into consideration variations in sewing, boards and coverings (Gullick 2012, 296-308). However, there is very limited information on the types of fittings used on bindings from this period. This largely results from the particularly

meagre survival of manuscripts in their original bindings, the majority of which have complicated histories as a result of later reworking and restoration (Gullick 2012, 300, 302). Nevertheless, Gullick (2012, 300, 303) is able to present some conclusions based on the very limited English examples by drawing comparisons with Continental counterparts. For example, of the fifteen surviving English Carolingian bindings, which are dated from the tenth to late-eleventh centuries, only two have evidence of fastenings (Gullick 2012, 300). It is inferred that the fastening mechanisms, which close from the lower to the upper board, found on the two pre-Conquest examples are unique to these two English bindings (Gullick 2012, 300). In comparison to Continental Carolingian bindings, nearly all of which have some evidence of fastenings, there is an apparent absence of a fastening system on most English bindings of this date (Gullick 2012, 300).

In Volume II of the Cambridge series, Gullick and Hadgraft (2008, 95-109) discuss what they consider to be the main three kinds of late medieval book, and their bindings, that could be found in England between 1100 and 1400. Taking into consideration the scarcity of original material and previous studies on bindings from this period, the fundamental features of the various types of bindings are summarised (Gullick and Hadgraft 2008, 95-109). However, only brief descriptions of the two main types of fastenings found on twelfth- to fourteenth-century stiff-board bindings are given, and the furnishings on such bindings receive very little discussion (Gullick and Hadgraft 2008, 102-3, 105). Such attempts at investigating late medieval bindings, and in particular their metal fittings, are hindered by the sole use of extant manuscripts. In the chapter on bookbindings between 1400 and 1557 in Volume III (Foot 1999, 109-27), the various technical features of bindings, including their fittings, are covered in a brief discussion whilst the remainder of the investigation concentrates on the impact of printing on binding materials and techniques, Continental influences and immigrant binders, centres of bookbinding, the association of binders with workshops and surviving manuscripts, and the owners of different types of books with bindings of this date. It is evident from these three studies that, whilst the techniques and variations in bookbinding of the late medieval period are covered at a superficial level, all lack sufficient consideration of the fittings that were once attached to the bindings. This is largely due to the reliance on evidence gathered from surviving books with original bindings, which are typically incomplete and of a poor condition. In order to understand the types and styles, frequency, chronology and provenance of late medieval book fittings, an interdisciplinary

method of investigation is necessary, where different types of evidence, in particular archaeological material, can be utilised.

One of the very few studies that analyses book fittings from archaeological contexts and considers the wider significance of the artefacts is a study by Arts (2009). This article deals with book fittings that were recovered during excavations in Eindhoven, in the Netherlands, which were found at the site of the castle and dated from the fifteenth and sixteenth centuries (Arts 2009). In this study, general observations regarding the nature of the artefacts, including frequency and physical characteristics, are described with the aid of a number of images, and a discussion on the wider contexts is also given, concentrating on how these fittings may have been lost or discarded. This study focuses on a small amount of material (31 book fittings in total) from a single site (Arts 2009, 124), and thus this restricts the conclusions that can be drawn. Nevertheless, this research is able to interpret the broader contexts of the book fittings by utilising historical records and extant manuscripts, and by considering the wider vicinity of the site in relation to the archaeological material (Arts 2009, 122-7). This study clearly illustrates the benefits of using archaeological material for the study of late medieval book fittings and the interpretation of their broader social and cultural contexts.

The most significant study that solely and comprehensively catalogues and investigates book fittings is Adler's *Handbuch Buchverschluss und Buchbeschlag: Terminologie und Geschichte im deutschsprachigen Raum, in den Niederlanden und Italien von frühen Mittelalter bis in die Gegenwart* (2010). This research classifies and contextualises book fittings from German-speaking countries, the Netherlands and Italy, dating from the early Middle Ages to the present (Adler 2010). For the first time, Adler (2010, 1-53) presents a typology of fastenings and furnishings using specific terminologies and definitions, and highly informative stylistic illustrations in order to demonstrate the various types and styles of book fittings. Individual cities of production and their manufacturers of book fittings are then discussed (Adler 2010, 54-9), although limited material and knowledge on production prevent particular types and styles of fittings being attributed to specific manufacturers (Adler 2010, 55). The different types of book fastenings and furnishings are subsequently classified by period based on developments in book fittings as new forms and types arose naturally and gradually as fashions changed and production techniques improved (Adler 2010, 60). Although broad dates are associated with each epoch discussed, the problems in doing so are acknowledged (Adler 2010, 60). For each period, Adler

(2010) discusses in detail the variations in the materials, manufacturing techniques, types and styles of decoration of book fastenings and furnishings, all the time referring back to his typology and giving examples of such fittings on surviving manuscripts along with detailed descriptions and colourful images. By comparing evidence gathered from these existing bindings with that from paintings, sculpture and archaeological finds, many of the different types of fastenings and furnishings used from the early medieval period onwards are broadly dated and places of origin are suggested (Adler 2010).

Focusing on the Romanesque and Early Gothic (eighth century to 1250), High Gothic (1250-1450) and Late Gothic (*c*.1450-1530) epochs, the variations and developments of medieval book fittings are also considered in their broader contexts (Adler 2010, 60-114). The mendicant orders and the establishment of new monasteries, the increase in numbers of universities, the development of paper and improved production methods, the professionalisation of book production and bookbinding, the expansion of the book trade, the new bourgeois class and the invention of printing are all thought to have affected the changes in book fittings during the medieval period (Adler 2010, 60-114). The study will unquestionably serve as a future reference for the identification and classification of book fittings and bindings of unknown date and provenance on the Continent. Adler's interdisciplinary methodology undoubtedly demonstrates the benefits of an in-depth typological study of book fittings and of utilising additional sources for interpreting the wider social contexts. It is clear from this and other studies that Continental Europe, particularly in Germany, the Netherlands, France and Italy, has a much richer corpus of books with their original bindings and fittings compared to England (see Dürrfeld 1996; Szirmai 1999; Adler 2010). However, in England, there is an abundance of archaeological material that has previously received little to no attention from scholars and it is for this reason that this material forms the basis of the research for this thesis.

1.4.3 PREVIOUS STUDIES ON BOOKS AND MONASTICISM IN LATE MEDIEVAL SOCIETY

Over many years, there have been a large number of historical studies that have investigated the nature of the book and its production and place within society throughout history. As already mentioned, a comprehensive history of the book is

given in the series *The Cambridge History of the Book in Britain* (Barnard *et al.* 1999-2012). Other studies on more specific aspects of the history of the book, such as production, include Clement's *Survey of Antique, Medieval and Renaissance Book Production* (1995) and Gillespie and Wakelin's edited volume *The Production of Books in England 1350-1500* (2011), which have highlighted the changes in manufacturing techniques and the appearance of books throughout history and in particular the late medieval period.

Extensive work, both historical and archaeological, has also been completed on the history of monasticism and late medieval monasteries in particular. More general studies have been published on the culture of monasticism examining, for example, the origins of this religious way of life, the founding of religious houses and the culture of the monastic community (see Knowles 1961a, 1962; Platt 1984; Keevill *et al.* 2001; Lawrence 2001; Clark 2007a; Burton and Stöber 2008; Burton 2012). Systematic catalogues and gazetteers of all the monasteries founded in England during the late medieval period have also been produced, providing dates of foundation and dissolution and other data including information on population and wealth (see Knowles and Hadcock 1971; Butler and Given-Wilson 1979; Midmer 1979). Additionally, many studies have been completed in order to understand specific religious houses, the daily routines of monastic life and the various monastic orders on more individual and regional bases (see Jennings 1999; Pestell 2004; Coppack 2008, 2009; Orme 2008; Sweetinburgh 2008). Focusing on books within medieval monasteries, much has been written about book production, reading practices, monastic education, the different types of books stored and used by monks, and the monastic libraries and their dispersal (see Wright 1958; De Hamel 1986; Doyle 1990; Robertson 1996; Gameson 2006; Clemens and Graham 2007; Piper 2007; Morgan 2008a, 2008b; Thomson 2008).

The studies discussed above provide valuable information on the social, economic, technological and cultural history of medieval books and the monastic environment in which they were produced, used, stored and destroyed. It is these studies that are necessary for the interdisciplinary analysis of late medieval book fittings.

1.4.4 MANUSCRIPT CATALOGUES AND ARCHAEOLOGICAL ASSEMBLAGES IN ENGLAND

For more specific studies on bookbindings, surviving books with all or part of their

original bindings have been the main source of evidence. In England, scholars have made huge efforts to produce accurate and inclusive catalogues of the books held in many research libraries around the country[1]. The five volumes of Ker's *Medieval Manuscripts in British Libraries* (1969-2002), for example, comprise a catalogue of about 3,000 manuscripts in Latin and Western European vernaculars that make up previously uncatalogued or inadequately catalogued institutional collections in Britain. Also, Ker's *Medieval Libraries of Great Britain: a List of Surviving Books*, first published in 1941 and subsequently revised and augmented in 1964, is a guide to surviving manuscripts and printed books that once belonged, in the medieval period, to religious houses and their members, cathedral and collegiate churches, universities, colleges and other corporate bodies in England, Scotland and Wales, providing details of the books' contents, authors, dates and provenances, and also details on their current locations and references. There are many published catalogues that focus particularly on the holdings of individual libraries and just a few examples include the *Catalogue of Dated and Datable Manuscripts, c.700-1600, in the Department of Manuscripts, the British Library* (Watson 1979), the *Guide to Medieval and Renaissance Manuscripts in the Huntington Library* (Dutschke 1989), the *Catalogue of the Manuscripts of Hereford Cathedral Library* (Mynors and Thomson 1993) and *A Descriptive Catalogue of the Medieval Manuscripts in Worcester Cathedral Library* (Thomson 2001). Catalogues of this type provide useful information on the manuscripts listed; however, in catalogue entries, bindings, especially medieval ones, are generally described with minimal, rudimentary detail and in some instances, only the presence of a medieval binding is acknowledged (Gullick and Hadgraft 2008, 96; Gillespie 2011, 157).

In more recent catalogues, however, binding scholars have strived to collect and interpret observations of bindings, charting the changes and differences in binding materials and techniques in order to understand how and why bindings differ (Gullick and Hadgraft 2008, 96). Important work has been carried out by Gullick (1993; 2001) on the collections at Hereford and Worcester Cathedrals producing fuller and more reliable descriptions of the medieval bindings and also more general observations concerning the bindings as a whole. Nevertheless, the examination of book fittings remains a secondary consideration in the study of medieval bindings, although this

---

1   For example: Oxford libraries (Watson 1984), the British Library, London (Watson 1979; British Library Board 2015a), Cambridge libraries (Robinson 1988), Canterbury Cathedral Library, Kent (Gameson 2008; James 2011), Exeter Cathedral Library, Devon (Maxted 1987), Hereford Cathedral Library (Mynors and Thomson 1993) and Worcester Cathedral Library (Thomson 2001).

is largely a result of the inadequacy of surviving contemporary fittings on bindings. In terms of such collections, the concerns of sixteenth- and seventeenth-century antiquarians in particular did not stretch to the preservation of their holdings as is the case today (Carley 2002, 345-6). It has been noted, for example, that at Hereford Cathedral an extensive binding, or complete rebinding, campaign by John Cooper, a local stationer, took place in the early seventeenth century and is thought to have been associated with new acquisitions and the changing practice of storing books (Morgan 1988, 146, 148; Gullick 1993, xxx; Williams 2000, 521). Cooper was responsible for the work completed on more than sixty medieval manuscripts during the seventeenth century and with the removal of medieval boards, the cutting of sewing supports and the addition of endpapers and pasteboards, medieval straps were cut off and fastenings were replaced by pairs of fastenings supplied by Cooper (Gullick 1993, xxx).

From the study of published catalogues, it has been possible to determine potential examples of surviving book fittings on extant late medieval books. Additionally, the use of online databases, particularly those provided by the British Library and the Huntington Library, enabled additional examples of late medieval books with original fittings to be established. Through the detailed examination of the available resources, it has been possible to directly study a significant number of examples of late medieval books housed in such places as the British Library and Hereford Cathedral library. Available images from online databases together with photographs and drawings of books and their fittings directly examined by the author have been used in this work.

From the review of previous studies on bookbindings and manuscript catalogues, it is evident that the in-depth analysis of book fittings in England is largely non-existent. In more recent years, studies have proved the value of investigating the physical structures of medieval bookbindings and what they can tell us (see Dürrfeld 1996, 2000; Foot 1999; Szirmai 1999; Gullick and Hadgraft 2008; Adler 2010; Gillespie 2011; Gullick 2012); yet, the study of book fittings is still a neglected area. It has become apparent that, compared to the Continent, England has significantly reduced numbers of surviving late medieval books with their original bindings and even fewer with fittings (Szirmai 1999; Gullick 2012). However, substantial quantities of book fittings have been recovered through archaeological methods, particularly from the late medieval period and from monastic sites, although they have received little attention from archaeologists.

Most often in excavation reports material culture is considered separately to discussions on stratigraphic and contextual evidence, and individual artefacts described in individual catalogues are generally devoid of any contextual considerations. In the case of book fittings, single examples are often found on archaeological sites, in particular monasteries, and are generally grouped with objects of the same material where they are often misidentified as belt fittings and receive little consideration of their cultural significance. As a result, book fittings are often easily neglected by scholars. Nevertheless, there are several archaeological reports and catalogues that do investigate book fittings in greater detail and discuss their broader contexts, although these are generally associated with projects where larger quantities of identifiable book fittings have been excavated. At Battle Abbey, East Sussex, for example, 43 book fittings were recovered through excavation and in the report 19 are described in necessary detail and skilfully illustrated (Geddes 1985, 160-1), along with the rest of the material culture recovered from the site. The fittings, however, are only briefly referred to in the discussions on the excavation and the contexts of the site (Hare 1985, 38, 43). An example of a more comprehensive analysis of book fittings is given in *Bordesley Abbey II: Second Report on Excavations at Bordesley Abbey, Redditch, Hereford – Worcestershire* (Hirst *et al.* 1983). In addition to the book fittings being described in the finds catalogue, the subject of books, their fittings and writing at Bordesley Abbey receives further in-depth analysis (Watts 1983, 200-6). In this discussion, the bindings of three known surviving manuscripts once owned by the monastery are examined and the book fittings, and other artefacts found at the abbey that are associated with book production, are analysed in greater detail and even reconstructions illustrating the possible locations of the different types of fittings on manuscripts are provided (Watts 1983, 200-6). The significance of the archaeological contexts in which the book fittings and writing implements were found is also explained. In this excavation report, Watts (1983, 200-6) demonstrates not only how book fittings can be analysed as a form of material culture but how this analysis can be used in order to interpret the broader contexts of books and writing in medieval monasteries.

Large-scale urban excavations have produced a significant amount of book fittings, and the findings from these excavations have sometimes been published in extensive catalogues and site reports. There are several good examples of these types of reports where book fittings are considered in relation to each other together with other artefacts associated with writing and books, and also with regard to their

broader contexts. Significant numbers of book fittings have been recovered from London (Egan 1998), Winchester (Biddle 1990) and York (Ottaway and Rogers 2002), and the material has been presented in catalogues that are arranged according to use. In each instance, the book fittings are described and illustrated as expected in any archaeological site report but they are also discussed with regard to similar examples of book fittings, other objects associated with books, the archaeological contexts in which they were found and their wider cultural significance (Biddle 1990, 729-59; Egan 1998, 270-81; Ottaway and Rogers 2002, 2934-42). These reports illustrate that this largely neglected form of material culture can be efficiently examined and interpreted to understand more about the late medieval book.

In addition to material that has been published in excavation reports and catalogues, a source of late medieval book fittings that is largely unexplored lies with English Heritage. The material held by English Heritage in archaeological stores across the country is primarily derived from large-scale Ministry of Works excavations or clearances on sites from around England. A significant number of artefacts are currently recorded from these sites as being probable book fittings; however, as discussed above (see 1.2), it is thought that book fittings are often incorrectly identified in the English Heritage database and that there is a large quantity of other artefacts that are actually types of book furniture (S. Harrison, *pers. comm.*). It is the substantial collection of book fittings held by English Heritage that forms the main source of archaeological material for this research.

During the undertaking of this research, the collections held in the English Heritage stores at Helmsley, North Yorkshire, Dover Castle, Kent, Atcham, Shropshire, and Fort Brockhurst, Hampshire, have been directly examined and it is these collections that form the basic platform of study. Furthermore, a number of artefacts in the English Heritage collections were on display at their sites of deposition. Consequently, visits were made to several sites that had significant numbers of book fittings on display, notably St Augustine's Abbey, Kent, and Battle Abbey, East Sussex. In total, 206 artefacts from the English Heritage collections have been directly viewed, identified and analysed as late medieval book fittings for this thesis. The remaining 130 artefacts catalogued and examined have been gathered from published excavation reports, and it has been possible to view a number of these artefacts that are housed in the Museum of London Archaeological Archive.

More than 1,700 potential book fittings have also been recovered through metal-

detecting and are recorded in the Portable Antiquities Scheme (PAS) database[2]. The ever-growing numbers of finds recorded through this scheme generally receive little study, which is typically due to the nature of recovery as the metal-detected artefacts are subject to several biases. As PAS finds are predominantly recovered from rural locations and little accurate spatial information is provided, it is difficult to link the finds to different types of sites and subsequently interpret them with regard to their broader contexts. Nevertheless, due to the large number of book fittings recorded in its database, the PAS is an important source of material. A preliminary investigation into late medieval book fittings using material from the PAS has demonstrated that this material, in conjunction with similar archaeological finds with established date and provenance, can be utilised to enhance our knowledge of book fittings (Howsam 2011). This thesis considers this material in more detail (see 6.5), considering its usefulness to further understand the nature of late medieval book fittings.

1.5 STRUCTURE OF THIS THESIS

Having considered the various interdisciplinary studies that have been completed on the late medieval book and its fittings, the chapters that follow present the in-depth analysis of book fittings, whilst highlighting and demonstrating the significance of these artefacts within late medieval religious society. Chapter 2 provides a unique typology of late medieval book fittings that has been used to classify artefacts excavated from English monastic houses. It also analyses the catalogued material in more detail, focusing on form and decoration. Chapter 3 presents a discussion on late medieval book production, providing an overview of the technology of the manufacture of books and a more in-depth investigation into the production of the fittings that were used on late medieval bookbindings. This is followed, in Chapter 4, by an examination of the concept of monasticism and how books played a vital role in the lives of monks, with a specific focus on the importance of books for religious, scholarly and reading practices within monasteries. Chapters 5 and 6 present in detail the results of the analysis of the archaeological material and the interpretations that have been drawn using a synthesis of evidence. Chapter 5 considers the classified book fittings from a number of different approaches in order to fully understand this form of material culture and its wider social contexts within the late medieval monastery, including the influences of different monastic orders and the geographical

---

2   Accurate as of 1 September 2015.

distribution of the material. Chapter 6 discusses the investigation into the destruction of monastic books and the deposition of late medieval book fittings through the analysis and interpretation of the spatial distribution of the artefacts catalogued for this research. Finally, Chapter 7 presents the major conclusions drawn from this study of late medieval book fittings, whilst also providing potential future directions of research into this form of material culture. This work is supplemented by a catalogue of the book fittings used for this research.

2 A TYPOLOGY OF LATE MEDIEVAL BOOK FITTINGS

2.1 INTRODUCTION

This chapter presents a typology of late medieval book fittings that has been used to classify artefacts excavated from English monastic houses and which have been analysed for this thesis. The development of this typology seeks to produce a usable classification system for the identification of book fittings, not only for the artefacts recorded for this research but also for future investigations into late medieval book furniture. This chapter considers previous work on the different types of book fittings, outlines the processes involved in developing this typology, discusses terminology and considers the difficulties in creating a typological chronology for book fittings before presenting the typology itself.

To move beyond simply defining types of late medieval book fittings, this chapter analyses in detail the forms of book fixtures classified in the catalogue and how they vary in shape. This branch of analysis focuses on the frequency of the various forms classified and uses archaeological evidence to consider the dating of this material. Evidence from contemporary depictions, sculptures and surviving bookbindings is used in conjunction with the archaeological material to further understand the different types of fittings that were used during the late medieval period.

The various styles of decoration found on these fittings are also examined. Certain patterns, motifs and monograms are commonly found on specific types of book furniture. The different styles of ornamentation and their frequency across the sites studied are discussed. Also, the possibility that some of these designs, in particular the monograms, contained a symbolic meaning is considered.

2.2 PREVIOUS STUDIES

One of the first considerations of the different types of book fittings used during the medieval period was by Szirmai (1999). Szirmai briefly discusses and illustrates the different types of book fittings found on the predominantly Continental books analysed for his research, however it is by no means a full classification of the

material. As already mentioned in the previous chapter (see 1.4.2), the first typology of Continental book fittings was published in 2010 by German scholar Adler. This work presents a typology of book furniture using specific terminologies and definitions, and highly informative technical illustrations in order to demonstrate the various types and styles of book fittings (Adler 2010, 1-53). This is largely based on evidence from surviving books from German-speaking countries, the Netherlands and Italy dating from the early Middle Ages.

There have been no previous attempts to develop a typology using the considerable quantity of English archaeological material. Excavation reports and archaeological catalogues generally group together objects of the same material and so the various types of book fittings are overlooked and some are misidentified, generally as belt fittings. In Egan and Pritchard's (2002, 154) catalogue of dress accessories recovered from London sites, for example, one type of book fitting is in fact classified as a strap end, although its function as a book fitting is tentatively acknowledged by the authors. Also, several types of mounts are interpreted as functioning as possible book fittings (Egan and Pritchard 2002, 197). Nevertheless, no comprehensive typology of book fittings has been created to classify and identify English archaeological material. Therefore, a key aim of this research has been to develop a typology with specific terminology and stylistic illustrations that would allow for the simple identification of book furniture.

2.3 CREATING THE TYPOLOGY

The typology developed for this research can be defined as a taxonomic classification as it is an ordered collection of different types that are based on particular attributes of artefacts (Rouse 1960, 315; Adams 1988, 44). This classification uses descriptive types, which are formed when creating a typology in order to express differences in the nature of artefacts where chronological information is lacking (Ford and Steward 1954, 43; Rouse 1960, 318). Statistical approaches are useful for creating types for the division of a group of similar artefacts in which variations in attributes are difficult to distinguish (Spaulding 1953, 306). For the classification of book fittings, however, the direct examination of both intrinsic and inferential attributes of the objects, such as form and function, proved to be more effective as they were more readily discernible visually (Adams 1988, 49).

Generating this classification involved a number of stages. It began with the initial examination of a sample of book fittings recorded in the Portable Antiquities Scheme (PAS) database (Howsam 2011). The study of this material facilitated the creation of different types by intuitively sorting and re-sorting the artefacts based on visible similarities and differences in function and form. However, using this initial typology for the classification of the archaeological material gathered for this research demonstrated that it was necessary to rework the initial typology developed from the PAS material. The recording of new archaeological material gave rise to a recognition of both new types and new variants of book fittings and this led to redefining existing categories and creating new types. Consequently, an improved typology has been developed for this thesis. The fittings recorded in the catalogue were classified to produce this typology, although future excavations and the expansion of the PAS database are likely to uncover new forms and variations of book fittings.

The artefacts classified in this typology are initially divided by function, resulting in two main types of book fittings: fastenings and furnishings. By doing this, it has been possible to distinguish and classify fittings that would have been used to keep books closed when not in use, i.e. fastenings, and those that protected the covers, namely furnishings. These functional types are then subdivided into further types based on overall form. Each of these types is then split according to variations in shape. The types defined in the typology are supported by stylistic illustrations created by the author.

2.4 Terminology

Creating a typology of book fittings has demonstrated that terminology is an important factor when considering this type of material culture. Studying the few previous discussions on medieval book fittings has illustrated that no definitive standardised terminology exists for describing this class of artefact (see Pollard 1962, 1976; Middleton 1963; Febvre and Martin 1984; Mowrey 1991). However, in more recent years, there have been attempts to specify and use key terms to distinguish book fittings and their functions (see Szirmai 1999; Dürrfeld 2000; Gullick and Hadgraft 2008). The most significant advance in terminology is the use of the term 'fastening' to identify fittings that would have formed a fastening mechanism on books and 'furnishing' to describe those that would have protected the covers of

bindings from wear and damage (see Szirmai 1999; Dürrfeld 2000; Adler 2010).

Book fastenings have generally been referred to as 'clasps', although this term, which is found across a wide range of studies, is often used with subtle differences in meaning (see Pollard 1962, 1976; Middleton 1963; Febvre and Martin 1984; Mowrey 1991; Szirmai 1999). For example, in Pollard's *Describing Medieval Bookbindings* (1976, 63-64), for which the author examined extant manuscript bindings, the term 'clasp' is used similarly to 'fastening' to define the fittings used to maintain books in the closed position. In *The Archaeology of Medieval Bookbinding* (Szirmai 1999), which is also primarily based on surviving manuscript evidence, Szirmai uses 'fastening' to generically refer to book fittings with fastening mechanisms and 'clasp' is used specifically to describe the hooked type of fastening found on later medieval manuscripts (Szirmai 1999, 257-262). More recently, Dürrfeld (2000, 312) uses the term 'fastening' as an alternative to 'clasp' as the latter can either refer to the entire fastening mechanism or that part of certain types which hooks onto the catch. For this thesis, the term 'fastening' is used generically to describe those objects that were attached to book covers with the function of securing the book closed.

For fittings used to protect bindings, many terms have been used in past studies as a result of the high degree of variation in fixtures with this purpose (see Pollard 1962, 1976; Middleton 1963; Febvre and Martin 1984). In recent studies, Szirmai (1999) and Dürrfeld (2000) use the term 'furnishing' and 'furniture', respectively, as a general term for all elements mounted on bindings to protect them from abrasion and damage, including bosses, edge guards, corner-pieces, centre-pieces, shoes, heels and edge strips. The term 'furnishing' will be used in this thesis to ubiquitously identify book fittings that were attached to late medieval books in order to protect the bindings.

2.5 DATING

For various reasons expanded upon below, a chronology has not been established for the different types of book fittings that comprise this typology. There are several factors that have a limiting effect on the development of an accurate typological chronology of late medieval book fittings. First, during the late medieval period, developments in book fittings were made as new forms and types arose naturally and gradually as fashions changed and production techniques improved (Adler 2010,

60). Over the course of producing this typology it became evident that there were numerous variations of types and styles of book fittings. As a result of this diversity, it is most likely that the use of different types of book furniture would have overlapped throughout this period.

The second factor is the manner by which book fittings were added to bindings. As part of the final process of book production, metal fixtures were frequently added as supplementary features for fastening and protective functions. However, books were not always bound at the time of production. Pollard (1962, 17) has produced a very broad chronology of book fastenings, however he states that "great caution is needed in assessing the chronological evidence of fastenings, because they were often added to earlier bindings". Book fittings were sometimes added at a later date and so they would not have been contemporary with the book on which they were attached. The analysis of extant medieval books and their bindings can only offer a partial understanding of the chronology of the fastenings and furnishings that were once attached to their covers. Gullick and Hadgraft (2008, 105) rightly point out that medieval fastenings were often lost or replaced at a later date and this makes it more difficult and less reliable to date the artefacts. As a result it was recognised that insufficient work has been completed to fully establish the chronology of late medieval book furniture, particularly those fittings used on English bindings produced during the period 1200 to 1400 (Gullick and Hadgraft 2008, 105). It is important to be aware that, as with fastenings, book furnishings could also have been a later addition to bookbindings or a replacement and they could also antedate the binding of a book as old furnishings were often reused after rebinding (Pollard 1976, 62; Szirmai 1999, 263). Thus it is difficult to determine accurately the date of the furnishings based on binding evidence.

The examination of the archaeological evidence, although key to this research, raises several concerns when considering dating and so producing a typological chronology from this evidence was not efficacious. Whilst the contexts and phasing of the archaeological finds can be most informative, they can also raise more questions. For example, a particular obstacle arises when an artefact relating to late medieval books is found in a context associated with the Dissolution of the Monasteries in the 1530s. This causes problems for dating the different types of fittings as, whilst they may represent the events of the first half of the sixteenth century, they are most likely to be late medieval in date. It is also possible that a number of the studied artefacts are residual finds, occurring in deposits later than the date of their origin and deposition.

It is evident that there are many factors that make it difficult to order chronologically the different types of late medieval book fittings. Changing fashions and technological developments across the late medieval period, the fact that books were not often bound immediately following production, that book fittings were frequently lost, removed and replaced, and the nature of their archaeological contexts must all be considered with caution when trying to date book fixtures. It is for these reasons that a typological chronology has not been produced for this research. However, one of the aims of this research has been to establish a firmer understanding of the chronology of the different types of book fittings used during the late medieval period. Conclusions in this area, drawn from the detailed investigation of archaeological material with the additional analysis of extant complete medieval books and contemporary documentary and sculptural evidence, are discussed throughout this research.

2.6 TYPOLOGY

2.6.1 A. FASTENINGS

The first functional category of book fittings is fastenings. Of the 336 book fittings recorded, 248 have been classified as fastenings, comprising nearly 74 per cent of the total fittings. Only 4 of the 47 monasteries studied have not provided a single example of a book fastening. During the late medieval period, books, when not in use, were kept closed by metal fittings in order to prevent distortion to the vellum and parchment leaves and its overall shape, which tended to warp over time (Pollard 1962, 17; Brown 1994, 118). There are two mechanisms that allowed book fastenings to function: the 'strap-and-pin' mechanism and the 'hooked' mechanism. Firstly, the strap-and-pin mechanism consists of a pin and base-plate (A.11) secured to the face of one cover and a leather strap attached to the other board ending in a pierced metal fastening (A.1, A.2, A.7, A.8.1-A.8.4, A.9 and A.10) designed to slot onto the corresponding pin. Secondly, the hooked mechanism comprises a hooked metal fastening (A.3, A.4, A.5 and A.8.5) that passes to a corresponding catch-plate (A.6). The hooked fastening can be secured to the book cover by means of a leather strap or an anchor-plate (A.6).

From the study of extant bindings alone it is often not possible to identify the type of fitting used to fasten a book, however, it is sometimes possible to identify

FIGURE 2-1. *The twelfth-century copy of Peter Lombard's commentary on the Pauline epistles (Hereford, Cathedral Library, MS O. IV. 6) with its contemporary binding and fittings of type A.11. Scale 1:2.*

FIGURE 2-2. *Detail of the staining from the now lost top fastening on Lombard's commentary on the Pauline epistles (Hereford, Cathedral Library, MS O. IV. 6) (detail). Scale 1:2.*

FIGURE 2-3. *A catch-plate and part of a leather strap survive on the fifteenth-century binding of a mid-thirteenth-century sacramentary (London, British Library, Egerton MS 2902) (detail) (British Library Board 2015b).*

which mechanism would have been used. The remains, or evidence, of pins and base-plates (A.11) survive more frequently on bindings than their corresponding strap and fastening. For example, a twelfth-century copy of Peter Lombard's commentary on the Pauline epistles (Hereford, Cathedral Library, MS O. IV. 6) retains its contemporary binding but only remnants of its fastening system. Two sets of pins and base-plates (A.11) survive *in situ* (Figure 2-1), but only staining on the inside of the front cover provides evidence for the straps (Figure 2-2). This evidence indicates that the strap-and-pin mechanism was used for this binding, although nothing can be said about the type of fastenings used other than that they must have had a corresponding hole to fit over the pins. Similarly, anchor-/catch-plates (A.6), or evidence thereof, sometimes survive on bindings, but it is not always possible to identify which type of hooked fastening was used as this element of the mechanism is often lost. For example, the fifteenth-century binding of a sacramentary (London, British Library, Egerton MS 2902), first compiled in the mid-thirteenth century, retains its catch-plates on its back cover and part of its leather strap, which is nailed to the front (Figure 2-3). The hooked fastening that would have been attached to the end of the strap, however, is now lost and so little more can be said other than that the fastening must have been hooked in order to function. Due to the limited efficacy of the analysis of surviving late medieval bookbindings, the typological and contextual analysis of the archaeological evidence is crucial to further understand the sorts of fittings used on late medieval books.

Book fastenings used in the late medieval period were generally made from copper alloys and were produced by both casting and working sheet metal. Other base metals, typically tin and iron, were sometimes used for different components of fastenings, in particular rivets. Methods and styles of ornamentation varied greatly between the different types of fastenings. Casting was often used to produce moulded decoration, the most common being projected terminal loops in the form of stylised animal heads. Surfaces were also frequently finished by engraving and punching/stamping various patterns and motifs, and more elaborate fastenings were sometimes finished with gold leaf or enamel. Techniques of manufacture and decoration are discussed in more detail in Chapter 3. This principal category is classified by the overall form and function of the artefact, whilst the subcategories are determined by variations in shape. A total of eleven broad types of book fastenings (A.1-A.11) have been identified and are defined below.

A.1: HINGED PLATE AND LOOP

This form of book fastening uses a strap-and-pin mechanism commonly used on manuscripts during the medieval period (Brown 1994, 118). It comprises a two-piece strap-end with a hinged plate and loop. The plate is folded to receive the end of a leather strap, which would be secured by 1-2 rivets and the strap itself would be attached to the cover of a book. The loop element of the hinged fastening would have fit over a corresponding pin (A.11) attached to the opposite cover of the book, which was often located in the centre of the cover during the late medieval period. The additional feature of a terminal loop would have allowed a piece of string or cord, which would have been threaded through the projecting loop, to be used as an aid to pull the book shut. The folded plate was typically manufactured from sheet metal and the loop would have been cast. Fastenings of this type were often decorated in various ways. Decorative elements of the plate include a concave end and bevelled edges. Secondary surface decoration on both the folded plate and loop was created by engraving or punching techniques. Additionally, it is common for the terminal loop to be in the stylised form of an animal head, which would have been cast during production of the loop. Also, other materials, such as gold leaf, were sometimes added to decorate fastenings of this type. This form of fastening is divided into three separate types based on distinguishable variations in the form of the loop.

A.1.1: Rectangular plate and sub-circular loop that is domed with a flat back, central perforation and projecting terminal loop
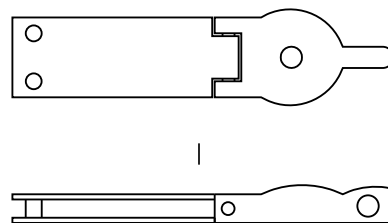
A.1.2: Rectangular plate and sub-circular loop that is domed with a flat back, circular depression in underside and projecting terminal loop
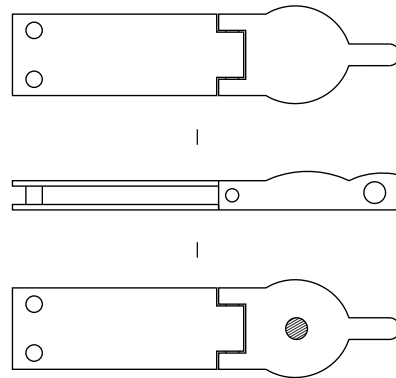
A.1.3: Rectangular plate and sub-circular flat loop with central perforation and projecting terminal loop
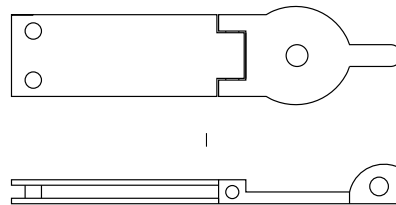
A.2: COMPOSITE WITH LOOPED SPACER

This is a composite fastening consisting of two rectangular plates and a looped spacer, held together by 1-2 rivets. Using the strap-and-pin mechanism, this type of fastening would have attached to the end of a book strap and would have fitted over a pin (A.11) on the cover of the book. Similar to A.1, the projecting terminal loop would have held a piece of string or cord to aid in the shutting of the book. In some incomplete examples it is possible to see that the looped spacer is forked, similar to forked-spacer strap-ends classified by Egan and Pritchard (2002, 140-6). The plates are typically of sheet metal and the looped spacer has been cast. The end of the plates often have a decoratively cut edge. The surface of the plates was also sometimes engraved with linear motifs and decorative borders. The terminal loop is often in the form of a stylised animal head, which would have been developed during casting.

A.2.1: Two rectangular plates and
        a spacer with a loop that is
        domed with a flat back, central
        perforation and projecting
        terminal loop
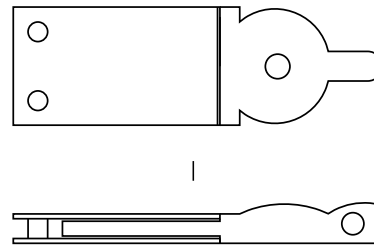
A.3: Hooked fishtail

One of the more common forms of late medieval book fittings is this type that comprises two plates with the front plate having a projecting hook at one terminal. The attachment end of the fastening is splayed resembling a 'fishtail', although the back plate is often simply rectangular in shape. This fitting would have been riveted to the end of a strap anchored to a book and would have fitted onto a catch-plate (A.6) attached to the opposite cover. This type of fastening was most likely forged from sheet metal. The degree to which this type of hooked object was decorated could vary greatly, although fastenings with a splayed attachment end were often highly decorated compared to other types of hooked fastenings. Methods of ornamentation usually comprised engraving and punching. Certain motifs and styles were frequently used during the late medieval period. Common designs in various combinations include engraved linear borders, engraved lines in chevron-shaped formations or triangles, engraved zigzag lines, concentric compass-engraved circles, decoratively drilled and blind-drilled holes, and punched motifs, such as acorns and fleurs-de-lys. Additional materials, such as gold leaf, were also often added to decorate fastenings of this type.

A.3.1: Two plates with the front plate
        having a projecting hook at one end
        and splayed attachment end
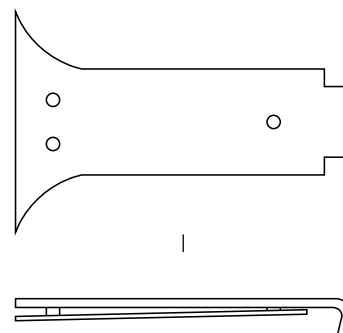
A.4: Hooked rectangular

This type of fastening is a variation of the hooked fastening A.3.1. Whilst it is similar in that it would have been attached to the end of a strap and would have fitted onto a catch-plate (A.6), its difference in overall form warrants a separate category. Two rectangular plates with the front plate having a projecting hook at one end constitute this type of hooked fastening. Fittings of this type are relatively plain in terms of ornamentation, although they sometimes have decoratively cut edges. This category is divided into two subcategories based on form and the presence of additional functional features.

A.4.1: Two rectangular plates with the front plate having a projecting hook at one end
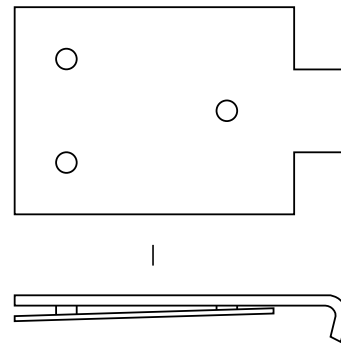
A.4.2: Two rectangular plates with the front plate having a projecting hook at one end and a perforated, riveted lug situated near the hook
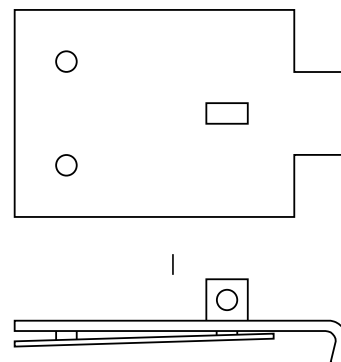
A.5: H<small>OOKED ALL</small>-<small>METAL</small>

Hooked fastenings of this type differ to those of types A.3 and A.4 in the way in which they would have attached to the bindings of books. This element of an all-metal fastening is characterised by a plate with a projecting hook at one end and one or two lugs at the other. The lug would have enabled the fastening to hinge onto an anchor-plate (A.6) attached to the edge of the cover of a book. This is in comparison to types A.3 and A.4, which would have been attached to the ends of straps. This fastening would have stretched across the whole thickness of the book and catch onto a plate (A.6) attached to the edge of the opposite cover. Examples of all-metal fastenings recorded in the catalogue demonstrate that fittings of this type were occasionally decorated in similar fashions to other categories of late medieval book fittings. Engraving and embossing processes were typically used during manufacture to embellish these fittings. This category is split into three subgroups that are defined by the number of lugs and the presence of a perforated riveted lug.

A.5.1: Rectangular plate with a projecting hook at one end and a lug at the other for attachment
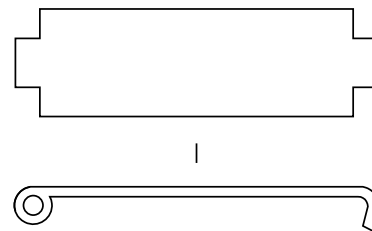
A.5.2: Rectangular plate with a projecting hook at one end and two lugs at the other for attachment
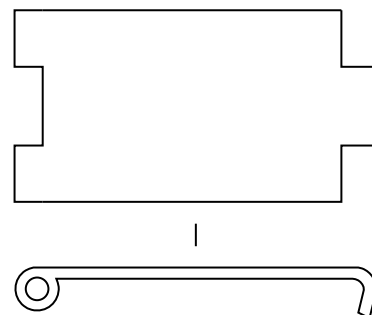
A.5.3: Rectangular plate with a projecting hook at one end and one lug at the other for attachment, and a perforated riveted lug situated near the hook
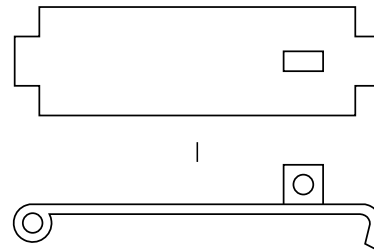
A.6: ANCHOR-/CATCH-PLATE

All hooked fastenings (A.3-A.5) fitted onto catch-plates in order to keep a book closed and anchor-plates were used on bookbindings so that fastenings of type A.5 could hinge onto the binding or to secure the straps of fastenings A.3 and A.4. Both anchor- and catch-plates would have sat at the edge of a book cover and would have been secured by 1-3 rivets. Each can be similar in form and this makes it difficult to accurately distinguish between anchor- and catch-plates in the archaeological record unless the anchor-plates have survived intact with the hooked element of the all-metal fastening (A.5), an example of which has been recovered from Fountains Abbey, West Yorkshire (**150** and **157**; Figure 2-4). Decorative designs and styles of anchor- and catch-plates were primarily associated with those used on the corresponding hooked fastening. It is common for anchor- and catch-plates to have a pointed terminal; however, they can often have more elaborate ends, particularly catch-plates that were used with hooked fastenings of type A.3 with a splayed fishtail attachment end. Whilst no examples of fittings with these particularly elaborate and decorative styles have been identified during this research, examples of anchor-/catch-plates that have engraved designs and decorative drilled holes have been recorded in the catalogue. Artefacts that fall into this category have been sorted into four subcategories defined by the form of the fitting.

FIGURE 2-4. *Fastening of type A.5.1 (150) hinged together with anchor-plate of type A.6.2 (157) from Fountains Abbey, West Yorkshire (English Heritage, 671099). Scale 1:1.*

A.6.1: Rectangular plate with rectangular
        perforation
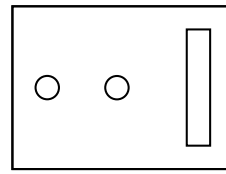
A.6.2: Rectangular plate with two
        projecting lugs holding a bar
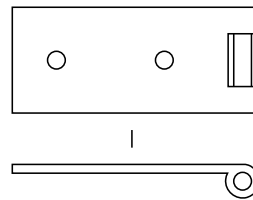
A.6.3: Triangular plate with rectangular
        perforation
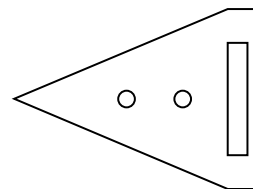
A.6.4: Triangular plate with two projecting
        lugs holding a bar
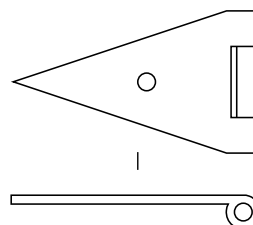
A.7: Double rectangular

Double rectangular fastenings use the strap-and-pin mechanism and consist of two rectangular plates, both with a central perforation. Between the two plates, and secured by 2-4 rivets, would have fitted a leather strap attached to the cover of a book. The strap would have also been pierced allowing the fastening to fit onto a corresponding pin (A.11) anchored to the opposite cover. Fastenings of this type are often identified in archaeological reports and catalogues as belt fittings, however, there are indications that this form of artefact once functioned as a book fastening. Their larger size and the presence of a central perforation separate them from late medieval belt fittings. Also, comparative examples on surviving medieval bindings substantiate their function as book fastenings. These fastenings often have decoratively cut edges with series of notches, cusps and circular apertures forming different designs. Secondary decoration on the surface of the plates is common for this type of fastening. Engraved lines and cabling, punched dots and lines of opposing triangles, engraved floral and leaf motifs and saltire crosses, and decorative drilled holes are typical examples of embellishment.

A.7.1: Two rectangular plates with central perforation
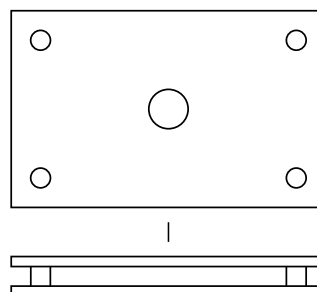
A.8: Folded

This general type of fitting comprises a rectangular plate that is folded widthways in order for it to fit onto the end of a leather strap that would have been attached to one cover of a book. The fitting would have been secured onto the strap by a number of rivets. Folded book fastenings are divided into five separate categories (A.8.1-A.8.5). The first four subcategories (A.8.1-A.8.4) function by means of a strap-and-pin mechanism and the final subcategory (A.8.5) has a projecting hook that

would have fitted onto a catch-plate (A.6). Surface decoration is not a common feature on fastenings of this type, though there are a few instances of decoratively cut edges, punched dots and possible decorative holes. The categories for this type of book fastening are determined by variations in overall shape.

A.8.1: Rectangular plate folded widthways, stepped in at fold to form projecting terminal loop, with perforation through front and back
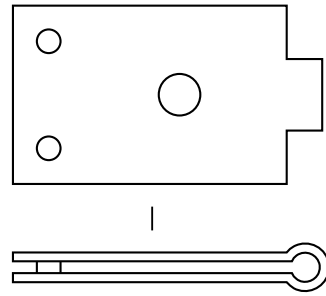
A.8.2: Rectangular plate folded widthways, stepped in at fold to form projecting terminal loop, with domed boss and perforation through front and back
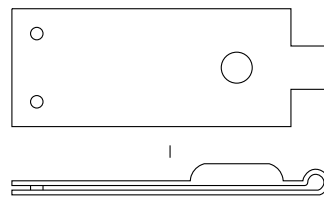
A.8.3: Rectangular plate folded widthways, stepped in at fold to form projecting terminal loop, with integral flat loop and perforation through front and back
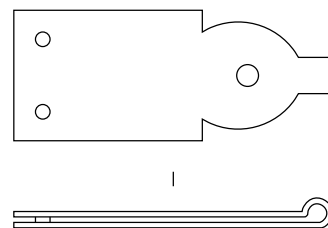
A.8.4: Rectangular plate folded widthways, stepped in at fold to form projecting terminal loop, with integral domed boss and circular depression in underside
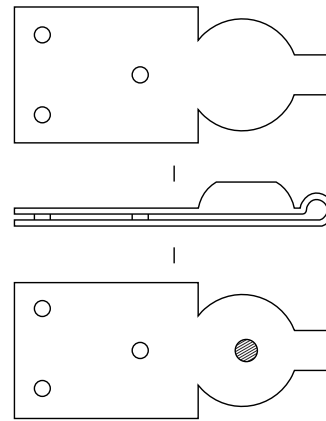
A.8.5: Rectangular plate folded widthways, tapering to fold and bent to form projecting hook
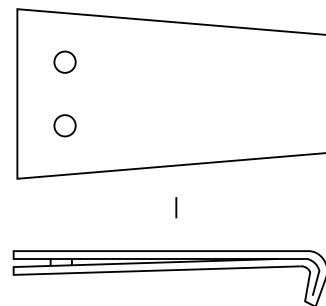
A.9: One-piece

This type of book fastening is elaborate in form. It would have been cast as one piece and consists of three elements: a rectangular and hollow attachment end, a boss with a circular depression in its underside and a projecting terminal loop often with a separate ring attached at its apex. Fastenings of this type functioned by means of the strap-and-pin mechanism. The open attachment end would have received the end of a strap anchored to one cover of a book, the boss would have fitted onto a pin (A.11) located on the opposite cover and the terminal loop would have held a piece of string or cord that would have been used to pull over the cover of the book. Consistent with its elaborate form, this type of fastening is often very ornate, and casting would have allowed the manufacturer to produce intricately decorated fastenings. The rectangular attachment end and bosses often carried relief motifs and letters or

engraved floral designs. Also, the projecting terminal loops would have had moulded collars or would have been formed into a stylised animal head. Additionally, other materials, such as gold leaf, were sometimes added to further decorate fastenings of this type. This main type is classified into two subcategories on the basis of the shape of the boss.

A.9.1: Rectangular attachment end extending into circular domed boss with circular depression in underside and projecting terminal loop
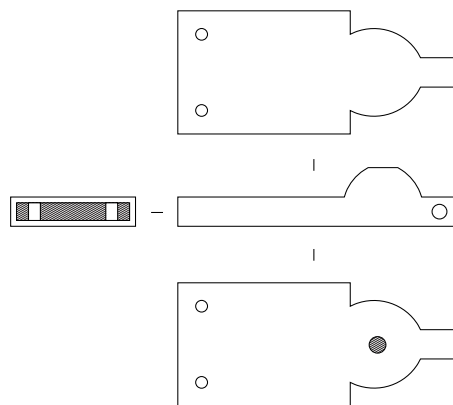
A.9.2: Rectangular attachment end extending into lozenge-shaped boss with circular depression in underside and projecting terminal loop with separate ring at apex
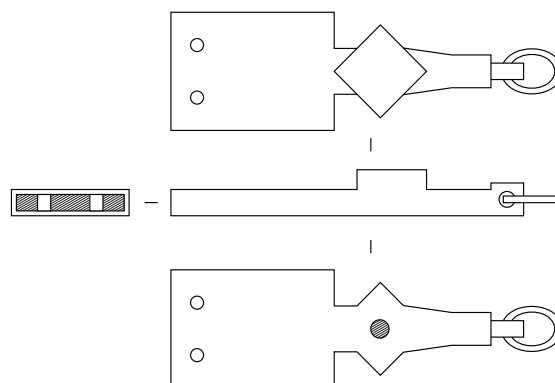
A.10: LOOPED RECTANGULAR

Fastenings of this type comprise a rectangular plate that has a perforation near a
projecting terminal loop and also a small back plate. These features would have
allowed this type of fastening to function using the strap-and-pin mechanism,
whereby the end of a leather strap attached to a book cover would have been
riveted between the two plates and the fastening would then have fitted over a
pin (A.11) anchored to the corresponding cover. Only one example of this type of
fastening is recorded in the catalogue and it is highly ornate. Due to the intricacy of
form and relief decoration, it is likely that the front plate would have been cast. This
manufacturing technique would have allowed the production of the terminal loop
in the form of a stylised animal head. Secondary decoration would also have been
added using a number of decorative techniques and materials, such as engraving,
gilding and enamelling with red- and blue-coloured glass.

A.10.1: Two rectangular plates with the
       front plate having perforation near
       projecting terminal loop
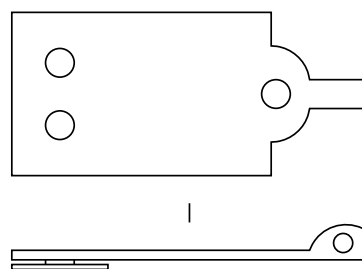
A.11: PIN AND BASE-PLATE

This category of fastening comprises a pin and square base-plate. As part of the strap-
and-pin mechanism, fittings of this type were a crucial part of keeping a book closed.
The base-plates, which are most often the only element of this sort of fastening that
survives archaeologically, often have similar decorative features. Bevelled edges
and small notches cut into the centre of each edge are two of the more common
decorative characteristics. Engraved lines are also found on base-plates giving them
a more foliated appearance. The pin and base-plates have been classified into two
subcategories on the basis of whether or not the plate is domed.

A.11.1: Pin and flat square base-plate
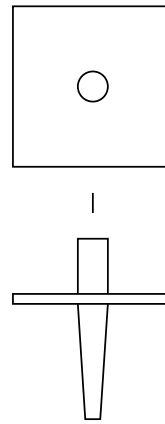
A.11.2: Pin and domed square base-plate
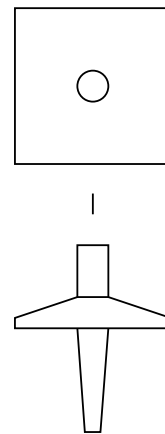
2.6.2 B. Furnishings

Book furnishings comprise the second functional category of this typology of late medieval book fittings. A total of 88 book fittings, comprising just over a quarter of the total assemblage recorded, have been classified as furnishings, although they are restricted to just 21 monastic sites. Furnishings were added to bookbindings in order to protect the leather or textile covers from abrasion (Szirmai 1999, 263; Dürrfeld 2000, 305). The presence and type of furnishings attached to covers is thought to have depended in part on the contents and the dimensions of the book, and the circumstances of its use and storage (Szirmai 1999, 263). In addition to the types of furnishings that protected the covers of bindings (B.1-B.5), late medieval books often carried forms of fittings that had other protective functions. First, chains (B.6) became a common feature of manuscript bindings from the thirteenth century (Jackson 1974, 78-9; Gameson 2006, 28-9). Chains protected books by securing them

to lecterns and shelves, preventing them from being removed from the libraries in which they were housed (Szirmai 1999, 267; Gameson 2006, 29). Whilst it is difficult to unequivocally identify the use of this type of artefact on bookbindings, there are some examples of chain links recovered from excavations of monastic sites that may have once been attached to late medieval books. Secondly, fittings classified as B.7 have been interpreted as possible bookmark fittings to protect the ends of leather or textile strips often attached to bookbindings. Although the function of this class of artefact is not certain, the form and decorative features may indicate its use on medieval bookbindings.

Late medieval book furnishings were generally made from a copper alloy and they were manufactured by casting or working from sheet metal depending on their form. As well as offering a degree of protection, such items were also used as forms of ornamentation. Methods and styles of decoration vary between types of furnishings. In addition to intricately cut edges, they were often decoratively finished by engraving, punching or stamping and sometimes gilding. An overview of the typical techniques of manufacture and decoration are discussed in more detail in Chapter 3. This principal category is classified by the overall form and function of the artefact, whilst the subcategories are determined by variations within these general types. A total of seven broad types of book furnishings (B.1-B.7) have been identified and are defined below.

B.1: DOMED BOSS

This class of artefact consists of a domed boss that would have been riveted to the cover of a book. Domed boss furnishings were one of the more common types used on late medieval bookbindings and are occasionally recovered archaeologically. Whilst domed bosses were sometimes used on items such as boxes or caskets, this type of fitting was frequently used as a corner piece on the front and sometimes the back faces of book covers as a form of protection for the bindings. Domed bosses would have been either cast, producing a distinctive dome, or turned on a lathe, or worked from metal sheet producing what Szirmai (1999, 263) describes as a 'half-dome'. Furnishings of this type often have simple moulded decoration created during casting or secondary decoration produced by engraving or punching the surface. This type is divided into seven subcategories identified by the general form of the fittings.

B.1.1: Circular domed boss with flange for attachment
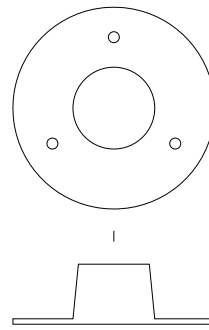
B.1.2: Circular domed boss with 3-4 tabs for attachment
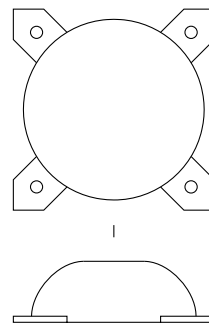
B.1.3: Square plate with central domed boss
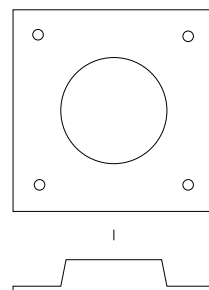
B.1.4: Square domed boss with 4 tabs for attachment
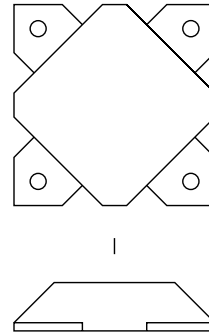
B.1.5: Triangular plate with central domed boss
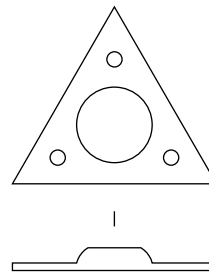
B.1.6: Polygonal domed boss/stud
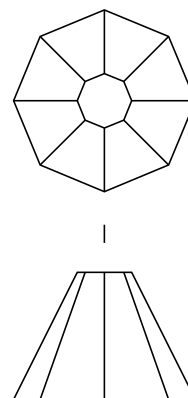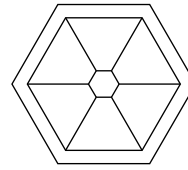
B.1.7: Polygonal domed boss with flange
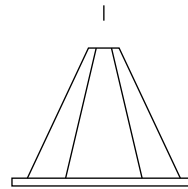
B.2: CIRCULAR PLATE

This type of book furnishing is formed from a single circular plate that would have
been attached to book covers, generally by 2-3 rivets. Produced from sheet metal,
this type of furnishing was often embossed and engraved to give a floral appearance.
This general type is classified into four subcategories defined by form and whether or
not it is domed. The presence of a central perforation may indicate that these fittings
functioned as a base-plate for a pin that would have been attached to the cover of
a book. Nevertheless, given the difference in shape compared to that of the definite
type of base-plate (A.11), fittings of this nature have been classified in a separate
category.
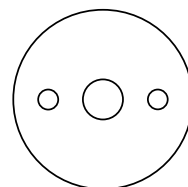
B.2.1: Circular plate with central
        perforation
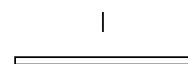
B.2.2: Circular domed plate with central
perforation
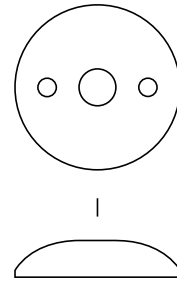
B.2.3: Cinquefoil plate with central
perforation
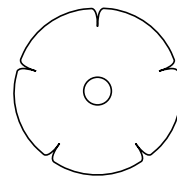
B.2.4: Sexfoil domed plate with central
perforation
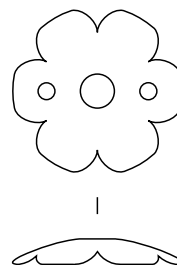
B.3: Polygonal plate

Within this category fall furnishings that are of an atypical form and only three examples are recorded in the catalogue. Furnishings of this type would have been either cast or worked from sheet metal. As examples are highly decorative, it is possible that they once functioned more as ornamental features of medieval bookbindings, such as centre-pieces. Techniques of decoration include engraving, punching, enamelling and gilding.
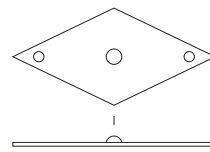
B.3.1: Single polygonal plate
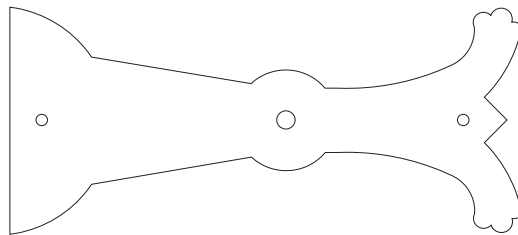
B.4: Corner-piece

Furnishings of this type were fixed to the corners of books to protect the edges of bindings. This general category comprises a plate with an approximate right angle to allow it to align with the rectangular bindings of books. Whilst fundamentally a basic type of furnishing, examples may occasionally be very ornate in form with additional features, typically in the angle of type B.4.2, including projecting decoratively cut motifs or ornamentations. Further embellishment can also be added by engraving, punching and repoussé techniques. Particularly intricate examples can be seen on medieval manuscripts from the Continent (see Szirmai 1999; Adler 2010). Three forms of corner-pieces have been identified from the research catalogue.

B.4.1: Sub-rectangular plate with two
        adjacent turn-downed sides and a
        domed boss
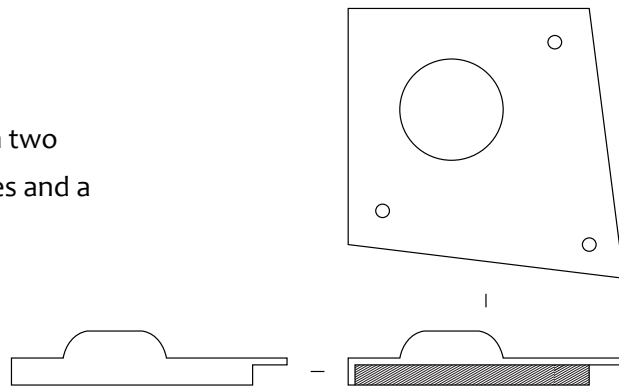
B.4.2: L-shaped plate with arms of equal
        length
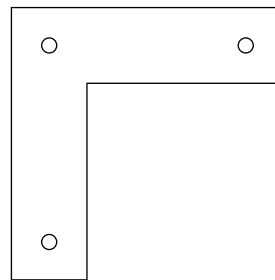
B.4.3: L-shaped plate with arms of equal
        length and two adjacent turn-
        downed sides
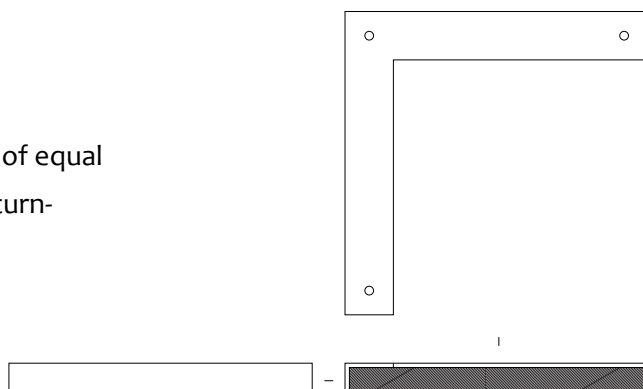
B.5: Binding strip

This category of furnishing was attached to the very edges of medieval book covers to protect the bindings from abrasion. Like other categories of book furnishings, this type could also be decorated with engraved and punched designs. Only one form of binding strip was identified from the catalogue.

B.5.1: Rectangular plate folded once lengthways
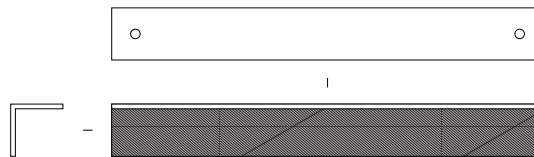
B.6: Chain

Chains were often additional features of late medieval bindings in order to secure books to lecterns and shelves in late medieval libraries. Chains could be attached to bookbindings by means of a clip or staple. The form of chain links can vary from circular to s-shaped links, and often swivel links were used to prevent entanglement (Szirmai 1999, 267). Chain links were often manufactured using the casting method. The use of this technique enabled makers to produce items with moulded decoration. Only one form of chain link has been identified from the material.

B.6.1: Swivel link comprising two swivel rings connected by a rivet through a central perforation
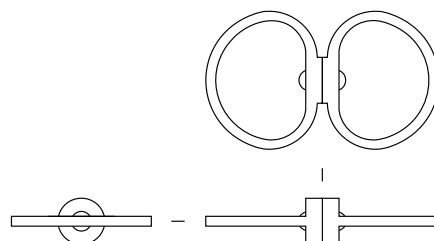
B.7: Folded composite (bookmark)

This type of book fitting comprises a single long rectangular plate that is folded in several places so that the fitting is essentially enclosed on three sides. It also has a separate strip of metal that is threaded and looped through a hole pierced in the folded edge at the end of the plate. The open end of the furnishing may have been riveted to the end of a leather strap or strip of material attached to the spine of a book, which may have functioned as a type of bookmark. It is likely that this form of furnishing would have been produced from sheet metal. Decoration added to this type of fitting often comprises engravings of various designs. Also, a common form of ornamentation found on artefacts of this type is a stamped monogram, sometimes repoussé, typically with the letters 'ihc' which symbolise the first three letters of the Greek form of the name Jesus (Stevenson *et al.* 2011, 150). The orientation of the monograms will most likely be indicative of the way in which this object was used and viewed, helping the interpretation that it could have been used to adorn leather and textile bookmarks often attached to medieval bindings.

B.7.1: Folded rectangular plate with separate strip threaded and looped through hole pierced in folded edge at end
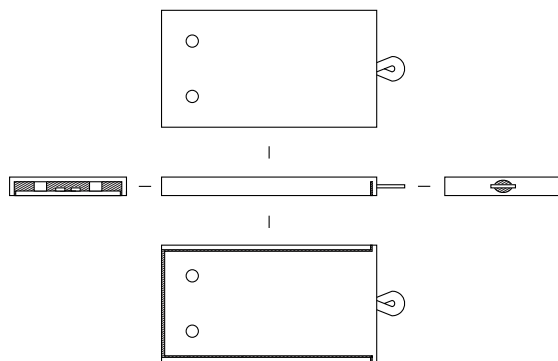
2.7 FORM

The typology created for this research (see 2.6) demonstrates the varied nature of late medieval book furniture. The artefacts recorded in the catalogue have been divided by their function and overall form in order to analyse and interpret the material effectively. From the analysis of the classified material, several patterns and correlations within the data have become evident. This section discusses in greater depth the analysis of the different types of book fittings used during the late medieval period. The frequency with which the various forms found across English monasteries, the chronology of these forms and the wider contexts in which these artefacts were used are addressed. Each type of book fastening and furnishing is discussed and interpreted separately. This discussion is supported by the examination of contemporary pictorial evidence and surviving bookbindings to further understand the broader contexts of this material.

2.7.1 FASTENINGS

Book fastenings were used on late medieval books to keep the books closed when not in use, and they functioned via the 'strap-and-pin' mechanism or the 'hooked' mechanism. A total of 11 broad types of fastenings (A.1-A.11) have been identified and defined in the typology developed for this research (see 2.6.1). The following discussion considers each type of book fastening individually, focusing on form, decoration and dating through the analysis of the archaeological material in conjunction with contemporary depictions, sculptures and surviving bookbindings.

A.1

A relatively common form of fastening that is found archaeologically on monastic sites comprises a hinged plate and loop (A.1). A total of 27 artefacts have been classified into this category. These fittings were found across 14 of the monastic sites examined. All 27 fittings of type A.1 are made from copper alloy, and two examples retain remnants of a leather strap (*307* and *326*). Additionally, two fittings, one from Bermondsey Abbey, Surrey (*44*) (Egan 2011, 246), and one from St Augustine's Abbey, Kent (*69*) (Henig and Woods 1988, 215), show that they had been gilded. From

2

44

68

125

244

328

331

FIGURE 2-5. *Book fastenings of type A.1:* **2** *from Battle Abbey, East Sussex (English Heritage, 802190),* **44** *from Bermondsey Abbey, Sussex (Museum of London Archaeological Archive, BA84 <861>),* **68** *from St Augustine's Abbey, Kent (English Heritage, 7716149),* **125** *from Fountains Abbey, West Yorkshire (English Heritage, 671201),* **244** *from the Austin Friars in Leicester (Mellor and Pearce 1981, 135, no.28),* **328** *from Wearmouth Priory, Durham (Cramp 2006, 248, no.CA127),* **331** *from St Andrew's Priory, North Yorkshire (Ottaway and Rogers 2002, 2937, no.15236). Scale 1:1.*

the examination of the examples of type A.1, it is evident that they can vary in size quite significantly. The average length of this type of fitting is approximately 38mm, however, examples range in length from 24mm to 66mm. Three variations, which differ on the basis of the form of their hinged loop, have been identified and included in the typology. The most common of these is type A.1.1; 23 examples have been identified. The form of type A.1.1 generally remains the same, however, the terminal of the rectangular plate is sometimes decoratively cut. In total, ten fittings have this slight deviation in form. It is most common for these fastenings to have a concave edge (**2**; Figure 2-5), although there are two examples, one from St Augustine's Abbey (**68**; Figure 2-5) (Henig 1988, 181) and another from St Andrew's Priory in York, North Yorkshire (**331**; Figure 2-5) (Ottaway and Rogers 2002, 3147), that have notches in their edges. Of types A.1.2 and A.1.3, only one and two fittings respectively have been classified. A single fastening has been identified as an example of type A.1, however, due to the nature of its incompleteness, it has not been classified further (**125**; Figure 2-5).

From the analysis of a synthesis of evidence, it is possible to comment on the dating of this form of book fitting. A late twelfth-century sculpture of an apostle that originally stood in the chapter house of St Mary's Abbey, North Yorkshire, carries a book with a fastening of type A.1 (Figure 2-6) (Ottaway and Rogers 2002, 2938). This corroborates with Gullick and Hadgraft's (2008, 102-3) conclusion that strap-and-pin fastenings were used on English bindings in the twelfth century. Of the total 27 examples of type A.1, 11 fittings, all of which are of type A.1.1, have come from sufficiently dated archaeological contexts. Although six have been excavated from contexts dating to the time of the Dissolution or later, the remaining five have come from late medieval contexts. For example, one fitting (**328**; Figure 2-5) from Wearmouth Priory, Durham, was found in a rubble fill associated with a rebuilding programme after the Conquest and has been given a date ranging between the twelfth and fourteenth centuries (Cramp 2005, 129-30; 2006, 248). At the site of the Austin Friars in Leicester, an example (**244**; Figure 2-5) was found in a context dating to the late fourteenth to early fifteenth century in the western range of the little cloister (Mellor and Pearce 1981, 28-9). At Bermondsey Abbey one fitting (**44**; Figure 2-5) was recovered from a demolition deposit in a post-medieval mansion garden that was once the site of the monastery's cemetery (Dyson *et al*. 2011, 139). However, it was found in association with ceramics dated *c.*1350-*c.*1500 so it has been suggested that this fitting may have belonged to the early fifteenth century (Dyson *et al*. 2011,
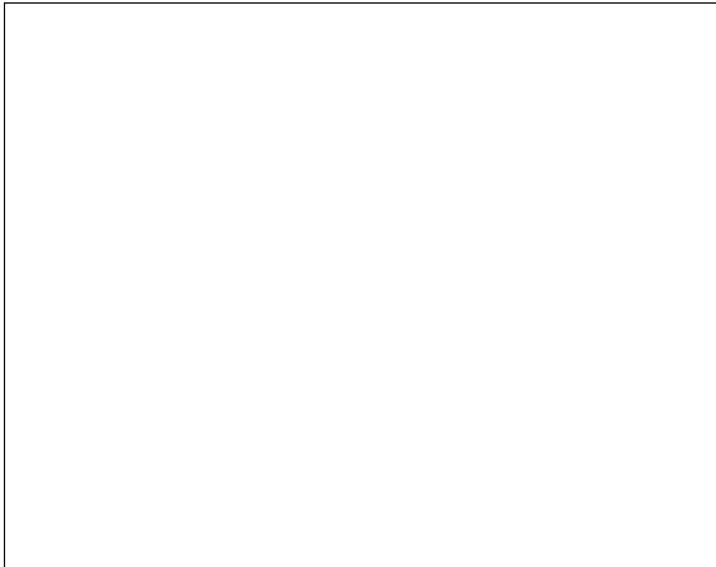
FIGURE 2-6. Detail of a book fitting of type A.1 from a statue of an apostle originally in the chapter house of St Mary's Abbey, North Yorkshire (Ottaway and Rogers 2002, 2938).

139). Manuscript bindings not only provide evidence of fastenings of type A.1, they also indicate more generally that strap-and-pin fastenings were still being used after the introduction of the hooked fastening by the end of the fourteenth century. For instance, a fifteenth-century German girdle book (New York, New York Public Library, Spencer MS 39) retains its contemporary binding and two fastenings of type A.1.1. Likewise, a French copy of Peraldus' *De eruditione principum* (San Marino, Huntington Library, MS HM 25778), written in the early fourteenth century, retains its fifteenth-century binding and its two fastenings of type A.1.1 (Figure 2-7) (Dutschke 1989, 637). The analysis of similar book fittings on late medieval manuscripts from German-speaking countries, the Netherlands and Italy has led Adler (2010, 11) to give a fifteenth-century date for this type of material culture. A manuscript containing several theological works (Lübeck, Stadtbibliothek, MS theol. lat. 4° 142), which was written from the beginning of the fifteenth century, retains its contemporaneous fastening of type A.1.1 (Figure 2-8) (Adler 2010, 72). There is the possibility that older fittings of type A.1 were re-used for the bindings of later medieval manuscripts such as these. Nevertheless, the archaeological, sculptural and manuscript evidence all clearly demonstrate that this type of fastening was continuously used throughout the medieval period.

FIGURE 2-7. *A French copy of Peraldus'* De eruditione principum *(San Marino, Huntington Library, MS HM 25778) retains its fifteenth-century fastenings of type A.1.1 (San Marino, The Huntington Library 2003b). Scale 1:2.*
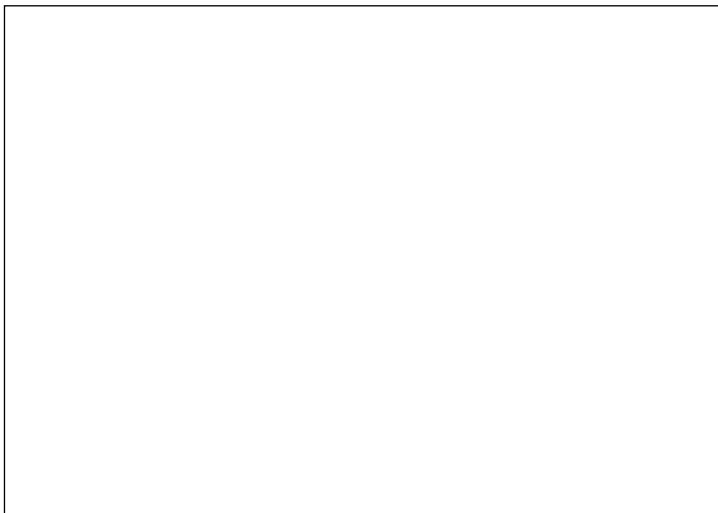
FIGURE 2-8. This fifteenth-century volume of theological works (Lübeck, Stadtbibliothek, MS theol. lat. 4° 142) demonstrates the use of type A.1.1 fastenings on Continental manuscripts (Adler 2010, 72).

A.2

Seven examples of a composite fastening with a looped spacer (A.2.1) have been found across three monastic sites. All of these fittings are made from copper alloy, and two retain fragments of leather straps (*45* and *71*). The lengths of the classified objects of this type range between 25mm and 57mm. In a similar fashion to fastenings of type A.1, the terminals of the plates were sometimes decoratively cut. Of the six relatively complete examples within the catalogue, four have shaped edges. Whilst three examples have a simple concave edge (*72*, *87* and *88*) (Figure 2-9), one fixture has a central aperture with a cusp either side in its edge (*45*; Figure 2-9).

Of the fittings that have come from datable contexts, all were excavated from Dissolution or post-medieval contexts. Nonetheless, this does not necessarily reflect the dates of the objects themselves or when they were used during the late medieval period. Given the physical characteristics of this type, it is most likely that they date prior to the sixteenth century. Type A.2.1 fittings are similar to those of type A.1, which are known to have been in use from the twelfth century and throughout the later medieval period, and so may be similar in date.

45

57
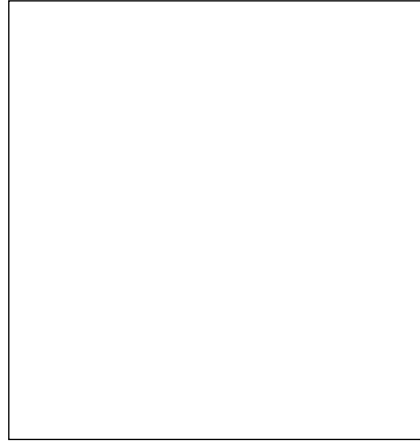
76

87
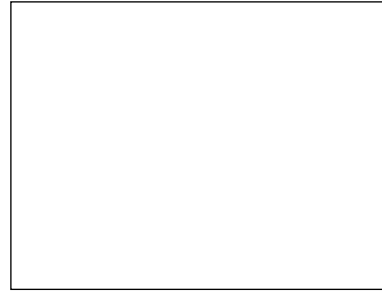
92
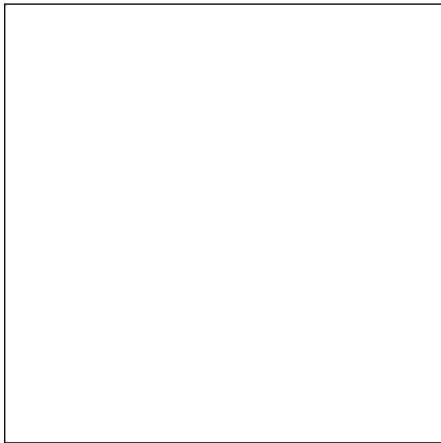
128

FIGURE 2-9. *Copper-alloy book fastenings of type A.2.1:* **45** *from Bermondsey Abbey, Surrey (Museum of London Archaeological Archive, BA84 <911>),* **87** *from St Gregory's Priory, Kent (Hicks and Hicks 2001, 269, no.8). Copper-alloy fastenings of type A.3.1:* **57** *from Bordesley Abbey, Worcestershire (Rahtz 1983, 176, no.CA96),* **76** *from St Augustine's Abbey (English Heritage, 782510), Kent,* **92** *from the Chester Blackfriars, Cheshire (Ward 1990, 167, no.3),* **128** *from Fountains Abbey, West Yorkshire (English Heritage, 671311.2). Scale 1:1.*

A.3

Hooked fishtail fastenings (A.3.1) are the most prevalent form of fastening within this research with 68 fittings found across 24 of the 47 sites examined. The overwhelming majority of this type of fastening is produced solely from copper alloy, the only exception being one made from iron with a copper-alloy coating from Mount Grace Priory, North Yorkshire (*259*) (Coppack and Keen 2002, 92). Also, there are two examples that have iron rivets (*251* and *257*) and one that has a surviving iron back-plate (*92*). Additionally, twelve fittings have remains of leather straps *in situ* (*5*, *101*, *133*, *134*, *136*, *219*, *221*, *255*, *276*, *284*, *285* and *322*), and a further three show evidence of having been gilded (*7*, *75* and *247*).

Whilst the typology defines a single subcategory of type A.3.1, variations in size and in the shape of the splayed end are common. Artefacts of this type range in length from 14mm to 73mm, the splayed end ranges in width from 10mm to 36mm, and the width of the hooked end ranges from 6mm to 18mm. With regard to the splayed fishtail attachment end, the majority of A.3.1 fittings have a decoratively cut edge; only one example has a straight edge (*128*; Figure 2-9) and two have edges that are incomplete making it difficult to determine any cut features (*103* and *265*). It is most common for these fittings to have notches and cusps cut into the edge, such as fitting *76* from St Augustine's Abbey (Figure 2-9), or an undulating edge. There are also a small number of fastenings that have a scalloped edge (*77*, *92* and *102*) (Figure 2-9). Another slight variation in form is the addition of a pair of transverse lateral projections situated near the hook of the fitting. This feature is found on several examples recorded in the catalogue, two of which were excavated from St Frideswide's Priory, Oxfordshire (*275* and *276*; Figure 3-46) (Scull 1988, 39).

Pollard (1962, 17) and Gullick and Hadgraft (2008, 105) argue that hooked fastenings were introduced by the end of the fourteenth century. This is largely supported by the archaeological evidence. Although only 26 fittings of type A.3.1 derive from contexts that have been sufficiently dated, some interesting points can be made in terms of the dating of this type of book furniture. The example excavated from Bordesley Abbey, Worcestershire, was found in the church below the south choir stall in "dirt" accumulated in the sub-floor space (*57*; Figure 2-9) (Hirst and Wright 1983, 55). Stratigraphic and artefact evidence led the excavators to date this context to the fifteenth century, a time when the monastic church was undergoing alterations (Hirst and Wright 1983, 54-5; Astill *et al*. 2008). This fitting was found with a collection

FIGURE 2-10. *A copy of Bede's* Historia ecclesiastica *(San Marino, Huntington Library, HM 35300) retains its copper-alloy hooked fastenings of type A.3.1 and corresponding copper-alloy catch-plates, which are likely to date to the fifteenth century (San Marino, The Huntington Library 2003c). Scale 1:2.*

of other small metal objects, including pins and points presumably from the monks' clothing, a pen nib and a lead stylus, that had "slipped through the cracks between the floorboards of the timber stall" (Hirst and Wright 1983, 55). Although it is possible that this book fitting may be slightly earlier in date, it would presumably have been attached to a book that was in use during the fifteenth century when it was most likely accidentally lost in the monastic church. The remaining 25 artefacts have all been recovered from contexts that have been dated to the sixteenth century, particularly the time of the Dissolution, or later. Although only a small proportion of the total fastenings of this type have sufficient associated archaeological context, it is interesting to note that none of these have been recovered from contexts dated earlier than the fifteenth century. Nonetheless, it is possible that some of the 68 examples date prior to the fifteenth century as the archaeological evidence represents the time at which the fittings were deposited rather than when they were either manufactured or in use.

Surviving medieval binding evidence, from both England and mainland Europe, demonstrates that this type of fastening was commonly used on bindings from the fifteenth century. For example, a copy of Bede's *Historia ecclesiastica* (San Marino,
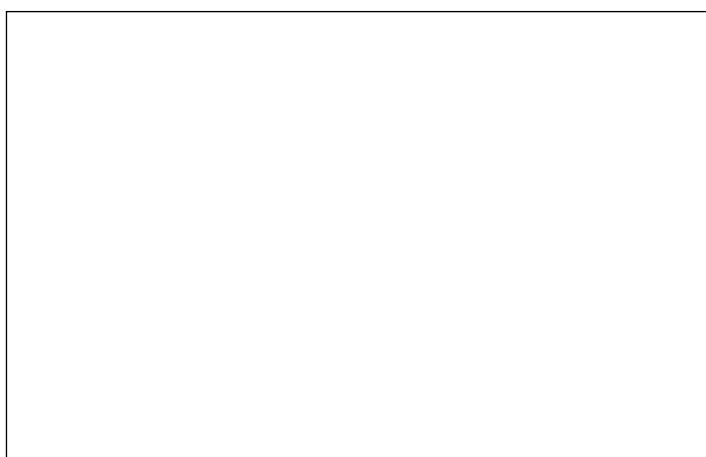
FIGURE 2-11. Here is the contemporary hooked fastening of type A.3.1 on a mid-fifteenth-century German manuscript (Lübeck, Stadtbibliothek, MS jur. 2º 7) (Adler 2010, 88).

Huntington Library, MS HM 35300) was written in England in two parts, one part at the end of the thirteenth century and the other in the middle of the fifteenth (Figure 2-10) (Dutschke 1989, 705-7). Its binding comprises whittawed leather over bevelled wooden boards, two copper-alloy hooked fastenings of type A.3.1 and two corresponding copper-alloy catch-plates. Due to the dating of the texts, the manuscript must not have been bound before the mid-fifteenth century. Although it is possible that the fittings could have been taken from another earlier binding, it is likely that these fastenings date to the mid- to late fifteenth century. Also, similar hooked fastenings on Continental bindings studied by Adler (2010, 25) have been generally dated between the mid-fourteenth and early sixteenth centuries. For example, a manuscript (Lübeck, Stadtbibliothek, MS jur. 2° 7) written in a fifteenth-century legal hand was bound by Johannes Fogel in Erfurt, Germany, between 1455 and 1461 and has a hooked fastening of type A.3.1 (Figure 2-11) (Adler 2010, 88). Additionally, on the sixteenth-century binding of a memorial book of the Holy Spirit from Leiden in the Netherlands (The Hague, Koninklijke Bibliotheek, MS 73 E 41), written in the early years of the century, a fishtail hooked fastening (A.3.1) survives (Adler 2010, 101).

A.4

A total of 16 hooked rectangular fastenings have been catalogued and further divided into 2 sub-categories (A.4.1 and A.4.2) based on variations in form. The key difference in form between these two types is that fastenings of type A.4.2 have an additional perforated, riveted lug situated near the hook. Four examples of type A.4.1 have been recorded from four different monastic sites. Fastenings of type A.4.2 make up the majority of artefacts identified as type A.4; 12 examples were found across eight monasteries. A relatively common characteristic of fittings of both types A.4.1 and A.4.2 is for the attachment end to have a decoratively cut edge. An example of type A.4.1 from St Augustine's Abbey (*78*; Figure 2-12) (Henig and Sherlock 1988, 193) has a relatively simple concave edge and central aperture compared to many of type A.4.2, which have a circular aperture with a notch either side or a trefoil-shaped cut-out, such as the example from Battle Abbey, East Sussex (*10*; Figure 2-12) (Geddes 1985, 160).

The stratigraphic evidence for type A.4 finds is limited in its efficacy for determining

10

78

120
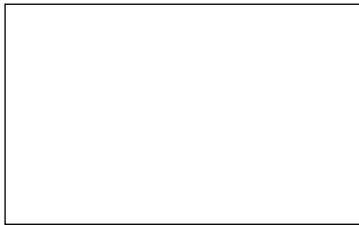
FIGURE 2-12. Book fastenings of type A.4: 10 from Battle Abbey, East Sussex (English Heritage, 793339), 78 from St Augustine's Abbey, Kent (English Heritage, 756297), 120 from Eynsham Abbey, Oxfordshire (Allen 2003, 266, no.53). Scale 1:1.

the date of this form of book fitting. Several artefacts have no surviving information regarding the contexts from which they were excavated. A total of nine fittings have been excavated from Dissolution and post-Dissolution contexts. Although this information is particularly useful for understanding the deposition of these items, it does not necessarily indicate that the fittings themselves were sixteenth-century in date. In conjunction with other forms of hooked book fastenings, it is likely that they are earlier in date, perhaps fourteenth- or fifteenth-century. One fitting from Eynsham Abbey, Oxfordshire, was excavated from a context that has been dated to the period between 1066 and 1109 (*120*; Figure 2-12) (Allen 2003, 265; Dodd and Hardy 2003, 29). Given the limited timescale of this phase of the site, a relatively high quantity of finds was recovered (Dodd and Hardy 2003, 29). Based on the form of this fitting in comparison to other types of medieval book fittings, the Eynsham artefact is in all probability later in date than the stratigraphic evidence from the site suggests.

The original bindings of extant late medieval books can shed more light on the dating and use of this type of book furniture. A fourteenth-/fifteenth-century book of grammar from Fountains Abbey, West Yorkshire (London, British Library, Add. MS 62132 A), survives in its original fifteenth-century binding of leather-covered

A.
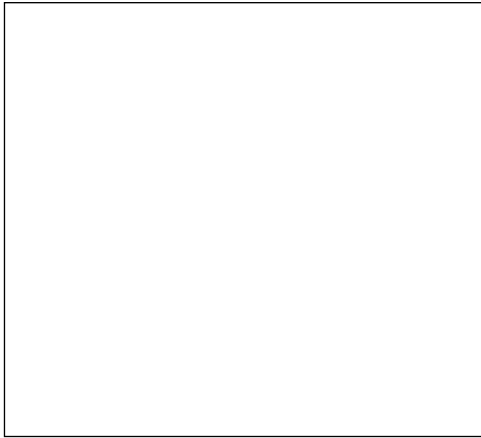
B.
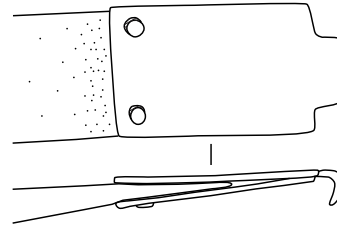
C.

FIGURE 2-13. Late medieval manuscripts with fastenings of type A.4: **A.** a fifteenth-century copy of Erfordia's Commentarii in Libros I-III Sententairum *(Leipzig, Universitätsbibliothek, MS 556) (Adler 2010, 89),* **B.** a fourteenth-/fifteenth-century book of grammar from Fountains Abbey, West Yorkshire (London, British Library, Add. MS 62132 A),* **C.** an early fifteenth-century Benedictine copy of Druthmarus' Expositio super evangelium secundum Matthaeum (Graz, Universitätsbibliothek, MS 382) (Adler 2010, 74).*

wooden boards with a hooked rectangular fitting of type A.4.1 (Figure 2-13, B.). This contemporary, *in situ* book fitting indicates that fixtures of this type were used on monastic books in the fifteenth century. The use of type A.4 fittings on manuscripts in the fourteenth and fifteenth centuries is also the case for Continental Europe. Adler (2010, 25) dates fittings comparable to those identified in this research as type A.4.2 to the fourteenth and fifteenth centuries. A fifteenth-century fitting of type A.4.2, for example, survives on a copy of Johannes de Erfordia's *Commentarii in Libros I-III Sententairum* (Leipzig, Universitätsbibliothek, MS 556) written in the first quarter of the fourteenth century (Figure 2-13, A.) (Adler 2010, 89). Also, a manuscript written *c.*1400 and owned by the Benedictine abbey of St Lambrecht in Sankt Lambrecht, Austria, contains Christianus Druthmarus' *Expositio super evangelium secundum*

Matthaeum (Graz, Universitätsbibliothek, MS 382) and has its original fifteenth-century fastening of type A.4.1 (Figure 2-13, C.). This fixture's form and also its decoration, which comprises an embossed design of acanthus leaves, are similar to those of late fifteenth-century fittings from Nuremberg, Germany, and Gdansk, Poland (Adler 2010, 74).

A.5

In total ten copper-alloy fittings have been classified as the hooked plates of all-metal fastenings (A.5). This element of an all-metal fastening is characterised by a plate with a projecting hook at one end and one or two lugs at the other, and it would have functioned in conjunction with anchor- and catch-plates (A.6). Three sub-categories are given in the typology (A.5.1-A.5.3). Type A.5.1 is the more prevalent form as eight out of the total ten fittings have been classified into this category. For types A.5.2 and A.5.3 a single artefact has been classified. The overall forms of the fittings of type A.5 recovered from English monastic sites are relatively simple compared to some found on manuscripts made on the Continent. A thirteenth-century Bible (London, British Library, Egerton MS 2908), made for a Franciscan friar in Italy, has a sixteenth-century German or Austrian binding of wooden boards covered with dark brown stamped leather and metal fittings. The fastening is of type A.5.1, but it is more elaborate in form than those recorded as part of this research. The artefacts in the catalogue are all simple, rectangular plates whereas the fitting from the Bible has a twisted central section (Figure 2-14). Excluding the single example of type A.8.5, which will be addressed later, type A.5 is the least common form of book fastening that functions by the hooked mechanism. As is the case with several other types of book fittings, there is limited archaeological information that can be used to date this form of book fitting. Two examples, one from St Andrew's Priory (**333**) (Ottaway and Rogers 2002, 2939) and one from Battle Abbey (**13**) (Hare 1985, 42-3), were both excavated from deposits associated with the Dissolution and dismantling of the monasteries in the sixteenth century (Figure 2-15). On the basis of the archaeological and manuscript evidence, it is likely that fixtures of type A.5 were used during the fifteenth and early sixteenth centuries.

The rarity of all-metal hooked book fastenings (A.5) on English monastic sites and manuscript bindings is replicated on the Continent. Studies on late medieval

bookbindings and fittings from mainland Europe indicate that this particular type of hooked, all-metal book fitting was a rare form (Szirmai 1999, 253; Adler 2010, 83). Adler (2010, 83) states that they were used mainly on elaborate bindings commissioned by wealthy individuals. These fittings were often produced in silver, requiring very precise work from the manufacturer or goldsmith, and were therefore expensive (Adler 2010, 83). The relatively simple nature of the copper-alloy examples excavated from the sites of English religious houses may represent a cheaper style of all-metal hooked fastening. Nevertheless, the rarity of this type of fixture on English sites may suggest that they were still an expensive piece of book furniture. It is significant that as many as seven of the total fittings of type A.5 have been recovered from three of the richer monasteries noted in the *Valor Ecclesiasticus* in 1535, those being St Augustine's Abbey, Fountains Abbey and Battle Abbey.

The comparability of the fittings found on English monastic sites and Continental examples also raises the possibility of the importation of book fittings of this type from the Continent. Due to the nature of the surviving evidence and the lack of manufacturing evidence, it can only be speculated that the all-metal fittings recovered from the sites of English monasteries may have been imported from
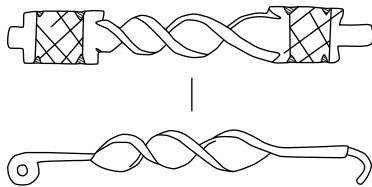
FIGURE 2-14. *The hooked fastening on the sixteenth-century binding of a thirteenth-century Bible (London, British Library, Egerton MS 2908). Scale 1:1.*

13

333

FIGURE 2-15. *Hooked fastenings of type A.5.1: **13** from Battle Abbey, East Sussex (English Heritage, 793204), **333** from St Andrew's Priory, North Yorkshire (Ottaway and Rogers 2002, 2937, no.15235). Scale 1:1.*

mainland Europe or produced in England by a foreign craftsman or under foreign influences. It is also possible that complete, bound manuscripts with this type of fastening themselves were imported.

A.6

Thirty-one anchor-/catch-plates, which were integral parts of the hooked fastening mechanism, have been identified from the catalogue. The majority of these (a total of 26) are rectangular with two projecting lugs holding a bar (A.6.2). Types A.6.1 and A.6.4 are each represented by a single fitting and three fixtures have been identified as type A.6.3. All examples of anchor-/catch-plates are made from copper alloy, but unlike the majority two have iron rivets (**19** and **222**). A single example also retains a piece of the leather that would have formed part of the book cover to which the fitting would have been attached (**290**). As discussed in the typology (see 2.6.1), a common feature of type A.6.2 fittings is to have a pointed end (Figure 2-16). This can be seen on 69 per cent (18 examples) of the fittings of this type.

114

153

312
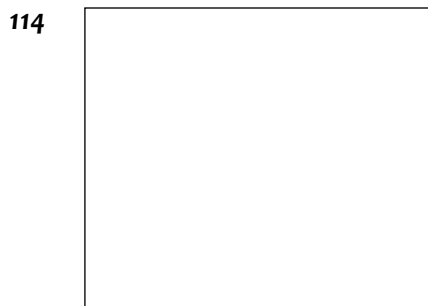
FIGURE 2-16. *Catch-plates of type A.6.2 with pointed ends: **114** from Denny Abbey, Cambridgeshire (Christie and Coad 1980, 258, no.43), **153** from Fountains Abbey, West Yorkshire (English Heritage, 671315.1), **312** from Roche Abbey, West Yorkshire (English Heritage, 765377.1). Scale 1:1.*

Anchor-plates and catch-plates functioned differently on the bindings of late medieval books. Anchor-plates, particularly those with projecting lugs, were a vital part of all-metal fastenings as they were hinged together with the hooked plate (A.5), and catch-plates were required by all types of hooked fastenings as the hooked fastening fitted onto the catch-plate to keep a book closed. Both of these, however, can be similar in form and this makes it difficult to accurately distinguish between anchor- and catch-plates in the archaeological record. From the general abundance of hooked fastenings of types A.3 and A.4 compared to the hooked elements of all-metal fastenings (A.5), it may be reasonable to believe that a greater proportion of the fittings of type A.6 are catch-plates rather than anchor-plates.

From the analysis of the forms of the four subcategories of type A.6, it has been possible to hypothesise how each type would have been attached to a book cover. The examination of extant manuscript bindings and their original fittings has been crucial for the corroboration of these findings. Types A.6.1 and A.6.3 are defined as rectangular and triangular plates respectively and both types have a rectangular perforation. Types A.6.2 and A.6.4 are again classified as rectangular and triangular plates respectively, however, they both have two lugs that hold a bar. Based on this distinguishing feature, it is likely that types A.6.2 and A.6.4 were produced from moulds and types A.6.1 and A.6.3 were made from sheet metal. From the evidence it is clear that fittings of type A.6.2 and A.6.4 were generally attached to the binding after the wooden boards were covered with leather. This can be seen on the probable fifteenth-century binding of a tenth-century German copy of Bede's *Breuis Explanatio Euangelii secundum Matheum* (London, British Library, Add. MS 23931), which retains its catch-plates of type A.6.2 (Figure 2-17). In comparison, the thin, flat plates of type A.6.1 and A.6.3 were typically attached directly onto the wooden boards of bindings, which were subsequently surrounded by a leather cover. A fourteenth-/fifteenth-century book of grammar from Fountains Abbey (London, British Library, Add. MS 62132 A) survives in its original fifteenth-century binding and clearly shows how a fitting of type A.6.1 was riveted onto the book cover prior to the addition of the leather covering (Figure 2-18, A.). How the examination of the decoration on such fittings has helped to substantiate these hypotheses is addressed in detail separately (see 2.8.1).

Only 45 per cent (14 examples) of type A.6 fittings have been excavated from datable contexts. The majority of these have been recovered from contexts dating to the Dissolution or post-medieval period. Only one fitting (**278**), from St Frideswide's
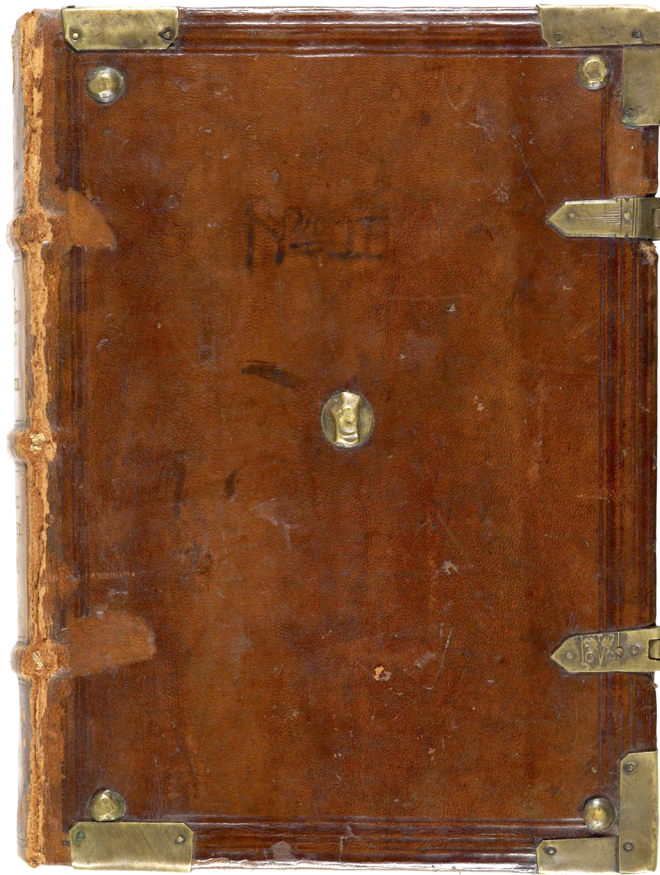
FIGURE 2-17. *The front cover of a copy of Bede's* Breuis Explanatio Euangelii secundum Matheum *(London, British Library, Add. MS 23931) (British Library Board 2015f). Scale 1:2.*

A.
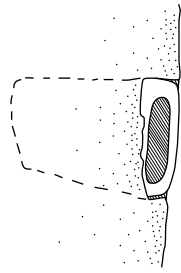
B.
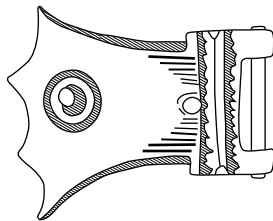
*FIGURE 2-18. Two catch-plates that survive on late medieval manuscripts held in the British Library, London: **A.** the catch-plate of type A.6.1 on Add. MS 62132 A, which was riveted onto the book cover prior to the addition of the leather covering, **B.** an early sixteenth-century catch-plate on the cartulary of Waltham Abbey, Essex (Add. MS 37665). Scale 1:1.*

Priory, came from a layer of gravelly loam containing no pottery later than the late fifteenth- or early sixteenth-century. This layer sealed the fill of late fifteenth-century features, and was presumably dumped to raise or level the cloister garth after the completion of its rebuilding (Scull 1988, 39, 66). The analysis of extant late medieval books expands upon this archaeological evidence for the dating of anchor-/catch-plates (A.6). The two fifteenth-century bindings on manuscripts (London, British Library, Add. MS 23931 and Add. MS 62132 A) already discussed demonstrate contemporary fittings of type A.6. They are also supported by the early sixteenth-century catch-plates on the cartulary of Waltham Abbey, Essex (London, British Library, Add. MS 37665) (Figure 2-18, B.). Although these sixteenth-century catch-plates are of a different form that is outside the scope of this research typology, they illustrate that such fittings were used in the early sixteenth century. The analysis of manuscript bindings from several Continental countries undertaken by Szirmai (1999, 254-62) further demonstrates the use of anchor-/catch-plates on fifteenth- and sixteenth-century bookbindings.

A.

B.

C.

D.
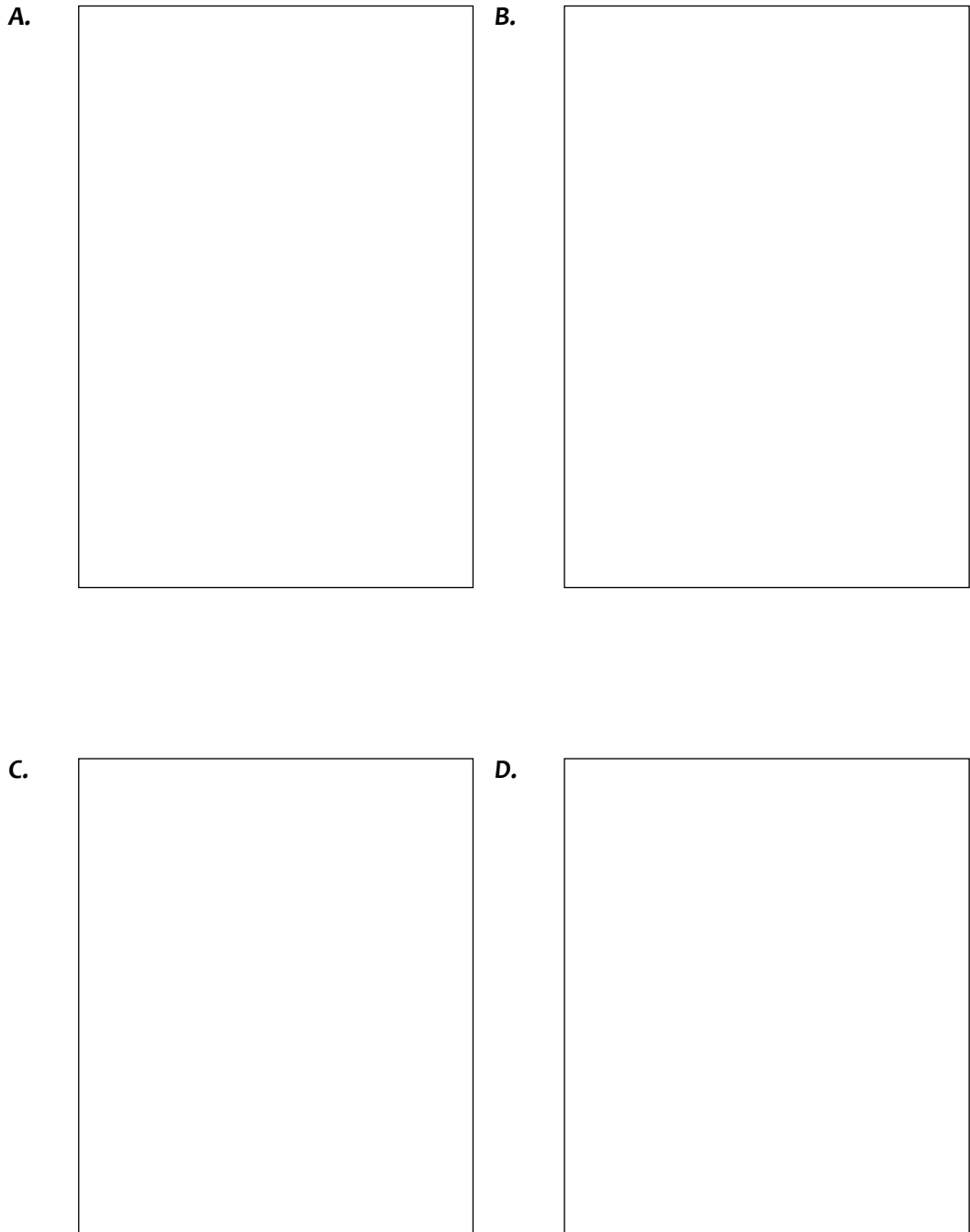
FIGURE 2-19. *Catch-plates on fifteenth- and sixteenth-century bindings from:* **A.** *the Netherlands (Szirmai 1999, 255, f, 256, a),* **B.** *France (Szirmai 1999, 262, g and h),* **C.** *Germany (Szirmai 1999, 259, a and b), and* **D.** *England (Szirmai 1999, 261, a and b).*

The analysis of European manuscripts also helps in the understanding of the provenance of different forms of anchor-/catch-plates. By comparing bindings with known provenances, it has become evident that there are certain differences in overall form and appearance. Szirmai (1999, 254-62) demonstrates the variety of forms of type A.6 that survive on the fifteenth- and sixteenth-century bindings of Continental manuscripts (Figure 2-19). In comparison, examples on English manuscripts that have previously been examined are much simpler in form than those of the same time period from the Netherlands, Germany, Italy and France (Szirmai 1999, 260). It is possible then that the relatively simple examples of anchor-/catch-plates that have been excavated from English religious houses and recorded in the catalogue are English products. Nonetheless, the catch-plates on the sixteenth-century cartulary belonging to Waltham Abbey (London, British Library, Add. MS 37665), which are similar to Continental examples, may well indicate a cultural exchange of forms and styles or the importation of foreign objects or craftsmen.

A.7

Fastenings of type A.7 consist of two rectangular plates and are the second most common type of fitting that has been recorded within this research catalogue: 51 artefacts have been recovered from 16 monastic sites across England. This type of fitting is usually made of copper alloy and its attachment on a strap is evident from the leather that survives between the plates of several examples in the catalogue. Fixtures of type A.7.1 can vary greatly in terms of size. In length they range from 17mm to 48mm and in width from 9mm to 38mm. Whilst the overall form of these fittings remains the same, it is not uncommon to find examples with decoratively cut edges. A total of 12 artefacts have decoratively cut edges, the most common form being notches or cusps cut into the short edges of the rectangular fittings. Particularly decorative examples have been recovered from the Dominican priory in Guildford, Surrey (*206, 209* and *210*) (Poulton and Woods 1984, 76), the Whitefriars in Coventry, Warwickshire (*107*) (Woodfield 1981, 94), and Fountains Abbey (*159* and *170*) (Figure 2-20).

Several late medieval manuscripts retain their original bindings and fastenings of type A.7.1. An early twelfth-century copy of Augustine's *Against Heresy* (San Marino, Huntington Library, MS HM 31151) was written in the scriptorium of Bury St Edmunds

107

159

209
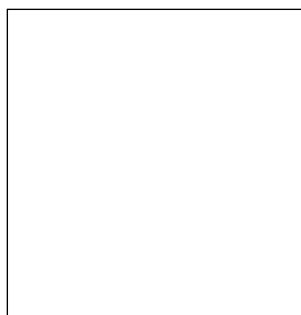
FIGURE 2-20. *Decorative fastenings of type A.7.1:* **107** *from the Coventry Whitefriars, Warwickshire (Woodfield 1981, 92, no.43),* **159** *from Fountains Abbey, West Yorkshire (English Heritage, 671163),* **209** *from the Guildford Blackfriars, Surrey (Poulton and Woods 1984, 75, no.16). Scale 1:1.*

Abbey, Suffolk, and retains its twelfth-/thirteenth-century binding (Figure 2-21) (Dutschke 1989, 697-9). The manuscript is bound in parchment over oak boards and the remains of a whittawed leather chemise under the rear pastedown is evident. The double rectangular fastening (A.7.1) is attached to a pink leather strap, thought to be a later medieval addition to the binding (Dutschke 1989, 698). This strap is likely to indicate a later repair, but it is possible that the fitting may have been reused. Also, a book of statutes (San Marino, Huntington Library, MS HM 906) written in England in the second half of the fourteenth century retains its contemporary binding, which includes a fastening of type A.7.1 that has notches along its edges (Figure 2-22) (Dutschke 1989, 262-5). A later manuscript with this type of fastening is a terrier of the Somerset estates of Glastonbury Abbey (London, British Library, Egerton MS 3034) written between 1514 and 1517. It retains its pre-1600 binding of white leather over wooden boards together with its fixtures. Its fastening is of type A.7.1 and has notches in the corners to create a trefoil effect (Figure 2-23). Similar fittings are sometimes found on medieval books on the Continent. Held in the abbey library of St Gall, Switzerland, which is one of the earliest and most important monastic libraries, a fourteenth-century psalter with chants (St Gall, Stiftsbibliothek, Cod. Sang. 24),

Figure 2-21. *The twelfth-/thirteenth-century binding of MS HM 31151 in the Huntington Library, San Marino, California, has a fastening of type A.7.1, which may be a later medieval addition (San Marino, The Huntington Library 2003d). Scale 1:2.*

FIGURE 2-22. This late
fourteenth-century book
of statutes (San Marino,
Huntington Library, MS HM
906) retains its contemporary
fastening of type A.7.1 that
has notches along its edges
(San Marion, The Huntington
Library 2003e). Scale 1:1.
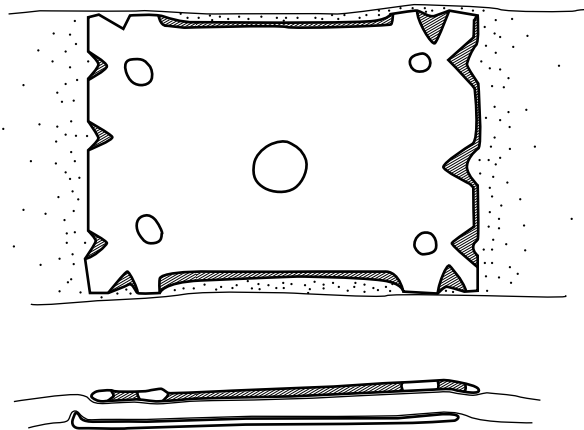
FIGURE 2-23. Here is the
fastening of type A.7.1
that survives on a terrier
of the Somerset estates of
Glastonbury Abbey (London,
British Library, Egerton MS
3034) written between 1514
and 1517. Scale 1:1.

for example, retains its two copper-alloy rectangular plates that are riveted to the leather strap attached to the book cover (Adler 2010, 72).

From the analysis of Continental manuscript bindings, Szirmai (1999, 168) has interpreted this type of book fitting (A.7) as a simpler form of the hinged plate and loop fastening (A.1). Based on the analysis of book furniture from several European countries, Adler (2010, 10) suggests a date of 1250-1450 for this particular form. From the analysis of the physical features of both types, during the completion of this research, there is no reason to dispute these interpretations. Based on this observation it is likely that types A.1 and A.7 are similar in date. The archaeological evidence for dating this form of book fastening, however, is limited. Of the 51 examples recorded only ten have suitable stratigraphic information. Most of these were excavated from Dissolution or post-Dissolution phases, such as two from Battle Abbey that were found in a rubbish layer attributed to events of the Dissolution (**22** and **23**) (Hare 1985, 42-3). For one example from Norton Priory, Cheshire, it is only known that it was excavated from the medieval phase of the site, from the foundation of the monastery to its Dissolution (1134-1536) (**270**) (Brown and Howard-Davis 2008, 382). Nonetheless, two examples excavated from Bordesley Abbey may be given more firm dates. Both were found in fifteenth-century contexts, one in the choir of the church (**60**) and the other in the room just east of the *vestiarium* off the eastern cloister walk (**59**) (Burrow 1983, 116; Hirst and Wright 1983, 55). Based on the stratigraphy of the site and other artefact evidence, the fittings cannot be later in date. Although more precise dates cannot be given for this form of fitting, or a chronology of its use, the typological and archaeological evidence together with the manuscript evidence, both English and Continental, demonstrate that type A.7 fastenings were used through the later medieval period.

A.8

In comparison to other types of fastenings, type A.8 has the most variations in overall form. Its general form comprises a rectangular plate that is folded widthways in order for it to fit onto the end of a leather strap and can function either by the strap-and-pin or hooked mechanisms. Yet, only 12 examples out of the total 248 fastenings have been identified. The most common variation is A.8.1 with five examples, followed by A.8.4 with three examples, then A.8.2 with two, and types A.8.3 and A.8.5 are

173

321

330
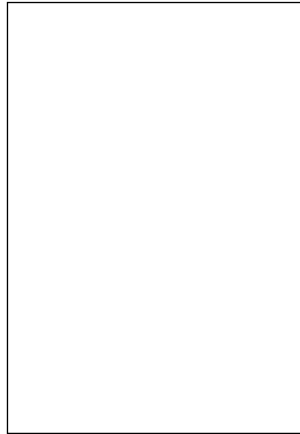
*FIGURE 2-24. Book fastenings of type A.8: **173** from Fountains Abbey, West Yorkshire (English Heritage, 671148), **321** from Sopwell Priory, Hertfordshire (Johnson 2006, no.SF12), **330** from Witham Priory, Somerset (Burrow and Burrow 1990, 174, no.7). Scale 1:1.*

each represented by a single example. All examples of type A.8 are made of copper alloy, and two retain fragments of leather indicating their prior attachment to a strap (**204** and **330**). As well as the variations in form, fixtures of type A.8 vary in size. The complete examples in the catalogue range in length from 21mm to 57mm and in width from 13mm to 24mm. The fitting of type A.8.5 is unlike the other forms as it tapers towards its hooked end and its width ranges from 11mm to 16mm (**330**). As with other forms of strap-and-pin book fastenings, type A.8 fittings often had a decoratively cut edge at the strap attachment end. Within the catalogue 42 per cent (five examples) of the fittings of this type have a shaped edge (Figure 2-24); two have a series of notches (**30** and **173**), two have cusps cut into the edge (**204** and **321**), and one has a combination of notches and cusps (**330**).

One example of type A.8.1 is found on a twelfth-century copy of Jerome's *Commentaries on Isaiah and Ezekiel* (London, British Library, Egerton MS 3776) (Figure 2-25). The contemporary binding of whittawed leather over oak boards originally had two fastenings that functioned via the strap-and-pin mechanism; this is evident from holes in the back cover, which would have been for two sets of pins and base-
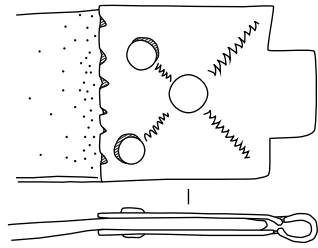
FIGURE 2-25. *The type A.8.1 fastening attached to the cover of Egerton MS 3776 held in the British Library, London. Scale 1:1.*
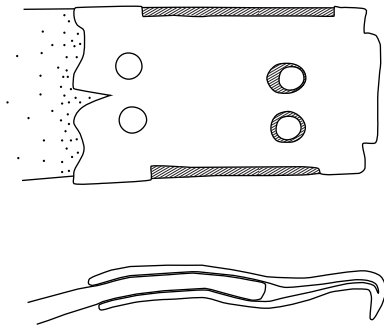
FIGURE 2-26. *The copper-alloy fitting of type A.8.5 on the fifteenth-century binding of a* martyrologium *(London, British Library, Add. MS 22285) that belonged to the Bridgettine abbey of Syon, Middlesex. Scale 1:1.*

plates (A.11), and remnants of two straps on the front cover. The binding was altered in the sixteenth century with the addition of a white strap, secured to the front cover by way of a decorated metal plate, with a fastening of type A.8.1 attached and the addition of a pin and base-plate of type A.11.1. This is thought to be a possible restoration of the original fastening (British Library Board 2015c). It is unknown if the original fittings survived to the sixteenth century but were damaged or if they were already lost by the time the manuscript was altered. If both original fittings survived but were in much need of repair by the sixteenth century, it is possible that only one would have been able to be reattached, as the strap and pin could only have been placed in between the locations of the original fittings.

The datable evidence for this form of book fastening is particularly limited. Only four examples have been excavated from dated contexts, all of which are Dissolution or post-Dissolution in date (*30, 89, 204* and *321*). There is, however, an example that survives on an extant medieval monastic book that has not been repaired or rebound; on the fifteenth-century binding of a *martyrologium* (London, British Library, Add. MS 22285) that belonged to the Bridgettine abbey of Syon, Middlesex, survives a copper-alloy fastening of type A.8.5 (Figure 2-26). The relative rarity of type A.8 fittings on

78

English monastic sites and English books is mirrored on the Continent. Within Adler's (2010) typology no fitting similar to those of type A.8 is classified. The unusual forms of fittings of the five subcategories of type A.8 and the paucity of surviving examples, both in England and on the Continent, perhaps suggests that they were more bespoke than other variations of late medieval book fittings. Other factors that may have influenced the use of such fittings, including monastic orders and geography, are discussed later (see 5.3 and 5.4).

A.9

One of the less common forms of fastenings identified is type A.9 with only three examples recorded. Such fittings would have been cast as one piece and consist of three elements: a rectangular and hollow attachment end, a boss with a circular depression in its underside and a projecting terminal loop often with a separate ring attached at its apex. Category A.9.1 is represented by a single example (*248*) and two fittings have been classified as type A.9.2 (*252* and *253*) (Figure 2-27). All three fittings are made from copper alloy. Two retain evidence of gilding, both of which contain remnants of the straps on which they would have been secured, one made of leather (*252*) and the other a tabby weave textile (*253*) (Stevenson *et al.* 2011, 150). The varying feature that defines the two subcategories of type A.9 is the shape of the boss, which in this case is either circular (A.9.1) or lozenge-shaped (A.9.2). Compared to other types of book fittings, the form of this type of fastening is perhaps the most elaborate in form. The two examples of type A.9.2 (*252* and *253*), both of which were excavated from St Mary Graces Abbey in London (Stevenson *et al.* 2011, 150), are particularly elaborate in form as they also have two projecting arms extending from the lozenge-shaped boss before extending into the terminal. Similar fittings from Continental Europe have been classified by Adler (2010, 18), however, they are not cast as one piece. They generally consist of a cast front plate with a circular domed boss or cap to sit over a pin and a projecting terminal loop to hold a cord, and a separate back plate (Figure 2-28).

The binding of the 'Tollemache Orosius' (London, British Library, Add. MS 47967) demonstrates how fastenings of this type would have once fitted onto the ends of straps anchored to the covers of books (Figure 2-29). This manuscript was written in England in two parts, the first part between *c.*892 and *c.*925 and the second

248

252

253

FIGURE 2-27. Book fastenings of type A.9: **248** *from the London Charterhouse (Museum of London Archaeological Archive, MED89 <1>),* **252** *and* **253** *from St Mary Graces Abbey, London (Museum of London Archaeological Archive, MIN86 <15> and <1939>). Scale 1:1.*

FIGURE 2-28. A schematic drawing of a similar fitting to those of type A.9 from Continental Europe (Adler 2010, 18).

FIGURE 2-29. *The binding of the 'Tollemache Orosius' (London, British Library, Add. MS 47967 fol. 5v) retains its fifteenth-century fastenings of type A.9.2 that are inscribed with 'ihc' and 'm' (British Library Board 2015d). Scale 1:2.*

during the latter half of the tenth century. It is thought that the original binding was altered in the fifteenth century when the Anglo-Saxon boards were covered with white leather and metal fastenings of type A.9.2 inscribed with 'ihc' and 'm' were added (Figure 2-74, A. and B.) (British Library Board 2015d). This suggests that these fastenings are fifteenth-century in date. The two examples of type A.9.2 recorded in the catalogue were both excavated from the Cistercian abbey of St Mary Graces in London (**252** and **253**) (Stevenson *et al.* 2011, 150). Despite being found in contexts attributed to the victualling yard phase of the site (1560-*c.*1660), it is thought that the two fittings are late fourteenth-century in date (Stevenson *et al.* 2011, 150). The emblematic monograms used on these fittings, which are discussed in greater detail below (see 2.8.4), suggest a fourteenth- to fifteenth-century date for these artefacts. Although not quite the same as fittings of type A.9, similar fittings have been found in small numbers on the Continent and are thought to have been used between the thirteenth and fifteenth centuries (Adler 2010, 18). Therefore, both the manuscript and archaeological evidence suggest that this type of fitting was used towards the end of the late medieval period.

174

Figure 2-30. *Fastening of type A.10.1 recovered from Fountains Abbey, West Yorkshire (English Heritage, 671210). Scale 1:1.*

Figure 2-31. *Fastening of type A.10.1 found in Fulford, near York, recorded through the Portable Antiquities Scheme (SWYOR-D9A074) (PAS/Trustees of the British Museum, 2003-2015c, SWYOR-D9A074). Scale 1:1.*

A.10

A single fixture of type A.10.1 has been catalogued, making this the least common form of book fitting (*174*; Figure 2-30). Although this type of fastening is unique within this research catalogue, a parallel fitting has been recorded through the Portable Antiquities Scheme (PAS) (SWYOR-D9A074; Figure 2-31) (PAS/Trustees of the British Museum 2003-2015c). Fittings of this type would have functioned in the same way as other types of book fittings identified in the typology using the strap-and-pin mechanism. As with the majority of book fittings recorded in this catalogue, the single example of type A.10.1 is made from a copper alloy. It is, however, one of only four catalogued book fastenings to have enamel as a secondary material. Evidence for the dating of this form of fitting is particularly limited given that only one example has been recorded. Nevertheless, based on the form of this fitting and also its decorative characteristics, which are considered later (see 2.8.5), it is thought that this artefact is twelfth-century in date (English Heritage object management database, accessed 7 December 2011, 671210). Unlike many of the book fastenings already discussed, a comparable example on an extant medieval bookbinding has not yet been found. Nevertheless, the physical features of this type of object are characteristic of late medieval book fittings and consistent with those identified as part of this research.

A.11

In order for strap-and-pin fastenings to fulfil their purpose of keeping a book in the closed position, a corresponding pin and base-plate (A.11) were required. A total of 22 fastenings of type A.11 have been identified in the catalogue. The base-plate of type A.11 is square in shape and the plates range in size from 11mm to 29mm. Two subcategories of type A.11 have been created within this typology. The variation in form between A.11.1 and A.11.2 is that the former has a flat square base-plate (*49*; Figure 2-32) and the latter has a domed square base-plate (*242*; Figure 2-32). Type A.11.1 is the more common form with 19 items identified whereas type A.11.2 is represented by only three examples. Only three complete examples of type A.11 have been identified (*82*, *109* and *110*) (Figure 2-32), and of the remaining 19 fittings, only the base-plate survives.

Whilst the general form of these fittings does not change, it is common to find

49
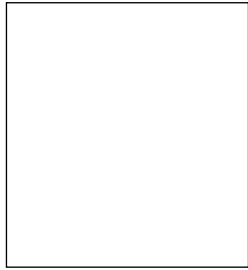
109
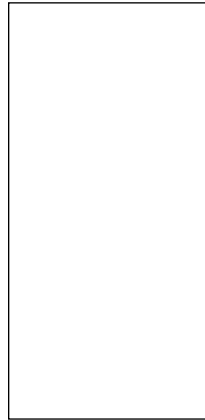
110

176

215

242
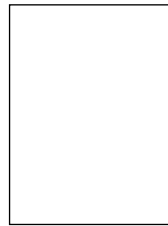
272

334
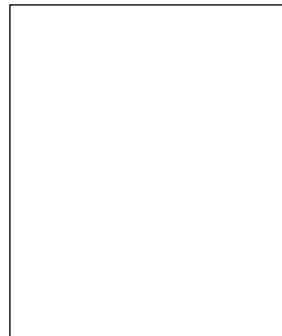
FIGURE 2-32. *Book fastenings of type A.11:* **49** *from Bermondsey Abbey, Surrey (Dyson et al. 2011, 253, no.S135),* **109** *and* **110** *from the Coventry Whitefriars, Warwickshire (Woodfield 1981, 96, nos.84 and 85),* **176** *from Fountains Abbey, West Yorkshire (English Heritage, 671126.2 B),* **215** *from the Guildford Blackfriars, Surrey (Poulton and Woods 1984, 77, no.29),* **242** *from Kirkstall Abbey, West Yorkshire (Moorhouse and Wrathmell 1987, 133 , no.179),* **272** *from the Oxford Blackfriars (Lambrick and Woods 1976, 215, no.10),* **334** *from St Andrew's Priory, North Yorkshire (Ottaway and Rogers 2002, 2939, no.15239). Scale 1:1.*

210
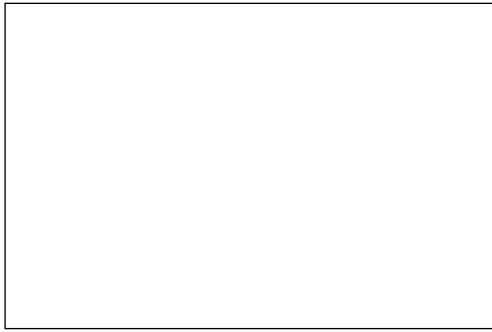
212

FIGURE 2-33. Two strap-and-pin fittings, 210 of type A.7.1 and 212 of type A.11.1, both excavated from below the choir stalls of the Guildford Blackfriars, Surrey (Poulton and Woods 1984, 76, nos.25 and 26). Scale 1:1.

examples with notches cut into their edges. Most typically, fittings have a single notch in the centre of each edge creating a quatrefoil effect, such as **109** from the site of the Carmelite friars in Coventry (Figure 2-32) (Woodfield 1981, 95). There are a few examples that have multiples notches, including **334** from St Andrew's Priory (Ottaway and Rogers 2002, 3147) and **110** from the Coventry Whitefriars (Woodfield 1981, 95) (Figure 2-32). A variation of this feature is the presence of cusps rather than notches cut into the edge. This can be seen on an example from the Dominican priory in Oxford (**272**; Figure 2-32) (Lambrick and Woods 1976, 216). Two fittings of type A.11 that are more elaborate in form are from the site of the Guildford Blackfriars and they have both cusps and notches cut into their edges to create a trefoil shape in each corner (**212** and **215**; Figures 2-32 and 2-33) (Poulton and Woods 1984, 76). It is possible that fitting **212** would have been used along with the A.7.1 fastening also found at this site (**210**) (Figure 2-33). Both fittings were excavated in the same context (Poulton and Woods 1984, 79) and both are very similar in terms of their decoratively cut edges. Another variation in form that occurs on A.11 fittings recorded in this catalogue is the presence of bevelled edges. Two examples have been found at Fountains Abbey (**175** and **176**) (Figure 2-32) and another at Bermondsey Abbey (**49**; Figure 2-32) (Dyson *et al.* 2011, 253).
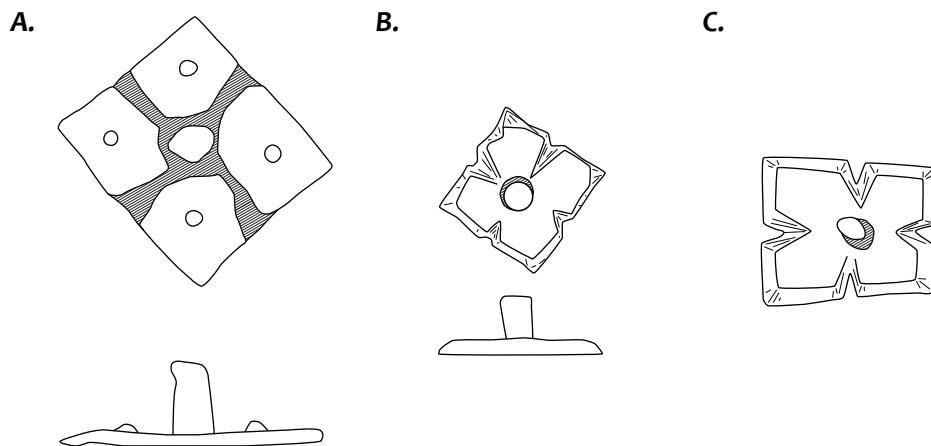
FIGURE 2-34. *(Above, top) Fastenings of type A.11.1 that survive on late medieval manuscripts in the British Library, London:* **A.** *the early sixteenth-century binding of the survey of the estates of Glastonbury Abbey (Egerton MS 3034),* **B.** *the original binding of a twelfth-century copy of Jerome's* Commentaries on Isaiah and Ezekiel *(Egerton MS 3776),* **C.** *the late fifteenth- or early sixteenth-century binding of a twelfth-century Cistercian missal (Add. MS 46203). Scale 1:1.*

FIGURE 2-35. *(Above) The fitting of type A.11.1 on the probable fifteenth-century binding of writings on Boniface VIII's Sixth Book of the Decretals (Hereford, Cathedral Library, MS O. VII. 5) (detail). Scale 1:1.*

The contemporary bindings of surviving medieval books demonstrate how these pins and base-plates were used with different types of strap-and-pin book fastenings. For example, an early fifteenth-century manuscript containing several theological works (Lübeck, Stadtbibliothek, MS theol. lat. 4° 142) has a fastening of type A.1.1 and corresponding pin and base-plate, albeit triangular in form rather than square (Figure 2-8) (Adler 2010, 72). Alternatively, the early sixteenth-century binding of the survey of the estates of Glastonbury Abbey (London, British Library, Egerton MS 3034) has a fastening of type A.7.1 that fits onto a pin and base-plate of type A.11.1 (Figure 2-34, A.). Also, the original medieval binding of a twelfth-century copy of Jerome's *Commentaries on Isaiah and Ezekiel* (London, British Library, Egerton MS 3776) has a pin and base-plate of type A.11.1, which receives a fastening of type A.8.1 (Figure 2-34, B.).

The archaeological evidence gathered for this research does not provide sufficient information for dating this type of fastening. Of the 22 artefacts of type A.11, only seven have been excavated from contexts that have been broadly dated. A single example from Bordesley Abbey was found in a fifteenth-century context in the south choir stall in the church (*61*) (Hirst and Wright 1983, 55). The remaining six artefacts were all excavated from sixteenth-century, or later, contexts (*49*, *109*, *110*, *239*, *271* and *334*). This, however, does not realistically reflect the dates of these artefacts. It has already been made clear that strap-and-pin fastenings were commonly used on bindings throughout the late medieval period. Therefore, the bindings of late medieval books can offer some insight into the dating and usage of pin and base-plates (A.11). In fact, these fittings often survive on bindings more so than their corresponding straps and fastenings as these were frequently removed in the late sixteenth and seventeenth centuries as library storage facilities changed (see 5.5). This is the case for the late fifteenth- or early sixteenth-century binding of a twelfth-century Cistercian missal (London, British Library, Add. MS 46203), which most likely belonged to Rievaulx Abbey. It retains its pin and base-plate of type A.11, but the strap and fastening have since been lost (Figure 2-34, C.). From Hereford Cathedral Library, the collections of which underwent a programme of binding repair and complete rebinding in the early seventeenth century, an early fourteenth-century copy of writings on Boniface VIII's *Sixth Book of the Decretals* (Hereford, Cathedral Library, MS O. VII. 5) retains its probable fifteenth-century binding and two fittings of type A.11.1, but not its straps and fastenings (Figure 2-35).
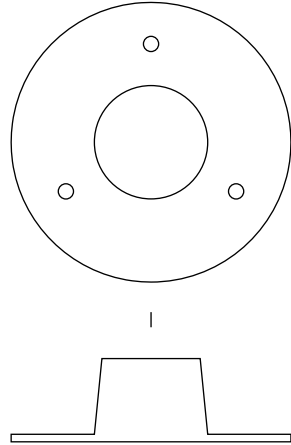
FIGURE 2-36. *A schematic drawing of furnishing type B.1.1.*

2.7.2 FURNISHINGS

Book furnishings comprise the second functional category of this typology of late medieval book fittings and were used on late medieval bookbindings to protect the leather or textile covers from abrasion and damage. A total of seven broad types of book furnishings (B.1-B.7) have been defined in the typology (see 2.6.2) and analysed for this research.

B.1

The most prevalent form of furnishing is the domed boss (B.1) with 42 examples identified, comprising nearly half of the total furnishings recorded. Based on form, the recorded examples of late medieval domed bosses, all of which are made of copper alloy, have been classified into seven different subcategories (B.1.1-B.1.7). As will be discussed (see 5.2.2), domed bosses were generally placed in the corners of book covers, often on both the front and back, although there are surviving manuscripts that have domed bosses situated in the centre of bindings as well.

Considering that as many as ten furnishings of this type could have been attached to a single binding, it is not surprising that domed bosses are the most common type of furnishing in this catalogue. Although, compared to several other types of book fittings, especially fastenings, and the often large numbers of books that monasteries held, domed bosses are not particularly common in the archaeological record.

Type B.1.1 (Figure 2-36) is the most common form of domed boss as some 23 examples have been identified, representing 55 per cent of the total 42 fittings of type B.1. The distinguishing characteristics of furnishings of this type are its circular shape and the presence of a flange, but the nature of the boss can vary as it can be either solid or hollow. A total of nine artefacts have a solid boss, 13 have a hollow boss, and one is undetermined as associated information was limited and the item itself was inaccessible as it was on display at the time data collection for this research was completed. Of the 13 fittings with a hollow boss, a single example, which was excavated from Roche Abbey, West Yorkshire, has been filled with a lump of material thought to be lead (*316*). The production methods of furnishings of type B.1.1 can also affect the overall look of these fittings. Domed bosses of this type were cast or worked from sheet metal using die blocks and ball punches (Szirmai 1999, 263; Adler 2010, 41-2). Casting produced a more prominent and generally solid domed boss, whereas working a sheet with a dapping-die produced a hollow 'half-dome' (Szirmai 1999, 265). This distinction can be seen clearly when comparing examples from Rievaulx Abbey (*297*) and Roche Abbey (*316*) (Figure 2-37). The use of these two techniques for producing domed bosses of this type is also evident from extant manuscripts from the Continent. For example, a cast, solid domed boss can be seen on the fourteenth-century binding of a manuscript held in the National Library of the Netherlands (RM B 75) (Figure 2-37, A.) (Adler 2010, 77). A half-domed boss that would have been produced from working sheet metal still survives on the binding, dated *c.*1400, of a twelfth-century copy of the *Letters* of Jerome (Graz, University Library, MS 86) (Figure 2-37, B.) (Adler 2010, 80).

Excluding one example (*335*), all fittings of type B.1.1 were recovered during excavations or clearances undertaken by the Ministry of Works in the early twentieth century. As a consequence, no information concerning the dates of the contexts in which these items were found is recorded. In order to assess the dating of these artefacts, it is necessary to examine surviving manuscript bindings. An important example that demonstrates that furnishings of this type were used from the twelfth century is the original binding of a *Glossa ordinaria* on Genesis (London, British

297

316

A.
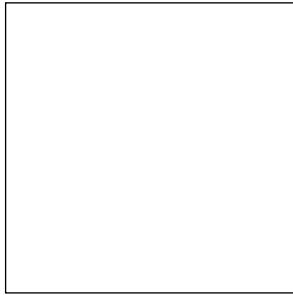
B.
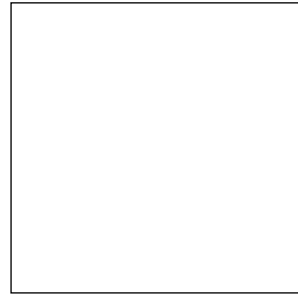
C.
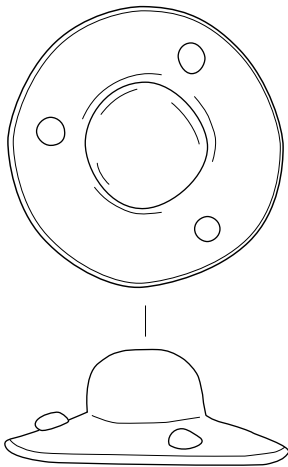
D.
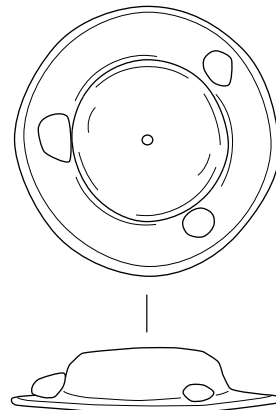
FIGURE 2-37. *Domed bosses of type B.1.1:* **297** *from Rievaulx Abbey, North Yorkshire (English Heritage, 85000270),* **316** *from Roche Abbey, West Yorkshire (English Heritage, 765379),* **A.** *from a fourteenth-century binding held in the National Library of the Netherlands (RM B 75) (Adler 2010, 77),* **B.** *from the early fifteenth-century binding of a twelfth-century copy of the* Letters of Jerome *(Graz, University Library, MS 86) (Adler 2010, 80),* **C.** *from the original binding of a twelfth-century* Glossa ordinaria on Genesis *(London, British Library, Add. MS 63077),* **D.** *from the early sixteenth-century survey of the Somerset estates of Glastonbury Abbey (London, British Library, Egerton MS 3034). Scale 1:1, except* **A.** *and* **B.**
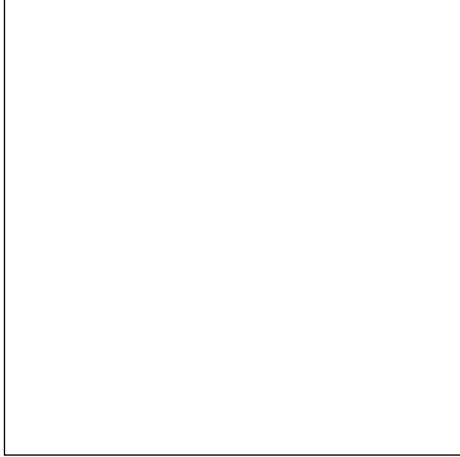
FIGURE 2-38. Domed boss
of type B.1.1 on the late
fifteenth-century binding
of a fourteenth-century
copy of Peter Comestor's
Historia scholastica *(Graz,
Universitätsbibliothek, MS 141)
(Adler 2010, 104).*

Library, Add. MS 63077), which dates to the second half of the twelfth century. Four
domed bosses of type B.1.1 originally adorned and protected the back cover of this
manuscript, although only two survive (Figure 2-37, C.). A fifteenth-century English
binding of a manuscript (London, British Library, Add. MS 22573), which contains
lessons from the four Gospels, originally had eight circular domed bosses, possibly of
a slightly later date, one of which is missing (British Museum 2012, 14). The furnishings
are of a very similar form to those of type B.1.1, however, they are not riveted to the
cover through the flange but most likely through an integral rivet projecting from the
underside of the boss itself. A later manuscript with type B.1.1 furnishings is an early
sixteenth-century survey of the Somerset estates of Glastonbury Abbey (London,
British Library, Egerton MS 3034), and this manuscript retains eight of its original
nine bosses (Figure 2-37, D.). On the Continent similar bosses are often known as
Kardinalshut (German for 'Cardinal's hat') because of their shape, and they were used
in the fifteenth and sixteenth centuries (Adler 2010, 39). Examples can be seen on
the late fifteenth-century binding of a fourteenth-century copy of Peter Comestor's
Historia scholastica (Graz, Universitätsbibliothek, MS 141) (Figure 2-38) (Adler 2010,
104). These are slightly different to those found archaeologically in England as they

are affixed to book covers by integral nails, and this is thought to be the case for those on the fifteenth-century book of Gospels mentioned above.

The second most common variation of domed boss is type B.1.2. It is similar to type B.1.1 in that it has a circular domed boss, however, it has tabs rather than a flange for its attachment to a book cover. Six examples have been identified in total (Figure 2-39). The majority of these fittings have a total of four tabs and they have been found across three monastic sites: Fountains Abbey (*189*), Bermondsey Abbey (*50-52*) (Egan 2011, 246) and Denny Abbey, Cambridgeshire (*115*) (Christie and Coad 1980, 257). Only one artefact, from St Augustine's Abbey, has three tabs (*83*) (Henig and Woods 1988, 215). The tabs of these fittings vary in form; three examples have trefoil-shaped tabs (*52*, *83* and *189*), two fittings have pointed tabs (*50* and *51*) and a single fitting has rounded tabs (*115*).

The artefact of this type from Denny Abbey (*115*) was excavated from a context dating to the Franciscan phase of the site (1339-1539) (Christie and Coad 1980, 257). Three fittings from Bermondsey Abbey (*50-52*) were recovered from contexts of the period following the dissolution of the abbey and the development of Bermondsey House (1538-1650) (Egan 2011, 246). These fittings were excavated from post-medieval mansion gardens that were originally the sites of the monastery's cemetery and cloister garth (Dyson *et al.* 2011, 163-4). Similar fittings have been found on northern German and Belgian bookbindings dating between the late fourteenth and mid-sixteenth centuries (Figure 2-39, A. and B.) (Adler 2010, 40, 104).

Type B.1.3 is a relatively uncommon variation of domed boss (B.1), in this current study only three examples have been identified. The square plates, with central domed bosses, can vary slightly in form as their edges are sometimes ornately shaped. Two fittings have decoratively cut edges; one of these was excavated from Fountains Abbey (*190*; Figure 2-40) and the other was found at the cathedral and priory of St Mary, Coventry (*97*; Figure 2-40) (Rylatt *et al.* 2003, 126). This example was recovered from a layer of early-sixteenth-century burning attributed to the destruction of books at the time of the suppression of the monastic community (Rylatt and Mason 2003, 43-4). Whilst the stratification of this context is apparent, it only tells us when this book furnishing was destroyed not when it was made or in use. Parallel examples of this type of book furnishing survive on the contemporary bindings of extant medieval books and these can offer more on the dating of these objects. A particularly good example is a copy of the English Benedictine monk Ranulf

50

51
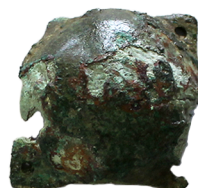
52

83

115

189

A.

B.

FIGURE 2-39. *Domed bosses of type B.1.2:* **50, 51** *and* **52** *from Bermondsey Abbey, Surrey (Museum of London Archaeological Archive, BA84 <802>, <561> and <360>),* **83** *from St Augustine's Abbey, Kent (English Heritage, 765715),* **115** *from Denny Abbey, Cambridgeshire (Christie and Coad 1980, 256, no.35),* **189** *from Fountains Abbey, West Yorkshire (English Heritage, 671190),* **A.** *from the binding of a fifteenth-century missal held in the Stadtarchiv Stralsund (Adler 2010, 76),* **B.** *used between the late fourteenth and the mid-sixteenth century in the Baltic Sea area (Adler 2010, 104). Scale 1:1, except* **A.** *and* **B.**

97

190
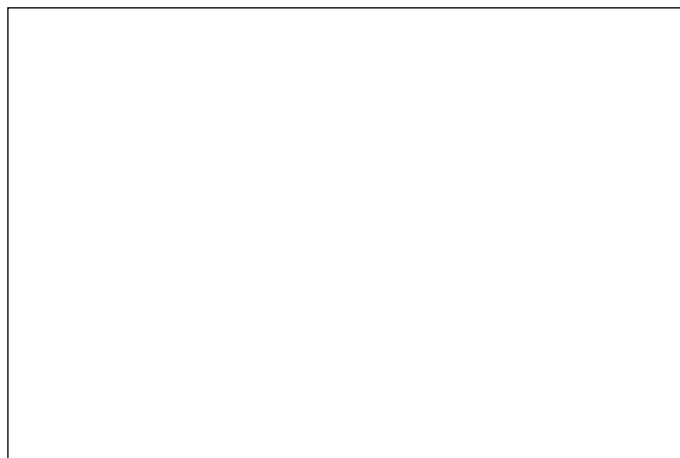
FIGURE 2-40. *(Above, top) Domed bosses of type B.1.3:* **97** *from Coventry Cathedral Priory, Warwickshire (Rylatt and Mason 2003, 127, no.m),* **190** *from Fountains Abbey, West Yorkshire (English Heritage, 671161). Scale 1:1.*

FIGURE 2-41. *(Above, centre) One of the seven surviving furnishings of type B.1.3 on the late fifteenth-century binding of a copy of Ranulf Higden's* Polychronicon *(San Marino, Huntington Library, MS HM 28561) (detail) (San Marino, The Huntington Library, 2003f). Scale 1:1.*

FIGURE 2-42. *(Above) Schematic drawings of type B.1.3 furnishings used on the Continent during the thirteenth and sixteenth centuries (Adler 2010, 42).*

Higden's *Polychronicon* (San Marino, Huntington Library, MS HM 28561) copied between the middle and the end of the fifteenth century (Figure 2-41) (Dutschke 1989, 683-7). Its late fifteenth-century binding comprises several layers of leather over bevelled wooden boards and evidence of two fastenings survives. It also has seven out of the original ten square domed bosses. Like the archaeological finds of type B.1.3 from Coventry and Fountains, these *in situ* fittings have decoratively cut edges, with one notch and two cusps in each edge. This example also demonstrates how domed bosses of type B.1 were used both in the corners and the centre of book covers. Comparable fittings from mainland Europe have also been classified by Adler (2010) (Figure 2-42). It is suggested that fittings of this type were used between the fourteenth and early sixteenth centuries (Adler 2010, 42). Furthermore, it is thought that such fittings were situated in the centre of book covers and used alongside corner fittings to adorn large and heavy liturgical books (Adler 2010, 42).

Another less common variation of domed boss is type B.1.4. Only four fittings have been classified as this type (Figure 2-43); two are from Battle Abbey (*33* and *34*), one is from Rievaulx Abbey (*301*) and the fourth is from the Dominican priory in Oxford (*273*) (Lambrick and Woods 1976, 216). The two examples from Battle Abbey are

33

34

273
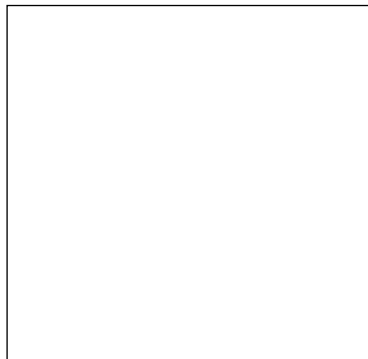
301

FIGURE 2-43. *Book furnishings of type B.1.4:* **33** *and* **34** *from Battle Abbey, East Sussex (English Heritage, 802164 and 802168),* **273** *from the Oxford Blackfriars (Lambrick and Woods 1976, 215, no.9),* **301** *from Rievaulx Abbey, North Yorkshire (English Heritage, 81065639). Scale 1:1.*

62
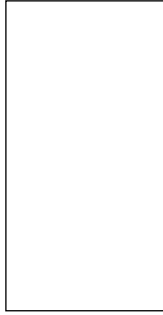
254

274
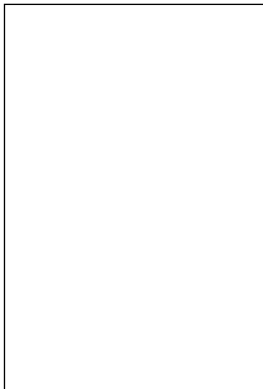
*FIGURE 2-44. Furnishings of type B.1.6: **62** from Bordesley Abbey, Worcestershire (Rahtz 1983, 176, no.CA65), **254** from St Mary Graces Abbey, London (Stevenson et al. 2011, 151, no.S64), **274** from the Oxford Blackfriars (Lambrick and Woods 1976, 215, no.12). Scale 1:1.*

almost identical in form as they both have a square domed boss with four pointed tabs, two of which have rivet holes, and they are very similar in size. The only difference is that one has a pointed dome (**33**) and the other has a flat top (**34**). The fitting from Oxford is slightly different in form as its pointed tabs are situated at the corners of the square boss rather than the sides, which is the case for the two fittings from Battle Abbey. The more unusual example of this form of book furniture is the artefact from Rievaulx Abbey (**301**). Although the physical characteristics of this object meant that it had to be classified as type B.1.4, its overall appearance raised doubt as to the accuracy of its identification as a book fitting. Nevertheless, manuscript evidence provides a parallel for this artefact from Rievaulx Abbey, clearly supporting its classification as a book fitting. A late twelfth-century copy of the *Letters* of St Jerome (Oxford, Bodleian Library, MS Lyell 2) written in England and once owned by the Cistercian monks of Holme Cultram Abbey, Cumberland, has four furnishings attached to its front cover (De la Mare 1971, 3). They have been described as being "shaped like woolpacks" (De la Mare 1971, 3) and are very similar in form and appearance to the fitting excavated from Rievaulx Abbey.

Only four examples have been categorised into type B.1.6. This category is generically

FIGURE 2-45. One of three furnishings of type B.1.6 that survive on MS HM 19915 in the Huntington Library, San Marino (detail) (San Marino, The Huntington Library, 2003g). Scale 1:1.
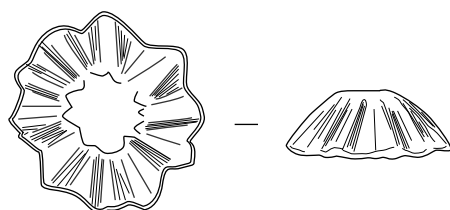
FIGURE 2-46. One of three later fluted, domed studs of type B.1.6 on the binding of a twelfth-century Glossa ordinaria *on Genesis from Rievaulx Abbey, North Yorkshire (London, British Library, Add MS 63077). Scale 1:1.*

defined as a polygonal domed boss/stud due to the varying nature of fittings of this type. Two examples from Bordesley Abbey are both octagonal in form and were recovered from the site of the book-room in trodden surface layers dated between *c.*1200 and *c.*1400 (**62** and **63**) (Figure 2-44) (Burrow 1983, 119). The example from the Dominican priory at Oxford is hexagonal and was excavated from the site of the north choir wall from an unstratified context (**274**; Figure 2-44) (Lambrick and Woods 1976, 216). The domed boss/stud from St Mary Graces is multi-faceted in form and was found at the site of the former monastic kitchen in a context dating to the dissolution and manor house phase of the site (1539-60) (**254**; 2-44) (Grainger and Phillpotts 2011, 63; Stevenson *et al.* 2011, 151).

Although only a small number of archaeological artefacts have been recorded and identified as type B.1.6, examples of this form do survive on late medieval manuscripts. A good example is an English manuscript (San Marino, Huntington Library, MS HM 19915) containing works of Augustine and Pomerius written around the turn of the thirteenth century (Dutschke 1989, 602-4). It is bound in contemporary white leather over wooden boards, the whole of which was later covered by a heavy parchment or deerskin wrapper with a fore-edge flap, possibly in

the fifteenth century. Three of the original four domed bosses of type B.1.6 survive and these are octagonal in shape and fluted (Figure 2-45). It has been suggested that this form is characteristic of fittings used on manuscripts that belonged to Holme Cultram Abbey (Dutschke 1989, 604). This manuscript belonged to the Cistercian abbey from an early date, indicative from two inscriptions written at the turn of the thirteenth century, the first on folio 1v "'*Liber Sancte Marie de Homcoltran. Hec Continentur in hoc volumine Enchriridion Augstini, Prosper De vita contempllativa*' and the second on folio 1r in the lower margin '*Liber sancte Marie de holmo*'" (Dutschke 1989, 604). A similar furnishing is also mounted in the centre of the front cover of a late twelfth-century copy of the *Epistles* of St Jerome (Oxford, Bodleian Library, MS Lyell 2) written in England, which also belonged to Holme Cultram Abbey from the thirteenth or fourteenth century ('*Liber Sancte Marie de Holmo*') (De la Mare 1971, 4). Three fluted, domed studs of type B.1.6 can also be found on the binding of a twelfth-century *Glossa ordinaria* on Genesis (London, British Library, Add. MS 63077) from Rievaulx Abbey (Figure 2-46). The binding dates to the second half of the twelfth century, however, these particular fittings (of which there would have originally been four) are believed to have been added at a later date, replacing the original fittings that were perhaps broken or lost (British Library Board 2015e). It is significant that these three extant manuscripts were written in England and owned by English monastic houses. In recent research on book fittings on the Continent, very few similar furnishings have been identified. Szirmai (1999, 264), whose research focuses on central and western European material of which England is represented by a minute sample, recognises such bosses, but does not offer any information on their provenance nor give any extant examples. Therefore, based on the archaeological and manuscript evidence, it is possible that furnishings of type B.1.6 were more commonly used in England than in Continental Europe during the late medieval period.

The least commonly represented variants of the domed boss are types B.1.5 and B.1.7. A single example has been classified for each subcategory. Although no parallels of these fittings have been found elsewhere or on extant medieval bookbindings, the nature of their form indicates their function as book fittings. Similar to other forms of domed bosses, and book fittings more generally, the fitting of type B.1.5, which was excavated from Cleeve Abbey, Somerset, has a notch in the centre of each of its three edges (**95**; Figure 2-47) (Guy 1999, 28). This artefact was excavated from general demolition debris at the site of the abbey's reredorter dating to the destruction of

95

FIGURE 2-47. *Example of type B.1.5 from Cleeve Abbey, Somerset (English Heritage, 823137). Scale 1:1.*

191

FIGURE 2-48. *Example of type B.1.7 from Fountains Abbey, West Yorkshire (English Heritage, 671107). Scale 1:1.*

the monastic buildings following the abbey's suppression (1536-c.1550) (Guy 1999, 28). The object of type B.1.7 from Fountains Abbey, which comprises a hexagonal domed boss with a flange, has an unusual projecting knop (*191*; Figure 2-48). It is possible that this may be the head of a rivet that was used to secure the boss to the cover of a book.

B.2

The second most common form of book furnishing is type B.2 with 19 examples, all of which are made of copper alloy, although one example has iron rivets (*90*). These fittings, which comprise a single circular plate with a central perforation, have been further classified into four subcategories as defined in the typology (see 2.6.2). They are generally circular in shape, however, types B.2.3 and B.2.4 have lobes (five and six respectively) to create a foliate appearance. Circular (B.2.2) and sexfoil (B.2.4) domed plates with central perforations are the more predominant variations, represented by seven and nine examples respectively. A single fitting has been identified as type B.2.1

and two have been recognised as type B.2.3.

Objects of type B.2 have previously been interpreted as book fittings (Poulton and Woods 1984; Adler 2010). Three fittings of type B.2 were excavated from the site of the Guildford Blackfriars (*216-218*) (Figure 2-49) (Poulton and Woods 1984, 77). These finds were recovered from dust layers beneath the choir stalls and have been interpreted as fittings from the choir books (Poulton and Woods 1984, 79). Other types of book furniture have been recovered from beneath the choir stalls, notably at Bordesley Abbey, and so it is not unreasonable, given their form and where they were found, that artefacts of type B.2 are interpreted as book fittings. Similar objects to those of type B.2 have also been identified on the Continent as items of book furniture. Adler (2010, 40, 104) classifies these as *knospenform* (German for 'bud form'), although they are a rare form as only a few late fifteenth-century pieces have been found in the Lübeck area of northern Germany, in the south of Germany and in Austria (Figure 2-50, A. and B.). These Continental book fittings vary slightly from those found archaeologically in England as they are typically attached to book covers by a single rivet or nail through the centre of the fitting; those found in England were fixed to book covers typically by two rivets, but they have a large central perforation,

217

218

FIGURE 2-49. Book furnishings of type B.2.4, both from the Guildford Blackfriars, Surrey (Poulton and Woods 1984, 77, nos.30 and 31). Scale 1:1.

which may have been to accommodate a larger decorative rivet or nail.

Similar fittings to those of type B.2 are known to have been used as late medieval dress accessories. Surviving belts particularly show that sexfoil plates with large central perforations were often used as decoration. These fittings also frequently doubled as strengthening surrounds for buckle pin holes in belts (Figure 2-50, C.) (Egan and Pritchard 2002, 165, 188). Eyelets have been interpreted as a more rigid type of surround than these circular plates with central perforations (Figure 2-50, D.) (Egan and Pritchard 2002, 165). In comparison to examples from London that have been identified as dress accessories, many of which are also domed, the type B.2.4 fittings recorded as part of this research are greater in diameter by one third. The comparatively greater size of these fittings suggests that they were used on larger objects than belts, and bookbindings in particular. It is possible, however, that such
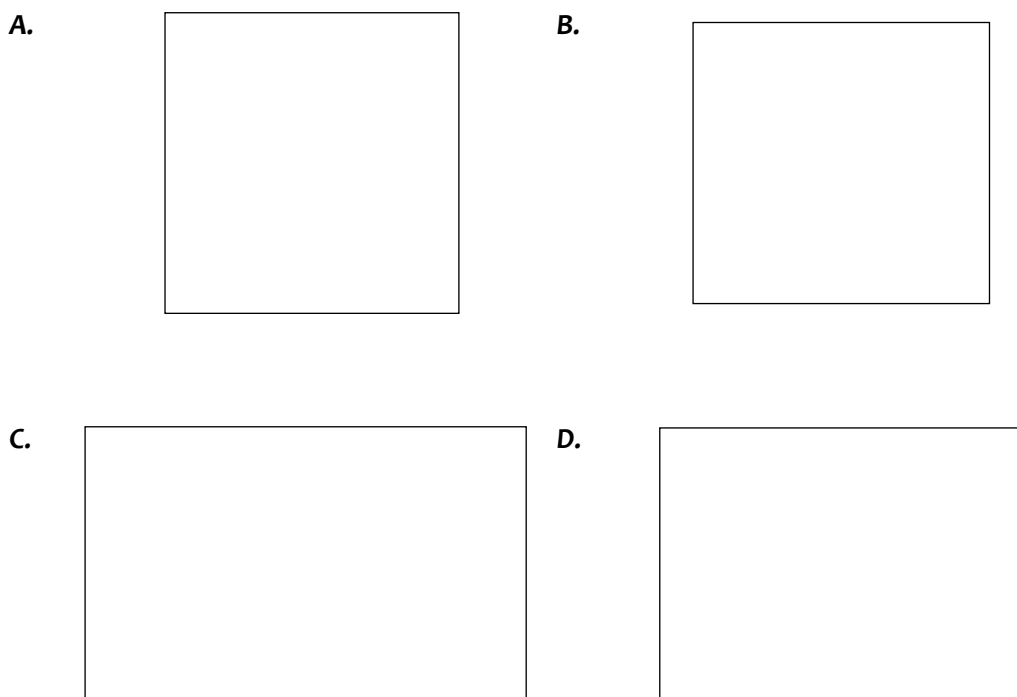
FIGURE 2-50. *Furnishings similar to those of type B.2:* **A.** *a schematic drawing of fittings used in the fifteenth century in the Lübeck area and in the south of Germany (Adler 2010, 40),* **B.** *an example used in Lübeck, Southern Germany and Austria in the fifteenth century (Adler 2010, 104),* **C.** *sexfoil plates similar to those of type B.2 found on an archer's wrist guard (Egan and Pritchard 2002, 229), scale 1:1,* **D.** *a schematic drawing of an eyelet, which was used on a belt to strengthen a buckle pin hole (Egan and Pritchard 2002, 163).*

objects had dual functionalities and may have been used as both book furnishings and belt fittings.

The majority of type B.2 fittings have no recorded stratigraphic or datable information. One example has been excavated from Battle Abbey (*38*) (Hare 1985, 42-3) and one from the Dominican priory in Chelmsford, Essex (*90*) (Drury 1974, 51), and both were recovered from layers of demolition debris associated with the destruction of the sites in the first half of the sixteenth century. A third fitting of type B.2 was excavated from the site of the Dominican priory in Beverley, East Yorkshire (*56*) (Goodall 1996, 159). The artefact came from a floor platform of the late fourteenth or early fifteenth century in the location of the little cloister (Goodall 1996, 155). This data offers a firm late medieval date for the deposition of this object and therefore the object itself as it would have most likely been accidentally lost or deliberately discarded at a time it was in use.

B.3

One of the less common forms of book furnishing is type B.3.1. This category encompasses fittings that are atypical in form and would have functioned more as ornamental features of late medieval bookbindings, such as centre-pieces. A total of five examples have been identified in the catalogue. They are all made from copper alloy, but three of them also have secondary materials. One example has rivets made of iron rather than copper alloy and is possibly decorated with enamel (*66*). The other two fittings (*98* and *192*; Figure 2-51) are both adorned with enamel. On one example the enamel sufficiently survives to determine the colours, which are Limoges-style blue and green (*192*). This fitting is also decorated with gold filigree.

A single lozenge-shaped plate was excavated from Bordesley Abbey (*66*; Figure 3-48). In the catalogue of the excavation report, it is recorded as a "belt, box or book decoration" (Rahtz 1983, 177) and in the discussion of the excavations it is referred to as a possible book fitting (Burrow 1983, 119). Given that this fitting was excavated from the monastery's book-room and that similar objects are found on late medieval bindings, it is reasonable to identify this example as a book fitting. A good example of an original late medieval binding that has a decorative plate in the centre of its cover is that of a fourteenth-century copy of the digest of Justinian I (originally compiled in AD 533) (London, British Library, Add. MS 12023). The front cover of its binding carries

98
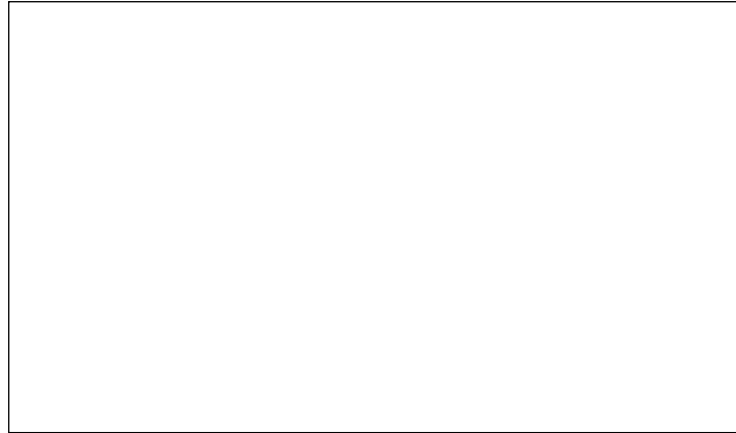
192

FIGURE 2-51. *Furnishings of type B.3.1:* **98** *from Coventry Cathedral Priory, Warwickshire (Rylatt and Mason 2003, 127, no.k),* **192** *from Fountains Abbey, West Yorkshire (English Heritage, 671159). Scale 1:1.*

an octagonal metal plate that is floral in shape, as well as four corner-pieces that are similar in design (Figure 2-52, A.). A similar fitting is also used on the fifteenth-century Italian binding of a thirteenth-century copy of Henry of Susa's magisterial *Summa super titulis decretalium* (Graz, Universitätsbibliothek, MS 26) (Figure 2-52, B.) (Adler 2010, 124).

Despite the atypical nature of this definition of fitting, two examples of type B.3.1 are very similar in form. These were excavated from St Mary's Cathedral-Priory in Coventry (*98*) (Rylatt *et al.* 2003, 126) and Fountains Abbey (*192*). Figure 2-51 demonstrates the physical features that these two items share. The ornamental nature of their form suggests that they were used on bookbindings. Although comparable pieces have not been found on the covers of extant medieval books in library collections during the completion of this research, the archaeological evidence indicates that these two examples were used on books. The example from Coventry was excavated from a rubble fill in the north-south undercroft (Rylatt and Mason 2003, 43). Due to the absence of pottery post-dating the middle of the sixteenth century, it is thought that the undercroft was filled with rubble shortly after the dissolution of the monastery (Rylatt and Mason 2003, 44). The rubble fill overlay a

A.

B.
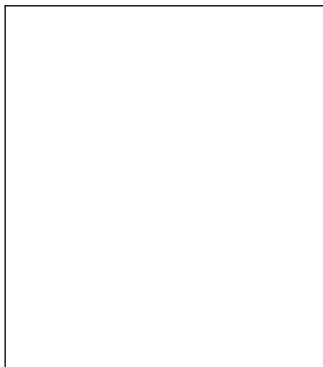
*FIGURE 2-52. Decorative plates on extant late medieval bindings: **A.** from the fourteenth-century copy of the digest of Justinian I (London, British Library, Add. MS 12023) (British Library Board 2015g), **B.** from fifteenth-century Italian binding of a copy of Henry of Susa's* Summa super titulis decretalium *(Graz, Universitätsbibliothek, MS 26) (Adler 2010, 124). Scale 1:2, except B.*

deposit resembling the product of paper burning, which is thought to represent the destruction of books (Rylatt and Mason 2003, 43-4). In view of the artefact itself and the archaeological evidence, it is reasonable to interpret this object, and similar fittings, as a type of book fitting.

B.4

Seven copper-alloy artefacts recorded in this research catalogue have been classified as corner-pieces (B.4), one of which retains fragments of leather (*116*). As can be seen from the subcategories of type B.4, plates could be sub-rectangular in shape with two adjacent down-turned sides (B.4.1) or L-shaped with arms of equal length, either with or without adjacent down-turned sides (B.4.3 and B.4.2 respectively). Two examples have been identified as type B.4.1, type B.4.2 is represented by three fittings and two corner-pieces have been catalogued as type B.4.3. Additional features of corner-pieces that enhance their appearance include domed bosses, projecting knops and decoratively cut edges. The type B.4.1 furnishing from Denny Abbey has a domed boss (*116*; Figure 2-53) (Christie and Coad 1980, 257), however the fitting of this type excavated from Bermondsey Abbey is more decorative in form, comprising a domed boss and scalloped edges (*53*; Figure 2-53) (Egan 2011, 246). The identified furnishings of types B.4.2 and B.4.3 are simple in form, although one example of B.4.3 from Fountains Abbey does have a decorative knop in the angle of the fitting (*193*; Figure 2-53).

The dating of this type of book furniture (B.4) is inconclusive. However, archaeological and extant binding evidence can shed some light on this matter. Corner-pieces frequently survive on late medieval bookbindings. For example, four modest furnishings of type B.4.3 are found on the fifteenth-century binding of a German copy of Bede's *Breuis Explanatio Euangelii secundum Matheum* (London, British Library, Add. MS 23931) (Figure 2-54, A.). Also, the sixteenth-century binding of a copy of Simplicius' commentary on the *Enchiridion of Epictetus* (London, British Library, Add. MS 10064), copied in the late fifteenth century, retains all eight of its corner-pieces of type B.4.1 (Figure 2-54, B.). More elaborately shaped corner-pieces of type B.4.1, which have decoratively cut edges, domed bosses and other relief elements, are frequently found on medieval books produced on the Continent. A variety of fittings used during the late fifteenth and sixteenth centuries in Germany

53

116
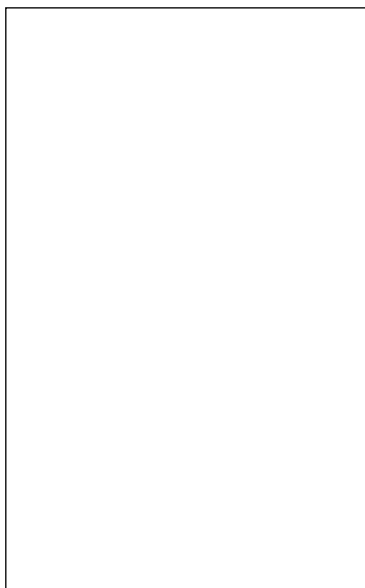
193

FIGURE 2-53. *Corner-pieces of type B.4:* **53** *from Bermondsey Abbey, Surrey (Museum of London Archaeological Archive, BA84 <999>),* **116** *from Denny Abbey, Cambridgeshire (Christie and Coad 1980, 256, no.37),* **193** *from Fountains Abbey, West Yorkshire (English Heritage, 88212907). Scale 1:1.*

A.
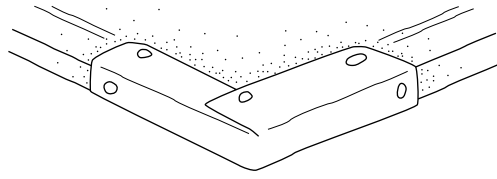
B.
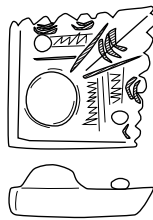
*FIGURE 2-54. Corner-pieces of type B.4: **A.** from the fifteenth-century binding of a German copy of Bede's Breuis Explanatio Euangelii secundum Matheum (London, British Library, Add. MS 23931), **B.** from the sixteenth-century binding of a copy of Simplicius' commentary on the Enchiridion of Epictetus (London, British Library, Add. MS 10064). Scale 1:1.*

are provided by Adler (2010, 105-9) (Figure 2-55). In terms of the archaeological evidence, two examples of type B.4.2, one from St Andrew's Priory (**336**) (Ottaway and Rogers 2002, 2940) and the other from Sawley Abbey, West Yorkshire (**320**) (Coppack *et al.* 2002, 86-7), were both excavated from deposits associated with the demolition of the monastic houses. At Sawley Abbey the fitting was found in an occupation and demolition deposit at the site of the reredorter (Coppack *et al.* 2002, 86-7) and the furnishing from St Andrew's Priory was recovered from a level associated with the demolition of the priory in the second half of sixteenth century (Ottaway and Rogers 2002, 2940). The corner-piece (B.4.1) from Bermondsey Abbey was found at the site of the infirmary in a context dating to the period between 1330 and 1430, a time when the infirmary was demolished and other conventual buildings and cloisters were being remodelled (**53**) (Dyson *et al.* 2011, 73-88). However, this artefact is thought to have been intruding into this context as its form and decoration suggest that it is sixteenth-century in date (Egan 2011, 246). No stratigraphic information is available for the remaining three corner-pieces recorded in this research catalogue. Although several of the archaeological finds are from sixteenth-century contexts, based on the physical characteristics of the objects in conjunction
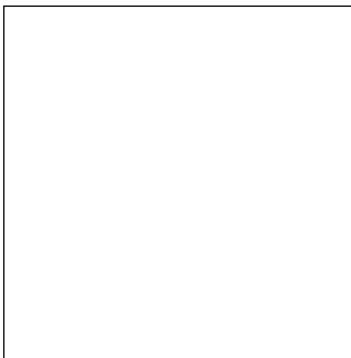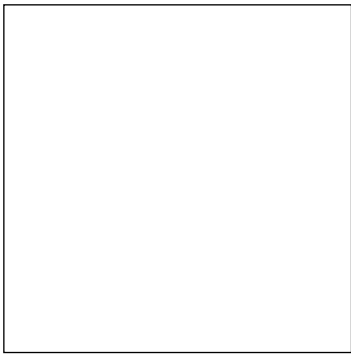
with the manuscript evidence, it is likely that fittings of type B.4 date to the fifteenth and early sixteenth centuries.

B.5

Binding strips (B.5), used as edge protectors, are perhaps one of the more difficult types of book furnishing to identify archaeologically. Within this research catalogue, seven fittings have been classified as rectangular plates that have been folded once lengthways (B.5.1). The examples recorded in the catalogue are simple in overall form, and range in length from 59mm to 134mm and in width from 7mm to 15mm. These artefacts are all made of copper alloy, however, a particularly ornate example from Battle Abbey was decorated with secondary materials using gilding and *vernis brun* techniques (**42**; Figure 3-51). Another fitting of this type, also from Battle Abbey, has remnants of an organic material thought to be leather still attached to its underside (**43**; Figure 2-56).

For the seven examples of this type there is very little associated contextual

43

117

A.
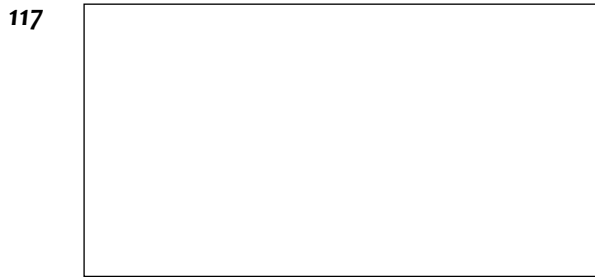
*FIGURE 2-56. Binding strips of type B.5.1: **43** from Battle Abbey, East Sussex (English Heritage, 802118), **117** from Denny Abbey, Cambridgeshire (Christie and Coad 1980, 256, no.39), **A.** from the fifteenth-century cover of Bede's Breuis Explanatio Euangelii secundum Matheum (London, British Library, Add. MS 23931) (detail) (British Library Board 2015f). Scale 1:1.*

information. Of the two binding strips from Battle Abbey, only one came from a dated context (**42**), excavated from a Dissolution deposit just to the north of the reredorter (Hare 1985, 42-3). The second fitting from Battle was found at the site of the chapter house, but no other information is known (**43**). Of the binding strip from Denny Abbey, it is known only that it was recovered from the Franciscan phase (1339-1539) of the monastic garden (**117**; Figure 2-56) (Christie and Coad 1980, 257). The remaining four furnishings of this type, all from Fountains Abbey, are from unstratified or unknown contexts.

Due to the nature of their form, it is possible that such fittings were used to furnish objects other than bookbindings, such as small boxes and chests. However, contemporary manuscript evidence supports the identification of these archaeological artefacts as book fittings since binding strips are often found on surviving late medieval bindings. For example, four binding strips (B.5.1) were used to protect the fifteenth-century leather cover of Bede's *Breuis Explanatio Euangelii secundum Matheum* (London, British Library, Add. MS 23931) (Figure 2-56, A.). Likewise, a German Cistercian breviary (San Marino, Huntington Library, MS HM 25777) written in the early fifteenth century is bound in contemporary panel-stamped,

FIGURE 2-57. *(Above, top) The ivory panels protecting the binding of a glossed copy of the* Gospel According to Matthew *(Leipzig, Universitätsbibliothek, MS 78) (Adler 2010, 67).*

FIGURE 2-58. *(Above) The metal edges protecting the binding of a thirteenth-century Cistercian book of sermons and chronicles (Leipzig, Universitätsbibliothek, MS 453) (Adler 2010, 68).*

brown leather over wooden boards and has binding strips of type B.5.1 situated along the top, bottom and fore-edge of both covers (Figure 5-1) (Dutschke 1989, 635-6). The strips in fact extend around the corners so that the edges of the covers are completely protected. Similarly, on the late twelfth-century binding of a glossed copy of the *Gospel According to Matthew* (Leipzig, Universitätsbibliothek, MS 78), which was produced in the Cistercian abbey of Walkenried or Altzelle in Saxony, Germany, ivory panels are situated along all the edges of the cover, protecting both the edges and the corners (Figure 2-57) (Adler 2010, 68). Also, the binding of a thirteenth-century Cistercian book of sermons and chronicles (Leipzig, Universitätsbibliothek, MS 453) has metal edge panels that protect the edges of the cover and are decorated with images of mythical creatures (Figure 2-58) (Adler 2010, 68).

B.6

The least common form of book furnishing is type B.6. As explained in the typology (see 2.6), late medieval books were often attached to bookshelves and lecterns by metal chains. In recent studies on bookbindings and their fittings, Szirmai (1999, 267) and Adler (2010, 50-2) use surviving contemporary binding evidence to identify the different forms of links that made up such chains. These range from circular to s-shaped links and include swivel links that were used to prevent entanglement. In the archaeological record, the identification of chains that were once attached to books is much more difficult. As a result of this, only one type of chain link is included in the typology and that is in the form of a swivel link (B.6.1). A single copper-alloy

198

FIGURE 2-59. *Swivel link (B.6.1) from Fountains Abbey, West Yorkshire (English Heritage, 671247). Scale 1:1.*

example has been recorded and identified (*198*; Figure 2-59). Its moulded decoration and the fact that it was recovered from the monastery's reredorter, a site at which many book fittings have been found, suggest that this example was used on a monastic book rather than for a more utilitarian purpose. Additionally, a small number of similar swivel links have been recorded in the PAS database and these may potentially have been used as book furnishings as well.

B.7

Perhaps one of the more unusual forms of book furnishing identified in the catalogue is that of type B.7. The folded composite furnishing (B.7.1) is represented by a total of seven artefacts. The form of this type of object, which essentially comprises a long rectangular plate that has been folded in several places so that the fitting is essentially enclosed on three sides, indicates that it would have been riveted to the end of a leather strap or strip of material. This is also supported by the remains of leather in one fitting from Fountains Abbey (*203*). The addition of a strip of metal that

199

200

Figure 2-60. *Examples of furnishing type B.7.1, all from Fountains Abbey, West Yorkshire (English Heritage, 671319, 671206 and 671205). Scale 1:1.*

202

has been threaded and looped through a hole pierced in the folded edge at the end of the plate bears some resemblance to the terminal loops on fastenings of types A.1, A.2, A.9 and A.10. It is possible that this element of type B.7.1 held a piece of string or cord to help move the fitting or to act as an additional ornamental feature. The seven artefacts of this type are all made of copper alloy. One example is different to the others as it has iron rivets and has also been gilded (*302*). Additionally, all examples recorded in the database have decoratively cut edges at the attachment end in a similar fashion to other types of book furniture. Three fixtures have two or three notches in the edge (*200*, *203* and *302*), two have a scalloped edge (*199* and *201*), and the remaining two artefacts of this type have a central notch with a cusp either side cut into the edge (*202* and *303*).

All examples of type B.7.1 were found in the early twentieth century during Ministry of Works excavations and clearances. As a result, almost no context information is known for these artefacts. Only two examples (*200* and *202*), both from Fountains Abbey, have information regarding the location in which they were found; they were both found in the reredorter of the Cistercian monastery. Due to the unusual form of this type of fitting and the lack of information associated with the finds, other sources of evidence have been investigated. During the undertaking of this research, only one comparable example from a secure archaeological context has been found. It is first important to note that this artefact was not excavated from a monastic site, but an urban centre, and so it has not been included in this research's database. At the Victoria Road site in the northern suburbs of Winchester, Hampshire, a copper-alloy folded sheet with a small hole at the centre of the fold was found in a nineteenth-/ twentieth-century layer (Figure 2-61) (Rees *et al.* 2008, 228). This artefact has been interpreted as a possible buckle plate and is thought to date to the late fourteenth or early fifteenth century (Rees *et al.* 2008, 228). Although this object is the closest match to book furnishing type B.7.1, there are several differences in its form. Primarily, it does not have down-turned sides created by extra folds in the plate and it does not have the extra metal strip running through it, although this element may easily have been lost, which is the case for several items of this type recorded in the catalogue. Also, the artefact from Winchester is bigger in size, particularly in width, than the average size of fittings of type B.7.1. The length and width of the Winchester fitting is 41mm and 31mm respectively, whereas the average length (excluding the loop) and width of type B.7.1 is 39mm and 19mm respectively.

In order to understand the function of the type B.7.1 fittings and the Winchester

artefact, more detailed research into late medieval buckle plates was undertaken. In Egan and Pritchard's (2002, 55-6) catalogue of late medieval dress accessories excavated from London, the features of buckle plates are clearly demonstrated (Figure 2-62). The diagram illustrates how the plate is folded widthways once, has recesses at the fold for the buckle frame and has a relatively large slot in the folded edge to receive the buckle pin. These features clearly distinguish buckle plates from the fittings of type B.7.1 and also the Winchester artefact. This differentiation between buckle plates and the furnishings of type B.7.1 therefore leads to the conclusion that these unusual artefacts were not used on belts but on other objects. Given their form, it is not unreasonable to suggest that such items were used on books. Although the artefact from Winchester is slightly different in form to type B.7.1 fittings, it does not have the distinguishing features of buckle plates as defined by Egan and Pritchard. It is thus possible that the Winchester object has been misidentified and it could be interpreted as a variation of the main type B.7.

No parallel fitting of type B.7.1 has been found on an extant late medieval binding. Nevertheless, the form, along with the style of decoration on these fittings (see 2.8.4) and the locations in which they have been found, namely the reredorter (see

FIGURE 2-61. *Fitting from Winchester, Hampshire, similar to examples of type B.7.1 (Rees et al. 2008 227). Scale 1:1.*
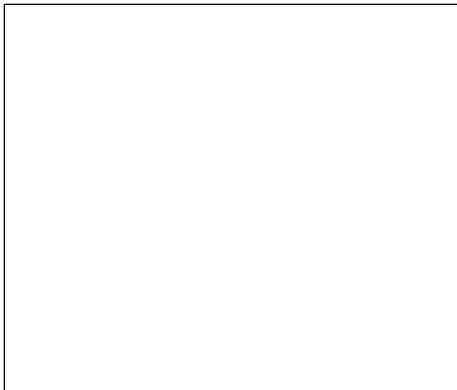
FIGURE 2-62. *A schematic drawing of a buckle plate (Egan and Pritchard 2002, 51).*

6.4), suggest that items of this type may have been used on late medieval bindings, perhaps as a form of bookmark. It is also on these bases that a fourteenth- or fifteenth-century date for this type of fitting has been suggested (S. Harrison, *pers. comm.*).

2.8 DECORATION

From this current analysis of the many and varied types of book fittings, it has become clear that different techniques and styles of decoration were used to adorn this type of material culture. Out of the total 336 book fittings that are recorded in the catalogue, 154 fittings (46 per cent) carry some form of decoration. The initial comparative analysis of the decoration of the two main classifications of fixtures, fastenings and furnishings, has shown that there is little difference between the numbers of decorated and undecorated pieces (45 per cent of fastenings (113 examples) and 47 per cent of furnishings (41 examples) are decorated). Consequently, further in-depth analysis is necessary. The different techniques of decoration and how they were achieved are addressed in Chapter 3. An evaluation of the styles of decoration found on pieces of late medieval book furniture recorded in the catalogue is therefore the focus of this section. A lack of ornamentation on certain types of book fittings is also considered. This analysis of decoration is used subsequently to interpret the wider contexts of book fixtures, with particular reference to dating and provenance.

2.8.1 ENGRAVED

The most common technique used to decorate the fittings is engraving and is present on a total of 109 fittings. Of these 76 per cent (83 examples) are fastenings and 24 per cent (26 examples) are furnishings. This technique of decoration is generally found on hooked fishtail fastenings (A.3.1). A total of 46 fittings of this type are decorated and 96 per cent of these have some form of engraved design. The more typical design of engraved decoration on type A.3.1 fastenings is in the form of compass-engraved circles; over half of these fittings (26 examples) have this decorative design. These circles were often concentrically arranged with rivet holes, but they were also used together with blind-drilled holes creating a ring-and-dot formation. Examples of

hooked fishtail fastenings (A.3.1) that are decorated solely with this motif include two from Fountains Abbey, West Yorkshire (**134** and **135**) (Figure 2-63), and another from Battle Abbey, East Sussex (**6**; Figure 2-63) (Geddes 1985, 160). The use of compass-engraved circles is only found on one example of another type of book fitting recorded in the catalogue, which is the example of furnishing type B.4.3 excavated from Mount Grace Priory, North Yorkshire (**265**; Figure 5-18) (Coppack and Keen 2002, 92). In this instance two engraved concentric circles surround each of the two rivet holes.

It is also evident that engraved circles on type A.3.1 fittings were commonly used alongside various other engraved patterns. These include zigzag lines, longitudinal lines of varying lengths and lines in chevron-shaped and herring-bone/feather-like arrangements. From the catalogue **93**, **111** (Figure 2-63), **255**, **275** and **276** (Figure 3-46) are all clear examples showing various combinations of these forms of engraved ornamentation. Although outside the geographical study area of this work, another particularly good example of a late medieval book fitting of type A.3.1 with all of these styles of engraved decoration was recovered from excavations at the site of the Greyfriars at Carmarthen (Figure 2-63, A.) (Brennan 2001, 26). Additionally, the fifteenth-century German binding of a tenth-century copy of the Venerable Bede's *Breuis Explanatio Euangelii secundum Matheum* (London, British Library, Add MS. 23931), once owned by Godefrid Bishop of Speyer, retains two fastenings of type A.3.1 that are both decorated with engraved designs, including compass-engraved circles, engraved oblique lines and a small engraved saltire cross (Figure 2-63, B.). Similarly, the early sixteenth-century hooked fishtail fastening (A.3.1), which survives on the Dutch binding of a memorial book of the Holy Spirit from Leiden in the Netherlands (The Hague, Koninklijke Bibliotheek, MS 73 E 41), is decorated with an engraved herring-bone pattern and a series of engraved longitudinal lines (Figure 2-63, C.) (Adler 2010, 101). On the basis of the archaeological and surviving binding evidence, the use of multiple engraved motifs and patterns on type A.3.1 fittings may indicate that such fittings are fifteenth- or sixteenth-century in date. From Adler's (2010) analysis of book fittings from the Continent, it may even be that the production of heavily decorated examples was influenced by Continental practices. On this basis it can perhaps be hypothesised that simply-decorated or undecorated type A.3.1 fixtures excavated from English religious houses are earlier in date, i.e. fourteenth- and early fifteenth-century, and possibly English in origin.

From the analysis of the archaeological material, the majority of the recorded

6

111
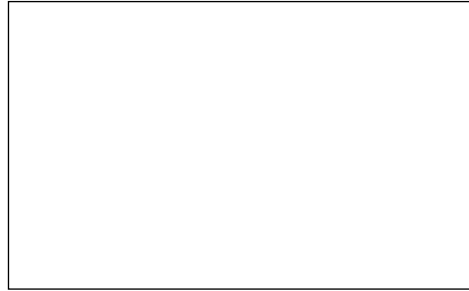
135

A.
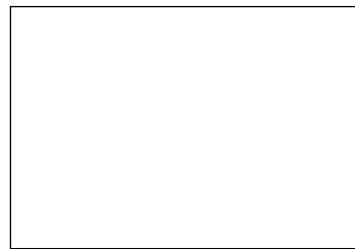
B.
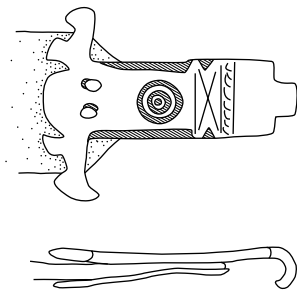
C.
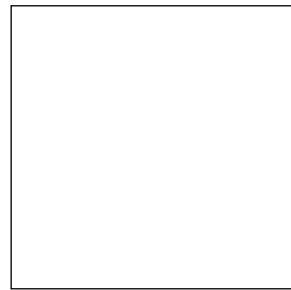
FIGURE 2-63. *Hooked book fastenings of type A.3.1 with various engraved decoration:* **6** *from Battle Abbey, East Sussex (English Heritage, 793371),* **111** *from Denny Abbey, Cambridgeshire (Christie and Coad 1980, 258, no.44),* **135** *from Fountains Abbey, West Yorkshire (English Heritage, 671311.1),* **A.** *from the Carmarthen Greyfriars, Carmarthenshire (Brennan 2001, 67, no.33),* **B.** *from the fifteenth-century German binding of a copy of Bede's* Breuis Explanatio Euangelii secundum Matheum *(London, British Library, Add. MS 23931),* **C.** *from the early sixteenth-century Dutch binding of a memorial book of the Holy Spirit (The Hague, Koninklijke Bibliotheek, MS 73 E 41), (Adler 2010, 101).*

examples of anchor-/catch-plates (A.6) are not decorated. Only two fittings carry some form of secondary decoration, one of which is engraved. This example (**313**), classified at type A.6.2, was excavated from Roche Abbey, West Yorkshire, and has engraved cabling along its edges. The lack of decoration on these objects may indicate how these fittings were attached to bookbindings. In the previous section (see 2.7.1), it was suggested that type A.6.1 and A.6.3 were attached directly onto the wooden boards of bindings, which were subsequently surrounded by a leather cover. It is possible then that artefacts of these two types were deliberately left undecorated as they would have been hidden underneath leather covers. This is most likely the case for the type A.6.1 fitting on a fourteenth-/fifteenth-century book of grammar from Fountains Abbey (London, British Library, Add. MS 62132 A). This original fitting is underneath the leather cover and attached directly to the wooden boards (Figure 2-18, A.). Although only part of the fixture is visible, it is probable that the remainder of it is unadorned.

The analysis of the decoration on anchor-/catch-plates (A.6) recorded in the catalogue has provided little insight as to the date of these particular objects. The examination of book fittings of type A.6 on surviving bindings, in both English and Continental

FIGURE 2-64. One of two engraved catch-plates of type A.6.2 on the late fifteenth-century binding of a German martyrology (San Marino, Huntington Library, MS HM 1044). Scale 2:1.

research libraries, has demonstrated not only the variety of anchor-/catch-plates that were used on late medieval books but also the different styles of decoration with which they were ornamented. For example, the cartulary of Waltham Abbey, Essex (London, British Library, Add. MS 37665), compiled and bound in the early sixteenth century, retains its two original catch-plates (Figure 2-18, B.). Both fittings have a splayed end with three cusps cut into the edge, bevelled edges and engraved linear decoration. This is in the form of a compass-engraved circle around one rivet and a series of longitudinal engraved lines around a second rivet. Furthermore, the type A.6.2 fittings on a martyrology (San Marino, Huntington Library, MS HM 1044) written in the second half of the fifteenth century for the Carmelite house near Heilbronn, Germany, are similarly decorated with engraved lines and a compass-engraved circle around one rivet (Figure 2-64) (Dutschke 198 9, 317). In contrast, several examples on surviving fifteenth- and sixteenth-century English manuscripts examined by Szirmai (1999, 260) are plain in terms of their ornamentation.

Although the study of the decoration cannot necessarily provide more definitive information on the dating of fittings of type A.6, it is possible that it can tell us more about their provenance. Previous examinations of anchor-/catch-plates (A.6) on extant manuscripts from different regions of mainland Europe have revealed some distinctive characteristics (Szirmai 1999, 254-62; Adler 2010, 84-103). Szirmai (1999, 254-62) demonstrates the variety of designs, motifs and patterns engraved on fittings of type A.6 that survive on the fifteenth- and sixteenth-century bindings of Continental manuscripts (Figure 2-19). The study of book fittings from excavations in Eindhoven, in the Netherlands, also demonstrates the decorative nature of Dutch fixtures (Arts 2009). In comparison, surviving fifteenth- and sixteenth-century examples on English manuscripts that have previously been examined are much simpler than those of the same time period from the Netherlands, Germany, Italy and France (Szirmai 1999, 260). It should be noted, however, that the data on book furniture of extant English manuscript bindings is significantly less than that of bindings from other European countries (Szirmai 1999, 260). Nevertheless, based on both the archaeological and binding evidence, it may be deduced that the fittings of type A.6 excavated from English monastic sites with little or no secondary decoration are of English origin.

Engraved decoration is also frequently used on another of the more common types of book fastening, specifically type A.7.1. A total of 23 artefacts of this type recorded in the catalogue are decorated, and 20 of these are engraved with a particular

FIGURE 2-65. *Engraved examples of type A.7.1 fastenings:* **22** *from Battle Abbey, East Sussex (English Heritage, 801973),* **165** *and* **167** *from Fountains Abbey, West Yorkshire (English Heritage, 671114.2 and 671114.4),* **205** *from the Guildford Blackfriars, Surrey (Poulton and Woods 1984, 74, no.5). Scale 1:1.*

design or pattern. One of the more typical forms of engraved decoration on these rectangular plates is cabling, formed from engraved oblique lines, along the edges of the object. This is often defined by an engraved linear border, as can be seen on **165** and **167** both of which were excavated from Fountains Abbey (Figure 2-65). These two examples also have engraved lines that are arranged in the shape of a saltire with the central perforation in the middle of the cross. Several fittings also have nondescript linear decorations, though many of these are enhanced by decoratively cut edges. Two thirds of type A.7.1 fittings that have shaped edges (eight out of 12) carry secondary decoration in the form of simple engraved linear ornamentation. It is not uncommon, however, to find more intricate designs on this type of book fixture. For example, one artefact of type A.7.1 found at the Dominican priory in Guildford (**205**; Figure 2-65) is decorated with engraved leaves set against a background of rows of engraved lines, all of which is defined by a line border (Poulton and Woods 1984, 79). Also, fitting **22** excavated from Battle Abbey is bordered by two engraved lines and this encloses an engraved foliate design, possibly of acanthus leaves, which is focused around the central perforation (Figure 2-65) (Geddes 1985, 160).

Binding strips (B.5) essentially served a functional purpose, but they were often

197

FIGURE 2-66. Engraved binding strip (B.5.1) from Fountains Abbey, West Yorkshire (English Heritage, 915686). Scale 1:1.

decorated to enhance the appearance of both the fittings themselves and the books to which they were attached. A binding strip from Fountains Abbey (**197**; Figure 2-66) has an indistinct criss-cross pattern engraved into its surface. Decorative design applied to a binding strip is more clearly demonstrated in another example. Excavated from Battle Abbey, this example is decorated with an engraved foliate scroll design (**42**; Figure 3-51) (Geddes 1985, 149). Very similar patterns are commonly found on borders in mid-twelfth-century English manuscript illuminations, as can be seen on a leaf illustrated with scenes from the New Testament (London, Victoria and Albert Museum, MS 661) (Stratford *et al.* 1984, 254; Geddes 1985, 149; Kauffmann 1975, 93-5). It is likely that this is one of the introductory leaves from the 'Eadwine Psalter' (Cambridge, Trinity College, MS R.17.1), which was produced at Christ Church, Canterbury, Kent, *c.* AD 1140-60 (Kauffmann 1975, 94). The design on this binding strip can also be closely paralleled to Mosan and Rhenish metalwork in regions where *vernis brun* was a popular technique (Stratford *et al.* 1984, 254). It has been suggested that this artefact from Battle Abbey may have been imported, but due to the documented artistic exchange between England and the main European metalworking regions in the twelfth century, there is the possibility that this artefact

4

211
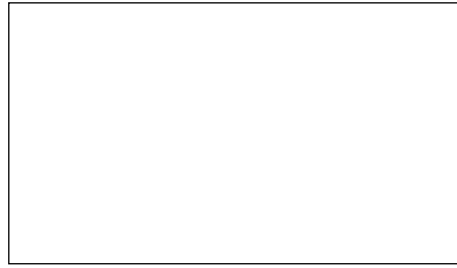
240
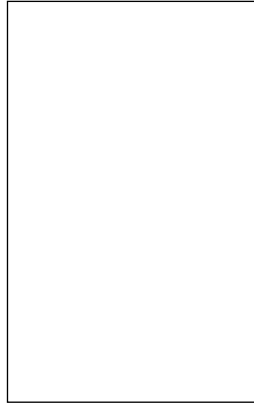
249
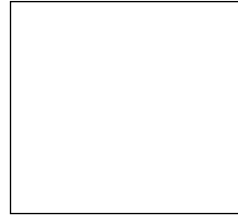
282

307

326

FIGURE 2-67. *Book fittings with punched/stamped decoration: **4** from Battle Abbey, East Sussex (English Heritage, 802223), **211** from the Guildford Blackfriars, Surrey (Poulton and Woods 1984, 75, no.12), **240** from Jarrow Priory, Durham (Cramp et al. 2006, 246, no.CA129), **249** from St Mary Graces Abbey, London (Stevenson et al. 2011, 154, no.S117), **282** from Rievaulx Abbey, North Yorkshire (English Heritage, 85000330), **307** from Roche Abbey, West Yorkshire (English Heritage, 765382), **326** from Thelsford Priory, Warwickshire (Gray 1993, 70, no.1). Scale 1:1.*

241
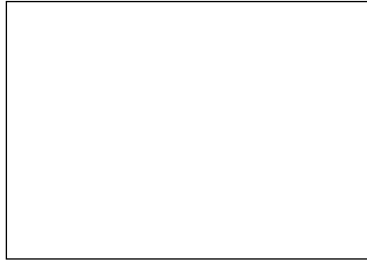
A.

FIGURE 2-68. Book fittings with punched parallel lines of opposing triangles: 241 from Kirkstall Abbey, West Yorkshire (Moorhouse and Wrathmell 1987, 133, no.173), A. from Woking, Surrey (PAS/Trustees of the British Museum, 2003-2015d, SUR-6DA691). Scale 1:1.

is English in origin (Stratford *et al.* 1984, 254). Despite the uncertainty of its origin, the decoration on this book fitting indicates that it most likely dates to the second half of the twelfth century.

2.8.2 PUNCHED/STAMPED

Punched and stamped forms of decoration are among the less frequently used decorative techniques represented in the catalogue assemblage; only 22 of the book fittings classified carry some form of punched or stamped ornamentation. The difference between these two techniques, which are discussed in detail in Chapter 3.3, is clearly distinguishable from the analysis of two particular fittings in the catalogue. A hooked fishtail fastening (A.3.1) excavated from Hailes Abbey, Gloucestershire (**220**), is decorated with a now faint line and foliate decoration. Since the design does not come through to the other side, it is considered to have been punched into the surface of the object. In comparison, the hooked element of an all-metal fastening (A.5.1) recovered from Jarrow Priory, Durham (**240**; Figure 2-67),

is thought to have had a design stamped into the fitting as the pattern can be seen on its reverse. The decoration comprises a relief design of overlapping lozenges with quatrefoil motifs bordered by raised triangles, and the sunken background has been engraved with a cross-hatch pattern (Cramp 2006, 248).

The punched technique is more commonly found on those book fastenings that incorporate hinged plates and loops (A.1). Twenty-one fittings of this type are decorated and five of these are ornamented with punched designs. In each case it is the hinged loop that has been manipulated by this decorative technique. The loops of two fastenings of type A.1.1 (*4* and *282*; Figure 2-67) are embellished with punched annulets, and another two examples of this type (*249* and *326*; Figure 2-67) are covered with a cluster of punched dots. The fifth example (*307*; Figure 2-67), which is of type A.1.3, is also decorated with a number of punched dots and these are accompanied by engraved zigzag lines around the central perforation. In comparison to the high proportion of decorated type A.1 fittings, fixtures of type A.8 are generally plain in terms of secondary ornamentation. Only two instances are decorated, one of which has a punched design. This example (*211*; Figure 2-67) from the site of the Blackfriars in Guildford, Surrey, has a motif of five dots forming a cross with four smaller dots in between and a line of small dots circling this central design (Poulton and Woods 1984, 75).

A punched design that is commonly found on dress accessories, such as buckle plates, mirror cases and pendants, from the late medieval period comprises parallel lines of opposing triangles, which are thought to have been created by the use of a roulette tool (Campbell 1981, 63; Egan and Pritchard 2002, 30). Despite the commonality of this particular technique on late medieval sheet copper-alloy objects, it is found on only two book fittings in the catalogue. On the type A.7.1 fastening from Kirkstall Abbey, West Yorkshire (*241*; Figure 2-68), a floral motif has been created using double lines of opposing triangles. In comparison, on the lozenge-shaped furnishing (B.3.1) from Bordesley Abbey, Worcestershire (*66*; Figure 3-48), this technique has been used to simply define the border of the fitting (Rahtz 1983, 177). This form of decoration is also found on a book fitting of type A.4.2 recorded in the PAS database, which was recovered from Woking, Surrey (SUR-6DA691; Figure 2-68, A.) (PAS/Trustees of the British Museum, 2003-2015d).

In the catalogue it is not uncommon for other forms of furnishings to also be adorned with punched designs. In the case of domed bosses (B.1), several have

motifs punched into the top of the bosses themselves. For example, two bosses of type B.1.1 (*179* and *186*; Figure 2-69), both from Fountains Abbey, have a cross. On the corner-piece (B.4.1) excavated from the site of the monastic garden at Denny Abbey, Cambridgeshire (*116*; Figure 2-53), there is a series of punched motifs around the base of the domed boss (Christie and Coad 1980, 257). Similarly, a punched Renaissance-style foliate pattern flanked by a punched border of beading between lines embellishes the surface of the corner-piece of type B.4.1 from Bermondsey Abbey, Surrey (*53*; Figure 2-53) (Egan 2011, 246). It is on the basis of the furnishing's decoration that this artefact has been dated to *c*.1520 (Egan 2011, 246). Additionally, furnishings, particularly those of type B.7.1, were often stamped with monograms. On fitting *201* from the catalogue the monogram can be seen on both the front and back of the object, demonstrating the use of the stamped technique. The various emblems found on book fittings, and their symbolic significance, are considered in more detail below (see 2.8.4).

179

186

FIGURE 2-69. *Furnishings of type B.1.1 with punched decoration, both from Fountains Abbey, West Yorkshire (English Heritage, 88212906 and 671160.4 D). Scale 1:1.*
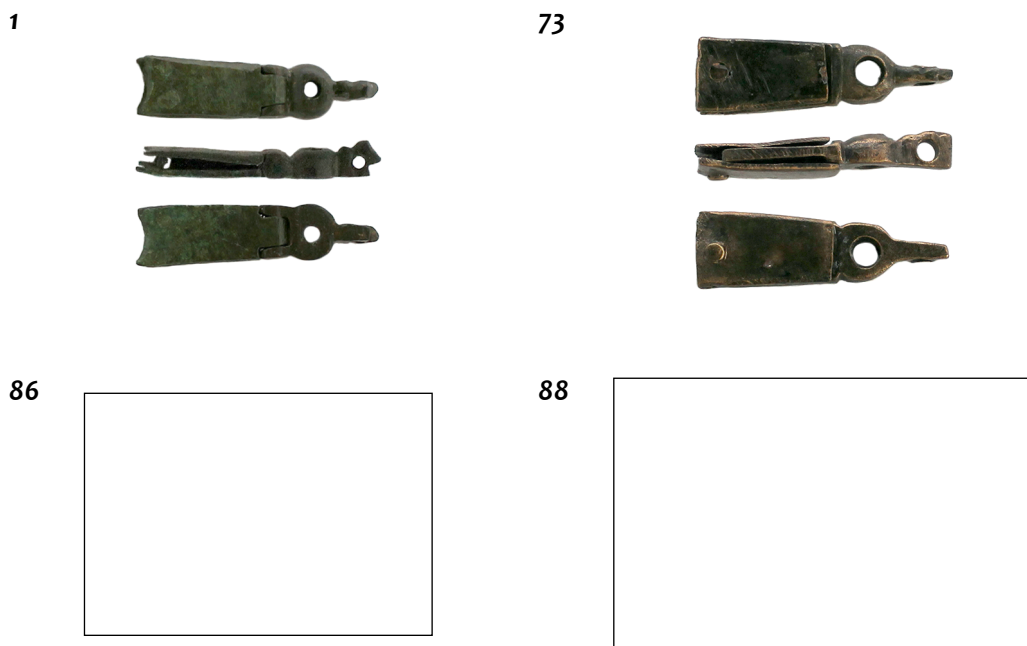
FIGURE 2-70. *Book fittings with moulded terminal loops: 1 from Battle Abbey, East Sussex (English Heritage, 802135), 73 from St Augustine's Abbey, Kent (English Heritage, 765747), 86 and 88 from St Gregory's Priory, Kent (Hicks and Hicks 2001, 269, nos.7 and 9). Scale 1:1.*

2.8.3 MOULDED DECORATION

Within the catalogue, moulded decoration is generally found on fittings that function via the strap-and-pin mechanism, namely types A.1, A.2, A.9 and A.10. These typically have a projecting terminal loop and it is generally this element that has been decoratively moulded. In comparison to other techniques of decoration discussed in this section, which are secondary forms of ornamentation, moulded features were made during the casting process of manufacture. A significant number of type A.1 fastenings all have a terminal loop that is in the form of a stylised animal head. Several examples that have been elaborately moulded with particularly well-defined animal head terminals include one fitting from Battle Abbey (*1*; Figure 2-70) (Geddes 1985, 158) and another from Rievaulx Abbey (*282*; Figure 2-67).

From St Gregory's Priory in Canterbury, Kent, two objects of type A.2.1 have terminal loops that are clearly modelled into stylised animal heads; however, one is of a rudimentary nature (*86*; Figure 2-70) and the other is more extensively modelled and delineated (*88*; Figure 2-70) (Hicks and Hicks 2001, 270). A similar example from Canterbury, this time from St Augustine's Abbey, also has a terminal loop in the form
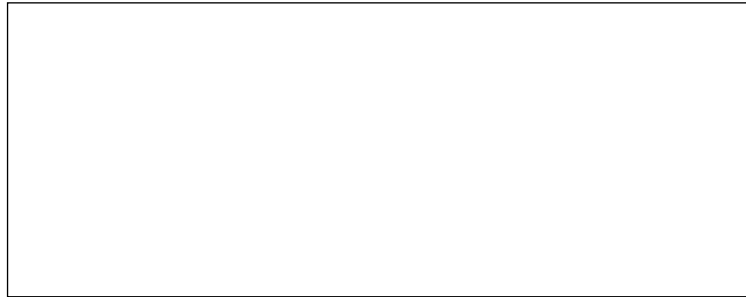
A.
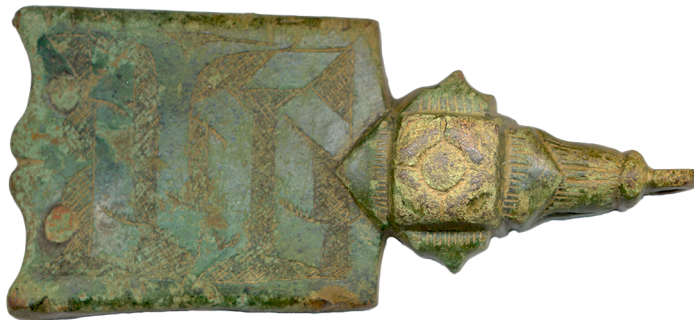
B.

Figure 2-71. (Above, top) The strap-and-pin fastening with a moulded dragon or lion's head terminal on a sixteenth-century manuscript (Berlin, Kunstgewerbemuseum, Inv.-Nr. F 345) (Adler 2010, 73).

*Figure 2-72. (Above) Fastenings of type A.9.2 with elaborate moulded decoration: **A.** from Stebbing, Essex (PAS/Trustees of the British Museum, 2003-2015e, ESS-859818), **B.** from Firle, Sussex (PAS/Trustees of the British Museum, 2003-2015f, SUSS-A64B56). Scale 1:1.*

183

317

FIGURE 2-73. *Domed bosses of type B.1. with moulded decoration:* **183** *from Fountains Abbey, West Yorkshire (English Heritage, 671160.1 A),* **317** *from Roche Abbey, West Yorkshire (English Heritage, 765364). Scale 1:1.*

of a stylised animal's head, but this is of a simple nature (**73**; Figure 2-70) (Henig and Woods 1988, 211). An example of a thirteenth-century book fitting of type A.1.2 with a particularly detailed moulded terminal survives on a sixteenth-century manuscript (Berlin, Kunstgewerbemuseum, Inv.-Nr. F 345). This example is in the shape of a dragon or lion's head (Figure 2-71) (Adler 2010, 73).

Fastenings of type A.9 are also particularly interesting to consider when analysing the decoration of late medieval book furniture. In addition to secondary surface decoration, this type of fixture can be particularly elaborate in shape from the addition of moulded features, which can be seen on two artefacts of this type in the catalogue (**252** and **253**; Figure 2-27), both of which have decoratively shaped terminals. These were excavated from the Cistercian abbey of St Mary Graces in London and both have moulded loops on the terminals (Stevenson *et al.* 2011, 150). Similar ornately moulded book fittings of this type are recorded in the PAS database. For example, several have elaborately modelled lozenge-shaped bosses in the form of stylised four-petal flowers. Particularly detailed examples include one from Stebbing, Essex (ESS-859818; Figure 2-72, A.) (PAS/Trustees of the British Museum, 2003-2015e) and another from Firle, Sussex (SUSS-A64B56; Figure 2-72, B.) (PAS/Trustees of the

British Museum, 2003-2015f). Comparable fifteenth-century fastenings can also be found on the 'Tollemache Orosius' (London, British Library, Add. MS 47967), which was written in England during the tenth century (Figure 2-74, A. and B.).

Moulded decoration is also found on several book furnishings, although this is less common. A single example of a chain swivel link (B.6.1) from Fountains Abbey (*198*; Figure 2-59) has been interpreted as one from a book based on its decorative form and the location in which it was found, in the monastery's reredorter. It is more common, however, to find that domed bosses (B.1) have moulded elements to enhance their appearance. Two examples from Fountains Abbey, one of type B.1.1 (*183*; Figure 2-73) and the other of type B.1.2 (*189*; Figure 2-39), both have a decorative ridge around the base of the domed boss. A domed boss of type B.1.1 excavated from Roche Abbey also has a moulded ridge, but in this case the ridge lies around the top of the boss (*317*; Figure 2-73). The unusually shaped fitting of type B.1.4, discussed in detail in the previous section (see 2.7.2), has a moulded ridge at the centre of each of its edges giving it the appearance of a woolpack, which is further enhanced by three engraved lines in each of its corners (*301*; Figure 2-43).

2.8.4 MONOGRAMS

Significant decorative elements found on late medieval book fittings are monograms that signify a particular symbolic meaning, often relating them to the religious ideology and iconography of the period. The use of emblematic letters is found on only a limited number of book fixtures. Recorded in the catalogue are four book fittings that carry some form of decorative lettering. Three of these are identified as type B.7.1 (*201*, *202* and *302*) and one is classified as type A.9.2 (*252*). All of these have been embellished with the 'sacred trigram' comprising the letters 'IHC'. This Christogram symbolises the first three letters of the Greek form of the name of Jesus (*IHCOYC* or *ΙΗΣΟΥΣ*) and is an alternative to 'IHS' for the Latin phrase *Iesus Hominum Salvator* ('Jesus saviour of mankind') (Blake *et al.* 2003, 176; Stevenson *et al.* 2011, 150). Two of the type B.7.1 furnishings, which are from Fountains Abbey (*201*; Figure 2-74) and Rievaulx Abbey, North Yorkshire (*302*; Figure 5-8), are each stamped with two 'ihc' monograms. The two sets of letters on each example are bordered by a circle of oblique cabling. The third fitting of type B.7.1, also from Fountains Abbey (*202*; Figure 2-60), has been engraved with the monogram 'ihc', which is set against a

201

A.
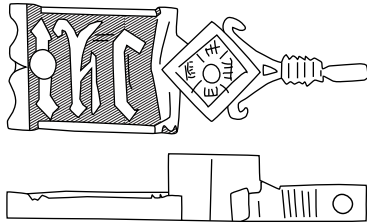
B.
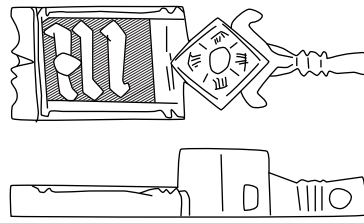
C.

D.

FIGURE 2-74. *Book fittings decorated with monograms:* **201** *from Fountains Abbey, West Yorkshire (English Heritage, 671204),* **A.** *and* **B.** *from the fifteenth-century binding of the 'Tollemache Orosius' (London, British Library, Add. MS 47967),* **C.** *from Roxwell, Essex (PAS/Trustees of the British Museum, 2003-2015g, ESS-6AF458),* **D.** *from Binbrook, Lincolnshire (PAS/Trustees of the British Museum, 2003-2015h, NLM-B1CAE5). Scale 1:1.*

background of an engraved linear pattern. The example of type A.9.2 was recovered from excavations at St Mary Graces Abbey (**252**; Figure 2-27) (Stevenson *et al.* 2011, 150). The rectangular attachment end of the fitting has an engraved linear border around the engraved letters 'ihc', which are surrounded by an engraved field of cross-hatching. The lozenge-shaped boss is also engraved with another sacred monogram that takes the form of the interweaving letters 'A' and 'M', which represent *Ave Maria*. Two fittings similar to that excavated from St Mary Graces Abbey are found on the 'Tollemache Orosius' (London, British Library, Add. MS 47967) (Figure 2-74, A. and B.). As previously explained, it is thought that the manuscript's original binding was altered in the fifteenth century when new leather covers and new fastenings were added (British Library Board 2015d). The metal fastenings added are of type A.9.2 and they are inscribed with 'ihc' and 'm'. Furthermore, artefacts of this type recorded in the PAS database have been decorated with such monograms. Fittings from Roxwell, Essex (ESS-6AF458; Figure 2-74, C.) (PAS/Trustees of the British Museum, 2003-2015g), and Binbrook, Lincolnshire (NLM-B1CAE5; Figure 2-74, D.) (PAS/Trustees of the British Museum, 2003-2015h), are both engraved with the monogram 'ihc', and another example from Firle, Sussex (SUSS-A64B56; Figure 2-72, B.), is engraved with another form of sacred trigram comprising the letters 'xpc' (from *ΧΡΙΣΤΟΣ*, Greek for 'Christ') (PAS/Trustees of the British Museum, 2003-2015f). Furthermore, a fifteenth-century German book on the Psalms (Leipzig, Universitätsbibliothek, MS 1502) has fittings of type A.3.1 and A.6, both of which are decorated with the letters "mari[a]" (Adler 2010, 98).

The use and significance of the sacred trigram in particular can be further explained from the investigation of the Cult of the Holy Name of Jesus. Originating from the New Testament, the veneration and acknowledgment of the power of the name of Jesus formed part of Christian tradition from the earliest times (Blake *et al.* 2003, 175). Used throughout the Christian world from the second century, three letters known as the 'sacred trigram' represented the Holy Name; by the sixth century, the forms 'IHS', 'IHC' and 'XPC' were typically used (Friedman 1995, 186; Blake *et al.* 2003, 176). Although the use of the sacred trigram was a longstanding tradition, a 'cult' of the Holy Name did not begin to develop in western Europe until the late thirteenth century. From the mid-fourteenth century, the Cult of the Holy Name gained widespread popularity. The earliest known text of the Mass of the Name of Jesus in England is found in the late thirteenth-century 'Beauchamp Missal' (Oxford, Trinity College, MS 8) (Blake *et al.* 2003, 176). This votive Mass became popular

throughout the country during the first half of the fifteenth century. The decorative use of the sacred trigram on book fittings not only illustrates the religious importance of monastic books, it can also be used to date objects on which it is found. These religious emblems, in conjunction with the form and style of these book fittings, indicate a fourteenth- to fifteenth-century date for the objects as this was the period when the Cult of the Holy Name of Jesus gained widespread popularity in England (Blake *et al.* 2003, 176; Carter 2010, 279-80). The popularity of the cult in England at this time also corroborates the fifteenth-century dating of the alterations made to the 'Tollemache Orosius' (London, British Library, Add. MS 47967) and the fastenings of type A.9.2 that were added.

The proliferation of the cult during the late medieval period is identifiable not only from books and their fittings but from other devotional and personal objects that carry the sacred trigram. Over 500 late medieval objects marked with the monograms of the Holy Name document the chronology and extent of the Jesus devotion. A study of the development and extent of the cult assesses many of these objects (Blake *et al.* 2003). The devotion to the Holy Name through the use of the sacred trigram is evident from the fabric and paraphernalia of churches, including the walls of chapels, lead-glazed tiles, memorial stone slabs and brasses, wooden furniture, textiles such as altar bands, tapestries and gowns, and church metalwork including altar crosses, chalices and patens (Blake *et al.* 2003, 179-81). Numerous objects that did not necessarily have an ecclesiastical association were also often marked with monograms signifying the Holy Name, including tableware comprising wooden and ceramic vessels and cutlery, personal seals, leather objects, dress accessories such as rings, brooches, pendants, badges, belt fittings and purse bars, and documents such as wills and indentures (Blake *et al.* 2003, 181-6). The use of the sacred trigram, during the fourteenth and fifteenth centuries, to decorate ecclesiastical and personal objects in addition to the fittings of monastic books demonstrates the significance of the Holy Name of Jesus in late medieval English society.

2.8.5 Secondary decorative materials

Late medieval book fittings were not only decorated by the manipulation of their surface, but also by the application of secondary materials. Based on the data gathered for this research, the most common material used to embellish the surface

of book fittings was gold. A total of ten recorded fixtures have had gold applied to their surface and nine of these have been gilded (*7*, *42*, *44*, *69*, *75*, *247*, *252*, *253* and *302*). Excavated from Fountains Abbey, the tenth example (*192*; Figure 2-51) that is adorned with this precious metal has not been gilded; the gold has been applied in the form of delicate filigree threads, although it is only visible in patches. On these book fittings the gold has typically been used to enhance and highlight designs created by other decorative techniques. Only two examples (*75* and *247*; Figure 2-75), both of type A.3.1, have been decorated by gilding alone. In the case of the type A.1.1 fastening recovered from St Augustine's Abbey (*69*; Figure 3-51), the five-petal rosette engraved on the loop was highlighted visually by applying gold to the indentations (Henig and Woods 1988, 215). Also, the two fittings (*252* and *253*; Figure 2-27) of type A.9.2 from the Cistercian abbey of St Mary Graces in London have both been gilded to further emphasise their already decorative surfaces; the fitting engraved with the religious monograms has been extensively gilded, including on its reverse side (*252*) (Stevenson *et al.* 2011, 150). It is perhaps not unusual that such richly decorated book fittings have been found at St Mary Graces Abbey as, by the time of the Dissolution, it was the third wealthiest Cistercian house in England with an income of £547 0s. 6½*d*., which mainly derived from tithes and property rents in London and the suburbs (Page 1909; Midmer 1979, 206).

In addition to gold, two classified book fittings are decorated with a second material. First, the engraved decoration on the binding strip (B.5.1) excavated from Battle Abbey (*42*; Figure 3-51) was enhanced not only by gilding but also by *vernis brun* (Geddes 1985, 149). The technique of *vernis brun* (literally in French 'brown varnish') consists of darkening areas of a copper-alloy object by coating them with a linseed oil mixture and then heating them so that a residue of the oil adheres to the surface of the object (Stratford *et al.* 1984, 254); a contemporary description of this technique is given in the twelfth century by Theophilus in *De diversis artibus* (Hawthorne and Smith 1979, 28-9). Second, the decoratively-shaped furnishing (B.3.1) excavated from Fountains Abbey (*192*; Figure 2-51) was not only decorated with gold filigree, it was also adorned with enamel. Enamels of blue and green were used on this object to enhance the engraved foliate design. The style of the enamel is characteristic of that produced in Limoges, France, and therefore may date the fitting from the second half of the twelfth century to the fourteenth century, a period when there was an international market for Limoges enamel (English Heritage object management database, accessed 7 December 2011, 671159). Based on both the form of this

Figure 2-75. *Hooked book fastening of type A.3.1 from St Augustine's Abbey, Kent, which has been gilded (English Heritage, 775157). Scale 1:1.*

artefact and the nature of its decoration, it is thought that this object may date to the thirteenth century (English Heritage object management database, accessed 7 December 2011, 671159).

Enamel was also used to furnish other recorded examples of book fittings. The lozenge-shaped centre-piece (B.3.1) excavated from Bordesley Abbey (**66**; Figure 3-48) has a central inset that is possibly made of enamel (Rahtz 1983, 177). Another fitting of type B.3.1, this time from Coventry Cathedral Priory, Warwickshire (**98**; Figure 2-51), is decorated with enamel in the sections created by the engraved foliate design (Rylatt *et al.* 2003, 126). This is very similar in both form and decoration to the example from Fountains Abbey (**192**; Figure 2-51) mentioned above. Due to the similarity of these two artefacts, it is likely that the Coventry example is of a similar thirteenth-century date to the object from Fountains Abbey. This type of decorative technique is also found on the fitting of type A.10.1 excavated from Fountains Abbey (**174**; Figure 2-30). On this example red and blue enamel, which is also characteristic of Limoges styles, would have completely filled the sunken elements of the central panel. A comparable fitting from Fulford, North Yorkshire, has been recorded on the PAS database (SWYOR-D9A074; Figure 2-31). Both examples are highly decorated

with engraved linear designs that have been subsequently enamelled. Similarly to the example from Fountains Abbey, this fitting has a central panel with a lozenge in relief that is surrounded by a pattern of red and blue Limoges-style enamel. The enamel is in fact in much better condition than that on the fitting excavated from Fountains Abbey and demonstrates more clearly how these fittings would have once looked. This example was also gilded, adding to the embellishment of this object. Both examples are intricately decorated using several techniques and this may be the reason for so few examples of this type. There is very limited information concerning the dating of this type of book fastening. Nevertheless, the style of the red and blue enamel is characteristic of that produced in Limoges, France, and so these two fittings may date between *c.*1150 and 1400.

2.9 SUMMARY

This chapter has presented a typology of late medieval book fittings that has been used to classify artefacts excavated from English monastic houses. The processes involved in developing this classification system, the terminology used and the difficulties associated with dating have been discussed. The in-depth analysis of the material itself has also demonstrated in more detail the many and varied forms that book fixtures took. The examination of extant late medieval bindings has helped to support the archaeological evidence, providing information on the chronology of these forms and the wider contexts in which they were used. Through the evaluation of the recorded pieces of late medieval book furniture, it has been possible to identify the use of decoration, and lack thereof, on different types of fixtures. By considering this information in broader terms, it has been possible to recognise the more common styles and techniques used, and, in some cases, the religious connotations that certain motifs and monograms signified. This analysis can, for example, be used by English Heritage to re-evaluate and re-interpret their collections and museum displays. The results and interpretations from this research have already been applied to the redevelopment of the museum displays at Rievaulx Abbey, North Yorkshire.

3 BOOK PRODUCTION

3.1 Introduction

This chapter presents a discussion on late medieval book production. It provides an overview of the technology of book manufacture, followed by a more in-depth investigation into the production of the fittings that were used on medieval bookbindings. Much has been written on the technology of medieval book production, from the manufacture of parchment to the binding of the quires (see Ivy 1958; Pollard 1962, 1976; Middleton 1963; Vezin 1978; Harthan 1985; Shailor 1994; Clement 1995; Barnard *et al.* 1999-2012; Szirmai 1999; Clemens and Graham 2007; Gillespie and Wakelin 2011; Clanchy 2013). In comparison, however, to date almost no research has been completed on the manufacturing of book fittings, which were a significant element of bindings. The absence of study of this key area has been an important driver behind this research. An exception is Adler's (2010) research on book fittings dating from the early Middle Ages from German-speaking countries, the Netherlands and Italy, but this only begins to consider their production. Nevertheless, through the use of documentary and archaeological evidence for medieval metalworking in general, and the examination of book fittings in particular, it is possible to determine the key materials, the methods and styles of the manufacture and decoration of late medieval book fittings.

Following this, consideration is given to the production of books in the context of late medieval English monasteries. In the following chapter (see 4.2 and 4.3), the importance of books within medieval religious society and the types of books available are addressed. From this it is clear that books for religious purposes, especially those used by monasteries, formed a huge proportion of those produced during this period. Additionally, the frequency with which book fittings have been recovered archaeologically from monastic sites further warrants an evaluation of the nature of monastic book production.

As will become evident, secular and commercial book production in urban centres had largely replaced production within the monasteries by the mid-thirteenth century. Therefore, the influential factors behind this transition, and also the continuation of sporadic programmes of production in monasteries, are investigated. To conclude this chapter on medieval book production, the invention of the printing

press in the mid-fifteenth century, in the context of its effect on the manuscript culture, is addressed.

3.2 THE TECHNOLOGY OF BOOK PRODUCTION

For many years, medieval books have been studied by palaeographers, codicologists and historians to understand, for example, the language and script of medieval texts (e.g. Gruys 1972; Delaissé 1976; Derolez 2003). Since the 1950s, however, interest has developed in the physical characteristics of the medieval book (see Ivy 1958; Pollard 1962, 1976; Middleton 1963; Vezin 1978; Harthan 1985; Shailor 1994; Szirmai 1999). It has been argued that to contextualise the written culture of the late medieval period, the structure of the physical object, that is the book, must be addressed (Da Rold 2011, 13). In previous years, the technology of late medieval book production and the numerous processes, materials and tools involved have been the subject of many studies, with more recent discussions published by Clement (1995), Barnard, McKitterick and Willison (1999-2012), Clemens and Graham (2007), Gillespie and Wakelin (2011), and Clanchy (2013). For this research, it is important to understand the manufacture of medieval books in order to recognise the combination of skills required to produce these diverse artefacts, and thus their value and importance within late medieval society. As the technology of medieval book production has been extensively investigated, this section provides an overview of the key processes, materials and tools involved in the production of the medieval book, beginning with a brief introduction to the book in its codex form. Contemporary descriptions and depictions of medieval book production, in addition to archaeological evidence, have been used to enhance this discussion.

3.2.1 ORIGINS OF THE CODEX

For thousands of years, the principal form of the book, along with the wax tablet, was the roll (*rotulus* or *volumen*) (Brown 1994, 107; Clement 1995, 9; Clemens and Graham 2007, 3). Typically made from papyrus sheets, rolls were inscribed and read horizontally from end to end. The appearance of the hand-produced book, the manuscript, in codex form (rectangular, bound or linked pages) can be traced to the first centuries of Christianity (Clement 1995, 11; Szirmai 1999, 3). The development of

the codex (from *caudex*, Latin for 'tree bark') is thought to have been facilitated by the preference of the early Christians for the use of parchment (Clement 1995, 13; Brown 2009, 179; Finkelstein and McCleery 2013, 36). Papyrus was the most widely used writing surface in the ancient world, however, with the decline of the Roman Empire, the means of obtaining papyrus diminished and so western Europeans turned to the more readily available and locally-produced animal skins (Clemens and Graham 2007, 4). Christians adopted the more resistant parchment as a writing surface for the preservation of their sacred works in codex form. The nature of the parchment codex had many advantages distinguishing it from other writing media, such as the papyrus roll. The codex form enabled texts to be more easily consulted and stored, and also allowed for greater portability and durability (Brown 1994, 42; Shailor 1994, 6; Clement 1995, 11; Evenden 2010, 91; Finkelstein and McCleery 2013, 36). The parchment codex eventually supplanted the roll as the standard form of book following the Christianisation of the Roman Empire in the fourth century. The Christian community developed a cohesive set of doctrines through the replication, augmentation and written recording of key messages, exploiting the format of the parchment codex (Brown 2009, 179; Finkelstein and McCleery 2012, 31). Produced as gathered leaves in a rectangular format, parchment codices had become standard across Europe as the main form for written texts by the fifth century (Robinson 2008, 47; Finkelstein and McCleery 2013, 36).

Although the codex was the usual form of book throughout the medieval period, the roll and the wax tablet continued to be employed and each format had its appropriate uses (Savage 2006, 47-8; Robinson 2008, 41-54; Brown 2009, 179; Clanchy 2013, 137-45). For example, Clanchy (2013) in his study on the uses of literacy in the *Middle Ages*, gives the different purposes that these two forms served in England between 1066 and 1307, particularly focusing on the use of rolls for bureaucratic documents and records. Robinson (1980; 2008) has also studied the different formats of books that were still in use alongside the codex during the medieval period, in particular booklets, small but structurally independent productions comprising one or several quires containing a single text or a number of shorter pieces.

3.2.2 PARCHMENT AND PAPER

The terms used most frequently to refer to writing surfaces prepared from animal

skins are parchment and vellum (Ivy 1958, 34; Brown 1994, 95; Clement 1995, 13-4; Clemens and Graham 2007, 9). 'Parchment' (*pergamenum*) derives its name from Pergamum, the reputed site of its invention and early production in the second century BC. The skins most commonly used for parchment were sheep and goat, although it is likely that many texts were also written on deer or pigskin (De Hamel 1992, 8). The term 'vellum' derives from the Latin *vitulinum*, meaning 'of calf' or 'made from calf', and so is strictly reserved for calfskin. Vellum is considered to have been more expensive than sheepskin parchment as it was typically obtained in larger sizes and was more resistant to severe handling, and so was often used for fine productions of large books (Ivy 1958, 35; Backhouse 1979, 8; Robinson 2008, 48).

In recent scholarship, these terms are often used interchangeably to refer to the same material, a writing surface made from an animal skin (De Hamel 1992, 8; Da Rold 2011, 14). This is largely due to the fact that, once the skin is prepared, it is difficult to accurately identify the animal from which the skin is made (Ivy 1958, 34; De Hamel 1992, 8; Clement 1995, 14). Consequently, parchment is often the preferred term to denote any animal skin prepared to receive writing and so is used generically by many scholars (e.g. Ivy 1958, 34; Brown 1994, 95; Clemens and Graham 2007, 9), and is a convention followed in this research.

The production of parchment is concisely summarised by Brown (1994, 95): "To produce parchment or vellum, the animal skins were defleshed in a bath of lime, stretched on a frame, and scraped with a lunular knife while damp. They could then be treated with pumice, whitened with a substance such as chalk, and cut to size". Various stages of the preparation of parchment are often depicted in contemporary sources (Figure 3-1). Also, a thirteenth-century recipe for parchment making, which describes all the processes involved, occurs in a German manuscript now in the British Library, London (Harley MS 3915, fol. 148r) (for a translation see Clemens and Graham 2007, 11-2).

It is traditionally assumed that parchment was a rare and expensive commodity (Shailor 1994, 11). However, it has been argued that this assumption fails to recognise the differences in the quality of parchment used for different types of books and also the cost of parchment relative to the cost of other materials and the scribe's time (Alexander 1992, 36-8; Clanchy 2013, 123). Although no extensive, detailed study has been made of these issues, Clanchy (2013, 123-5) offers a few indicative pieces of evidence. For example, some late thirteenth-century obedientaries' accounts for
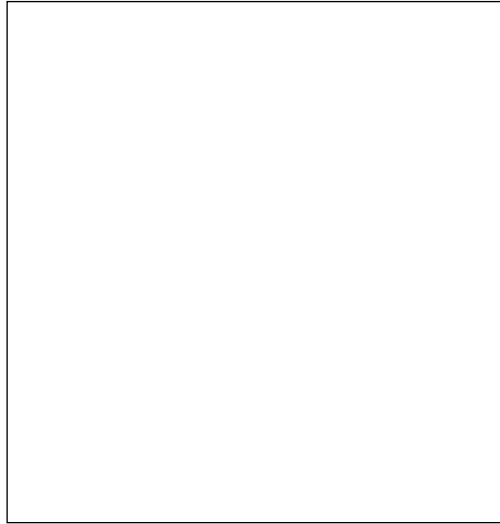
Figure 3-1. *A monk can be seen working with a lunular knife (*lunarium *or* lunellum, *meaning 'little moon') on a skin suspended on a parchment maker's frame in a twelfth-century German copy of Ambrose's* Opera varia *(Bamberg, Staatsbibliothek, MS Patr. 5, fol. 1v) (detail) (Dodwell 1993, 309; Clemens and Graham 2007, 11).*

several monasteries sufficiently distinguish between the expense of writing materials and labour costs, suggesting that even the finest parchment was cheaper than the scribe's time. In the case of Norwich Cathedral Priory, in 1288, a gross of skins cost 17*s*. 5*d*., whereas the scribes were paid 20*s*. 5*d*. and similarly, in 1296, a gross of skins cost £2. 1*s*. 6*d*., while the scribes writing the book were paid £3. 6*s*. 10*d*. (Clanchy 2013, 124). Furthermore, Clanchy (2013, 125) argues that the large number of animals kept in England, particularly sheep for wool production, may have made parchment cheaper, although sheepskins were used for a number of purposes other than for producing parchment.

However, as the late medieval period progressed paper became increasingly available as an alternative to parchment for the production of books. Made from hemp or linen, paper was invented in China, adopted by the Arabs in the eighth century and spread throughout Muslim states along the Mediterranean between 800 and 1000 (Finkelstein and McCleery 2013, 36). It was finally adopted by the Italians who perfected production techniques by the thirteenth century before being introduced into England via France and Italy by the beginning of the fourteenth century (Ivy 1958, 36; De Hamel 1992, 16; Thomson 2008a, 77-8; Da Rold 2011, 24; Finkelstein and

McCleery 2013, 36). Paper mills were established in Spain and Italy by the thirteenth century, in France by about 1340 and in Germany by 1390. In England, however, paper was not manufactured until 1494 and imported paper was not widely used for manuscripts before 1400 (De Hamel 1992, 16). As described by Ivy (1958, 37), paper had several disadvantages compared to parchment. Firstly, paper could not take and retain the same variety of inks and pigments as prepared skins and it was more susceptible to damage from damp and heat. Also, in bound volumes, paper could tear and become dog-eared in the corners more easily. Nevertheless, the import and use of paper is believed to have revolutionised the traditional way of producing books (Da Rold 2011, 22). As printing became more established towards the end of the late medieval period, paper largely replaced parchment making books cheaper to manufacture and purchase (Ivy, 1958, 37-8; Backhouse 1979, 8; Brown 1994, 95; Shailor 1994, 11; Lyall 2007, 11-2). Parchment continued to be used, however, for luxury manuscripts as it offered a sturdier base for the application of coloured pigments and gold, and it was also used for manuscripts that were exposed to intensive use, such as liturgical and school books (Alexander 1992, 35; Derolez 2003, 32).

3.2.3 QUIRES

Once the prepared animal skins had been cut into sheets of parchment, the next stage in the production of manuscripts was the making of quires, or the gatherings of leaves. The quire was the scribe's basic writing unit throughout the late medieval period, and various sizes were made during this time. It has been suggested that, up to the twelfth century, manuscripts produced in England and on the Continent were usually quires of eight leaves (*quaternio*) and that after this time practice became more varied (Ivy 1958, 39). For example, between the late thirteenth century and *c.*1400, quires of 12 were fashionable (Derolez 2003, 33; Thomson 2008a, 79). Nevertheless, throughout the late medieval period, the most common sizes were quires of eight or ten leaves (*quiniones*) (Ker 1960, 40; Clement and Graham 2007, 14; Thomson 2008a, 79).

There were two methods of producing quires. First, a *bifolium* was generated by folding a single sheet down the centre to create two leaves (*folia*). The front and back of a folio are referred to as the *recto* and *verso*, respectively (Brown 1994, 57). Quires were made by nesting four or five sheets (*bifolia*), one inside the other, to

produce eight or ten leaves (Figure 3-2) (Ivy 1958, 38; Clement 1995, 23; Clemens and Graham 2007, 14-5). Second, a multi-folded method was used to form quires by taking a large sheet, folding it several times and then cutting along the appropriate edges. Sheets were folded either twice to obtain a quire of four leaves, or three times to achieve a quire of eight leaves (Figure 3-3) (Ivy 1958, 38; Clemens and Graham 2007, 14-5). The use of *bifolia* is thought to have been the easiest method when producing large books and the multi-folding method is considered to have been simpler for the manufacture of smaller books (Clement 1995, 24; Evenden 2010, 92).

When producing quires of parchment, the scribe would have had to take into consideration the arrangement of the hair- and flesh-sides of the sheets, due to changes in colour and texture (Clement 1995, 24-5; Derolez 2003, 33; Clemens and Graham 2007, 15). For aesthetic reasons, medieval scribes thought it was essential that, at any opening of a book, the reader should see only one colour and texture of skin (Figure 3-4) (Clement 1995, 24-5; Clemens and Graham 2007, 15).
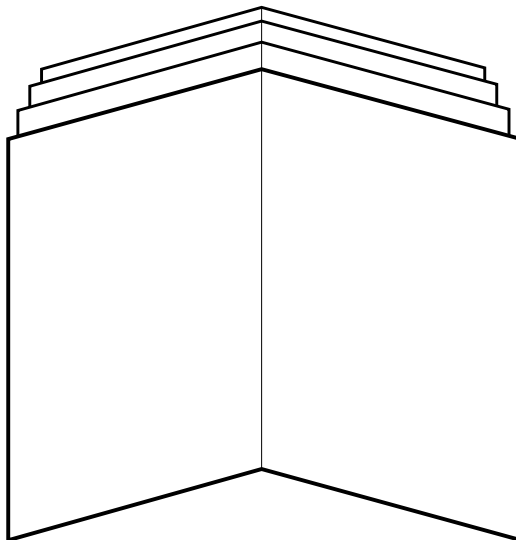
FIGURE 3-2. Diagram of a regular eight-leaf quire made up of four bifolia *nested together. Redrawn from Clemens and Graham 2007, 14.*
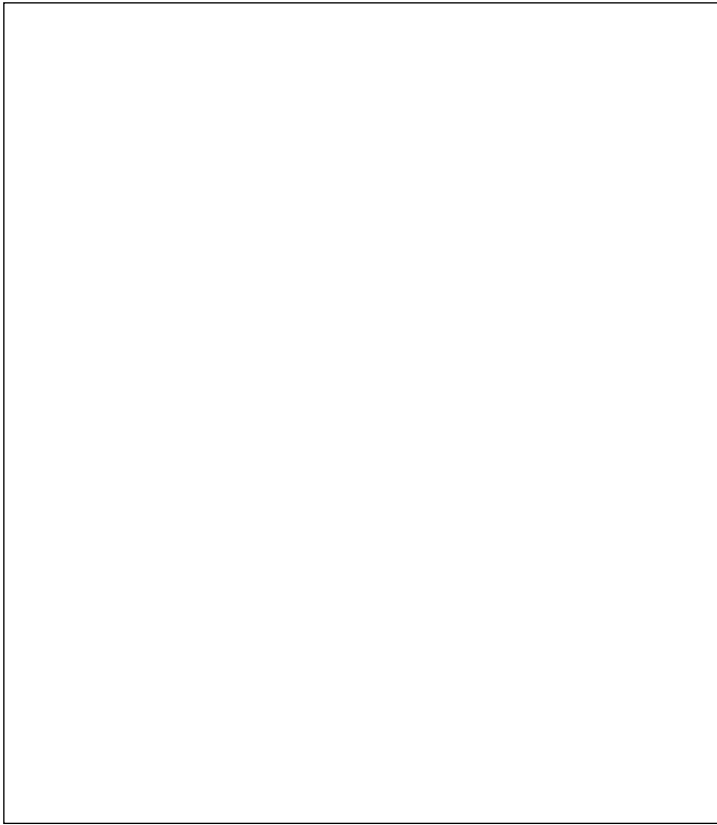
FIGURE 3-3. Diagram showing how a four-leaf quire could be produced by making two folds in a large sheet of parchment (Clemens and Graham 2007, 15).

FIGURE 3-4. Hair follicles are visible on these two pages (Chicago, Newberry Library, MS 79, fols. 55v-56r) (Clemens and Graham 2007, 14).

3.2.4 PRICKING AND RULING THE LEAVES

Before writing could begin, the scribe would have to rule the leaves of parchment. In order to do this, they would first prick small holes in the margins to guide their horizontal and vertical rulings, keeping the ruling regular from page to page and quire to quire. Sheets of parchment were pricked and ruled by scribes either before or after the folding of the sheets to form *bifolia* and quires (Clement 1995, 25; Clemens and Graham 2007, 16). If the scribe pricked and ruled folded sheets, it was necessary to make lines of holes in both the inner and outer margins of the leaves. The text to be written also influenced the layout of the holes. The arrangement of text and commentary in books, such as glossed biblical books produced *c.*1130-1250 and the books of canon and civil law produced 1100-1400, but particularly after *c.*1250, varied from page to page. Consequently, pages would have had to have been pricked in both margins so that each page could have been ruled individually (Thomson 2008a, 81). In some cases, the holes can still be seen on leaves (Figure 3-5), but those in the outer margins were frequently lost when the edges of leaves were trimmed during the binding process (Derolez 2003, 35; Clemens and Graham 2007, 15).
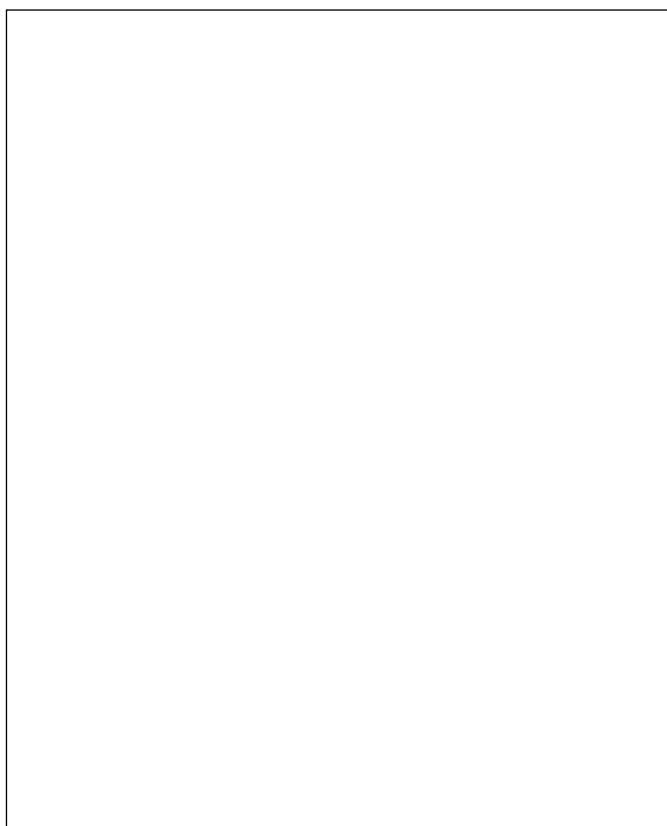
FIGURE 3-5. *Manuscript showing prickings in the outer margin (Chicago, Newberry Library, MS 3, fol. 90v) (Clemens and Graham 2007, 16).*

The tools typically used by scribes to make these holes include a knife, an awl or parchment-pricker, compass or in some cases a spiked wheel attached to a handle (Figure 3-6) (Ivy 1958, 43; Clement 1995, 25; Savage 2006, 48; Clemens and Graham 2007, 15; Thomson 2008a, 80-1). Parchment-prickers are frequently found on excavations of medieval sites (Figure 3-7), with examples including Eynsham Abbey, Oxfordshire (Allen 2003, 267), Bermondsey Abbey, Surrey (Dyson *et al*. 2011, 139), and Southampton (Platt and Coleman-Smith 1975, 274). Parchment-prickers are made from worked bone and have an ovoid or spherical head and a short tapering or parallel-sided shaft, which is usually ornamented with one or more bands of multiple engraved lines. The defining feature of the parchment-pricker is the metal inset at its tip. Their metal points are generally made of iron but sometimes copper alloy or even silver (MacGregor 1985, 124).

Next, the leaves were ruled, and the scribal methods for ruling varied throughout the late medieval period. Prior to the late eleventh century, ruling was in drypoint, where the rulings were made by pressing into the page with a knife or stylus. From the late eleventh century, there was a gradual transition from drypoint ruling to ruling in plummet, or leadpoint (Figure 3-8) (Ivy 1958, 43; Ker 1960, 41-2; Shailor 1994, 14-5; Clement 1995, 25-6; Derolez 2003, 34-5; Clemens and Graham 2007, 16-7). Excavations often recover examples of these lead tools used for the ruling of manuscript pages during the medieval period. In particular, those with flattened ends are thought to have been designed specifically for ruling lines and examples from Winchester come from thirteenth- and fourteenth-century contexts (Figure 3-9) (Biddle and Brown 1990, 736). Finally, during the fourteenth and fifteenth centuries, ruling using pen and ink became the common method (Ivy 1958, 43; Ker 1960, 41-2; Shailor 1994, 14-5; Clement 1995, 25-6; Derolez 2003, 35; Clemens and Graham 2007, 16-7).

Throughout the late medieval period, various patterns of ruled lines were used to define the written space (Figure 3-10). The number of vertical rulings, for example, depended on the number of columns in which the text was to be written. As described by Ker (1960, 42-3), Clemens and Graham (2007, 16) and Parkes (2008a, 56-8), single columns were simply guided by a pair of vertical lines close together. More complicated patterns, however, were required for writing texts in multiple columns or for producing tables. Also, particular types of work, such as glossed biblical texts, necessitated a more elaborate and often asymmetrical presentation (Shailor 1994, 18; Parkes 2008a, 58).
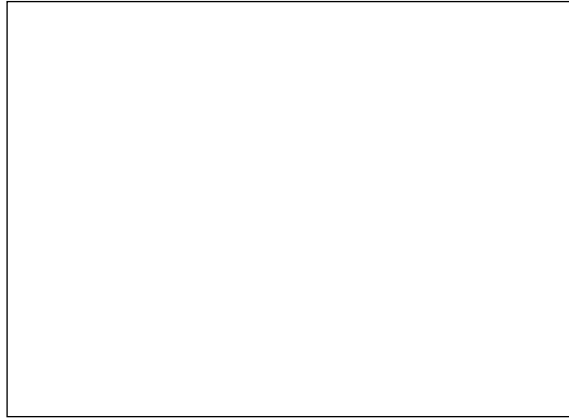
FIGURE 3-6. Tools for pricking holes in parchment (Clement 1995, 24).
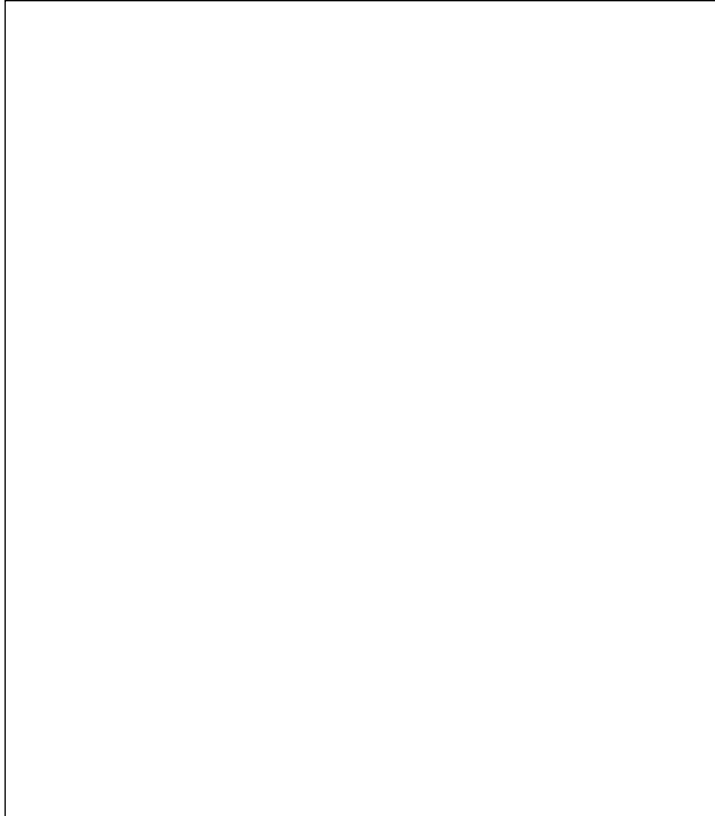
FIGURE 3-7. Parchment-prickers recovered during excavations at Eynsham Abbey, Oxfordshire (left) (Allen 2003, 267, nos.57 and 58), Bermondsey Abbey, Surrey (centre) (Dyson et al. 2011, 139, nos.S32 and S34), and Southampton (right) (Platt and Coleman-Smith 1975, 274, nos.1936 and 1937). Scale 1:1.

FIGURE 3-8. *This manuscript page has been ruled in lead plummet to receive three columns of text (Newberry Library, MS 16, fol. 487r) (Clemens and Graham 2007, 17).*

FIGURE 3-9. Two writing leads excavated from Winchester (Biddle and Brown 1990, 745, nos.2298 and 2299). Scale 1:1.
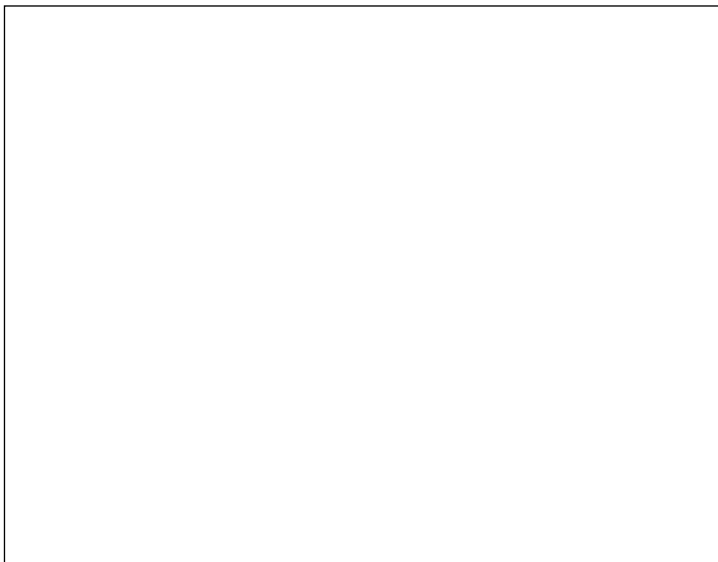
FIGURE 3-10. A typical pattern of pricking and ruling (Clemens and Graham 2007, 17).

3.2.5 WRITING

Once the sheets had been ruled, they were ready to receive text. Initially, scribes had to prepare their pen and ink. A scribe would prepare his pen using a quill, the best of which was considered to come from the wings of a goose or swan (De Hamel 1992, 27; Thomson 2008a, 81). The quill was prepared by removing the feathers, hardening the quill, scraping it clean, and then squaring off and splitting the point (De Hamel 1992, 29). Archaeologically goose bones, specifically the radii, with obliquely cut and pointed ends have been tentatively identified as medieval pens similar to the quill (Figure 3-11), with examples recovered from excavations at York (MacGregor *et al.* 1999), Boston (Moorhouse 1972) and Leicester (Mellor and Pearce 1981). As these objects lack the split ends that give added flexibility to quill pens, it has been argued that they could have been used as pens for ruling if loaded with viscous ink and held with the open side upwards, almost horizontally (MacGregor 1985, 125; MacGregor *et al.* 1999, 1976). However, it has been suggested that these bone items were used for other functions, including as pipettes for charging quill pens and as 'economisers' for broken quills where the quill is inserted into the hollow bone to lengthen it and so allow the continued use of the quill pen, as indicated by the contemporary residue of ink on an example from Boston (Moorhouse 1972, 43). Furthermore, it has been proposed that this tool could have been used to scoop out or measure quantities of softened oak galls for the preparation of ink (MacGregor 1985, 125-126).

Ink for writing was made in a number of ways with the basic distinction being between carbon-based and iron-gall-based inks (Ivy 1958, 45; Backhouse 1979, 8; De Hamel 1992, 32-3; Clemens and Graham 2007, 19-20; Thomson 2008a, 81-2; Da Rold 2011, 14). Both types include gum arabic as a fixative and additional ingredients include charcoal, wine, vinegar, vitriol and iron sulphate (*copperas*) (Clemens and Graham 2007, 19; Da Rold 2011, 14). Medieval descriptions of book-making often include recipes for ink. For example, a fifteenth-century miscellany (Cambridge, Trinity College, MS R.14.45) has a recipe for ink alongside instructions for making parchment (for a description see Ivy 1958, 45). Throughout the Middle Ages, there is a great deal of variation in ink colour between books as well as within single volumes, including various shades of black, brown and yellow. Despite this variation, scribes often remarked on the importance of preparing good black ink ("*Si vis facere bonum atramentum*") (London, British Library, Sloane MS 416, fol. 37v), suggesting iron-gall-based ink as the best quality black ink for use on parchment (Da Rold, 14-5).
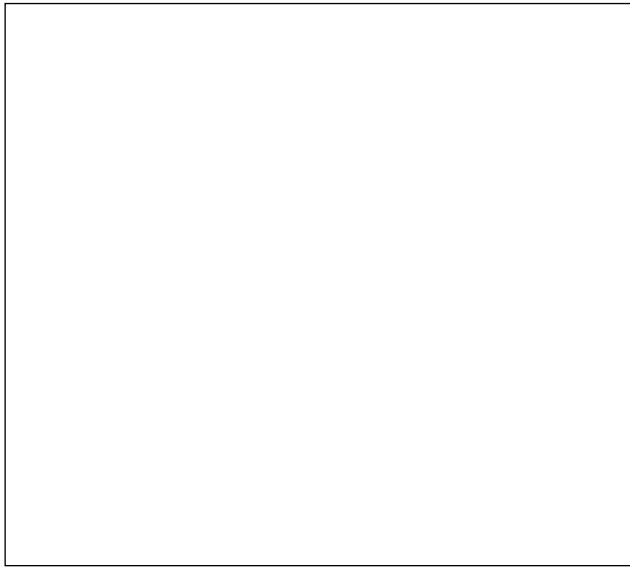
FIGURE 3-11. Goose radii, with obliquely cut and pointed ends identified as medieval pens, excavated from York (left) (MacGregor et al. 1999, 1976, nos.7976 and 8059), Boston (centre) (Moorhouse 1972, Fig. 7, no.12) and Leicester (right) (Mellor and Pearce 1981, 143, no.109). Scale 1:2.
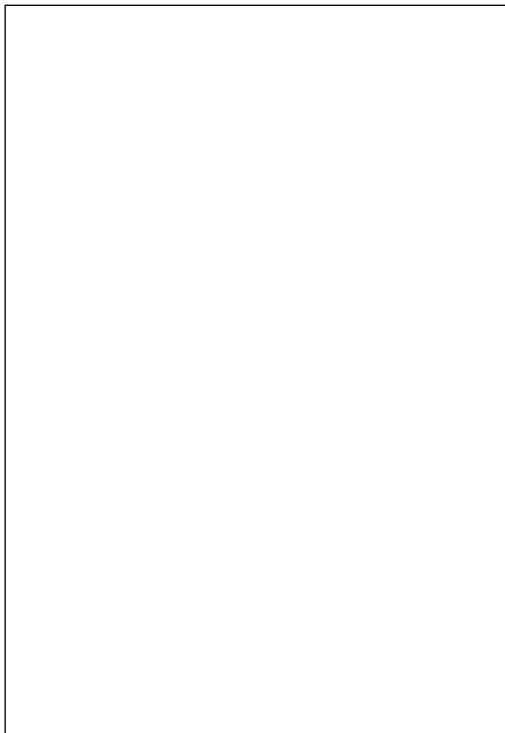
FIGURE 3-12. A late medieval decorated leather inkwell (De Hamel 1922, 32).
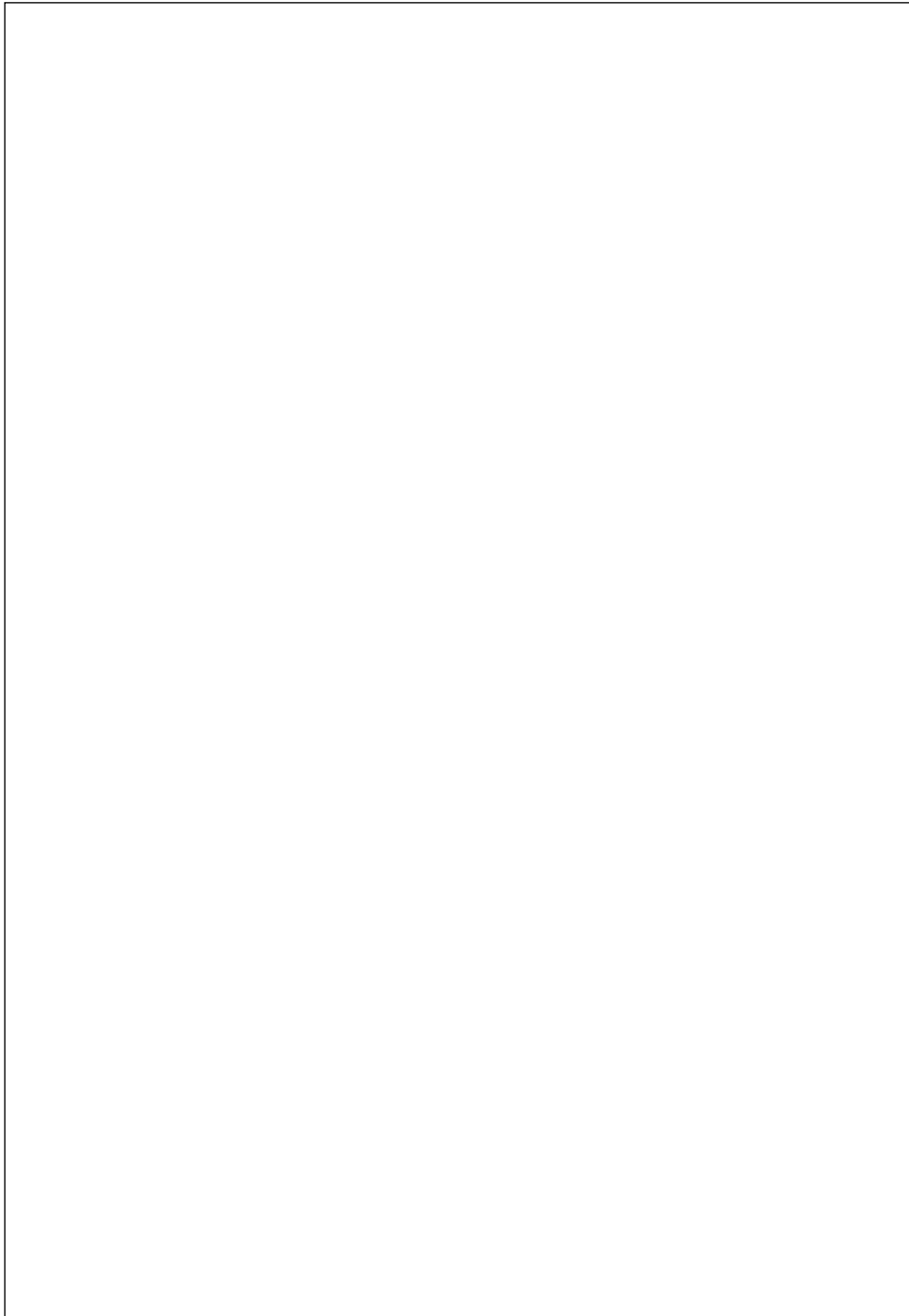
FIGURE 3-13. *The monk Eadwine depicted working with a quill and penknife in a mid-twelfth-century portrait in a luxury glossed psalter (Cambridge, Trinity College, MS R.17.1, fol. 283v) (De Hamel 1997a, 75).*

FIGURE 3-14. *Vincent of Beauvais depicted writing in his study (London, British Library, MS Royal 14 E. i (pt. 1), fol. 3r) (detail) (British Library Board 2015j).*
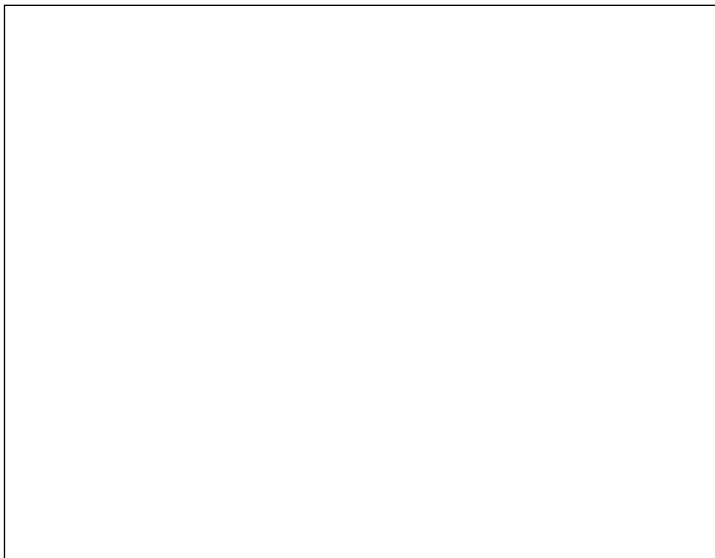
FIGURE 3-15. *Mid-fifteenth-century depiction of Jean Miélot (Brussels, Bibliothèque Royale Ier, MSS 9278-80, fol. 10) (detail) (De Hamel 1992).*

Inkwells were used by medieval scribes, and these were made from a number of different materials, including bone, horn, leather and wood (Figure 3-12). Two late medieval examples of horn inkwells, now in the Museum of London, both make use of the natural hollow, cylindrical form of the raw material (London Museum 1954, 292). Other tools required by a medieval scribe for writing included a penknife, which was used to sharpen the quill, steady the page and to erase any mistakes made during writing. Also, a means of storing writing tools and a surface on which to lean the parchment when writing were necessary (Thomson 2008a, 81). Depictions of late medieval scribes utilising these various tools are often found in contemporary manuscripts. For example, the monk Eadwine, the 'prince of scribes', as the inscription calls him, is shown in a mid-twelfth-century portrait in a luxury glossed psalter (Cambridge, Trinity College, MS R.17.1, fol. 283v), where Eadwine is clearly depicted working with a quill and penknife (Figure 3-13) (De Hamel 1997a, 75). However, Clanchy (2013, 119) believes that such depictions are not truly representative of medieval scribes, arguing that the average scribe did not sit in an elaborate chair at an elegantly draped desk, and that he did not normally write on the blank pages of a bound book, as in Eadwine's portrait. It has also been suggested that classic portraits of the scribe, which are most often monastic in origin, illustrate the traditional copyist who wrote beautiful liturgical books, distinguishing them from the new type of scribe, the secular clerk, which came to the fore in the twelfth century (Clanchy 2013, 119). Nevertheless, a more authentic author-portrait is considered to be that of Vincent de Beauvais in a late fifteenth-century copy of de Beauvais' *Speculum Historiale* (London, British Library, Royal MS 14 E I (pt. 1), fol. 3r), which shows the scribe at his desk writing while holding a quill and penknife (Figure 3-14) (Ivy 1958, 49). The mid-fifteenth-century depiction of Jean Miélot (Brussels, Bibliothèque Royale Ier, MSS 9278-80, fol. 10) shows the scribe and translator sat at his desk, which has storage facilities for his tools, and utilising his quill and penknife, he is writing on a sheet of parchment as he copies from an exemplar (Figure 3-15) (De Hamel 1992). Although they may not be wholly representative of the conditions of the typical medieval scribe, these illustrations demonstrate the different tools necessary for writing.

For the writing of the text, the scribe required an exemplar, a book from which another is copied. The only occasion in which an exemplar was not necessary was when the scribe was in fact the author creating an original composition, although they would have typically copied from drafts of their work written on wax tablets or

scraps of parchment (Clemens and Graham 2007, 22). It was the scribe's task to copy the text from the exemplar as accurately as possible (Shailor 1994, 19; Clemens and Graham 2007, 20-1). The scribe would first typically write portions of text that were in plain ink, leaving blank the appropriate amount of space and often providing guides for headings, initials (the enlarged and decorated first letters of the first words of text divisions) and decoration. The typical method of writing was to begin on the first page of the quire (the *recto* of the first folio) and to work straight through (Ivy 1958, 44; Clement 1995, 26). Before turning to write on the *verso* of a page, the scribe would have had to pause in order to let the ink dry (Ivy 1958, 44; Clement 1995, 26). Alternatively, text was sometimes written out of page order (Ivy 1958, 44; Clement 1995, 26). This method is thought to be supported by manuscripts written by Durham scribes as their writing is often cramped at the bottom of pages suggesting that they were trying to keep exactly level, page for page, with their exemplars, by cramping their handwriting in order to make the text join properly with the page already written (Ivy 1958, 44).

The types of scripts used by late medieval scribes that have been the focus of scholars for many years (e.g. Bischoff 1990; Brown 1990; Parkes 1997, 2008b; Derolez 2003; Wakelin 2011; Webber 2012) do not relate directly to the objectives of this research and so are not discussed in detail here. Palaeographers have specialised in studying the history of scripts, their adjuncts, such as abbreviation and punctuation, and their decipherment. For example, Bischoff (1990) presents a detailed account of the development of the Latin script in its cultural context from antiquity to the Middle Ages and more recently Derolez (2003) offers an in-depth survey of all book scripts in use in western and central Europe from *c.*1100 to *c.*1530. A brief but useful overview of the development of different scripts, from the Roman cursive to the late medieval Gothic cursive, is given by Shailor (1994, 28-35) and a discussion on those used in England during the medieval period and the process of writing is given by Wakelin (2011, 39-44).

The arduous nature of transcribing medieval texts is frequently described in contemporary medieval manuscripts (Irwin 1966, 120; Savage 2006, 45-6; Clemens and Graham 2007, 23; Wakelin 2011, 34-5; Clanchy 2013, 118). One complaint relating to the onerous labours that scribes had to face is found in a tenth-century Spanish copy of the *Moralia on Job* of Gregory the Great (Madrid, Biblioteca Nacional, MS 80). This account describes "the burden of writing: it mists the eyes, it curves the back, it breaks the belly and the ribs, it fills the kidneys with pain, and the body with

all kinds of suffering" (Clemens and Graham 2007, 23). Also, the bodily endurance of medieval scribes can be deduced from the occasional manuscript in which the scribe has recorded both the start and end date of their work (Clemens and Graham 2007, 23; Wakelin 2011, 35). For example, it is noted in the 'Stavelot Bible' (London, British Library, Add. MSS 28106-7) that it took the scribe Goderannus and his assistant Ernesto four years to complete it, from 1093 to 1097 (Clemens and Graham 2007, 23).

3.2.6 CORRECTING, GLOSSING AND ANNOTATING

Once the main text had been completed, the quires were checked and corrected and any glossing and annotations were added (Clement 1995, 26; Clemens and Graham 2007, 35; Thomson 2008a, 83). Upon completion, a corrector scrutinised the text and then made any necessary alterations; two of the most common methods of correcting were erasure and subpunction (Ivy 1958, 55; Clement 1995, 26; Clemens and Graham 2007, 35-7; Thomson 2008a, 83; Evenden 2010, 93). Incorrect letters and phrases were erased by scraping away the ink with a penknife and inserting the correct letters and phrases in their place or in the margin (Figure 3-16). The method of subpunction involved the placing of dots under incorrect letters and then the writing of the correct letters above the originals (Figure 3-17) (Ivy 1958, 55; Clement 1995, 26; Clemens and Graham 2007, 35-7; Thomson 2008a, 83; Evenden 2010, 93).

Explanatory glosses and commentaries of various kinds occur frequently in late medieval manuscripts (Clemens and Graham 2007, 39). A 'gloss' is defined as a word or series of words often written in margins or between lines commenting on, clarifying and translating words in the main text (Brown 1994, 59; Clemens and Graham 2007, 266). A 'commentary' is more of a discussion and/or expansion of a text and is typically written in the margins of manuscripts, which are generally of a biblical, patristic or legal nature (Brown 1994, 44). From the twelfth century onward, glosses became fuller and more complex in content and format, largely through the development of more sophisticated methods of biblical commentary and the desire to provide glossed copies of portions of the Bible and other biblical texts as study tools (Figure 3-18) (Clemens and Graham 2007, 39).

Throughout the late medieval period, and between 1350 and 1500 in particular, readers came to expect several elements in an English book that would either facilitate reading or help a reader find particular passages or topics (Partridge 2011,
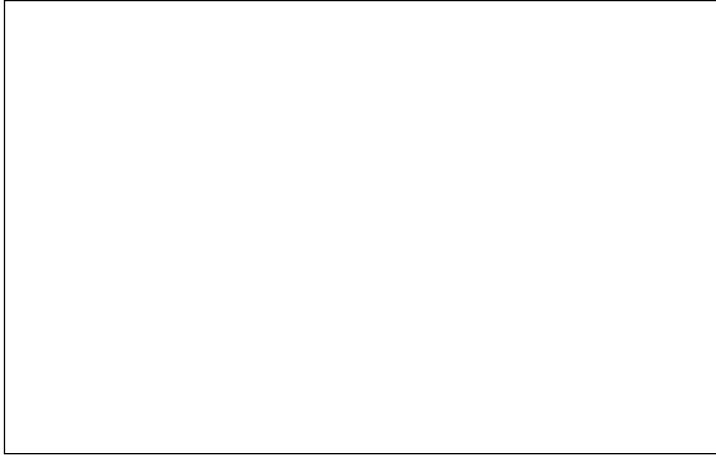
FIGURE 3-16. *The text that originally occupied lines 1-3 and 6-7 has been erased by scraping away the ink (Chicago, Newberry Library MS 20.1, fol. 29r) (detail) (Clemens and Graham 2007, 36).*
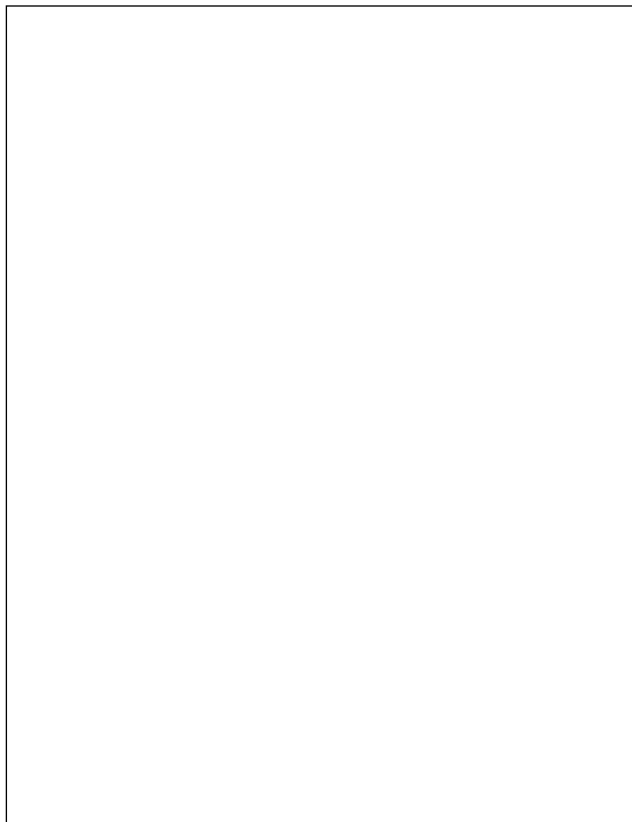
FIGURE 3-17. *Here dots have been placed under the word* tuam *to mark its deletion (Chicago, Newberry Library MS 104.5, fol. 32r) (Clemens and Graham 2007, 36).*
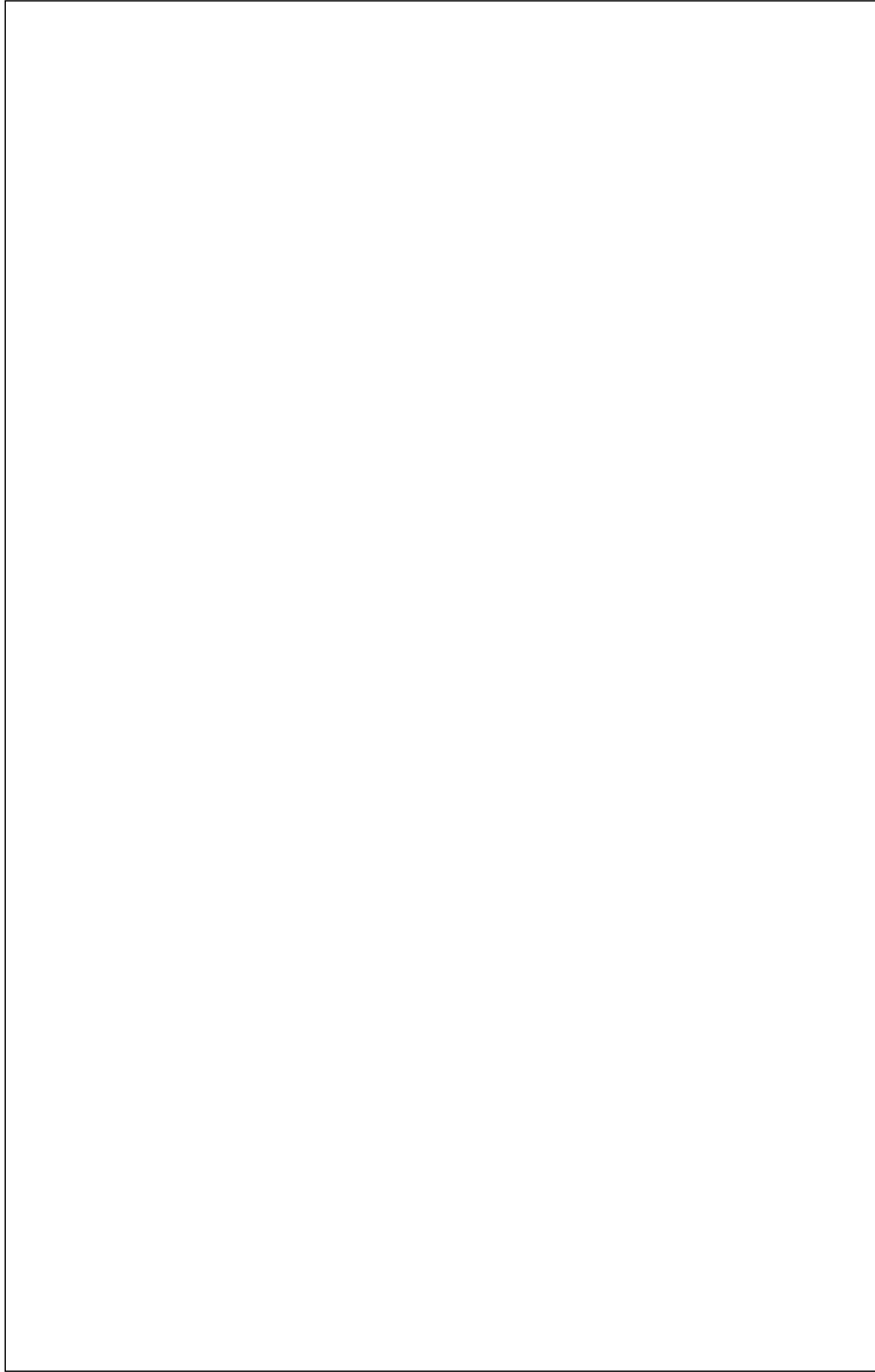
FIGURE 3-18. In this glossed Liber decretalium *of Gregory IX, the commentary is more extensive that the text itself (Chicago, Newberry Library, Medieval Manuscript Fragment 58, fol. 2v) (Clemens and Graham 2007, 41).*
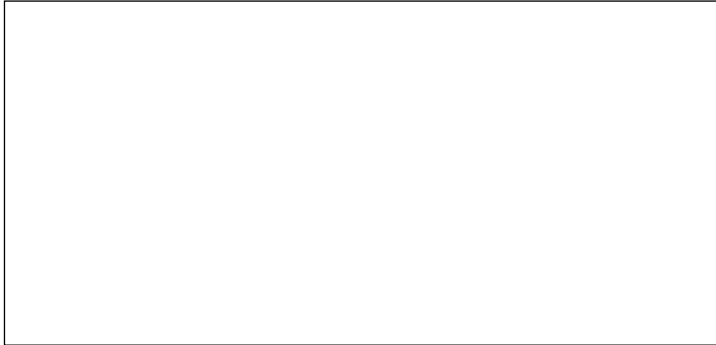
FIGURE 3-19. *Example of a* manicula *from a Franciscan repertory of papal bulls, 1464-71 (Chicago, Newberry Library, MS 80, fol. 41r) (detail) (Clemens and Graham 2007, 45).*

79). Elements frequently added to the pages of books were annotations. Common marks of annotation were finding aids, such as leather strings attached to the binding and finger tabs either as cut-outs from the pages or as objects attached to the pages that could be seen while the book was open to another page (Clemens and Graham 2007, 43). Other finding aids include the *nota bene* designed to draw the attention of the reader to an important passage and the *manicula*, which was a sketch in the margin of a hand with the index finger extended to point towards a significant extract (Figure 3-19) (Ivy 1958, 57; Clemens and Graham 2007, 44-5). Additional types of annotation include line fillers to maintain the appearance of a justified margin, pen trials which were created when a scribe was checking that the pen was cut correctly after sharpening and also sketches and rough drafts, typically of more ornate initials, made by the scribe (Clemens and Graham 2007, 44-8).

3.2.7 RUBRICATION

The next stage of production was rubrication, or lettering in red. The term 'rubric'

derives from the Latin for red, *rubrica*, as red ink was generally used for this process (Brown 1994, 111). Rubrics were used in manuscripts to help identify different components of texts. Most medieval manuscripts contain more than one text and generally each text begins and ends with a title, or rubric, written in red (Clement 1995, 26; Clemens and Graham 2007, 24). Rubrication was also used to differentiate initials, chapter headings and the word or phrase being glossed or commented on in more specialised texts (Clement 1995, 26; Evenden 2010, 93). Additionally, red ink was often used to add paragraph markers and to highlight capital letters (*litterae notabiliores*) in the body of text (Clement 1995, 27; Clemens and Graham 2007, 24).

As with instructions for preparing animal skins and mixing inks for writing text, simple recipes for mixing the cheap red ink for rubrication can be found in manuscripts. The red ink was made from red lead and the twelfth-century German monk who wrote under the pseudonym Theophilus described in his artist's handbook, *De diversis artibus*, how red lead was made by firing white lead, which itself was prepared by submerging sheets of lead in vinegar or urine (Hawthorne and Smith 1979, 14; Clemens and Graham 2007, 24-5; Thomson 2008a, 82). Additionally, instructions for rubricators were often left by scribes. Normally these notes were erased or trimmed when the book was bound, but many are still visible in manuscripts. Just one instance can be seen in a copy of Jean Beleth's *Summa* (New Haven, Beinecke Library, MS 315, fol. 117v) written in England between *c.*1175 and 1200; the scribe added notes for the rubricator in the inner margins perpendicular to the text (Figure 3-20) (Shailor 1994, 38). Despite these types of instructions, rubrics are occasionally absent from spaces provided for them, both within the text and at the beginning and end of folios in manuscripts (Partridge 2011, 85).

Although these elements for rubrication were typically produced using red ink, they were also produced using other pigments (Clemens and Graham 2007, 25-7). In tenth- and eleventh-century English manuscripts, green was a common colour alongside red for the rubrication of initials as it was also simple and cheap to produce. A common method of using these two colours was to alternate red and green initials with one another (Clemens and Graham 2007, 25). The common form of green was verdigris, and this pigment used the green deposit that formed on copper and was made by mixing this copper deposit, perhaps in the form of filings, with vinegar and other ingredients. As with other materials, recipes for verdigris can be found in contemporary manuscripts, including a fifteenth-century copy of *Libellus multorum naturalium* (Chicago, Newberry Library, MS 25), a miscellaneous collection of recipes
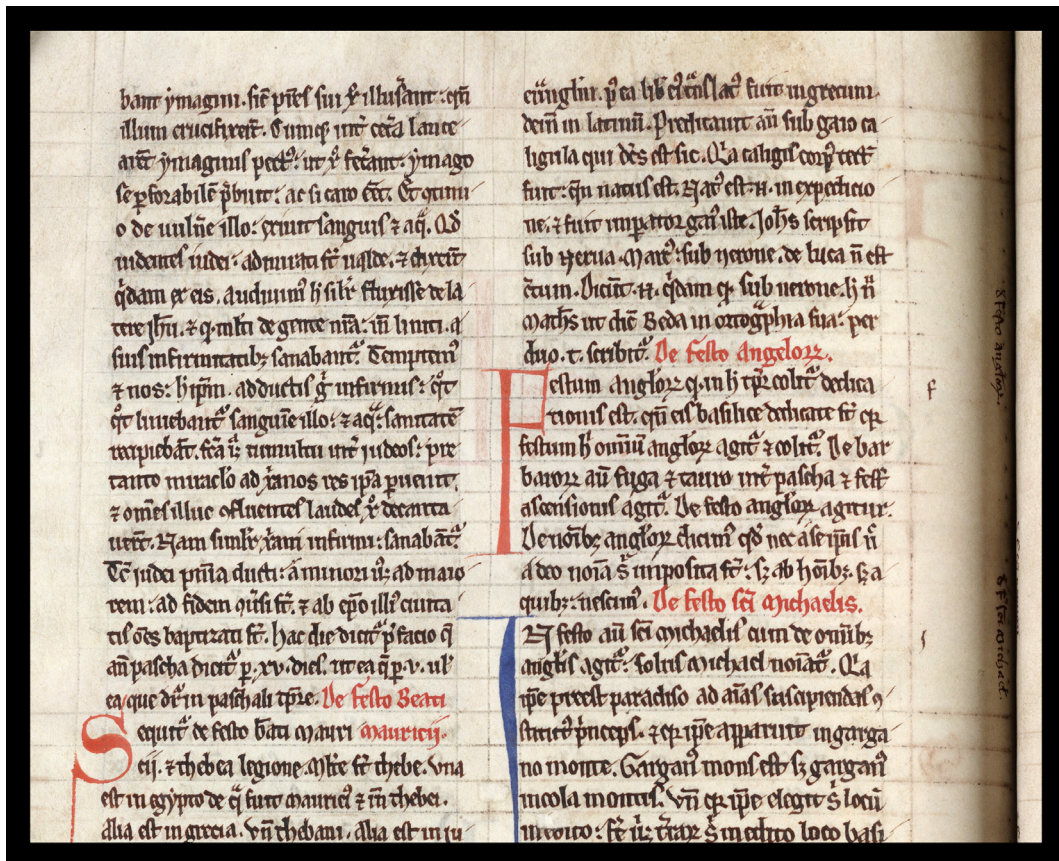
FIGURE 3-20. *Here instructions for the rubricator have been added to the inner margin of a copy of Jean Beleth's* Summa *(New Haven, Beinecke Library, MS 315, fol. 117v) written in England between c.1175 and 1200 (detail) (Yale University, Beinecke Rare Book and Manuscript Library 2013a).*
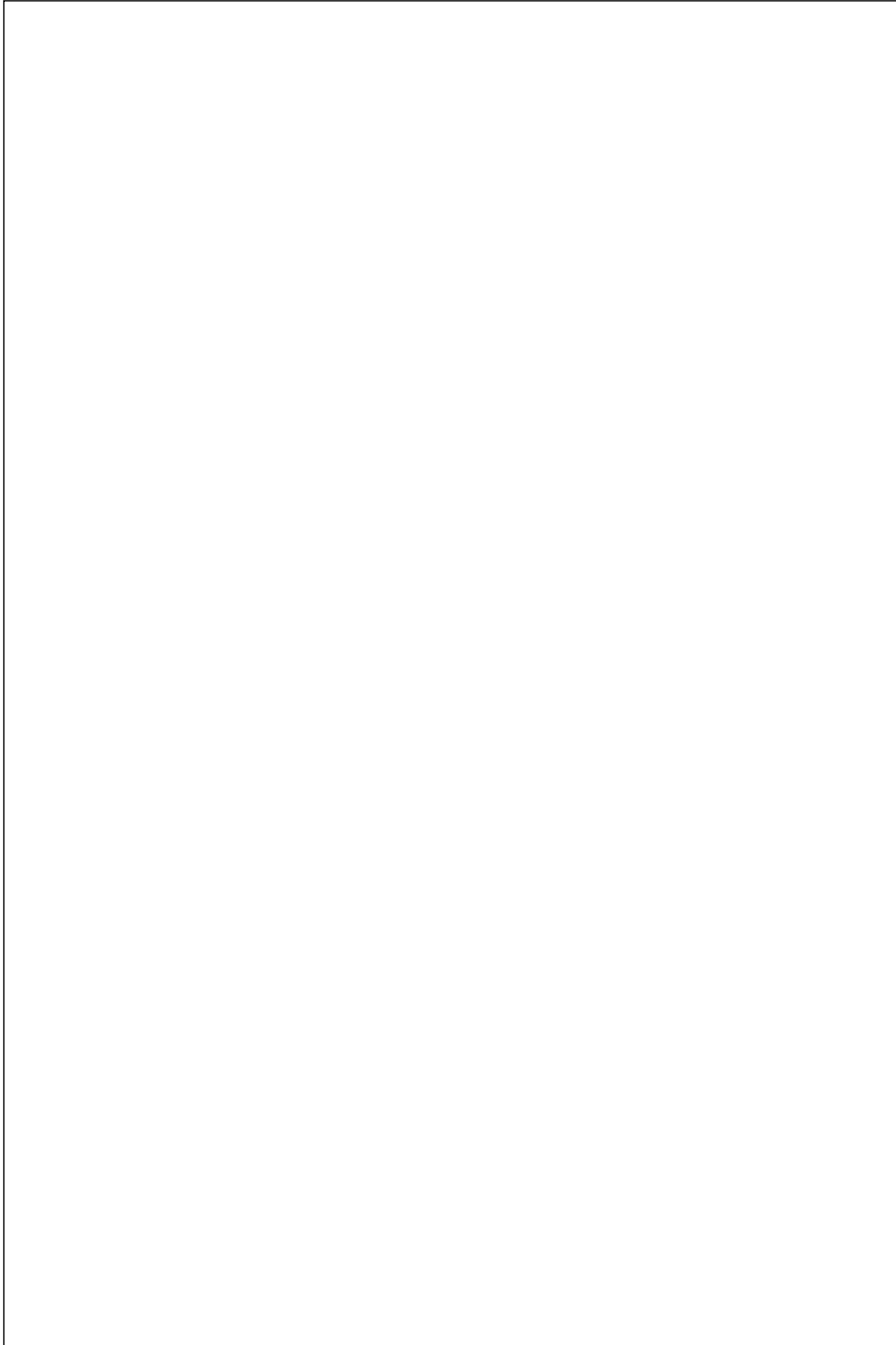
FIGURE 3-21. *Red initials with blue pen-flourishes are followed by blue initials with red pen-flourishes in this volume of Aristotle's scientific works (Chicago, Newberry Library, MS 23, fol. 42v) (Clemens and Graham 2007, 26).*

for ink, various pigments and glue (for a translation see Clemens and Graham 2007, 27).

In thirteenth- and fourteenth-century manuscripts, blue was a common pigment, frequently used together with red (Clemens and Graham 2007, 27). These two colours were often used conjointly in pen-flourished initials, an initial with fine linear embellishment, and again there was a pattern of alternation (Brown 1994, 97; Clemens and Graham 2007, 27). This arrangement can be seen in a copy of the scientific work of Aristotle (Chicago, Newberry Library, MS 23, fol. 42v), made in Germany or Austria in the first half of the fourteenth century, where red initials with blue pen-flourishes are followed by blue initials with red pen-flourishes (Figure 3-21) (Clemens and Graham 2007, 27).

3.2.8 DECORATION AND ILLUMINATION

The next stage of production was the process of illustrating and illuminating the quires, which was often complex. Illustrations were typically placed in books as

FIGURE 3-22. A good example of a bas-de-page miniature can be seen in the English 'Alphonso Psalter' (London, British Library, Add. MS 24686, fol. 13v), created c.1284, and it depicts a noblewoman with dogs hunting deer (detail) (Brown 1994, 16).

miniatures, decorated initials, borders and marginal scenes (Shailor 1994, 38-53; Scott 2007, 31-64; Driver and Orr 2011, 104-28). Miniatures are independent illustrations and typically occupy the full width of the text area and may range from the full height of the text to a quarter-page or less (Diringer 1967, 253; Brown 1994, 86; Shailor 1994, 46; Scott 2007, 34-9; Driver and Orr 2011, 106). Bas-de-page ('bottom of the page') miniatures, for example, are usually unframed images that may or may not refer to the text or other miniatures on the page and these became popular from the thirteenth century (Figure 3-22) (Brown 1994, 16). Enlarged, decorated initials were much more ornamental than the initials or capital letters that were lettered in red, and other colours, thus requiring the skills of an artist (Clemens and Graham 2007, 25). From the twelfth century, Bibles contained many 'historiated' initials that included human figures and scenes, some of which related directly to the text (Diringer 1967, 263; Brown 1994, 68; Shailor 1994, 42; Clemens and Graham 2007, 27). For example, in a Book of Hours (Chicago, Newberry Library, MS 52, fol. 113r) made in France in the first half of the fifteenth century the initial 'D' that opens the Office of the Dead shows a group of figures holding vigil over a coffin in front of which three candles are burning (Figure 3-23) (Clemens and Graham 2007, 27). The
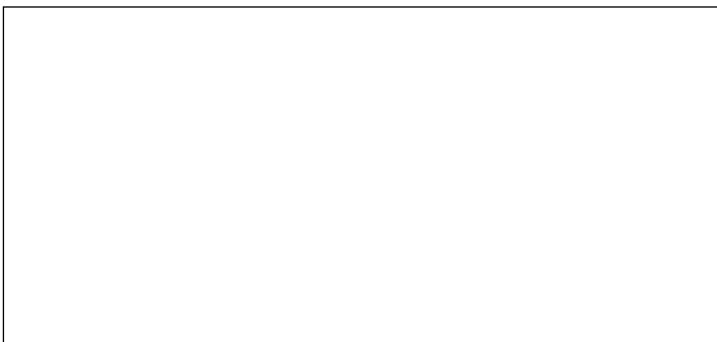
FIGURE 3-23. The historiated initial 'D' in a fifteenth-century Book of Hours (Chicago, Newberry Library, MS 52, fol. 113r) depicts a group of figures holding vigil over a coffin (detail) (Clemens and Graham 2007, 27).
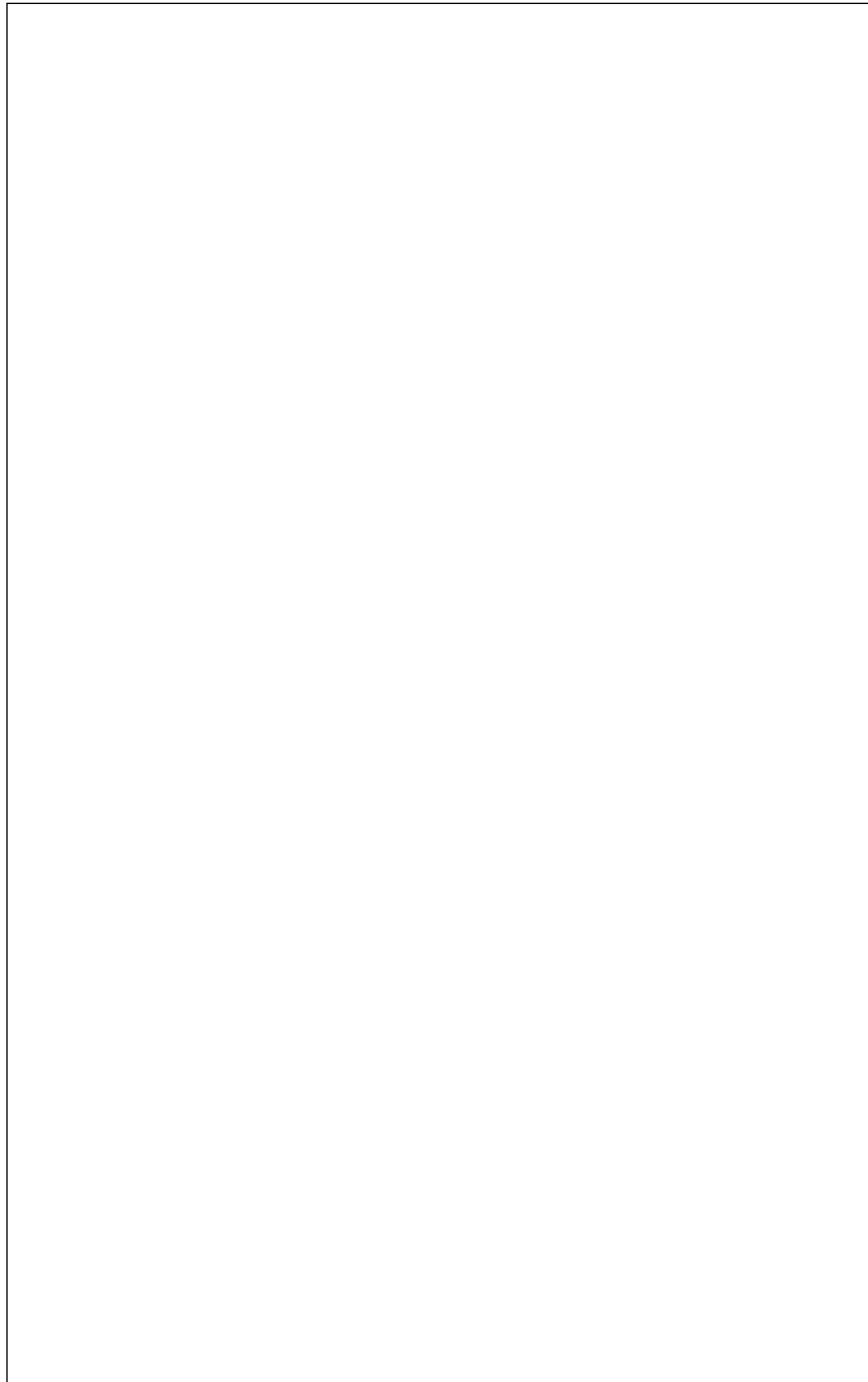
FIGURE 3-24. *An early sixteenth-century French copy of the* Epistles of St Paul *(Los Angeles, Getty Museum, MS Ludwig I 15, fol. 2r) has a text page with a strewn border with naturalistic plants and insects (Brown 1994, 25).*

FIGURE 3-25. *In a late fifteenth-century French missal (New Haven, Beinecke Library, MS 425, fol. 133v), a miniature depicts Christ foretelling the treachery of his disciple Judas, as related in the Gospel according to John (13.1-30), and this illustration is enhanced by secondary miniatures in the border representing the events of the last supper (Yale University, Beinecke Rare Book and Manuscript Library 2013b).*
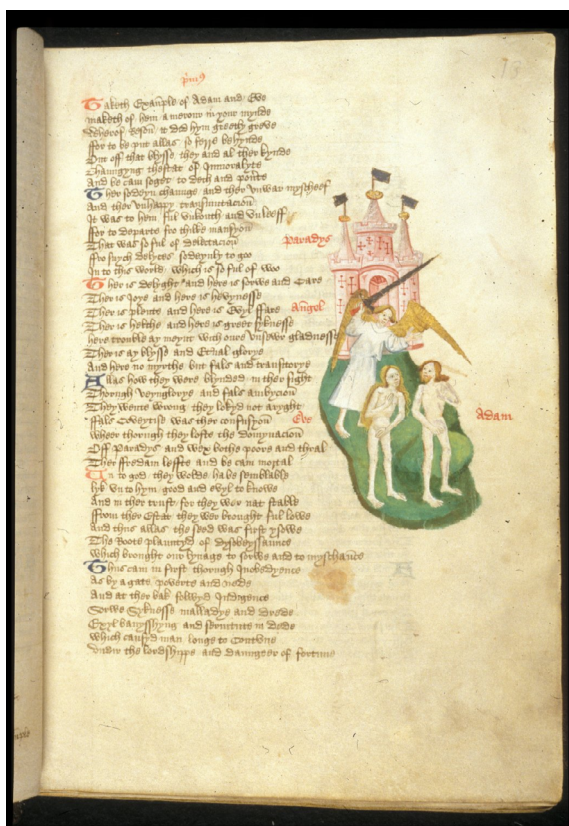
FIGURE 3-26. *Here is the miniature in the margin of folio 13 of John Lydgate's* Fall of Princes *(London, British Library, Harley MS 1766, fol. 13), which depicts the Expulsion from the Garden of Eden (British Library Board 2015q).*

decorative borders prominent in late medieval manuscripts evolved from elaborate initials during the thirteenth century (Brown 1994, 24; Shailor 1994, 45; Scott 2007, 39). Borders surround texts and images, occupying the margins and often the space between columns. By the fifteenth century, borders frequently ran the entire length of the page and a popular form of border incorporated naturalistically rendered flora and fauna placed, as if strewn, on the ground, which is often gilded (Figure 3-24) (Brown 1994, 24; Shailor 1994, 45; Derolez 2003, 43; Scott 2007, 51). As with historiated initials, borders often include marginal scenes to strengthen main illustrations on the page (Brown 1994, 24; Scott 2007, 43). For example, a French missal (New Haven, Beinecke Library, MS 425, fol. 133v) produced in the third quarter of the fifteenth century contains border scenes that are integrated with the main miniature to recreate the narrative sequence of the Last Supper (Figure 3-25) (Shailor 1994, 53). Additionally, independent marginal scenes placed outside the text justification became a distinctive feature of a number of English vernacular books during the period between 1350 and 1500 (Scott 2007, 43; Driver and Orr 2011, 106). There are many marginal scenes, for example, in John Lydgate's *Fall of Princes* (London, British Library, Harley MS 1766), produced *c.1450-c.1460* (Figure 3-26).
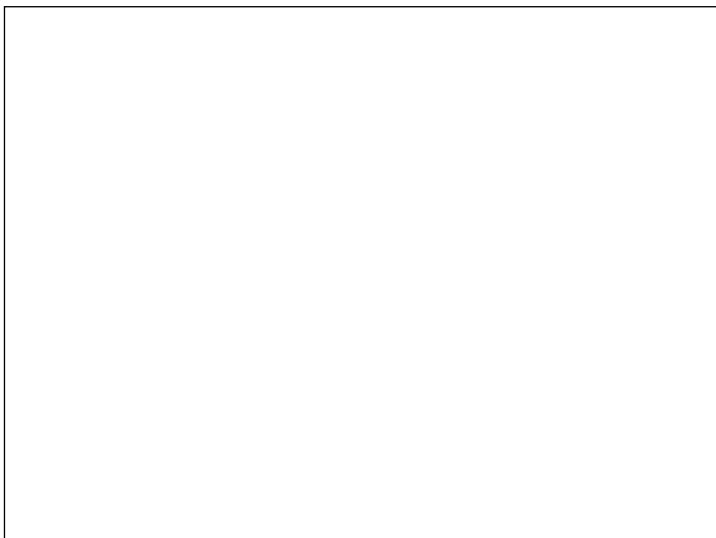
FIGURE 3-27. *From a French Book of Hours (Oxford, Bodleian Library, MS Douce 267, fols. 35v-6), the border on the left is finished, but that on the right shows the incomplete preliminary sketch (De Hamel 1992, 54-5).*

The first step in producing these various types of decoration was to make outlines of the images in plummet, which were often then strengthened with ink, and these are sometimes still visible in surviving manuscripts (Alexander 1992, 38-9; Clement 1995, 27; Morgan 2008a, 93; Driver and Orr 2011, 111; Partridge 2011, 85). A partially-completed fifteenth-century French Book of Hours (Oxford, Bodleian Library, MS Douce 267, fols. 35v-6) has two pages that show the different stages involved in the creation of decorative elements in manuscripts (Figure 3-27). A completed border is shown on the left but that on the right shows the preliminary plummet sketch, which has been strengthened in ink, before the application of colour (De Hamel 1992, 54-5). After the drawing of illustrations and other ornamentation, the next step, in the richer medieval manuscripts, was the illumination of specific areas in gold (Backhouse 1979, 8). This precious metal was used for initials, figures and other ornamental features, backgrounds to illustrations (Figure 3-28) and also certain details within illustrations, such as halos, which were regularly delineated after gilding with a black ink line. The techniques for the application of gold are described in the fourteenth-century 'Ludlow Manuscript' (London, British Library, Harley MS 273) and in Book I of Theophilus' *De diversis artibus* (Hawthorne and Smith 1979 36-7; Morgan 2008a, 91). The artist would have then applied the paint to the leaves. Each colour was painted in turn and allowed to dry, with the final element being the application of a stipple or white highlight (Clement 1995, 27-8; Morgan 2008a, 94). Many high-status illuminated manuscripts that incorporated a large number of illustrations used a broader range of colours than the simple reds, greens and blues that were commonly used for titles and initials in manuscripts of lower value (Figure 3-29) (Clemens and Graham 2007, 30; Morgan 2008a, 86). Palettes used to hold pigments and gold are sometimes found on archaeological sites. During the late medieval period, shells were often used by manuscript illuminators and artists as receptacles for their materials. Gold decoration created by using powdered gold mixed with gum arabic and applied with a pen or brush was often mixed in a sea shell, commonly mussel or oyster, and is generally known as shell gold (De Hamel 1992, 57; Clemens and Graham 2007, 33). Furthermore, examples of oyster shell palettes that contain pigments have been found during excavations at Glastonbury Abbey, Somerset (Figure 3-30), and monastic sites in London (Figure 3-31) (Museum of London 2005).

FIGURE 3-28. *A twelfth-century miniature of Dunstan with an illuminated background in* Expositio in Regulam S. Benedicti *(London, British Library, Royal MS 10 A xiii, fol. 2v) (British Library Board 20150).*
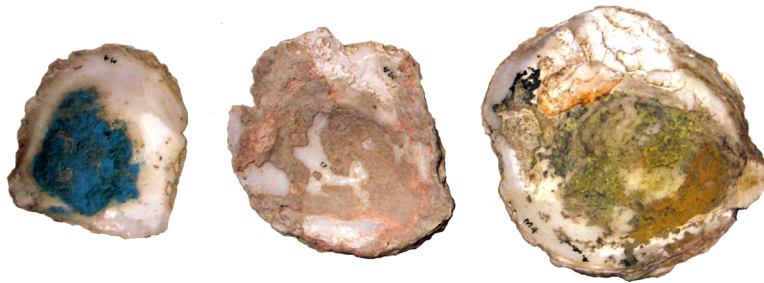
FIGURE 3-29. (Above, top) The historiated initial used to indicate the start of the entry for 'colour' in a fourteenth-century encyclopaedia (London, British Library, Royal MS 6 E VI, fol. 329r) depicts an artist with a number of colour pans demonstrating the wide variety of colours available (detail) (Clemens and Graham 2007, 30).

FIGURE 3-30. (Above, centre) Remnants of pigments have been found in shells excavated from Glastonbury Abbey, Somerset (Photograph taken by H. Willmott).

FIGURE 3-31. (Above) Shell paint palettes have also been recovered from religious sites in London (Museum of London 2005).
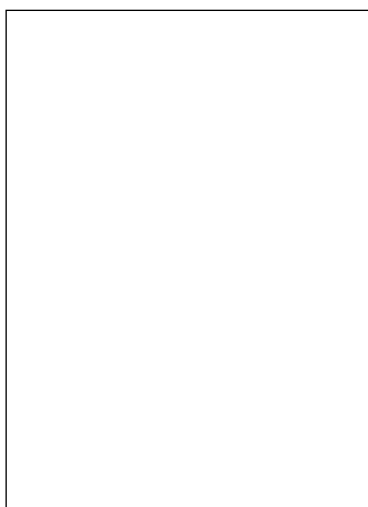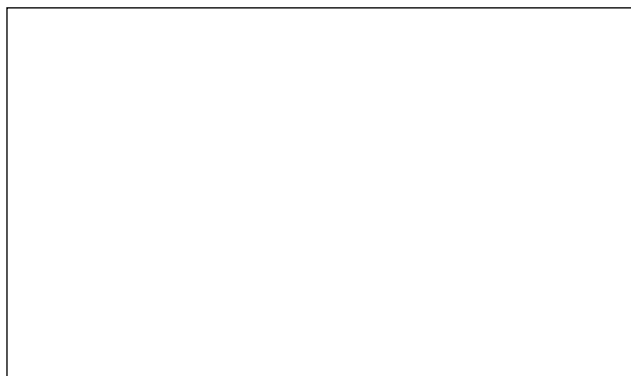
FIGURE 3-32. *(Above, top) Detail showing a quire numeral (III) entered at the bottom of the first page of a quire (Chicago, Newberry Library, MS 8, fol. 18r) (detail) (Clemens and Graham 2007, 49).*

FIGURE 3-33. *(Above, centre) A catchword entered in the lower margin of the last page of a quire and its referent at the top of the first page of the next quire (Chicago, Newberry Library, MS 75, fols. 79v-80r) (detail) (Clemens and Graham 2007, 49).*

FIGURE 3-34. *(Above) Leaf signatures Mi and Mii on the first and second leaves, respectively, of a quire in a fifteenth-century copy of Ranulf Higden's Polychronicon (Chicago, Newberry Library, MS 33.1, fols. 103r-103v) (detail) (Clemens and Graham 2007, 50).*

3.2.9 Assembling and binding

The final stages of production involved assembling and binding the quires. Once all textual and decorative elements were complete, the loose quires were assembled in the correct order ready for binding. As an aid to ordering, it was common to write a number, or sometimes a letter of the alphabet, on the first or more typically the last page of each quire (Figure 3-32) (Clemens and Graham 2007, 49). An alternative method to facilitate the arrangement of quires was to write a catchword in the lower margin at the end of a quire that repeats the first word or words on the first page of the next quire (Figure 3-33) (Ivy 1958, 51; Brown 1994, 36; Clemens and Graham 2007, 49). From the fourteenth century, a further system to ensure the correct ordering of quires became popular. Known as signatures, a small letter of the alphabet followed by a small Roman numeral was written in the right-hand bottom margin (Figure 3-34). The alphabetical sequence of the letters that preceded the numbers guided the correct ordering of the quires (Ivy 1958, 47; Shailor 1994, 53; Clemens and Graham 2007, 49-50).

Once the quires had been properly assembled and ordered, it was time for binding. However, it must be noted that binding did not always take place and it has been argued that it was not an integral part, or necessary consequence, of medieval book production (Ivy 1958, 34). Nonetheless, during the late medieval period, a book was usually either softbound or hardbound. A softbound book was usually covered in parchment and then stiffened leather (Bischoff 1990, 31; Clement 1995, 35; Derolez 2003, 45). If a manuscript was to receive a hardbound cover, wooden boards were normally used. The typical process for this type of binding involved the quires being sewn one by one onto several cords or thongs, the ends of which were channelled into the boards that served as the front and back covers, which were typically made of oak (Figure 3-35). The boards were then generally covered with leather or animal hide (Backhouse 1979, 8; Bischoff 1990, 31; De Hamel 1992, 67; Brown 1994, 22; Clement 1995, 36; Derolez 2003, 44).

Following the main stages of binding, a number of techniques were used to decorate leather covers, for example with chemises, tooled decoration, precious materials and metal book fittings. As book fittings are the focal point of this research, they are only discussed briefly in the context of the process of binding books. First, chemises were sometimes added to manuscript bindings and these can be described as covers of leather or textile where flaps extended past the boards or edge of the text block
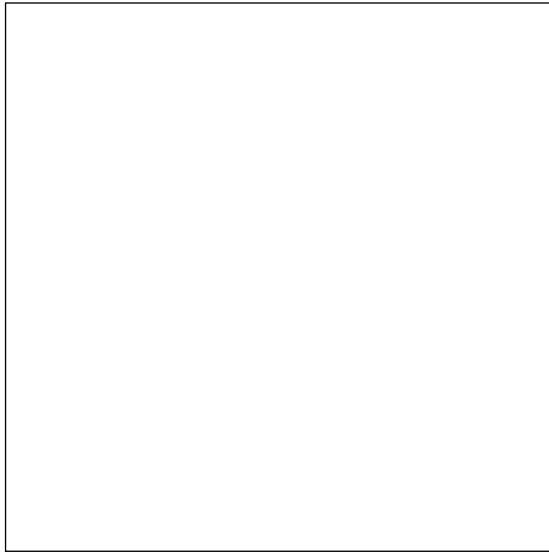
FIGURE 3-35. A monk at work on a binder's frame in the twelfth-century German copy of Ambrose's Opera varia (Bamberg, Staatsbibliothek, MS Patr. 5, fol. 1v) (detail) (Clemens and Graham 2007, 51).

FIGURE 3-36. An early fifteenth-century copy of the Speculum humanae salvatoris (New Haven, Beinecke Library, MS 27) has a chemise constructed from two skins to protect the book (Gillespie 2011, 152).

FIGURE 3-37. *(Above, top) The quadripartite indenture between King Henry VII and John Islip, Abbot of Westminster (London, British Library, Harley MS 1498), dated to 1504, has a chemise made from crimson velvet lined with pink damask and gold thread, and is adorned with fittings in gold, silver and enamel, decorated with the King's emblems (British Library Board 2015n).*

FIGURE 3-38. *(Above) A fifteenth-century German girdle book (New York, New York Public Library, Spencer MS 39) (Spencer Collection, New York Public Library 2014).*

and over the fore-edge in order to fully enclose the book (Brown 1994, 38; Gillespie 2011, 151). This type of covering acted either as a primary covering over a book's boards or as a secondary cover to an existing one. Throughout the late medieval period, chemise bindings varied in form from high-status luxurious embellishments for Books of Hours and prayer books to functional wrappers for administrative records and library books (Brown 1994, 38). For example, over the red-stained, tawed primary cover of an early fifteenth-century copy of the *Speculum humanae salvatoris* (New Haven, Beinecke Library, MS 27) a chemise has been constructed from two skins to further protect the book (Figure 3-36) (Gillespie 2011, 152). A more elaborate specimen is the binding of the quadripartite indenture between King Henry VII and John Islip, Abbot of Westminster (London, British Library, Harley MS 1498), dated to 1504 (Figure 3-37) (Brown 1994, 38; McKendrick *et al*. 2011, 180). This chemise is made from crimson velvet lined with pink damask and gold thread. Decorative fittings in gold, silver and enamel, enhanced with the King's emblems, adorn both the lower and upper covers and attached to the base of the manuscript are five silver cases in which the original wax seals are stored (McKendrick *et al*. 2011, 180). Furthermore, a popular form of late medieval binding was the girdle book and this comprised a chemise binding with a long tail-flap drawn into a knot, or hook, designed to hang the book upside down from a belt or girdle (Bischoff 1990, 31; Szirmai 1999, 236; Gillespie 2011, 152-3). This type of binding can be seen on a fifteenth-century German breviary (New York, New York Public Library, Spencer MS 39) (Figure 3-38). In this instance, the doeskin covering the wooden boards extends about 11 inches from the tail of the book and is knotted so that, when hanging from a belt, the book was upside down ready to be lifted into a reading position while still attached (Miner 1957, 55-6).

The leather covers were sometimes decorated with simple impressed designs created by the use of individual heated metal stamps or more detailed panel stamping (Backhouse 1979, 8; Bischoff 1990, 31; Clement 1995, 36; Derolez 2003, 45; Clemens and Graham 2007, 53). Covers have been 'tooled' if the impressions have been filled with gold leaf, and 'blind-tooled' if not (Febvre and Martin 1984, 105). For example, the fifteenth-century leather covering of a scholar's notebook (New Haven, Beinecke Library, MS 392), written in Germany between the first half of the fourteenth century and the second half of the fifteenth, has been blind-tooled with patterns of roses, two-headed eagles, crowned swans and fleurs-de-lys (Figure 3-39) (Shailor 1994, 62). Panel stamping, which originated in the Low Countries in the thirteenth century, involved placing panel stamps with the leather covering in a mechanical press (Shailor

FIGURE 3-39. *The fifteenth-century leather covering of a scholar's notebook (New Haven, Beinecke Library, MS 392) has been blind-tooled with patterns of roses, two-headed eagles, crowned swans and fleurs-de-lys (Yale University, Beinecke Rare Book and Manuscript Library 2013c).*

1994, 62; Derolez 2003, 45). There is some documentary evidence concerning the tools for such forms of decoration. The 1483 inventory of St Michael's Abbey in Bamberg, Germany, for example, records 19 hand tools for decorating leather, six of them made of iron (Szirmai 1999, 243). Furthermore, examples of bookbinders' stamps have been found archaeologically in England (Figure 3-40). One example is from Denny Abbey, Cambridgeshire, and consists of a tapered shank for insertion into a wooden handle and a diamond-shaped head with engraved, opposed fleurs-de-lys (Christie and Coad 1980, 257). Also, a mid-twelfth-century stamp excavated from Belvoir Priory, Leicestershire, has a tapered shaft and a square head with an engraving of an animal with bird's feet, springing to the right in front of a tree (Dalton 1924, 272).

Other types of decoration included the use of precious textiles for coverings and the addition of ivory panels and elaborate metalwork laden with enamel, precious stones and jewels (Middleton 1963, 124; Bischoff 1990, 30-1; Clement 1995, 36; Szirmai 1999, 166). The nature and elaborateness of a binding is considered to have been directly related to the wealth and status of its commissioner or owner (Clement 1995, 36). Treasure bindings were ultimately reserved for royalty and high-status ecclesiastical
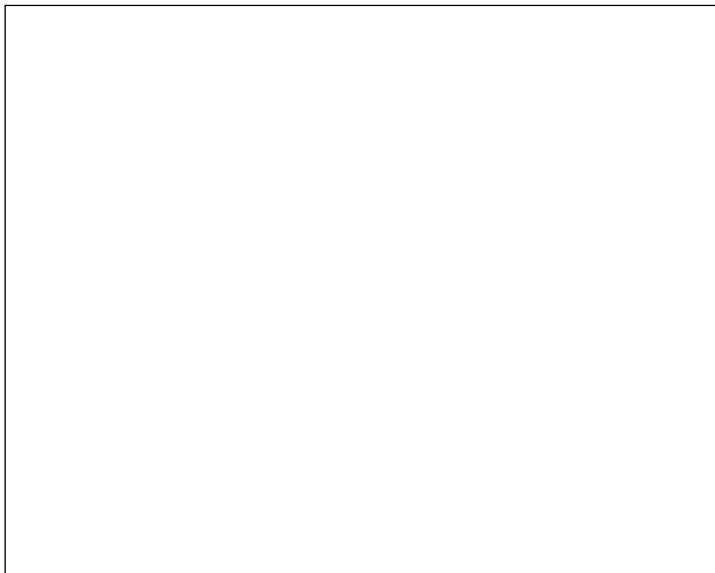
FIGURE 3-40. Bookbinders' stamps from Denny Abbey, Cambridgeshire (left) (Christie and Coad 1980, 256, no.45), and Belvoir Priory, Leicestershire (Dalton 1924, 272).
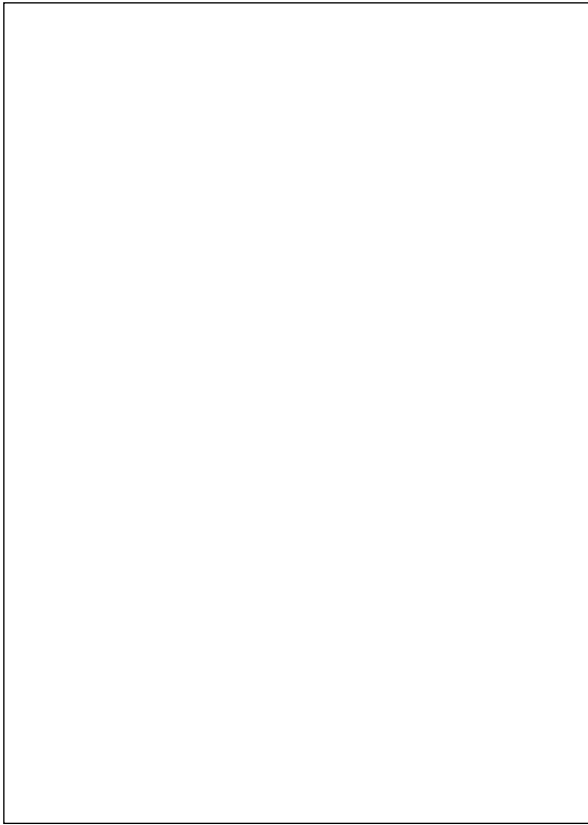
FIGURE 3-41. *The Gospels of Otto III (Bayerische Staatsbibliothek, Clm. 4453) survives in its original treasure binding set with jewels and classical intaglios around a tenth-century Byzantine ivory of the Dormition of the Virgin (De Hamel 1997a, 43).*

institutions (De Hamel 1997a, 60; Gullick and Hadgraft 2008, 105). Arguably the grandest manuscript of all is the Gospels of Otto III in Munich (Bayerische Staatsbibliothek, Clm. 4453) (Figure 3-41) (De Hamel 1997a, 60). This manuscript, produced around the turn of the eleventh century, is in its original binding that is set with jewels and a tenth-century Byzantine ivory panel. The use of pearls on embroidered covers is also evident from King Henry VIII's manuscript (London, British Library, Royal MS 20 A IV) containing a description of the Holy Land written by Martin de Brion of Paris in *c.*1540 (McKendrick *et al.* 2011, 408). Evidence for manuscripts with treasure bindings in ecclesiastical institutions is more often found in inventories as very few bindings have survived. For example, an inventory drawn up in 1295 from St Paul's Cathedral, London, lists 11 gospel books in treasure bindings, describing their exteriors in detail, and an inventory compiled in 1315 at Canterbury Cathedral Priory, Kent, carefully describes the exteriors of 22 treasure bindings, one of which belonged to Archbishop Thomas Becket and another that was a gift from Edmund, Earl of Cornwall (Gullick and Hadgraft 2008, 106). Nevertheless, many ordinary medieval books had only modest bindings with little decoration, and many had no bindings at all beyond a protective piece of parchment that wrapped together the quires of the
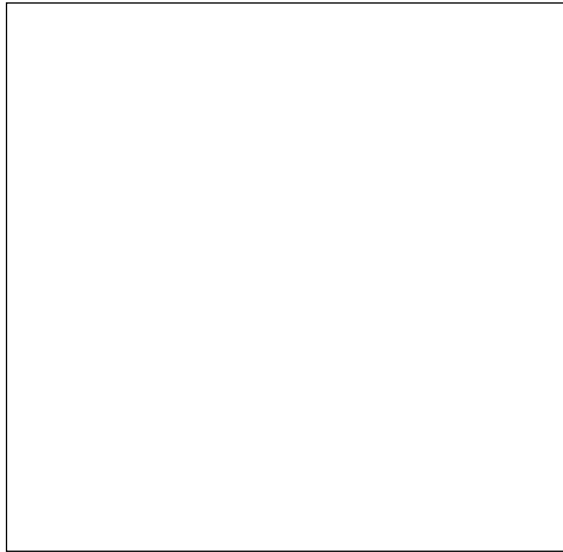
FIGURE 3-42. *A monk can be seen working with a hammer in a German copy of Ambrose's Opera varia (Bamberg, Staatsbibliothek, MS Patr. 5, fol. 1v) (Dodwell 1993, 312), which has been interpreted as representing the fixing of metal fittings onto bindings (detail) (Adler 2010, 54).*

books (Clement 1995, 36).

The final element that was frequently added to the bindings of medieval books was the metal fittings that served preservative and protective functions, but which also were ornamental. As discussed in Chapter 2, late medieval books, when not in use, were kept closed by metal fastenings in order to prevent distortion to the parchment leaves and its overall shape, which tended to warp over time (Pollard 1962, 17; Middleton 1963, 127; De Hamel 1992, 67; Brown 1994, 118). Fastenings were attached to bindings either by leather straps secured onto the covers or they were directly fixed onto the wooden boards (Pollard 1962, 17; Middleton 1963, 127-8; Gullick and Hadgraft 2008, 105). Book furnishings were also added to bindings in order to protect the leather or textile covers from abrasion (Middleton 1963, 129-30; Bischoff 1990, 31; Clement 1995, 36; Szirmai 1999, 263; Dürrfeld 2000, 305; Derolez 2003, 44). As this research demonstrates, there was a wide variety of types and styles of fittings used on the bindings of late medieval books. It is the analysis of these different forms of book fittings and their wider social contexts that is one of the key purposes of this research.

3.3 PRODUCTION OF BOOK FITTINGS

This chapter so far has investigated the techniques, materials and tools involved in the production of late medieval books. Following on from this, the production of book fittings themselves is discussed in detail. To produce a comprehensive analysis of late medieval book fixtures, it is necessary to gain a clear understanding of their manufacture. This section in turn takes into consideration the various characteristics, materials and processes involved in the production of late medieval book fittings.

3.3.1 EVIDENCE OF PRODUCTION

Despite the common occurrence of book fittings on archaeological sites, there has been very little previous discussion on their production. The single exception is provided by Adler (2010) whose research classifies and contextualises book fittings found on the Continent dating from the early Middle Ages. Here, it is stated that there is very little documentary evidence for the makers of book fittings prior to the fifteenth century, although Adler (2010, 54) believes that the twelfth-century German copy of Ambrose's *Opera varia* (Bamberg, Staatsbibliothek, MS Patr. 5, fol. 1v) contains one of the oldest pieces of evidence for the production of book fittings. Within this manuscript a full-paged coloured drawing comprises ten roundels surrounding a central panel, and in these roundels the various stages of the production of books, including the preparation of parchment and the sewing of the quires, and the fruit of the work are depicted (Dodwell 1993, 309). Adler (2010, 54) interprets the last illustration, which depicts a monk holding a hammer, as the process of securing metal fittings to the book cover (Figure 3-42). Using documentary evidence from the fifteenth century onwards, the production and manufacturers of book fittings in individual cities are discussed by Adler (2010, 54-9). Very limited production evidence, however, prevents particular types and styles of fittings being attributed to specific manufacturers. Adler (2010, 55) concluded that the profession of producing book fittings was never a craft with its own guild, but it was connected to other metalwork trades, such as girdlers who produced dress accessories. Consequently, taking Adler's research into consideration, it is necessary to consider in general the manufacture of copper-alloy objects, and dress accessories in particular, during the late medieval period in order to understand the production of book fittings.

The archaeological evidence for the working of copper alloys in the Middle Ages is limited, nevertheless, production methods are sometimes revealed through the recovery of crucibles, moulds and offcuts (Goodall 1981, 63; Egan 1996, 83, 86; Jones 2001, 16-7). Excavations carried out in the precinct of the Guildhall in London revealed extensive evidence for metalworking (Bowsher *et al*. 2007), where the locations of workshops and the variety of metalworking activities that took place in the late eleventh, twelfth and fourteenth centuries, such as the casting of dress accessories, are indicated by foundry hearths, mould fragments, crucibles and waste material (Pearce 2007a, 346-7; 2007b, 347-51). Similar evidence has also been found in York in the St Andrewgate and Bedern areas (Finlayson 2004) and Much Park Street, Coventry (Wright 1982). Furthermore, recent research (Cassels 2013, 148-52) on dress accessories in England considers the significant changes in the technology of their production that occurred during the late medieval period, including the introduction of the stack mould, changes to the form and fabric of crucibles, the expansion of production workshops and the formation of guilds. Such technological and production developments were likely to have impacted upon the production of book fittings as similar techniques and materials were used for their manufacture.

There is very limited direct documentary evidence for the production of late medieval book fittings. One instance of written evidence for the production and use of metal book furnishings in the twelfth century is provided by Henry, a Benedictine monk of Hyde Abbey, near Winchester, Hampshire (Warton 1871, 213; Szirmai 1999, 169). Whilst transcribing the work of several classical authors in 1178, Henry recorded that he himself made the book, illuminated the initials and formed the brazen bosses of the covers with his own hands (Warton 1871, 213; Szirmai 199, 169). More typically, documentary evidence provides detailed information on the general production methods and decorative techniques used for metalworking during the late medieval period. Although this type of evidence does not explicitly refer to the manufacture of book fittings, examples describe many techniques that would have been applied to their production. One of the most informative pieces of evidence is Book III of Theophilus' handbook *De diversis artibus*, written in the twelfth century, which describes the art of the metalworker (Hawthorne and Smith 1979, 77-192). This book describes many of the materials, tools and techniques used by contemporary metalworkers, and it also offers more detailed descriptions of the workshops of these craftsmen and the production methods for particular types of objects, such as chalices, patens and bells (Hawthorne and Smith 1979, 77-192).

Both documentary and archaeological evidence provide a general insight into the production of metal artefacts during the late medieval period, which can be used to a certain extent in understanding the production of book fittings. However, as a result of limited evidence, it is argued that the most important type of evidence for the production of metal objects is acquired from the analysis of the artefacts themselves (Goodall 1981, 63; Egan 1996, 83; Jones 2001, 16). Therefore, due to the lack of direct evidence for the production of book fittings, the following discusses the materials, production methods, and decorative techniques and styles that can be indirectly determined from the analysis of late medieval book fittings.

3.3.2 PRODUCTION: MATERIALS AND TECHNIQUES

For the manufacture of the vast majority of book fittings, the medieval craftsmen worked with a number of metals, the principal metal being copper. Pure copper is a versatile metal as it is soft and ductile with a melting point of 1084°C, which is lower than that of iron. To work it into objects more easily in the late medieval period

19

FIGURE 3-43. Copper-alloy book fittings with iron rivets: 19 from Battle Abbey, East Sussex (English Heritage, 793275), 222 from Hailes Abbey, Gloucestershire (English Heritage, 777015). Scale 1:1.

222

copper was generally alloyed with varying amounts of tin, zinc or sometimes lead (Maryon 1971, 234; Goodall 1981, 63; Jones 2001, 15). In modern terms, bronze is an alloy comprising mainly copper and tin, and brass is an alloy mainly of copper and zinc. Contemporary descriptions, however, reveal that, during the medieval period, the terminology and compositions of copper alloys were more variable (Blair and Blair 1991, 81-4). As the composition of a medieval copper-alloy artefact cannot be accurately determined by visual examination, for the purposes of this research and for accurate artefact descriptions, the identification of the material composition is restricted to the use of the term copper alloy. The majority of book fittings studied for this research are principally made from copper alloys, however, there are instances where iron has been used alongside the copper alloys most notably to produce rivets. Examples include fastenings from Battle Abbey, East Sussex (**19**), and Hailes Abbey, Gloucestershire (**222**) (Figure 3-43).

The huge variety of copper-alloy objects excavated from late medieval sites in England is considered to demonstrate a wide range of manufacturing techniques (Goodall 1981, 63), and the various medieval practices of working copper alloys are covered in detail in numerous studies (see Salzman 1970; Maryon 1971; Goodall 1981; Campbell 1987; Blair and Blair 1991; Jones 2001). The two primary methods of producing copper-alloy objects were casting and forging with a hammer, also known as wrought metalworking. Casting essentially involved melting the metal and then pouring it into a mould, with different types of moulds being suited to different types of objects (Goodall 1981, 53; Campbell 1987, 163; Blair and Blair 1991, 86). In addition to finished artefacts, the most commonly found evidence of casting consists of crucibles, the vessels in which the metal was melted, and the moulds used for casting the metal into shape (Jones 2001, 16). Moulds could be open or enclosed and were made from a variety of materials, sand, clay, metal or stone (Campbell 1987, 163; Egan 1996, 84; Jones 2001, 16). In the case of closed moulds, the complexity of the object being produced and the quantities required influenced the number of pieces used to make the mould itself (Blair and Blair 1991, 86; Egan 1996, 87). Casting in moulds would most likely have been used to produce several types of book fittings, including types A.9 and B.1, and the looped element of types A.1 and A.2.

The forging of copper-alloy artefacts involved the shaping of solid metal by hammering or cutting (Campbell 1987, 164; Blair and Blair 1991, 85; Jones 2001, 17). To maintain the advantageous properties of copper alloys, the metal was annealed, a process whereby the metal was essentially softened by repeated heating and

cooling and subsequently hammered over a number of different anvils. Sheets were commonly produced and then cut into the basic pattern appropriate to the final object, which was then formed into the required shape using hammers, files, gravers, chisels, dies and punches (Campbell 1987, 164; Blair and Blair 1991, 85; Jones 2001, 17). Common archaeological evidence for wrought metalworking comprises small pieces of scrap metal, such as sheet offcuts, in addition to the artefacts themselves (Egan 1996, 86; Jones 2001, 17). This method of manufacture would most likely have been used to produce book fittings that were essentially made of metal plates, such as fastenings A.3, A.4 and A.8 and furnishings B.5 and B.7. After the production of the various copper-alloy objects, either by casting or forging, they would have then been finished to create smooth surfaces by filing and rubbing with an abrasive (Goodall 1981, 63; Blair and Blair 1991, 88; Egan 1996, 86). The artefacts would then be ready for any surface decoration desired by the commissioner.

Alongside the use of base metals, precious metals were occasionally used in the production of late medieval book fittings, typically for secondary decoration. During the late medieval period in England, most gold is thought to have been imported and silver too was imported, although England was itself a silver producer, which

FIGURE 3-44. Two examples of book fittings made from precious metals; (above) a silver book fitting recorded in the PAS database (PAS/ Trustees of the British Museum, 2003-2015a, SUR-322ED5) and (below) gold and silver fittings used on the elaborate binding of the 1504 indenture between Henry VII and John Islip, Abbot of Westminster (London, British Library, Harley MS 1498) (British Library Board 2015n).

was mainly obtained from lead ores (Campbell 1991, 108; Jones 2001, 19). These precious metals have similar melting points to those of copper alloys and as both silver and gold are very soft, they would sometimes have been cast into shape or, more commonly, worked as solid metals (Campbell 1991, 117-8; Jones 2001, 19). Occasionally, examples of book fittings made entirely from precious metals have been found, such as a silver fitting found in Guildford, Surrey (SUR-322ED5; Figure 3-44) (PAS/Trustees of the British Museum, 2003-2015a). Gold and silver fittings were also used on the elaborate binding of the 1504 indenture between Henry VII and John Islip, Abbot of Westminster (London, British Library, Harley MS 1498) (Figure 3-44) (Brown 1994, 38; McKendrick *et al*. 2011, 180). However, such metals were typically used on book fittings as a form of secondary decoration.

3.3.3 DECORATION: MATERIALS AND TECHNIQUES

It is evident from the archaeological evidence that, throughout the late medieval period, considerable efforts were taken to improve the desirability of the bindings of books through the decoration of their fittings. A significant aspect of the production of medieval book fittings was the application of secondary decoration to the surfaces of the objects. Such techniques include the manipulation of the metal surface itself and also the application of other materials to the surface to create a desired effect. Ranging from simple linear engravings to the addition of precious metals, book fittings could be transformed through the manipulation of their surfaces. Many of these techniques have been discussed in detail in several studies focusing in general on medieval metal artefacts, including those by Maryon (1971), Goodall (1981), Campbell (1987, 1991), Egan and Pritchard (2002), and Cassels (2013). An initial study of book fittings recorded in the Portable Antiquities database, which was completed at the outset of this research, brought to light varying styles of decoration found on medieval book fittings (Howsam 2011).

One of the most commonly used forms of decoration on the artefacts was linear decoration. The production of linear motifs was typically created by engraving, where some of the metal was removed using a graver (Figure 3-45, A.). This method of decoration was a swift process and thus suitable for mass production (Egan and Pritchard 2002, 30-1). In addition to simple straight engraved lines used to border other motifs or the copper-alloy objects themselves, the engraver could use

A.   77

144

B.
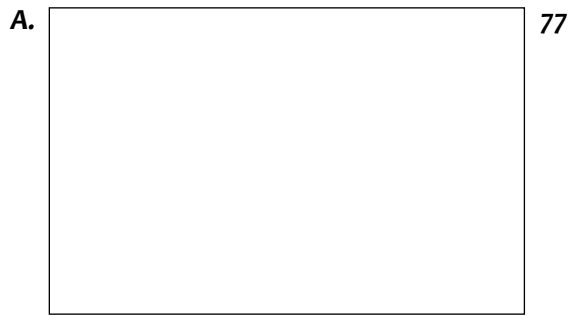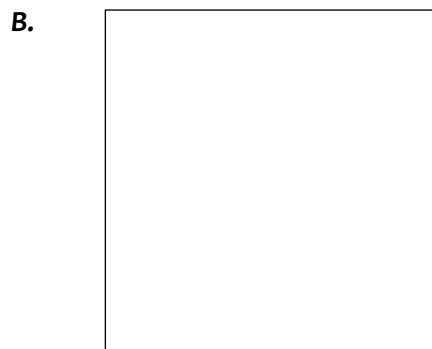
C.   275
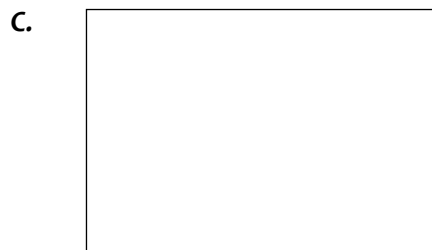
276

*FIGURE 3-45. Engraving: **A.** engraving tool (left) and cross section showing removed material (right) (Egan and Pritchard 2002, 29), **B.** engraving zigzags (Egan and Pritchard 2002, 30), **C.** a late medieval book fastening excavated from the site of the Carmarthen Greyfriars, Carmarthen, demonstrating the engraving technique (Brennan 2001, 67, no.33). Scale 1:1.*

*FIGURE 3-46. Hooked book fastenings showing different engraved designs: **77** from St Augustine's Abbey, Kent (English Heritage, 7716156A), **144** from Fountains Abbey, West Yorkshire (English Heritage, 671312.4), **275** and **276** from St Frideswide's Priory, Oxfordshire (Scull 1988, 40, nos.SF48 and SF34). Scale 1:1.*

linear styles to create other designs, typically in chevron-shaped and herring-bone formations (Figure 3-46). Another decorative engraving technique used during the late medieval period produced zigzag lines, sometimes known as 'wriggle work', by walking a graver, essentially rocking the tool from side to side as it was pushed across the surface of the metal object (Figure 3-45, B.) (Egan and Pritchard 2002, 31). A further design practised by medieval engravers is that of concentric, compass-engraved circles, particularly in combination with either decorative blind-drilled holes or rivet holes (Figure 3-46) (Egan and Pritchard 2002, 31). A good example of such decorative techniques can be seen on a late medieval book fastening excavated from the site of the Carmarthen Greyfriars, Carmarthen (Figure 3-45, C.) (Brennan 2001, 26), which has been engraved with straight and transverse lines and compass-engraved concentric circles. Two similar examples (**275** and **276**) were found during excavations in the cloister of St Frideswide's Priory, Oxford , both of which have been engraved with straight lines in chevron-shaped and herring-bone formations, transverse zigzag lines and compass-engraved concentric circles (Figure 3-46) (Scull 1988, 39).

Punched and stamped decoration was another basic form of secondary decoration used on copper-alloy artefacts from the late medieval period, and book fittings

66

282

FIGURE 3-47. Punching/ stamping tool (left), punched metal (right, top) and stamped metal (right, bottom) (Egan and Pritchard 2002, 28).

*FIGURE 3-48. Book fittings with punched/stamped decoration: **66** from Bordesley Abbey, Worcestershire (Rahtz 1983, 176, no.CA57), **282** from Rievaulx Abbey, North Yorkshire (English Heritage, 85000330). Scale 1:1.*

in particular. These two methods are differentiated by the extent to which they manipulate the metal sheet. Essentially, the term 'punched' is applied when a piece of metal is decorated without the design coming through to the reverse, and 'stamped' is used when the metal sheet is completely altered through its thickness so the design can be seen on its underside (Figure 3-47) (Egan and Pritchard 2002, 29). The punched technique can be seen on several book fittings, such as a fastening recovered from Rievaulx Abbey, North Yorkshire, which is decorated with punched annulets (**282**; Figure 3-48). Punched motifs of various designs are also common on book fittings and are used in combination with engraved designs. A variation on the stamping technique is known as repoussé, or embossing, which creates relief designs by pushing or hammering the metal from behind against dies (Egan and Pritchard 2002, 29). An unusual form of decoration that can also be found on medieval book furniture comprises regular double lines of punched dots or triangles (Egan and Pritchard 2002, 30). It is uncertain how this relatively common form of decoration was produced, however, Campbell (1981, 63) suggests that this type of ornamentation was made with a roulette tool. This style of decoration can be seen on a fitting excavated from Bordesley Abbey, Worcestershire (**66**; Figure 3-48) (Hirst *et al.* 1983, 176).

93
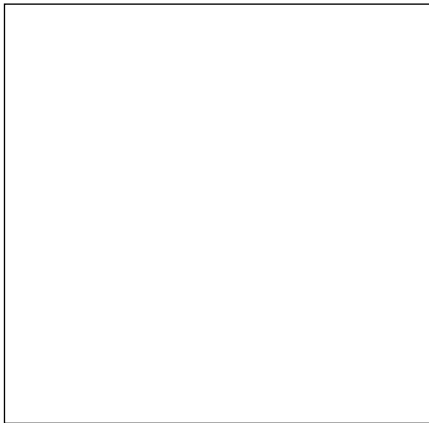
FIGURE 3-49. Book fittings decorated with drill and blind-drilled holes in combination with engraved designs: **93** from Chester Blackfriars, Cheshire (Ward 1990, 167, 169, no.4), **255** from Maldon Whitefriars, Essex (Isserlin 1999, 120, no.23). Scale 1:1.

255

A further common type of decoration, used most commonly for hooked fastenings of type A.3, is drilled or blind-drilled holes. By its nature this method of decoration was appropriate only for relatively thick sheeting or for cast objects (Egan and Pritchard 2002, 32), and these holes are typically used on book fittings in combination with engraved and punched decoration. Examples include fastenings from the Chester Blackfriars, Cheshire (**93**; Figure 3-49) (Lloyd-Morgan 1990, 116) and the Carmelite friary in Maldon, Essex (**255**; Figure 3-49) (Isserlin 1999, 119).

As already mentioned, precious metals were used to illuminate the pages of late medieval manuscripts. This use, however, was not restricted to the interior of manuscripts. Gold was used, particularly in the form of gold leaf, to embellish the copper-alloy fittings of bindings (Figure 3-50). As summarised by Campbell (1991, 131-2), the typical method of gilding copper alloys during the late medieval period was by mercury-gilding, also known as fire-gilding. This type of gilding would have been achieved through two means. The first involved the object being coated with a gold and mercury amalgam on the parts to be gilded, and then heated causing the mercury to evaporate leaving a gold layer ready for burnishing. The second method comprised the surface of the object being rubbed clean with mercury, and then gold leaf placed on top until the desired effect was created before the piece was heated. There are several examples of book fittings that demonstrate the use of gilding, such as one from Battle Abbey (**42**; Figure 3-51) (Geddes 1985, 147-9) and one from St Augustine's Abbey, Kent (**69**; Figure 3-51) (Henig and Woods 1988, 215). The great religious houses are thought to have been foremost patrons of the goldsmith's craft, many of them, such as the abbey of St Albans, Hertfordshire, numbering amongst their inmates artists of great repute (Salzman 1970, 134-5; Campbell 1991, 120).

Another popular method of using precious metals as a form of decoration, particularly during the thirteenth century, was to use silver in the form of niello,

FIGURE 3-50. *Gold leaf was sometimes used to embellish the copper-alloy fittings of bindings (De Hamel 1992, 57).*

174

192

FIGURE 3-51. *Book fittings that have been decorated with gold and enamel:* **42** *from Battle Abbey, East Sussex (English Heritage, 801969),* **69** *from St Augustine's Abbey, Kent (English Heritage, 777590),* **174** *and* **192** *from Fountains Abbey, West Yorkshire (English Heritage, 671210 and 671159). Scale 1:1.*

an alloy of sulphur and silver, which was usually inlaid into engraved metal items (Campbell 1987, 165). There is limited archaeological evidence for such a delicate form of decoration, one possible example is a fastening from Fountains Abbey (*151*). However, there is some documentary evidence for the use of silver on books. For example, the inventories of the treasury of St Paul's Cathedral, from 1245 (Lehmann-Brockhaus 1956, 123-43) and 1295 (Lehmann-Brockhaus 1956, 182-218), both record book covers that have been inlaid with niello in addition to other ornate items such as silver chalices and candlesticks.

The inlaying of enamel was a further technique used to adorn metal items during the late medieval period, although perhaps reserved for finer decorative pieces. The technique of enamelling fundamentally involved the placing of glass powder on a metal surface, usually engraved with a design and then a firing that fused the two materials (Campbell 1987, 164). This method of decoration allowed a metal surface to be permanently coloured, achieving an effect rivalling that of an illuminated manuscript (Campbell 1991, 107). It is difficult to recognise the practice of enamelling metal objects in late medieval England due to the fact that, from the late twelfth and into the thirteenth century, Limoges, in France, dominated the production and exportation of decorative pieces to England (Campbell 1987, 164). Nevertheless, it is reasonable to believe that enamelling on a modest scale was being carried out in thirteenth-century England and on into the fourteenth century as documentary evidence shows that some raw materials for producing enamel were being imported (Campbell 1991, 129). This technique is found on a small number of late medieval book fittings from Fountains Abbey (*174* and *192*; Figure 3-51) and Coventry Cathedral Priory, Warwickshire (*98*) (Rylatt and Mason 2003, 126), however, it is not as common as other forms of decoration already discussed.

3.4 Monastic book production

Having discussed the technological processes behind the production of late medieval books and their fittings, it is now necessary to consider the circumstances in which these processes took place. Books were an essential part of the furniture of monastic houses in England and so this has raised the question of the source of monastic books. It is generally believed that, from the seventh century until the end of the twelfth century in England, the vast majority of books were produced within

monasteries and for the most part by their members (Doyle 1990, 1; Brown 1994, 88; De Hamel 1997a, 85-6; Webber 2006a, 119; Thomson 2008b, 136; Scase 2010, 563). The following section discusses the production of books that took place in monasteries, as it is important to understand the significance of monastic houses as key sites of late medieval book production in order to analyse and interpret the many book fittings that have been recovered archaeologically from them.

3.4.1 THE MONASTIC MOVEMENT AND BOOK PRODUCTION

It has already been discussed how the spread of Christianity facilitated the use of the codex book. Between *c.* AD 500, by which time the codex was the standard form of book in Europe, and the end of the late medieval period the supply and demand of books changed fundamentally (Buringh and van Zanden 2009, 426). During the majority of this period, a close link existed between the monastic movement and book production; monasteries were one of the most important sources not only of supply but also of demand (Clarkson 1993, 182; Buringh and van Zanden 2009, 426). As part of their study, Buringh and van Zanden (2009) estimated the numbers of monasteries in Western Europe and charted the production of manuscripts between the sixth and fifteenth centuries; a minimum of 17,352 manuscripts produced in 11 regions of Western Europe between 501 and 1500 has been suggested (Buringh and van Zanden 2009, 412). They concluded that the growth of monasteries, along with the spread of Christianity, had a major impact on the growth and cultural homogenisation of Western Europe and therefore the production and consumption of books from the tenth century onwards (Buringh and van Zanden 2009, 439).

As part of their religious duties, the reading and studying of the word of God were core roles of the religious houses. From early Christian times, the Christian community utilised the written word to unify those doctrines that were essential for their religious service and so there was a heavy monastic and ecclesiastical emphasis on written texts (Buringh and van Zanden 2009, 426; Finkelstein and McCleery 2012, 31). The development of the monasteries from the early medieval period was followed by a dramatic growth in the number of monasteries between AD 900 and AD 1300. With increased power and status, particularly in rural areas, the monasteries greatly increased the production of books during this time (Buringh and van Zanden 2009, 428-9). The monasteries were prominent as local lords, patrons and producers, and

in the field of book production their influence was profound (Clark 2007b, 3; Buringh and van Zanden 2009, 429).

It is thought that the numbers of books produced in a given society are complex indicators of economic performance and societal capabilities (Buringh and van Zanden 2009, 410). The scale of demand is believed to have prompted sustained programmes of monastic book production during the final decades of the eleventh century and the first half of the twelfth, and the extent of such arrangements depended in part upon the economic resources of the community and its superiors (Webber 2006a, 119; Buringh and van Zanden 2009, 426, 429). In England, for example, 43 volumes are known to have been made for Glastonbury Abbey during a period of approximately ten years, owing to the wealth and patronage of Henry of Blois, who held the abbacy in plurality with the bishopric of Winchester (Sharpe *et al*. 1996, 160-5; Webber 2006a, 119). Books were also made within monasteries using the wealth acquired from agricultural surplus that regions and countries directed to the monastic economy (Buringh and van Zanden 2009, 426). Writing on the manuscripts of the Benedictine monastery of Monte Amiata, one of the oldest and most important monasteries in eleventh-century Tuscany, Italy, Gorman (2002, 229) states that "manuscript production coincides with favourable economic factors. An active scriptorium depends upon a great library, full of exemplars, and both require significant financial resources. Many peasants must work hard to raise the sheep, make the parchment and produce the wealth to be consumed by the monks toiling away in the abbey's library and scriptorium".

3.4.2 MONKS AND PROFESSIONAL SCRIBES

The period between *c*.1100 and *c*.1175, in particular, is considered to have been the time when most religious houses undertook a concerted programme of book manufacture (Thomson 2008b, 140). Ker (1960, 1) has described this period as "the greatest in the history of English book production". With five hundred or so monasteries in England needing books during the twelfth century, the efforts put into book production is thought to have been considerable (De Hamel 1997a, 85). For example, over the last few decades of the eleventh century and into the twelfth, prolonged or sporadic periods of intense copying took place at many Benedictine monasteries, such as Canterbury Cathedral Priory, Kent, and perhaps St Augustine's

Abbey, Kent, from the 1080s, Durham from the 1090s and Rochester from around the turn of the of the twelfth century (Webber 2006a, 112). Protracted periods of copying also took place at numerous other communities during the first half of the twelfth century and continuing into the second half at more recently founded Cistercian and Augustinians houses (Webber 2006a, 112). While monasteries may have dominated English book production in the twelfth century, it cannot be assumed that all books were made in monasteries (Thomson 2008b, 158). For example, other ecclesiastical communities, such as secular cathedrals, including Lincoln and Hereford, produced large numbers of books over the last quarter of the eleventh and into the twelfth century (Doyle 1990, 1; Thomson 2008b, 158).

During the twelfth century, English religious houses of a medium- or large-size, that is with a population of about 50 to 80 monks, would have likely had a collection of anywhere between 100 and 500 books (Thomson 2008b, 140). However, little is known about the numbers of medieval monasteries that had the facilities to produce their own books. The knowledge of how monastic scriptoria worked is constrained by the paucity of the surviving manuscript evidence (Thomson 2008b, 141). Good numbers of books and catalogues do survive from the Benedictine houses in Canterbury, Kent, from Bury St Edmunds Abbey, Suffolk, from Durham Cathedral Priory and from Worcester Cathedral Priory (Thomson 2001, xvii; Thomson 2008b, 141). In comparison, the Cistercian houses have particularly suffered with only a handful of books surviving from such houses as Rievaulx Abbey, and very few catalogues remain. The same is true for major Benedictine houses such as Gloucester Abbey, Gloucestershire, Tewkesbury Abbey, Gloucestershire, Malmesbury Abbey, Wiltshire, and Glastonbury Abbey (Thomson 2008b, 141). Nevertheless, as many of the surviving English manuscripts are known to have been written in monastic communities during this period, it is likely that some form of scribal participation was an expected activity within many of the well-equipped religious houses where scribes within a scriptorium produced the books (Clement 1995, 15; De Hamel 2008, 7; Thomson 2008b, 136; Edwards 2010, 18).

The 'scriptorium' is often defined as a writing room and this term is generally, but not exclusively, used to refer to the place in a monastery or church dedicated to, and equipped especially for, the copying of books by trained people (Brown 1994, 116; Edwards 2010, 18). The monastic scriptorium, which had to be supplied with adequate warmth, light and appropriate furniture, most likely would have taken varying forms within religious houses (Edwards 2010, 18). In some instances, a scriptorium

would have been a large specific room that may have also served as a sort of library (Clement 1995, 17; Thomson 2008b, 141; Edwards 2010, 18). This form is perhaps most notable at the Benedictine abbey of St Albans (Thomson 2008b, 141). Another type consisted of a small individual writing room, or *scriptoriolum*, such as at Clairvaux Abbey, France, and in the third type of scriptorium writing is believed to have occurred in cloister alcoves (Clement 1995, 17).

It is thought that a scriptorium often operated under a supervisor and that the groups of working monks varied in composition, from a single scribe-artist who was responsible for the whole book to extensive teams of scribes, rubricators, illuminators, correctors and binders (Brown 1994, 88; Clement 1995, 17). The monastic scriptorium, especially larger ones, would have been supervised by a member of the community; the librarian, *armarius* or *bibliothecarius*, was often in charge of the writing rooms but the precentor was also frequently responsible for the running of the scriptorium (Clement 1995, 17). In most cases, scriptoria functioned through the copying of texts by the monks themselves, working until the community was felt to have adequate library resources (Thomson 2008b, 141). Monastic scribes generally worked about six hours a day; copying and their religious duties accounted for all daylight hours and artificial light was rarely used due to the risks posed (Clement 1995, 17). Silence was imposed on the scriptorium although copying itself was not silent. It is believed that each scribe dictated to himself and so the scriptorium would have been filled with the dull murmurings of the scribes (Irwin 1966, 119-20; Clement 1995, 17-8).

Not all book production would have taken place in a highly organised scriptorium and not all scriptoria were organised for the same purpose (Edwards 2010, 18-9). For example, some may have primarily had administrative functions to support the running of the monastery (Edwards 2010, 19). Furthermore, small communities, such as dependent cells, may not have had the facilities or the skilled men to produce books themselves and so in all probability would have obtained their books from the mother house (Thomson 2008b, 141). For example, 13 manuscripts, dated from the eleventh to thirteenth centuries, have been identified from St Guthlac's Priory, Herefordshire, a dependent priory of Gloucester Abbey (Thomson 1997, 5). However, it is thought unlikely that this small community would have had a scriptorium of its own and the manuscripts themselves are considered to show signs that at least some of them were produced in the mother house (Thomson 1997, 5; Heale 2004, 181-2). Additionally, Carthusian monks produced books in their individual cells, as

demonstrated by the archaeological evidence from Mount Grace Priory, North Yorkshire (Coppack and Keen 2002, 310-2; Coppack 2008, 174).

Books produced within monasteries, over two or three generations of scribes, were thought to have facilitated the development of 'house' styles of script and decoration (Thomson 2008b, 141). It is argued by Doyle (1990, 3) and Thomson (2008b, 141) that, in some cases, the identification of the place of origin of books can be determined because of their distinctive appearance and the occurrence of distinctive habits of preparation, writing, punctuation and decoration associated with domestic training and teamwork. Consequently, where groups of books are from a known locality and seemingly worked on by the same scribes, it is possible to envisage the existence of a monastic scriptorium (Thomson 2008b, 141). For example, the analysis of ornamental letters with fine, linear designs in curvilinear patterns, or arabesque initials, found in English manuscripts dating between the late eleventh and late twelfth centuries has shown that different scriptoria produced distinct variants (Thomson 2008b, 144). In the case of Canterbury Cathedral Priory, a survey of the surviving manuscript evidence showed that, from the twelfth century, the monastery had an organised and productive scriptorium producing manuscripts of a high standard of correctness, legibility and materials, and utilising increasingly regular initials and scripts (Lawrence 1982, 109). Additionally, in a group of interrelated high-quality manuscripts[1] produced at Durham Cathedral Priory in the early twelfth century, the work of a core group of scribe-artists shows a set of distinctive foliage motifs used for arabesque initials and is argued to indicate that a recognisable house style had emerged (Lawrence-Mathers 2003, 80).

Prior to the end of the twelfth century, scribes were almost always monks and canons; however, professional lay scribes and artists were sometimes needed to work alongside the monks (Jackson 1974, 74; Butler 1979, 96; Brown 1994, 116; Clement 1995, 17; Savage 2006, 44; Webber 2006a, 119; Gill 2007, 59; Thomson 2008b, 143; Scase 2010, 563). It is likely that monks worked quite slowly when producing books, particularly as they had other duties to attend to, and so when the amount of work to be done exceeded the labour and resources available, the monks often brought in professional help (De Hamel 1997a, 92; Doyle 1990, 2). One of the earliest references to professional scribes in England is found in the chronicle of Abingdon

---

1   These manuscripts are: Durham, Cathedral Library, MSS B II 18, B IV 4, B IV 5, B IV 7, B IV 14 and Hunter MS 100, Durham, University Library, MS Cosin V ii 6, Oxford, Bodleian Library, MS Digby 20, and Oxford, University College, MS 165 (Lawrence-Mathers 2003, 70, 264-6).

Abbey, Berkshire. It states that Abbot Faricius employed six professional scribes to copy out patristic texts but he left to the monks the task of writing missals, graduals, antiphoners and other liturgical books (De Hamel 1997a, 92; Thomson 2008b, 143). Also, the manuscripts produced during the twelfth and early thirteenth centuries at both St Albans Abbey (Thomson 1982) and Hereford Cathedral (Mynors and Thomson 1993) provide good evidence for the hiring of small groups of scribes and artists throughout the expansion of the monasteries' collections. Additionally, at the Augustinian Priory of Worksop, Nottinghamshire, it is understood that the canons produced the scripts and left the painting and decorating to lay artists (Butler 1979, 96). In some cases, professional scribes and artists became monks themselves (Butler 1979, 96; Doyle 1990, 5). One example of this is from the fourteenth century when Nicholas Litlyngton, Abbot of Westminster, had a magnificent new missal made in 1383-1386, for which there is evidence that the scribe was a salaried living-in layman, Thomas Preston, who subsequently joined the religious community (Doyle 1990, 5). It is this use of professional scribes and artists that is thought to account for a wide range of variation in the quality of books surviving from English monasteries (Thomson 2008b, 143). The scale of the costs of producing monastic books is also considered to be an indication of the use of professionals (Doyle 1990, 5).

3.4.3 MONASTIC BOOK PRODUCTION AFTER THE TWELFTH CENTURY

From the thirteenth century onwards, the increasing production of books in England was largely secular and this change is discussed in the following section. Nevertheless, monastic book production continued alongside secular production during the later Middle Ages with sporadic programmes of manufacture occurring particularly during the fourteenth and fifteenth centuries (Backhouse 1979, 9; Brown 1994, 88; Clement 1995, 18; Bell 2006, 135). It is thought that, during this time, only such religious institutions as cathedral priories and the largest religious houses of the contemplative orders had the socio-economic conditions for producing books in-house (Pouzet 2011, 217). For example, at the Cathedral Priory of Durham, monks including John Fishburn and John Wessyngton are associated with the copying of several substantial volumes for the monastery's collections (Piper 1978, 234; Doyle 1990, 8; Pouzet 2011, 217-8). Additionally, the analysis of the manuscripts from the Benedictine abbey of St Albans (Pouzet 2011, 218) and Worcester Cathedral Priory (Thomson 2001, xx) indicates continuity in the production of books. A miscellaneous

formulary (Cambridge, University Library, MS Ee.4.20, fol. 274r) from St Albans Abbey was compiled by William Wyntershulle, almoner of the abbey and the abbot's chaplain in 1382, describing the equipment pertaining to the library or study and the production of books (for translation see Pouzet 2011, 218).

Surviving evidence for the production of books at places such as Buildwas Abbey, Shropshire, and Llanthony Secunda Priory, Gloucestershire, demonstrates markedly more dispersed production activities in the fourteenth century (Pouzet 2011, 217). Nevertheless, developments in production techniques and changes to handwriting styles evident in surviving archival and manuscript evidence are thought to have produced "a resurgence of monastic scribal activity in the second half of the fourteenth century" (Bell 1999, 253). The statutes of the General and Provincial Chapters of the Benedictines in England in 1277 made specific reference to the art of book production, calling upon brethren, not occupied with reading, to busy themselves in the copying, decorating, illuminating and binding of books (Pantin 1931, 74-5; Clark 2007b, 10). This was further reiterated in the 1343 statutes of the English Benedictines, and again in the revision of 1444, which attempted to maintain or revive their traditions by specifically advising that superiors should set their monks to study, reading, writing books, correcting, illuminating and binding (Pantin 1931, 61; Doyle 1990, 3; Savage 2006, 36-7).

As discussed below (see 3.5), the development of universities and the increase in demand for books by their students from the thirteenth century were influential factors in the professionalisation and commercialisation of late medieval book production in urban centres (Talbot 1958, 66; Jackson 1974, 61; Backhouse 1979, 9; Morgan and Sandler 1987, 148; Clement 1995, 18; Michael 2008, 169-70; Buringh and van Zanden 2009, 429). However, the needs of the university students and their teachers, many of whom were in fact monks, also revived the production of books within monasteries (Clark 2007b, 11). In the fourteenth century, in particular, a number of greater monasteries resumed the production of books to meet the demands of their university students and to restock their libraries. There is evidence of a return to at least sporadic book production at Bury St Edmunds, Durham, Norwich and a seemingly more systematic programme at St Albans (Dobson 1973, 376-8; Clark 2004, 97-111; Savage 2006, 37; Clark 2007b, 11).

In England towards the end of the late medieval period, the monastic order for which there is proportionately the most abundant surviving evidence of book production

by its members is the Carthusian order (Doyle 1990, 13; Derolez 2003, 29; Bell 2006, 135; Greatrex 2008, 119-23; Horobin 2010, 65-6; Finkelstein and McCleery 2013, 47). The period between *c.*1375 and 1530 is considered to have been the time of its greatest expansion compared with the other monastic orders and it had the strongest traditions in favour of book production (Doyle 1990, 13). Mount Grace Priory, North Yorkshire, founded in 1398, has been extensively excavated, revealing an almost complete layout of the monastery and from these excavations evidence for books and their production has been recovered (Coppack and Keen 2002). The statutes of 1259 provide an insight into the production of books within Carthusian houses. Listed in the statutes are items required by the monks, including bedding, clothing, domestic items, such as eating utensils, and then objects for writing (Hope 1905, 295; Coppack and Keen 2002, 307). For writing, there was to be "a desk, pens, chalk, two pumices, two inkhorns, a penknife, two razors or scrapers for scraping parchment, a pointer, an awl, a weight, a rule, a ruler for ruling, tables, a writing style" (Hope 1905, 295; Coppack and Keen 2002, 307). Objects and materials resulting from the priory's literary activities have been discovered archaeologically, providing outstanding evidence of book production on site (Coppack and Keen 2002, 310). For example, two oyster shells containing pigments were found in two cells and analysis has shown that one contained a red pigment made from red lead and the other contained a green pigment made from copper and white lead (Coppack and Keen 2002, 310). Such pigments and the use of oyster shells are often associated with the production of wall paintings, as is the case at Ely Cathedral Priory, Cambridgeshire, for which these items, along with leaves of gold and silver, are recorded in the treasurer's accounts (Chapman 1907, 73, 83, 136; Coppack and Keen 2002, 310). However, in the case of Mount Grace Priory, the shells containing pigments are thought to have been associated with the decoration of books within the priory given the importance of books and writing within the Carthusian order (Coppack and Keen 2002, 310). A late fifteenth-century Carthusian miscellany of poems, chronicles and treatises (London, British Library, Add. MS 37049) is believed to have been produced at the priory and contains many coloured miniatures using red, green and blue pigments (Coppack and Keen 2002, 310). Also, a fifteenth-century theological miscellany (London, British Library, Harley MS 2373) with an *ex libris* inscription associating it with Mount Grace has initials in blue with red pen-flourishes and rubrics in red ink (Figure 3-52). These examples demonstrate the use of pigments similar to those that have been recovered archaeologically from the monastery. Furthermore, Doyle (1990, 13-4) explains that there is a lack of evidence for Carthusian members purchasing books and that the
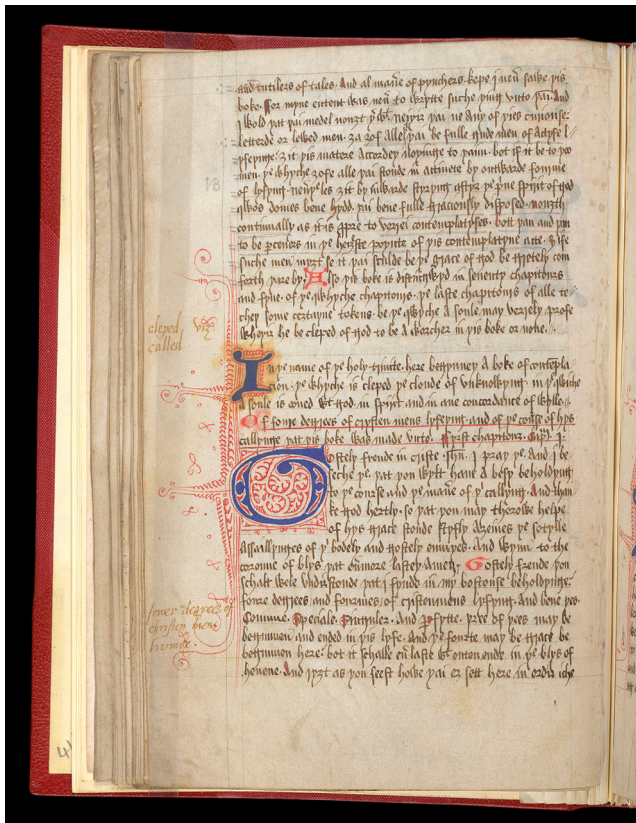
FIGURE 3-52. *A fifteenth-century theological miscellany (London, British Library, Harley MS 2373) with an ex* libris *inscription associating it with Mount Grace Priory supports the archaeological evidence for the monastic production of books after the twelfth century (British Library Board 2015k).*

contents and appearance of a number of manuscripts, especially those attributed to Sheen Priory, Surrey, suggest that they were made by Carthusian hands. Many of these Carthusian books were signed by individuals about whom a certain amount is known. At Sheen Priory, founded in 1415, five named scribes were active during the fifteenth century producing books for Sheen itself and for the nearby Bridgettine nuns of Syon Abbey, Middlesex, demonstrating that books continued to be produced in monasteries by their members (Doyle 1990, 13-4; Thomson 2008b, 167).

3.5 SECULAR BOOK PRODUCTION

Until the thirteenth century, book production was predominately undertaken by the monasteries. Nevertheless, after this time, a class of professional scribes began to develop and by the mid-thirteenth century, 'in-house' monastic book production became less prevalent and book production had essentially moved from the hands of the monks to lay professionals (Knowles 1962, 299; Butler 1979, 96; Morgan and Sandler 1987, 148; Clement 1995, 17-8; De Hamel 2008, 7; Clanchy 2009, 194).

Local monastic production of books became the exception rather than the rule in the subsequent expansion of monastic libraries and so purposeful acquisition from commercial book producers became a principal means of obtaining books for monasteries (Thomson 2008b, 165). By the mid-thirteenth century, the secular book trade had taken over the majority of the business of producing manuscripts (De Hamel 1997a, 123). In order to generate an understanding of the development of secular book production, there have been many studies that have investigated the rise of the universities and the mendicant orders, the increase in importance of urban centres and trade, and the increase in lay literacy (see Talbot 1958; Jackson 1974; De Hamel 1997a; Christianson 1999; Michael 2008; Clanchy 2009, 2013; Edwards 2010; Horobin 2010; Kwakkel 2011). Therefore, it is important to provide an overview of how late medieval book production became a commercial and professional venture as a result of these influences.

3.5.1 UNIVERSITIES AND MENDICANT ORDERS

Characteristic of the thirteenth and fourteenth centuries is the movement of book production away from the monasteries towards the new university centres, such as Oxford (Talbot 1958, 66; Backhouse 1979, 34; Shailor 1994, 88; Derolez 2003, 29, Michael 2008, 175-83). Newly-established universities created a new kind of reading public that required new texts, reference works and commentaries for scholastic study that were not produced in monasteries and this resulted in a shift in book production away from the monastic scriptoria (Talbot 1958, 66; Jackson 1974, 61; Backhouse 1979, 9; Morgan and Sandler 1987, 148; Clarkson 1993, 182; Clement 1995, 18; Michael 2008, 169-70; Buringh and van Zanden 2009, 429).

Secular book production and trade became "a licensed appendage of the university" (Clement 1995, 18). Though the statutes that regulated the process of book production and trade did not appear until sometime after the establishment of the universities, Talbot (1958, 68-9) argues that the monopoly of the book trade was controlled by the university authorities from their foundation. The control extended to every aspect of book production and distribution. Manufacturing the books required by university students for cash sale became an industry supporting an unknown number of stationers, scribes, illuminators, parchment makers, paper makers, bookbinders and all other craftsmen associated with the technology of

book manufacture (Talbot 1958, 69; Jackson 1974, 61; Clement 1995, 18). It became necessary to multiply certain texts required for the scholastic curriculum and to produce them in a short space of time at a relatively low cost. The use of the *pecia* system for copying books quickly and cheaply for university students, which is discussed in more detail below (see 3.5.4), was closely controlled by universities (De Hamel 1997a, 130). As explained by De Hamel (1997, 130-1), commissions of university masters examined stationers' exemplars for accuracy and if they contained errors they had to be corrected at the stationer's expense. These commissions also published official lists of texts available, with the titles of the approved *peciae* copies, the number of pieces in each copy and the price for hiring them. The earliest known example of such a list is from the University of Paris dated 1275 and it records, for example, a copy of Thomas Aquinas' commentary on St Matthew comprising 57 pieces at a fixed rental of 3 *sous d'or* for the set (De Hamel 1997a, 130-2). Also, university statutes strictly regulated the pecia system and stationers were required to take an oath of allegiance to universities and to follow the guidelines on the hiring out of peciae and profiting on the re-sale of books (De Hamel 1997a, 136; Clemens and Graham 2007, 23).

In addition to the rise of the universities, it is commonly accepted that the establishment of the Franciscan and Dominican friars, in the first half of the thirteenth century, greatly stimulated the secular book trade as they had limited or no access to a scriptorium and needed easily portable books for travelling and preaching (Talbot 1958, 74; Jackson 1974, 73; Clement 1995, 18; Derolez 2003, 29). The Franciscans, for example, were bound by a vow of poverty and book production was considered dangerously profitable, so in 1260 the Franciscan General Chapter of Narbonne prohibited their friars from making books (Jackson 1974, 74; De Hamel 1997a, 123; Derolez 2003, 29; Robson 2006, 89; Savage 2006, 31). These factors meant that they had to obtain books from sources outside the monasteries, purchasing them from secular suppliers (Jackson 1974, 73).

Friars also frequently entered university life and found a need for greater numbers of books. Their connection with the universities further stimulated the production of books within cities as the friars needed new books to meet the needs of the curriculum, which they could not get from the older monastic libraries (Talbot 1958, 75; Jackson 1974, 72). The universities had an important place in the campaign of the mendicant orders (Robson 2006, 60-1). For example, the Dominicans, founded in the early thirteenth century, had the primary aim of teaching and confirming fundamental

truths in order to resist heresy and to educate intellectuals in orthodox religion (De Hamel 1997a, 123). The Dominican friars acted as a steady source of purchasing books as they endeavoured to master theology and law at university to fulfil their mission to strengthen the church against secular challenge (Jackson 1974, 73; De Hamel 1997a, 123). For example, the Dominican friar Thomas Aquinas, whilst at the school of theology at the University of Paris, needed a satisfactory collection of books to fight the battle of orthodox doctrine against unsettling influences from Moslem, Jewish and pagan sources, and to support Christian revelation with the manipulation of the logic of Aristotle (Jackson 1974, 72). Franciscan students were also avid buyers of books as the 1260 statute not only restricted them from producing their own books but it also specified that friars that went to university did so without any special provision and were only supplied with books at the discretion of the Minister Provincial and Definitory (Jackson 1974, 73-4; Robson 2006, 61).

3.5.2 Urban centres

Lay commercial book production, independent of university authority, manufactured books according to traditional methods, although new techniques were introduced
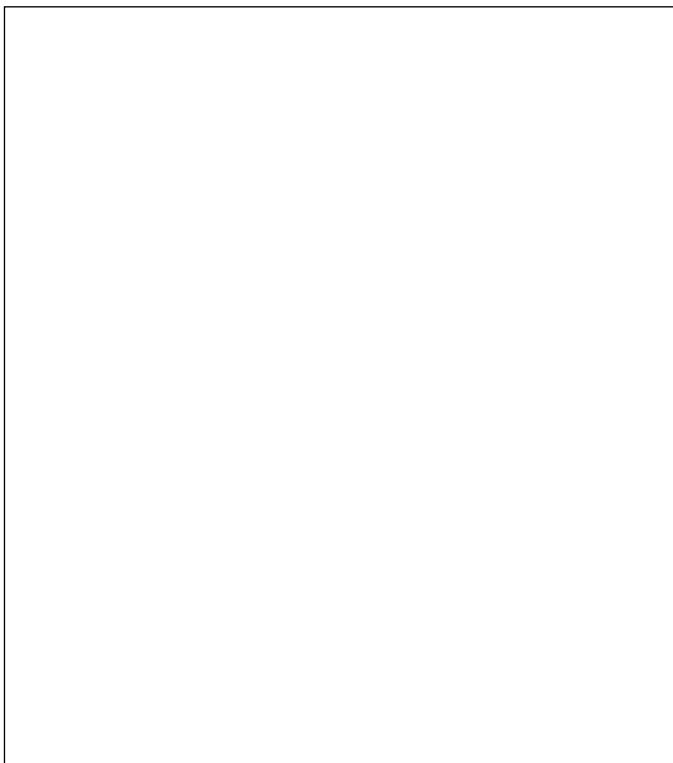
FIGURE 3-53. A late thirteenth-/early fourteenth-century illustration showing book production ('escriture') as a mechanical trade (London, British Library, Add. MS 30024, fol. 1v) (Kwakkel 2001, 174).

in order to reduce production time and to produce high-quality books more economically (Derolez 2003, 30). In a copy of Brunetto Latini's three-volume encyclopaedia, *Li Livres Dou Trésor* (London, British Library, Add. MS 30024, fol. 1v) dating to *c.*1300, the inclusion of book production in a miniature that depicts a selection of technological arts is deemed important as it is thought to show that by this time the activity had become part of urban economies (Figure 3-53) (Kwakkel 2011, 174). As the largest city in England, London is considered to have been a major site for the production of high-quality books, although other major cities, such as Lincoln, Norwich, Salisbury and York, also had the capabilities to produce manuscripts of a similar standard (Morgan and Sandler 1987, 148; Michael 2008, 174; Edwards 2010, 24; Mooney 2011, 194).

By the end of the twelfth century, cities had grown in importance further establishing the shift of book production away from the monastic scriptoria (Morgan and Sandler 1987, 148; Clement 1995, 18). The commercialisation and professionalisation of book production in urban centres is believed to have been facilitated by an increase in clientele with diverse backgrounds and needs, a division of labour among craftsmen that supplied this market with books and the organisation of these craftsmen into guilds (Kwakkel 2011, 175). From the end of the twelfth century, scribes would have sought a variety of commissions from a range of different employers requiring copies comprising a selection of different texts encompassing legal documents and account books, as well as literary works (Clement 1995, 18; Horobin 2010, 61).

Commercial book production in English cities, particularly London, was facilitated by greater availability of resources for production and of scribes, illuminators, parchment makers, artists and binders, and also greater access to larger and wealthier potential markets (Brown 1994, 116; Christianson 1999, 135; Michael 2008, 184; Edwards 2010, 23; Mooney 2011, 196). By the end of the fourteenth century, artisans involved in commercial book production and trade had become a part of the urban economy and formed a community of their own, united through the object they helped to produce, the individuals that brought their skills together and the close proximity of their workshops, which were usually located in the same area, as was the case with other urban trades (Backhouse 1979, 36; Morgan and Sandler 1987, 153; Brown 1994, 116; Kwakkel 2011, 181). It was not until the mid-fifteenth century, however, that bookshops were firmly established, employing groups of artisans for the production of books (Horobin 2010, 66).

From the mid-fourteenth to the early sixteenth century, London seemed to have been both the origin and centre of secular vernacular literary book production and many of the scribes copying the works of poets such as William Langland, Geoffrey Chaucer, John Gower, Thomas Hoccleve and John Lydgate, appear to have been doing so within the city or in its surrounding area (Mooney 2011, 192). In the London area one of the first pieces of evidence for the sustained production of books in the vernacular is the early fourteenth-century 'Auchinleck Manuscript' (Edinburgh, National Library of Scotland, Adv MS 19.2.1), which was written almost entirely in Middle English verse by six different scribes and was originally extensively illustrated (Hanna 2000, 92-3; Wiggins 2003; Edwards 2010, 21). The contents of the manuscript mainly comprise a large number of romances, and the logistics of assembling and organising so many different scribes and exemplars, as well as coordinating the copying, decoration and assemblage of the manuscript, suggest not only a market for English works but the resources to meet such a demand within a metropolitan area (Edwards 2010, 21-2).

3.5.3 LAY LITERACY

Lay literacy increased during the late medieval period and so too did the demand for specific types of books (Buringh and van Zanden 2009, 429; Clanchy 2009, 203-5; Evenden 2010, 92). From the thirteenth century, the development of the 'urban middling sort' affected commercial book production and trade. A marked growth in literacy was influenced by a growing interest in learning and the increase of reading for pleasure among the middle classes (Shailor 1994, 88). Works of popular literature, such as romances and poetry, and technical handbooks increased in demand during this time and there was also a rise in the number of books requested in the vernacular (Jackson 1974, 139; Backhouse 1979, 9; Morgan and Sandler 1987, 150-1; Shailor 1994, 88; Christianson 1999, 133; Evenden 2010, 92; Horobin 2010, 57).

By 1400, commercial book production was aimed not only at the schools and universities but also wealthy lay people in town and country (Clanchy 2009, 204). Illuminated manuscripts continued to be produced but their patrons were kings, dukes and knights and also, by this time, lay women were perhaps as likely as lay men to be the owners of books, particularly Books of Hours and vernacular literature (Backhouse 1979, 9; Clanchy 2009, 204; Clanchy 2013, 114). Noble households were

entertained often by readings of courtly romances and Arthurian legends and this resulted in a steady increase in the work of lay scribes and book ownership in the secular household (Jackson 1974, 76; Morgan and Sandler 1987, 150-1; Clanchy 2009, 194). Scase (2010, 566-7) argues that a growth in the proportion of the population that was literate and an increase in the composition of vernacular reading material in late medieval England coincided with the development of an infrastructure intended to produce books for communities of readers other than those of the religious houses. Similarly, Buringh and van Zanden (2009, 433) argue that, given the interactions between supply and demand, the rapid growth of book production and consumption is explained by the increase of lay literacy.

3.5.4 Developments in production

The professionalisation of book production in the late medieval period is evident from new developments in the manufacture of books. The establishment of the 'stationer', or bookseller, is an important part of the proliferation of professional bodies for the making of books (Talbot 1958, 70; Clement 1995, 18; Edwards 2010, 23; Kwakkel 2011, 176-7). The stationer is commonly believed to have organised the logistics of secular book production first by making contact with the potential purchaser, and establishing their specific needs, and then by purchasing the materials, obtaining an exemplar to be copied, arranging the decoration that may have followed and finally payment. The stationer was also responsible for the buying and reselling of old books (Talbot 1958, 70; Clement 1995, 18; Michael 2008, 171-2; Edwards 2010, 23). The stationer offered a service that required both entrepreneurial skills and an adequate line of credit or capital as the costs of business fluctuated, dependent on the current prices of materials and on the frequency of commissions (Christianson 1999, 130-1). Although little surviving documentary evidence indicates how stationers completed such roles, Edwards (2010, 24) concludes that these "entrepreneurial…middle men" were a crucial aspect of book production and trade.

Distinctions between scribes have been made on the basis of the types of work they produced (Mooney 2011, 192-3). A professional scribe, or perhaps a 'scrivener', is defined as someone who made a living by writing legal documents and accounts but also by copying vernacular literary texts for their own or family's or community's use (Mooney 2011, 192-3). By the mid-fourteenth century, those in London who used
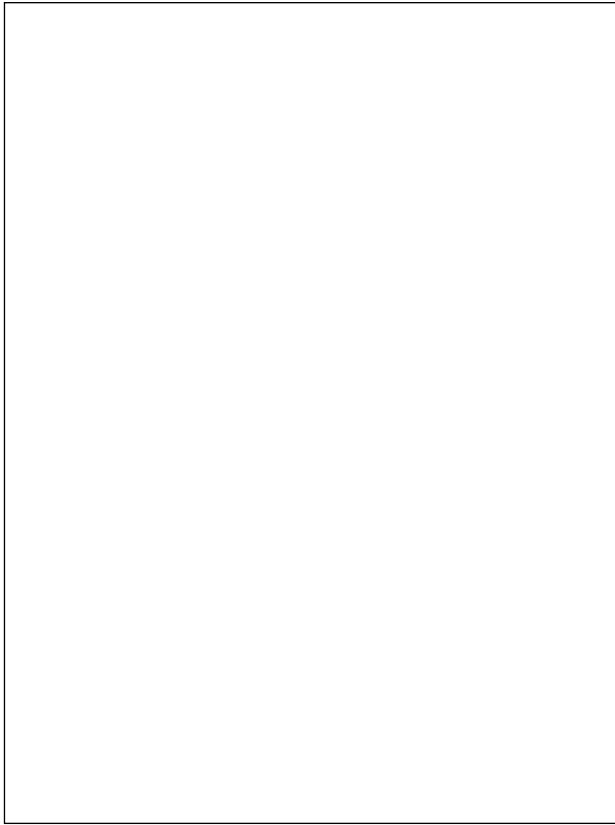
FIGURE 3-54. Here the abbreviation 'pᵃ' for pecia in the right margin and a numeral in the lower margin demonstrate that the text was copied using the pecia system (Chicago, Newberry Library, MS 121, fol. 6v) (detail) (Clemens and Graham 2007, 24).

a 'Court Letter' handwriting style and wrote legal documents were united in the Mistery of Writers of the Court Letter, later called the Scriveners' Guild (Steer 1968, vii-viii; Kwakkel 2011, 175; Mooney 2011, 193). A commercial scribe is considered to have been someone who copied books, particularly school and university books, bibles and other liturgical texts, for a bespoke trade and perhaps, later in the fifteenth century, for sale in a shop. These 'Writers of the Text Letter' joined the Stationers' Guild with other artisans involved in book production (Steer 1968, ix; Kwakkel 2011, 175; Mooney 2011, 193).

As well as the professionalisation of certain roles involved in book production and trade, standardised patterns and techniques were introduced in order to reduce production time and to produce high-quality books more economically (Derolez 2003, 30; Bell 2006, 131). In order to yield the large numbers of books required by the rising numbers of university students and teachers in the later twelfth century, the pecia system for copying texts was introduced and used from the thirteenth century onwards (Talbot 1958, 67-8; Pollard 1978, 145; Brown 1994, 97; Shailor 1994, 98; Clement 1995, 18-9; De Hamel 1997a, 130; Derolez 2003, 29-30; Bell 2006, 131; Clemens and Graham 2007, 23-4; Michael 2008, 171; Buringh and van Zanden 2009,

425). Believed to have originated in Bologna, Italy, *c.*1200, the pecia system spread to universities elsewhere in Italy and in France, Spain and England (Pollard 1978, 148; De Hamel 1997a, 136-7; Clemens and Graham 2007, 23). The stationer held one or more exact copies of university-approved books that were divided into sections, hence *pecia* meaning 'piece' in Latin. Gatherings of four or six folios that had been corrected by the stationer to maintain their textual accuracy were then rented out for a specific time so that students or scribes could be copying parts of the same book at the same time (Jackson 1974, 72; Pollard 1978, 151-2; Shailor 1994. 98; Clement 1995, 18-9; De Hamel 1997a, 130; Clemens and Graham 2007, 23). Evidence for the use of this system can be seen in numerous surviving examples of the peciae hired out by the stationers and of the copies owned by students. The original peciae were often numbered in the upper margin of their first page and the copies typically have notes entered in their outer margins recording where the copying of a new peciae began (Talbot 1958, 68; Jackson 1974, 72; Pollard 1978, 152-3; De Hamel 1997a, 132; Clemens and Graham 2007, 23). An example of a pecia copy is a fragment of a copy of Thomas Aquinas' commentary on the third book of Peter Lombard's *Sentences* (Chicago, Newberry Library, MS 121). Figure 3-54 shows that the abbreviation 'p[a]' for pecia has been entered in the right margin of folio 6v and in the following line there is a change in the nature of the script (Clemens and Graham 2007, 24). Also, the numeral entered in the lower margin is believed to record the number of the new pecia being copied (Clemens and Graham 2007, 24).

As well as the method of copying texts, the increase in demand for books in universities and urban centres resulted in physical and codicological changes to the books being produced. The simplification of the processes involved in book manufacture increased the rate of production (Talbot 1958, 67; Jackson 1974, 73). For example, new forms of script were adopted, abbreviations were used, decoration was almost completely removed and a more pliable and more easily portable binding was introduced. Economic bindings were those without wooden boards, otherwise known as limp bindings, and this was a very common way of binding books in England and throughout Europe during the late medieval period (Kwakkel 2011, 189). This type of covering was cheap due to its short production time and the low cost of the material, which was often plain tawed or tanned leather, damaged parchment sheets or recycled manuscript pages (Kwakkel 2011, 190). Also, parchment was made into much thinner sheets, the number of folios used to create quires increased, text was frequently written in two columns on the page and the general format of

FIGURE 3-55. An example of a 'pocket-sized' Bible (Private collection, s.n., fol. 178v-179r) (De Hamel 1997a, 121).

books was reduced in size (Talbot 1958, 67). The influence of the universities and mendicant orders on these changes in book production is reflected in the significant numbers of 'pocket-sized' Bibles perfect for the travelling preacher and student, such as the c.1250 copy believed to have been owned by the Dominicans in Auxerre, France (Private collection, s.n., fol. 178v-179r) (Figure 3-55) (Backhouse 1979, 34; De Hamel 1997a, 118; Light 2012, 382-3; Clanchy 2013, 137). An early English example of a pocket Bible (Oxford, Bodleian Library, Lat. Bib. e.7) is that painted by William de Brailles in Oxford for a Dominican friar, dated to between 1230 and 1240 (Light 2012, 382-3). Furthermore, the pace of the scribes employed to produce books in university cities was most likely faster than that of the monks in monastic scriptoria, owing to the changes in script, page layout and use of abbreviations (Jackson 1974, 73). Further changes to the writing, and consequently reading, of texts were influenced by the increasing demand for books in the vernacular. The separation of words by consistently sized spaces, which was an important element of writing in Latin by 1100, was passed to vernacular languages, enabling the reader to scan the text silently rather than identifying each word by pronouncing it out loud (Clanchy 2009, 197). Buringh and van Zanden (2009, 425) believe that, as a result of these innovations of the later medieval period, the price of books was greatly reduced providing additional impetus to the growth of commercial book production. Such changes in the production of books were likely to have affected the production and use of book fittings. It is probable that the increase in demand for larger numbers of cheaper books created a need for more numerous and cost-effective fittings. Given the technological changes in metalworking that also occurred from the thirteenth century (see Cassels 2013), it is not unlikely that cheaper book fittings were produced to meet the demands of the university students, mendicant friars and lay society.

3.5.5 CONTINUATION OF MONASTIC BOOK PRODUCTION

It must not be forgotten that monasteries continued sporadically to produce books even though the majority of the work had been passed onto lay craftsmen (Backhouse 1979, 9; Brown 1994, 88; Clement 1995, 18; Horobin 2010, 65). An early fourteenth-century example is the scriptorium of Peterborough Abbey, Northamptonshire, from which was produced a psalter (Brussels, Bibliothèque Royale Ier, MSS 9961-2) in the contemporary delicate-mannered Gothic style that had developed in both France and England (Knowles 1962, 299-300). Indeed,

monastic scriptoria experienced a revival during the fifteenth century in the work of renewed religious orders such as the Carthusians (Finkelstein and McCleery 2013, 47). Nevertheless, even where instances of monastic book production continued, it is often more difficult to distinguish their products as it is believed that, in the fourteenth and fifteenth centuries, most members of the religious orders learned to write primarily in the cursive utilitarian scripts with similar models and often in the same schools as their lay contemporaries (Doyle 1990, 3).

3.6 PRINTING

By the fifteenth century, the producers of manuscripts were under increasing pressure to produce multiple copies of new and popular texts with relative speed (Evenden 2010, 93). As scribes and artists struggled to meet demand, an alternative mode of book production was sought. Around 1439, Johann Gutenberg, a goldsmith from Mainz, Germany, invented the manufacture and use of movable type and by 1450 the printing press was in operation (Evenden 2010, 93). Printing spread quickly across Europe and by the 1470s there were presses in many countries of Western Europe. The subject of the development, technology and spread of printing is a complex topic, has been extensively covered by many scholars (see Gaskell 1972; Balsamo 1976; Trapp 1983; Febvre and Martin 1984; Steinberg 1996; Ford 1999; Hellinga 1999, 2009; McKitterick 2003; Shaw 2009), and does not appertain directly to the objectives of this work. However, the physical differences between manuscripts and printed books and also the impact of printing on the production of manuscripts are of importance to this research and therefore, the following discussion offers an overview of this topic.

3.6.1 MANUSCRIPTS VS. PRINTED BOOKS

Early printed books produced before the turn of the sixteenth century, or *incunabula*, differed little in their appearance from manuscripts (Febvre and Martin 1984, 105; De Hamel 1992, 21; Shailor 1994, 107; Blake 2007, 404-5; Evenden 2010, 93; Finkelstein and McCleery 2013, 47). In fact, the first printed texts were produced to look the same as manuscripts and printing was seen merely as a cheaper and quicker method of producing the same texts. Early printed books were influenced by manuscript

traditions, emulating many of their visual features (Hellinga 1999, 65; Blake 2007, 405; Evenden 2010, 93). For example, the typefaces used were modelled on the scripts familiar to their readers, the use of signatures, foliation and catchwords, first used in manuscripts, continued in printed books, guidelines were often ruled around every line of printed text and decoration was created by hand (Gaskell 1972, 51-2; De Hamel 1992, 21; Shailor 1994, 110; Hellinga 1999, 70; Blake 2007, 404-5; Evenden 2010, 93-4; Finkelstein and McCleery 2013, 47).

Additionally, the printing of certain texts on parchment is considered to have been in response to a wish to conform to the traditional manuscript culture (Hellinga 1999, 95; Blake 2007, 404). For example, William Caxton's copy of the *Myrrour of the Life of Christ* (London, British Library, IB.55119) was printed on parchment possibly to reflect the archaic use of the language (Hellinga 1999, 95). This deliberate archaising act of printing on parchment may be further demonstrated by two surviving parchment copies of Wynkyn de Worde's *Book of hawking, hunting and heraldry: a treatise of fishing* printed in 1496 (London, British Library, IB.55193 and Manchester, John Rylands Library, 19668) (Hellinga 1999, 95).
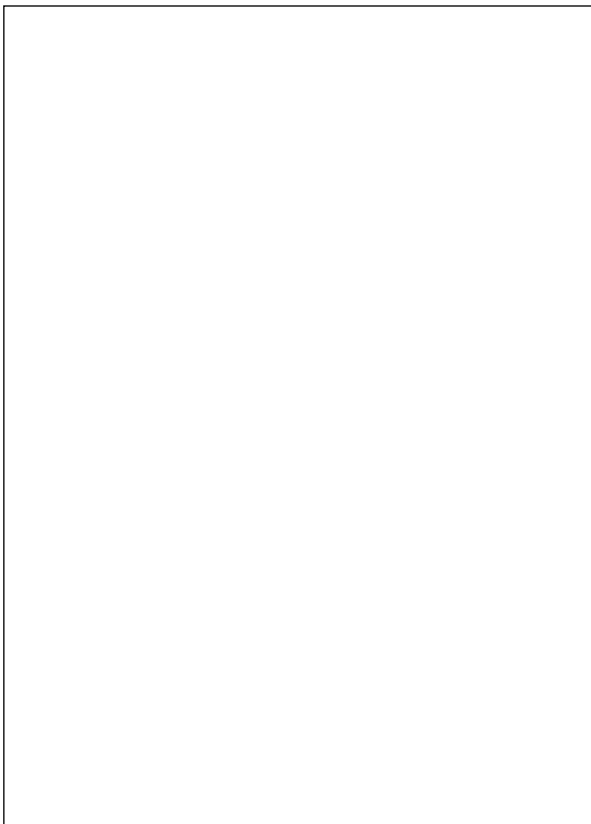
FIGURE 3-56. An example of an early printed book (London, Lambeth Palace Library, 1494.4), dated to 1494, in its original binding and its fastenings in situ (Nixon 1979, pl. IX).

There was also little difference in the bindings of late medieval manuscripts and printed books of the late fifteenth century. The same craftsmen who bound manuscripts applied their skills in the same way to printed books (Febvre and Martin 1984, 104). Early printed books continued to be bound in wooden boards, covered with stamped leather and affixed with metal fittings. For example, the 36 *incunabula* collated by Nixon (1976), which are thought to have been printed by William Caxton and Wynkyn de Worde in Westminster, demonstrate this continuation as the majority survive in their original bindings of wooden boards covered with decorated leather and retain evidence of having once been fitted with fastenings (Figure 3-56). From the beginning of the sixteenth century, however, changes in the bindings of printed books can be observed. As the printing press began to produce many more books, binders had to adapt their methods to respond to new demands (Febvre and Martin 1984, 106; Foot 1999, 114). More cost-effective and continuous production was necessary to produce bindings of a suitable quality to satisfy a larger and less wealthy market (Febvre and Martin 1984, 106; Foot 1999, 114). For example, as the use of paper increased due to the growth in printing, waste sheets grew in number. From this the pasteboard was developed. This type of covering was cheaper and lighter than wooden boards and was made by pasting several paper sheets together, which toughened them (Febvre and Martin 1984, 106; Foot 1999, 114). The increase in demand for bound printed books also resulted in a decline in the decorating of the covers (Febvre and Martin 1984, 108). Furthermore, such developments in bookbindings were likely to have impacted upon the production and use of metal book fittings at this time. It is likely that the increase in cheaper printed books created a demand for cheaper fittings. Given that paper and pasteboards were increasingly used for printed books, it is probable that metal fittings became less functionally necessary and became a more decorative feature of bindings. Extant bindings of later sixteenth- and seventeenth-century manuscripts and printed books demonstrate the continuation of the use of book fittings; however, it is possible that metal book fittings were used less frequently as the printed book became the more dominant form of codex.

3.6.2 Impact of printing on manuscript culture

Manuscript culture did not die out with the invention of printing. It continued to exist through the sixteenth and seventeenth centuries (Edwards 2010, 30). As manuscript

production coexisted alongside the printing of books, the boundary between manuscript and print is "as untidy chronologically as it is commercially, materially or socially" (McKitterick 2003, 12). Nevertheless, the continuation of a manuscript tradition has been the focus of several studies (see Love 1993; Woudhuysen 1996; Beal 1998; Ezell 1999).

The potential for economic gain brought about by printing ensured that the number of printing houses increased across Europe from the second half of the fifteenth century. There was, however, a continuation in the market for bespoke manuscripts (Evenden 2010, 94). The independent role of the scribe was maintained by diversifying and adapting to consumer tastes, and print did not become the automatic medium of choice for writers of the period (Evenden 2010, 98). Evenden (2010, 98) states that "the coexistence of print and manuscript presented writers with tactical choices". Deliberate choices between manuscript and print made by the poet John Skelton, for example, depended on the motivations behind the production of his text and its target audience (Evenden 2010, 98). Similarly, it is argued that poets like Henry Howard, Earl of Surrey, Sir Thomas Wyatt and Sir Philip Sidney, whose works circulated almost wholly in manuscript form during their lifetimes, were conscious of a stigma of print as it potentially exposed their writings to a wider, far less defined audience than they imagined for their works (Edwards 2010, 29-30). Also, the arguments of sixteenth-century Dominican monk, Filippo di Strata, against the adoption of the printing press illustrate that this new technology caused a cultural change that threatened privileges and areas under elitist control as lower classes became more literate (Finkelstein and McCleery 2013, 42). As explained by Finkelstein and McCleery (2013, 42), Filippo professed in the Venetian senate that "printing needed to be resisted in favour of writing because…it corrupted texts (through circulation in poorly manufactured and incorrect editions for profit); it corrupted minds (making available immoral or dangerous texts to a general public without proper approval or consent by the church); and it corrupted knowledge (by making it freely available to the ignorant)".

It is commonly accepted that early printers focused on printing texts that had previously been produced as manuscripts; if a text sold well in manuscript form, it was likely to prove just as popular in printed form (Driver 2004, 5-6; Piper 2007, 101; Evenden 2010, 99). Early printers with limited resources deliberately chose to invest in the production of texts with an established reputation for which there was a ready market (Febvre and Martin 1984, 249; Piper 2007, 101). However, it was not

uncommon for manuscripts to be copied from printed books, a phenomenon that has been studied by Reeve (1983). An example of a manuscript copied from a printed book is the handwritten copy of *Dicts and Sayings of the Philosophers* (London, Lambeth Palace Library, MS 265), translated from French into English by Anthony Woodville, Earl Rivers, which was first printed by Caxton in November 1477 (Steinberg 1996, 47; Backhouse 1999, 270; Blake 2007, 413-4). This volume is believed to indicate that manuscripts were still highly regarded after the advent of the printing press (Backhouse 1999, 270; Blake 2007, 413).

It has also been suggested that, once printing had been firmly established and was generally the medium of choice, handwritten books often developed "an aura of forbidden knowledge or one of privileged secrecy" (Evenden 2010, 98), which continued even into the seventeenth century (Love 1993, 142). The printed word increasingly gained authority and prestige and so printed texts gained a form of legitimacy, whereas handwritten texts allowed authors much more freedom of expression and potentially allowed them to be more subversive (Love 1993, 142; Bell 2006, 138; Evenden 2010, 98). Also, the manuscript tradition remained familiar for certain kinds of texts, particularly alchemy books, whereas more established texts circulated in both manuscript and print (McKitterick 2003, 27). This demonstrates that manuscripts continued to be produced, and that there was a ready market for them, despite the technological improvements in the production of books at the end of the late medieval period.

3.7 Summary

This chapter opened with a discussion on the technology of the production of late medieval books, looking at the key processes, materials and tools involved in the manufacture of medieval manuscripts in codex form, which became the main format for written texts across Europe by the fifth century. By complementing the information with documentary, pictorial and archaeological evidence, it has been possible to illustrate the combination of skills and types of material culture required to produce these diverse objects. For this research on book fittings, it was also necessary to consider in more detail how these objects were produced. This chapter has shown that there is very little direct documentary and archaeological evidence for the manufacture of this type of artefact, however, it has demonstrated that much

can be inferred from the examination of the fittings themselves.

To consider the technology of book production in isolation yields only a narrow view of late medieval book manufacture. It is therefore important to understand the production of books within the context of monasteries, its transition from the monastic scriptoria to the commercial urban centre and finally the impact of printing on manuscript culture. By illustrating where books were produced and by whom during the late medieval period, and also demonstrating the growth of book production, trade and literacy levels in general, the value and importance of books within late medieval society is clearly demonstrated.

4 MONASTERIES AND THEIR BOOKS

4.1 INTRODUCTION

To enable the contextual analysis of the archaeological material that is the primary focus of this research, it is necessary to understand the concept of monasticism and how books played a vital role in the lives of monks. There has been extensive work, both historical and archaeological, on the history of monasticism and also medieval monasteries (see Knowles 1961a, 1962; Knowles and Hadcock 1971; Brooke 1974; Butler and Given-Wilson 1979; Platt 1984; Keevill *et al.* 2001; Lawrence 2001; Clark 2007a; Burton and Stöber 2008; Burton 2012). For this research an overview of monasticism is presented with a specific focus on the importance of books for religious, scholarly and reading practices within monasteries.

Following this, consideration is given to the various types of books used and kept within English monasteries of the late medieval period. The importance of contemporary catalogues and booklists for our understanding of the contents of monastic book collections is also addressed in this chapter. As well as considering the contents of books, the several ways in which monasteries acquired books are covered. Whilst it would be unfeasible to fully cover the vast subject of monastic book collections within this current study, it is necessary to have a sound understanding of the various books used by monks for the interpretation of book fittings in their wider contexts.

For the analysis of the distribution of book fittings that have been recovered archaeologically, it is crucial to understand how and where books were stored on site. Accordingly, this chapter examines a synthesis of evidence in order to provide an overall view of the different types of storage furniture used in monasteries, namely chests, cupboards and enclosed wall recesses, and the various locations of monastic book storage and use, from the abbey church and cloister, to the refectory and infirmary.

4.2 MEDIEVAL MONASTICISM

This section examines monasticism from its beginnings with the fall of the Western

Roman Empire, to the development of monastic rules and reading practices, through to the twelfth-century scholastic movement and the rise of the universities, with a focus on how books formed an integral part of monastic life in the late medieval period.

4.2.1 ST BENEDICT AND THE DEVELOPMENT OF MONASTICISM

From the fourth century AD, especially following the fall and the Christianisation of the Western Roman Empire, the culture of monasticism evolved over a millennium, although it was founded on the rules, constitutions and customs established in its earliest centuries (Clark 2007b, 5). The Papacy at this time endeavoured to establish itself as a pan-European power with the aim of bringing the Western Church into a unified organisation, under its control, that was united in doctrine, liturgy and law (Thomson and Morgan 2008, xviii). This uniformity both required and produced a standardisation of texts and reading (Brown 2009, 179; Finkelstein and McCleery 2012, 31).

Two of the earliest writings on religious community life to have survived are the *Ascetica* written by St Pachomius (*c.*292–346/8) and the *Asceticon* by Basil of Caesarea (330-79), and by the end of the fourth century, interest in the monastic way of life was spreading to the West (White 2008, xviii). From this time a number of monastic rules were written to instruct religious communities on their ascetic way of life, notably the *Rule of St Augustine* developed by St Augustine of Hippo (354–430) at the end of the fourth century, the *Institutes* and the *Conferences* by John Cassian (*c.*360 – 435) in the fifth century, and the *Rule of the Master* written in the early sixth century by an unknown author (Smalley 1952, 27; Riché 1976, 107; Robertson 1996, 89; White 2008, xviii-xxi). Perhaps the most influential monk that led the way in developing monasticism, however, was St Benedict of Nursia (*c.*480–547) who founded the large Benedictine house at Monte Cassino, Italy, *c.*529 (Butler 1979, 13; Clement 1995, 15; Robertson 1996, 89; Lawrence 2001, 18; Lucas 2006, 242). To serve as a guide for the conduct of Benedictine monastic communities St Benedict wrote a book of precepts known as the *Regula Sancti Benedicti* (Figure 4-1) and this work had a major influence on the development of the rules and customs of monasticism in general (Clement 1995, 15; Harris 1995, 91; Lawrence 2001, 18; Clark 2007b, 5). The *Rule of St Benedict* consists of a prologue and 73 chapters that set out a detailed plan for the

FIGURE 4-1. *An extract of the* Rule of St Benedict *(Oxford, Bodleian Library, Hatton MS 48 fols. 38v-39r) (De Hamel 1997a, 18).*

government of a monastic community and explain the aims and characteristic virtues the monks were to endeavour to achieve (Lawrence 2001, 21-2). The essence of the way of life of St Benedict's religious community, or *cenobium*, was the daily *Opus dei* ('work of God'), the divine service (*Officium divinum*) of the Lord undertaken by every monk. The demands of the *Opus dei* not only directed "the active and contemplative lives of the monks, it also dominated their mental horizons" (Clark 2007b, 6). A monk's basic routine was formed on the basis of the daily round of the seven offices (Lauds, Prime, Terce, Sext, None, Vespers and Compline), in addition to the singing of the night office of Vigils or Nocturns, that were recited in common at certain hours of the day (Butler 1979, 13-4; Lawrence 2001, 30; White 2008, viii). Linked to the *Opus dei* was the *Opus manuum*, which involved the physical labour necessary for the sustenance and maintenance of the community, and also the mental labour for divine reading (*lectio divina*) (Clark 2007b, 6). Chapter 48 of the *Rule* emphasises the importance of the daily physical and mental labours of the brothers as "idleness is the enemy of the soul" (White 2008, 72). This chapter sets out the hours of both physical work and personal reading, which varied with the season:

> "From Easter until I October the brothers should go out in the

morning and work from the first until about the fourth hour, as necessary. From the fourth hour until about the sixth hour, they should spend the time reading. After the sixth hour, when they leave the table they must rest on their beds in complete silence, or if anyone wants to read by himself, he must do so in a way that does not disturb anyone else…From I October until the beginning of Lent, they should spend the time reading until the end of the second hour…After the meal they should devote themselves to reading or the Psalms. During Lent they should spend the morning reading until the end of the third hour, and then they should work on the tasks assigned them until the end of the tenth hour…On Sundays they should all spend time reading, apart from those who have been assigned various tasks" (White 2008, 72-3).

4.2.2 *LECTIO DIVINA*

Translated as 'divine reading', *lectio divina* is considered to have been at the centre of medieval religious life (Smalley 1952, xv; Clemens and Graham 2007, 181; Kerr 2009, 21). It has been interpreted in several ways to mean 'holy reading', 'prayerful reading' and 'reading devoted to God', and in Latin texts of the early Christian period it has been interpreted to have originally meant 'Bible reading' that involved the reading and study of the Bible and associated commentaries, including those of the Church Fathers (Clemens and Graham 2007, 181; Gill 2007, 58; White 2008, 118). The religious experience of reading began with the concept of the Scripture as "inspired writing dictated by the Holy Spirit to patriarchs, prophets, evangelists and apostles" (Robertson 1996, 38). *Lectio divina* was regarded as a physical and spiritual activity to prepare the community for their performance in the *Opus dei* rather than as an intellectual endeavour (Smalley 1952, xv; Harris 1995, 92; Greatrex 2000, 41; Clark 2004, 124; Webber 2006a, 121; Clark 2007b, 6; Clemens and Graham 2007, 181; De Hamel 2008, 6; Kerr 2009, 178). The practice of *lectio divina* is believed to have been distinct from the study of Scripture or works of theology (Gill 2007, 58). Whereas monastic scholarship may have led to the composition of works of theology and history, divine reading was a process that involved *meditatio* (Parkes 1976, 115; Clemens and Graham 2007, 61; Gill 2007, 58). In the medieval monastic world, this term chiefly meant the repetition, recitation and memorisation of the divine wisdom

of the text for the learning of the Divine Office and, in particular, the Psalms (Coleman 1996, 89; Robertson 1996, 97; Clemens and Graham 2007, 61; Gill 2007, 58; Clanchy 2013, 270-1). *Lectio divina* also involved the interpretation of the Scripture, known as exegesis, which is described in great detail by de Lubac (1998-2009). This process involved the interpretation of the text on the following four bases: *historia* (the literal reading), *allegoria* (the doctrinal explanation), *tropologia* (its moral or ethical implications), and *anagogia* (the prophetic and eschatological sense) (Robertson 1996, 40-3; Clemens and Graham 2007, 181).

In addition to the *lectio divina* undertaken by individuals in monasteries, religious communities regularly engaged in public divine reading (Robertson 1996, 93). This generally took place in the church and chapter house, during mealtimes in the refectory and at the evening collation (Riché 1976, 116; Coleman 1996, 89; Lawrence 2001, 142; Webber 2006a, 120; Erler 2007, 134). The purpose of the daily chapter, held in the chapter house after Terce in the winter and after Prime in the summer, was to hear confessions, examine the conduct of individual monks and administer discipline, commemorate those who had given property or money to the house and manage every kind of monastic business. Yet it was of primary importance that the assembled community listened to the reading of a lesson and a chapter of the *Rule* before these matters could be addressed (Butler 1979, 68; Lawrence 2001, 110). The importance of public reading within monastic life is further emphasised by the solemn readings at mealtimes (Figure 4-2) (Brooke 1974, 64; Kerr 2009, 84). Monks were to listen to readings of the Bible and the Church Fathers whilst dining in the refectory: "The brothers' meals should always be accompanied by reading, not by a person at random who just picks up the book, but by someone who will read for the whole week, starting on a Sunday" (White 2008, 61). During meals monks were directed to listen attentively so that the body was nourished both by the food and the Word of God (Robertson 1996, 93; Kerr 2009, 84). The directions for reading during meals are laid out in Chapter 38 of the *Regula Sancti Benedicti* (White 2008, 61). Instructions for the reader include that he should take his meal afterwards with the servers, although he is allowed a little to eat and drink before he begins to read. Also, for the brothers listening there was a requirement for complete silence so it is instructed that they be supplied with everything they need while dining and if anything is required signs should be used rather than words (Kerr 2009, 84-5). Furthermore, public reading in some monasteries was a solution to a problem of a large number of monks and a smaller number of books. The religious community at Cluny, Burgundy, for example,

had approximately 300 members by the beginning of the twelfth century and if a large number of monks wanted to read the same book it was accomplished by public reading (Brooke 1974, 64).

Monastic reading, whether alone or in public, was performed aloud as implied by Chapter 48 of St Benedict's *Rule*: "when they [the monks] leave the table they must rest on their beds in complete silence, or if anyone wants to read by himself, he must do so in a way that does not disturb anyone else" (White 2008, 72). From the second century onward, written texts had no punctuation or spacing (*interpuncta*) and so readers had to contend with unseparated text (*scriptura continua*) (Saenger 1982, 370; Robertson 1996, 94; Finkelstein and McCleery 2013, 37). It is believed that, even by the time of St Benedict, to read a text either to himself or to others, a monk would have needed to vocalise each syllable in order to understand the words and sentences of the text (Saenger 1982, 371; Robertson 1996, 95). Systems of spacing words and punctuating texts were introduced in England from the seventh century, and from the twelfth century 'canonical word separation' became characteristic of almost all written, and eventually printed, texts (Robertson 1996, 95; Clanchy 2013, 271; Finkelstein and McCleery 2013, 37). Saenger's (1997) research on the origins of
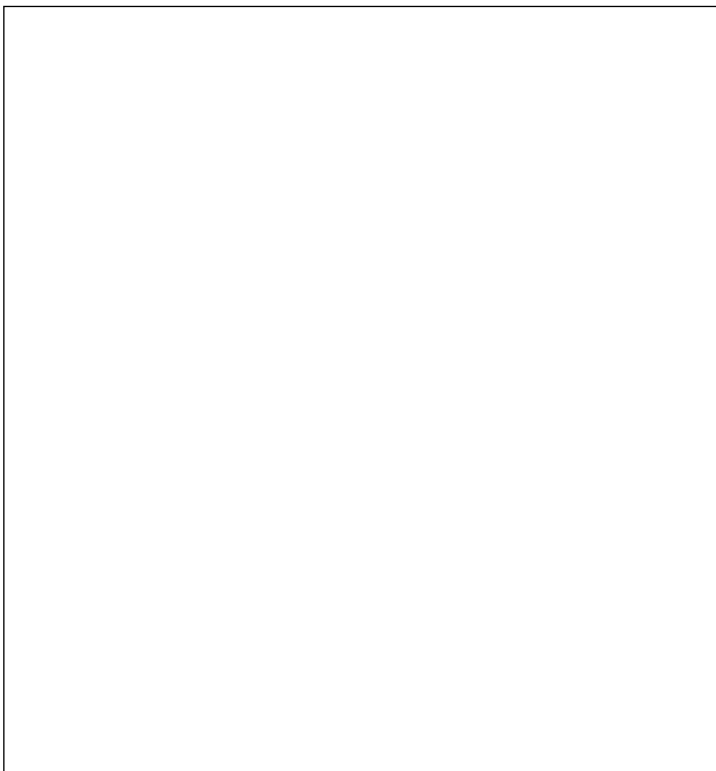
FIGURE 4-2. *Public reading in the refectory from a mid-fifteenth-century copy of Suso's* Horologium Sapientiae *(Brussels, Bibliothèque Royale, MS IV.III, f.20v) (detail) (Coleman 1996, Figure 3).*

silent reading provides a detailed analysis of the different forms of word separation developed during the period from late antiquity to the fifteenth century. In conjunction with tenth-century Benedictine reforms and other changes to the format of manuscripts, word separation encouraged silent or voiceless reading. However, it was between the thirteenth and fifteenth centuries that silent reading became an increasingly common practice (Saenger 1982, 379; 1997, 183-5, 258; Amsler 2001, 92). The continued practice of reading aloud is often depicted in late medieval manuscript illustrations that show people reading in groups. For example, an illustration in a mid-fifteenth-century copy of Dominican friar Henry Suso's *Horologium Sapientiae* (Brussels, Bibliothèque Royale, MS IV.III, fol. 20v) depicts a scene of religious public reading in a monastery's refectory (Figure 4-2). "To read in groups was to read aloud; to read alone was to mumble" (Saenger 1982, 379-80). Private individual reading was a slow process in which one would read and mutter the text (*sub voce*) (Gill 2007, 58; De Hamel 2008, 6-7; Thomson 2008b, 136; Kerr 2009, 178; Clanchy 2013, 271). Vocalisation made it easier for monks to read texts, but reading the Scripture aloud transformed reading into a form of prayer (Robertson 1996, 102; Amsler 2001, 86). Robertson (1996, 102) observes that by sounding words out loud and engaging the
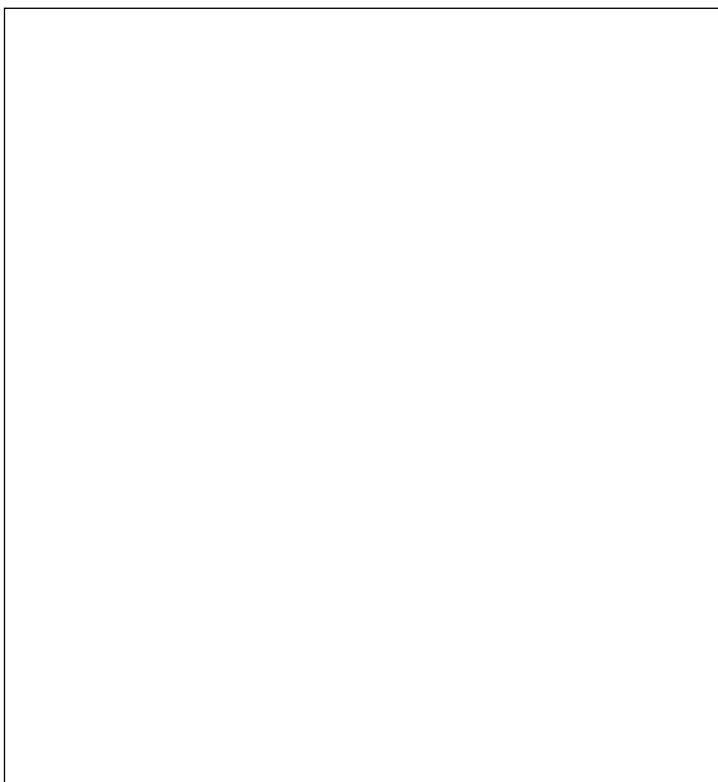
FIGURE 4-3. *Lanfranc, Prior of Bec, Abbot of Caen and Archbishop of Canterbury (1070-89), from a twelfth-century manuscript of his reply to Berengar of Tours (Oxford, Bodleian Library, MS Bodley 596 fol. 1r) (detail) (Butler 1979, 30).*

sense of hearing, the reader was able to ascertain the meaning of the words and put into practice the protagonist's role.

4.2.3 BOOK DISTRIBUTION AND OWNERSHIP

The speed and intensity of monastic reading may be indicated by the practice of annually distributing books to monks at Lent. This practice is embedded in the *Rule of St Benedict*: "during Lent they should all be given a book from the library which they should read from cover to cover. These books should be handed out at the beginning of Lent" (White 2008, 73). The distribution took place in the chapter house on the first Monday of Lent each year (Wormald 1958, 21; Sharpe 2005, 245; Kerr 2009, 180). Monks spent the year reading and meditating upon the same book; if they had not made good use of the book, he was expected to confess his negligence and beg for forgiveness (Savage 2006, 58; Kerr 2009, 180). Although monks retained books for the year, the books were returned to storage for safe keeping when not in use (Kerr 2009, 180). The requirement that each monk should read one book a year is described in detail by Lanfranc, William the Conqueror's archbishop of Canterbury from 1070 to 1089 (Figure 4-3) (Knowles and Brooke 2002, xv; Lucas 2006, 243; Webber 2006a, 121; Gill 2007, 58). Lanfranc's regulations were written in the eleventh century for the Benedictine community of his cathedral priory in Canterbury, Kent, and derived from the *Rule of St Benedict* (White 2008, xxvii; Clanchy 2013, 162). In Lanfranc's *Constitutions* directions for the liturgy are divided into a total of 81 precepts; numbers 20-22 explain the rules for the first Sunday of Lent and the following weekdays:

"On Monday... Before the brethren go in to chapter, the librarian should have all the books save those that were given out for reading the previous year collected on a carpet in the chapter-house; last year's books should be carried in by those who have had them, and they are to be warned of this day by the librarian in chapter the previous day. The passage from the Rule of St Benedict concerning the observance of Lent shall be read, and when a sermon has been made on this the librarian shall read out a list of the books which the brethren had the previous year. When each hears his name read out he shall return the book which was given to him to read the year before, and anyone who is conscious that

he has not read in full the book he received shall confess his fault
prostrate and ask for pardon, then the aforesaid librarian shall
give to each brethren another book to read" (Knowles and Brooke
2002, 29-31).

The books given out at Lent were typically recorded by the monks, and in Lanfranc's *Constitutions* it is the librarian (*custos librorum*) who keeps a written list of books on loan (Clanchy 2013, 162). The customs of the Benedictines required the precentor to keep lists of books, particularly those distributed at Lent (Sharpe 2008, 199). A unique account of the annual Lenten distribution of some 51 books at Thorney Abbey, Cambridgeshire, dating from the period 1324 to 1330, is the only record to survive from English Benedictine abbeys (Sharpe 2005, 243; Lucas 2006, 243; Kerr 2009, 180). The precentor, in his role as librarian, reused a thirty-year-old mortuary roll that presumably had served its purpose (Sharpe 2005, 245). It is argued that the nature of these lists on reused parchment exemplifies why there is a paucity of surviving evidence (Sharpe 2005, 245). It is evident from the Thorney Abbey record that the books distributed at the beginning of Lent were brought back into the chapter house on the same date the following year, indicating that the monks used the whole year to thoroughly read their books (Sharpe 2005, 266). This document also indicates that some monks even retained the same book for several years, presumably because of their slow reading speed or, in the case of the abbots and obedientaries, much of their time was taken up by administrative duties (Sharpe 2005, 266).

It is clear that books were a fundamental part of monastic life. When considering the use of books, it is important to understand the monastic attitude towards their possession. At a basic level one can turn to the *Rule of St Benedict*, where in Chapter 33 it is stated that "no one should presume to give or receive anything without the abbot's permission, or to possess anything of his own – nothing whatever, not a book or writing tablet or pen or anything at all, for monks should not even count their own bodies and wills as their own" (White 2008, 55). This rule can be seen to have continued from the time of St Benedict into the later medieval period. In the case of the Cistercian abbey of Abbey Dore, Herefordshire, the proceedings of the 1318 visitation (London, British Library, Royal MS 12 E XIV, fols. 27v-29) carried out by John of Gloucester, abbot of Hailes Abbey, Gloucestershire, noted that the monastery's books were to be kept together in a bookcase and that no monk was to keep one out at night without permission of the precentor (Harper-Bill 1980, 105). It was also ordered that all books belonging to the community, including the abbot and all the

monks, were to be entered on a common list and anyone was treated as a thief if a book was not presented for cataloguing (Harper-Bill 1980, 105-6). As the medieval period progressed, however, the private ownership of devotional objects, such as painted, drawn, printed or sculpted images, prayer beads and decorated prayer books, seemingly became more widely tolerated (Luxford 2005, 48). Early sixteenth century episcopal registers containing details of visitations of English monasteries, and their 'silence' on the subject of private ownership, are thought to indicate a tolerance to a degree of personal ownership (Luxford 2005, 48).

4.2.4 MONASTIC DEVELOPMENTS FROM THE TWELFTH CENTURY

English monasteries reached their peak in the twelfth century as the structure of monasticism became more complex (Cook 1961a, 45; De Hamel 1997a, 74). By the end of the eleventh century, the majority of the approximate 130 religious houses in England belonged to the Benedictines and the remaining few were Cluniac houses, which were dependent on the reformed Benedictine abbey of Cluny in Burgundy. In the twelfth century, however, traditional monasticism in England was revolutionised by a significant wave of monastic expansion and the arrival and popularity of new orders (Cook 1961a, 45; Lawrence 2001, 203; Dyer 2002, 114). Perhaps the most important were the Cistercians and the orders of canons regular (Cook 1961a, 45; Dyer 2002, 114). The Cistercians strictly followed the *Rule of St Benedict* but revived the rigid simplicity and uniformity of the Benedictine way of life (Cook 1961a, 45; Brooke 1974, 114; Midmer 1979, 7; Lawrence 2001, 172-3). The canons regular, of which there were three orders (Augustinian, Premonstratensian and Gilbertine), were communities of priests that compiled their own customaries, observing a discipline and living a common life that drew upon traditional monastic sources, including the Benedictine *Rule* (Cook 1961a, 45; Lawrence 2001, 163). Although the Carthusian order was founded at the end of the eleventh century, the first English house was not established until 1180-1 (Midmer 1979, 6). The Carthusian order was the strictest and most austere of all the religious orders, and whilst it followed the *Rule of St Benedict*, its main focus was the salvation of its members' souls (Midmer 1979, 6; Coppack 2008, 168). In the early years of the thirteenth century, England experienced a greater diversion from the monastic tradition with the arrival of the mendicant friars, notably the Dominican and Franciscan orders (Cook 1961a, 47; Midmer 1979, 12-13; Lawrence 2001, 238).

St Benedict's *Rule* laid out the ideal cenobitic life, however, the lifestyle that characterised the monastic order during the late medieval period differed significantly. The *Regula Sancti Benedicti* remained the foundation of monastic culture throughout the medieval period (Figure 4-4), but over the centuries many practices, patterns of behaviour and schools of thought were transformed (Brooke 1974, 51; Clark 2007b, 7). The pursuit of learning, the production of books and the use of other decorative or devotional objects became integral to monastic life, yet they were not included in the life envisaged by St Benedict (Clark 2007b, 6). Clark (2007b, 9) considers the most significant modification to have been the importance attached to intellectual activities. Although monastic life was largely based on the *Rule of St Benedict*, manual labour became less significant as reformers of this time placed a higher value on learning, initiating a tradition of education, book production and private study (Brooke 1974, 50-1; Clark 2007b, 9).

During the later medieval period, monasteries were significant places of intellectual knowledge and artistic life (De Hamel 1997a, 80). The importance of reading in monastic culture is signified by the amount of time allocated to it in St Benedict's *Rule*. By the twelfth century, however, the importance of books and learning in monasteries was significantly greater (Lawrence 2001, 111; Clark 2007b, 9-10). The augmentation of the monks' liturgical duties was in part responsible for the increasing importance of intellectual activities over the manual labours of the monks (Lawrence 2001, 111). As well as the spiritual readings of the daily offices and allocated times for private reading, it became relatively common for monks to take any opportunity to read texts and meditate over their meaning (Clark 2004, 126). At St Albans Abbey, Hertfordshire, for example, the traditional reading during the daily meetings in the chapter house, which focused on the Benedictine *Rule*, was extended to include additional chapters from the *Rule*, passages from the Bible, and extracts from the papal canons and the monastery's own domestic constitutions (Clark 2004, 126). According to an early fourteenth-century copy of the customary of St Augustine's Abbey, Kent (London, British Library, Cotton MS Faustina C XII), additional public readings of the *Rule* took place on special occasions, including abbatial elections, the admission and profession of novices, and also the start of Lent[1] (Thompson 1902, 390; Clark 2004, 127; Barker-Benfield 2008, 1705). The practice

---

1   "*Item, quod lecciones de regula propriae scilicet de ordinando abbate, preposito, cellerario, et de disciplina suscipiendorum fratrum, die eleccionis seu institucionis eorum, et eciam de Quadragesimae observacione, prima die Lunae ejusdem ad premunicionem cantoris legantur; et regula semper in crastino ingressionis noviciorum a capite inchoetur*" (Thompson 1902, 390).

FIGURE 4-4. *St Benedict in the twelfth-century 'Arundel Psalter' (London, British Library, Arundel MS 155 fol. 133r) (detail) (British Library Board 2015l).*

of reading in the refectory also continued to be performed as the range of both scholarly and spiritual reading material was expanded and new works were produced (Clark 2004, 126). From the late thirteenth century, however, monastic life saw a shift away from common meals in the refectory toward more intimate dining in private rooms, although this varied across different monastic orders and houses (Knowles 1961a, 244; Erler 2007, 140). At the same time, private cells were created through the partitioning of the dormitory with panels or curtains (Knowles 1961a, 244; Erler 2007, 141). The growth of private spaces within monasteries, whether for dining or sleeping, facilitated the development of private life and especially the act of solitary reading (Erler 2007, 141).

Despite this obvious increase in reading and the study of books, twelfth-century reformers did attempt to revert back to the customs set out by St Benedict in the sixth century. The Cistercians, in particular, along with other reformed monastic orders aimed to reinstate manual labour in the daily timetable of the monks and assert its spiritual significance (Lawrence 2001, 111). Nevertheless, the new religious orders and certain individuals simultaneously prompted the rise in spiritual and scholarly learning within monasteries. During the eleventh and twelfth centuries, many of the new orders regarded the copying of books as the greatest of the monastic labours and so books became of greater importance as monasteries rapidly acquired book collections (Brooke 1974, 114). The Carthusian order, for example, from its foundation at the end of the eleventh century, regarded reading and writing as the most important form of labour (Sargent 1976, 225). The Carthusians adapted the ideal of the desert hermits to pursue the most austere solitary life within the context of a supporting community. They acknowledged a customary that took liturgical instructions from the Benedictine *Rule* and constitutional features from the Cistercians, however, they spoke to the Christian world through the books they wrote, copied and transmitted (Sargent 1976, 225; Midmer 1979, 6; Lawrence 2001, 156-9; Kerr 2009, 177). Contemporary evidence of the Carthusian attitude towards reading and writing is provided by Adam of Dryburgh (*c.*1140–*c.*1212), one of the first and best-known English Carthusian authors, in his work *De Quadripartito Exercitio Cellae* ('On the quadripartite exercise of the cell'), which recalls a passage of the *Consuetudines*, written by Guigo I between 1121 and 1128 (Sargent 1976, 225; Greatrex 2008, 119-20). Adam wrote:

> "if the prior has so provided, there is one work to the performance
> of which you ought especially to attend; that is either that you

learn to write (if, of course, you can learn), or if you can and know, that you do write. This work is, as it were, immortal work; work, if one may say so, not passing but lasting; work certainly, may we say, and yet not work; the work, finally, which among all other works is most fitting to literate religious men…

Indeed, this ought especially to be the work of the enclosed Carthusians. The venerable Guigo, of blessed memory… spoke thus of it, in the twenty-eighth chapter of the book of Institutions of the Carthusian Order, which he wrote: 'Almost all whom we accept, if possible, we teach to write', and a little after, 'Surely we ought to preserve books most carefully… and to make volumes most assiduously'" (Sargent 1976, 226).

Even by the end of the twelfth century, the Cistercians, who initially professed a simpler way of life, were active not only in the writing of spiritual and devotional texts but also the production of chronicles and foundation histories (Golding 1995, 179). In comparison, the Gilbertines, who drew their inspiration from the Cistercians, adhered more rigidly to their own customs and did not transcribe anything other than service books without the permission of the Master of the order (Golding 1995, 179-80).

The reforms of certain individuals also influenced the growth in spiritual and scholarly learning within monasteries. In the fourteenth century, at the Benedictine abbey of St Albans for example, Thomas de le Mare (abbot 1349-96) reformed the constitutions of the house, requiring the monks to engage in studious and artistic activities (Clark 2004, 132). In an attempt to improve the intellectual life of the abbey after the Black Death, de la Mare decreed that the monks and those of dependent priories should devote themselves to writing, illumination and bookbinding rather than to physical outdoor activities (Cook 1961a, 35). The abbot also invited scholars from nearby houses of other orders to teach and preach in the community (Clark 2004, 17). A number of Augustinian friars, for example, went to St Albans during the abbacy of de la Mare as their convent was situated close to the abbot's own city residence. Secular priests were also often found to be living and working alongside the monks; chaplains served the parochial chapel of St Andrew, which adjoined the north wall of the abbey church. The influence of the secular priests on the intellectual life of the monastery is evident in the manuscripts produced by the secular clerics. For example, a Book

of Hours (St Albans, St Albans Cathedral, Muniment 620) was compiled and most likely copied by William Trebilville, chaplain in the time of Abbot John Whethamstede (*c*.1392–1465) for use in private devotion, and remains in the abbey church to this day (Clark 2004, 17).

From the twelfth century, monastic reforms also presented monks with a new educational programme (Clark 2007b, 10). The arrangement of education within the monastic cloister on the whole was extended with the establishment of a syllabus of studies, including grammar, logic and philosophy, and theology. The cultural change from monastic to scholarly reading was facilitated by the increasing numbers of available and legible texts (Robertson 1996, 203). The scholastic approach to *lectio divina* involved a more logical scrutiny of the text and consultation for reference purposes, whereas monastic *lectio divina* was a spiritual exercise that involved reading, interspersed by prayer, as a basis for *meditatio* (Parkes 1976, 115; Coleman 1996, 89). The familiar practice of *meditatio* continued to be executed in monasteries, but from the twelfth century readers viewed this activity more as a "conscious, voluntary, rational 'scrutiny,' in which the reader 'penetrates' (*penetrat*) and 'investigates' (*rimatur*), seeking to 'extract' hidden meaning" (Robertson 1996, 205-6). Robertson (1996, 203-30) in his study on *lectio divina* has researched the various approaches to reading, which combined intellectual and religious attitudes, that had been laid out by early schoolmen, including Abelard (1079-1142), Hugh of St Victor (*c*.1096-1141), John of Salisbury (*c*.1120-80) and Guigo II (d.1193). Augustinian canon Hugh of St Victor, for example, prepared an educational programme for the students of the abbey of St Victor, Paris (Figure 4-5). Written in the late 1120s, Hugh's *Didascalicon* is an introductory guide containing a survey of all that should be read for understanding Christianity. This work supported the Augustinian attitude towards balanced study, incorporating the seven liberal arts and the Scripture, in the pursuit of knowledge linking the student to God (Taylor 1961, 3; Jackson 1974, 65; Roberson 1996, 212-3).

With the rise of universities from the twelfth century, a proportion of the monastic community was able to study outside the monastic complex (Clark 2007b, 10). The increase in the numbers of monks being sent to university is thought to have had a detrimental effect on the intellectual activities within monasteries, such as the practice of historical writing, which was in decline by the end of the thirteenth century (Cook 1961a, 35). Nonetheless, university education can be seen to have encouraged the scholastic movement within the monastic precinct as studying
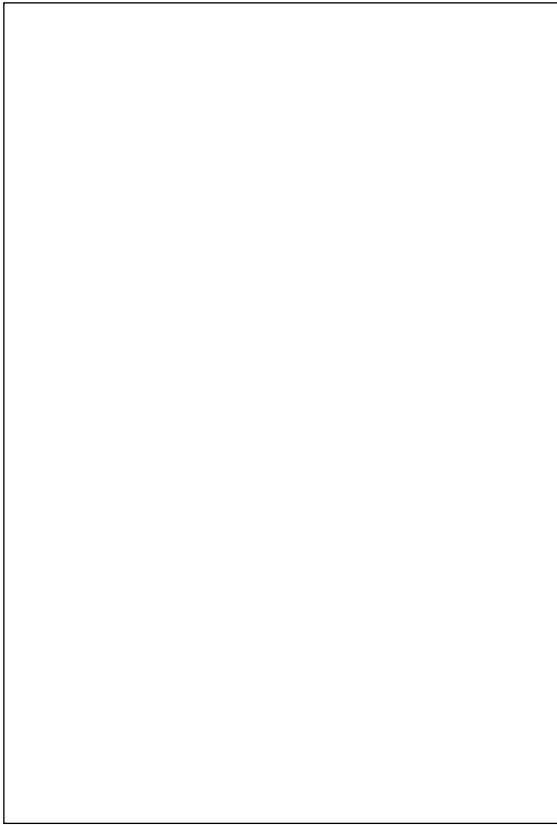
FIGURE 4-5. *Hugh of St Victor depicted in a late twelfth-century copy of his* Didascalicon *(Leiden, Universiteit Bibliotheken, MS Vulcanianus 46, fol. 130) (detail) (Taylor 1961).*

Scripture increasingly involved a more logical and precise method rather than the traditional, ruminative approach (Greatrex 2000, 45; Bell 2006, 129). Legislation passed in the late medieval period endorsed this method of study in monasteries. In 1336 Pope Benedict XII (d.1342) issued his *Summa magistri* and this prescribed a programme of training in the 'primitive sciences', grammar, logic and philosophy, followed by higher study in theology and canon law that was to be mandatorily provided within the walls of all Benedictine monasteries (Clark 2000, 57; Bell 2006, 129). Grammar, in particular, became a compulsory component in the development of novices, and for late medieval monks the study and reading of religious texts, especially the Scriptures, increasingly involved lexical and grammatical analysis as well as exegesis (Knowles 1961a, 335-6; Clark 2000, 61; Greatrex 2000, 45; Bell 2006, 129-30).

4.3 MONASTIC BOOK COLLECTIONS

During the late medieval period, numerous types of manuscripts were produced for

both the spiritual and intellectual needs of the monastic orders. Over the centuries, monasteries gathered together collections of remarkable range and depth (Butler 1979, 94). The core of any monastic library consisted of the Bible and other service books, and this was supplemented with the writings of the four Fathers of the Church, together with books for monastic scholarship, including books on theology, medicine and grammar (Knowles 1961a, 334-5; Butler 1979, 94). One of the aims of this research has been to associate different types of fittings with different types of books. To aid the contextual analysis of book fittings excavated from English religious houses, this section provides an overview of the key types of books used by monastic communities. The importance of contemporary booklists and catalogues for understanding the contents of monastic book collections is also discussed.

In addition to the variety of books used by the religious communities, consideration is also given to the question of how these books were acquired by medieval monasteries. It has already been shown in Chapter 3 that monks produced the vast majority of books within their monasteries, at least until the end of the twelfth century. This section demonstrates that the copying of texts was not the only way in which books were acquired throughout the late medieval period. The latter part of this section focuses on how monasteries enhanced their book collections through donation and purchase.

4.3.1 TYPES OF BOOKS

The fundamental text at the centre of religious life in every medieval monastery was the Bible (Knowles 1961a, 334; Harris 1995, 99; De Hamel 1997a, 77; Parkes 2008a, 60). A significant characteristic of old monastic Bibles is that they were usually extremely large and these monumental Bibles were intended for use on a lectern rather than for private study (De Hamel 1997a, 118). Alongside the Bible, various types of books were produced for use in the religious services and it is thought that the making of such books must have been the largest category of work for the monastic scriptoria (Wilson 1958, 87; Knowles 1961a, 334; Clemens and Graham 2007, 192; Morgan 2008b, 291). The basic distinction between liturgical books lies in those that were intended for the celebration of the Mass and those that served the requirements of the *Officium divinum* (De Hamel 1997a, 189; Clemens and Graham 2007, 192; Clanchy 2013, 112). The missal was the most important service book and this comprised

the full range of texts spoken and sung at Mass, including prayers recited by the celebrant, scriptural readings and chants sung by the choir (Clemens and Graham 2007, 193). The main book for the performance of the Divine Office was the breviary, which contained all the texts spoken and sung for all the hours, such as the Psalms, antiphons, lessons and prayers (Clemens and Graham 2007, 193-194).

From the mid-twelfth century, monastic libraries experienced a growth in the variety of books related to the study of the Bible. This is thought to have been influenced by the emergence of new schools and universities throughout Europe, and is evident in the appearance of glossed books of the Bible in the majority of monastic libraries (Webber 2006a, 115; Thomson 2008b, 153). As Smalley (1952, xi) observes in her work, "The Bible was the most studied book of the Middle Ages". Forming one of the largest elements of the monastic library after the Bible and other service books, the most significant and numerous group of books were single volumes of Scripture with extensive commentaries and glosses (Wilson 1958, 87; Knowles 1961a, 335; Cheney 1973, 333; Webber 2006a, 115; Clemens and Graham 2007, 181-3; Parkes 2008a, 60; Thomson 2008b, 153-4). This type of book, the most important and common being the *Glossa ordinaria*, had a commentary or gloss down either side of the page or an interlinear gloss written in a smaller script (Figure 4-6) (De Hamel 1997a, 78; Webber 2006a, 115; Clemens and Graham 2007, 183). The increase in the use of glossed biblical texts is evident in several contemporary catalogues, including 36 from Bury St Edmunds Abbey, Suffolk, 37 from Durham Cathedral Priory, 39 from Hereford Cathedral Priory and 20 from Buildwas Abbey, Shropshire (Thomson 2008b, 154-5). Other works that also acted as tools to aid the study of the Bible included Peter Lombard's *Sentences*, composed *c.*1155-8, the *Historia scholastica* of Peter Comestor (d.*c.*1178), and the *Verbum abbreviatum* of Peter the Chanter (d.1197) (Wilson 1958, 87; Webber 2006a, 116).

The devotional writings of the four Church Fathers (the 'Latin doctors' Jerome, Augustine, Ambrose and Gregory) also formed a significant part of the central core of the medieval monastic library (Knowles 1961a, 335; Harris 1995, 99; Lawrence 2001, 112). These were fundamental, authoritative texts for understanding the meaning of Scripture and the conduct of religious life. Examples include Augustine's writings on the Psalms, Gregory's *Moralia on Job*, and Ambrose's *De Officiis* and *Enchiridion* (De Hamel 1997a, 78-80; Webber 2006a, 111). The significance of the works of the Church Fathers for the cenobitic way of life was recognised by St Benedict in the sixth century and was subsequently stressed in his *Rule* (Webber 2006a, 111). In Chapter 73
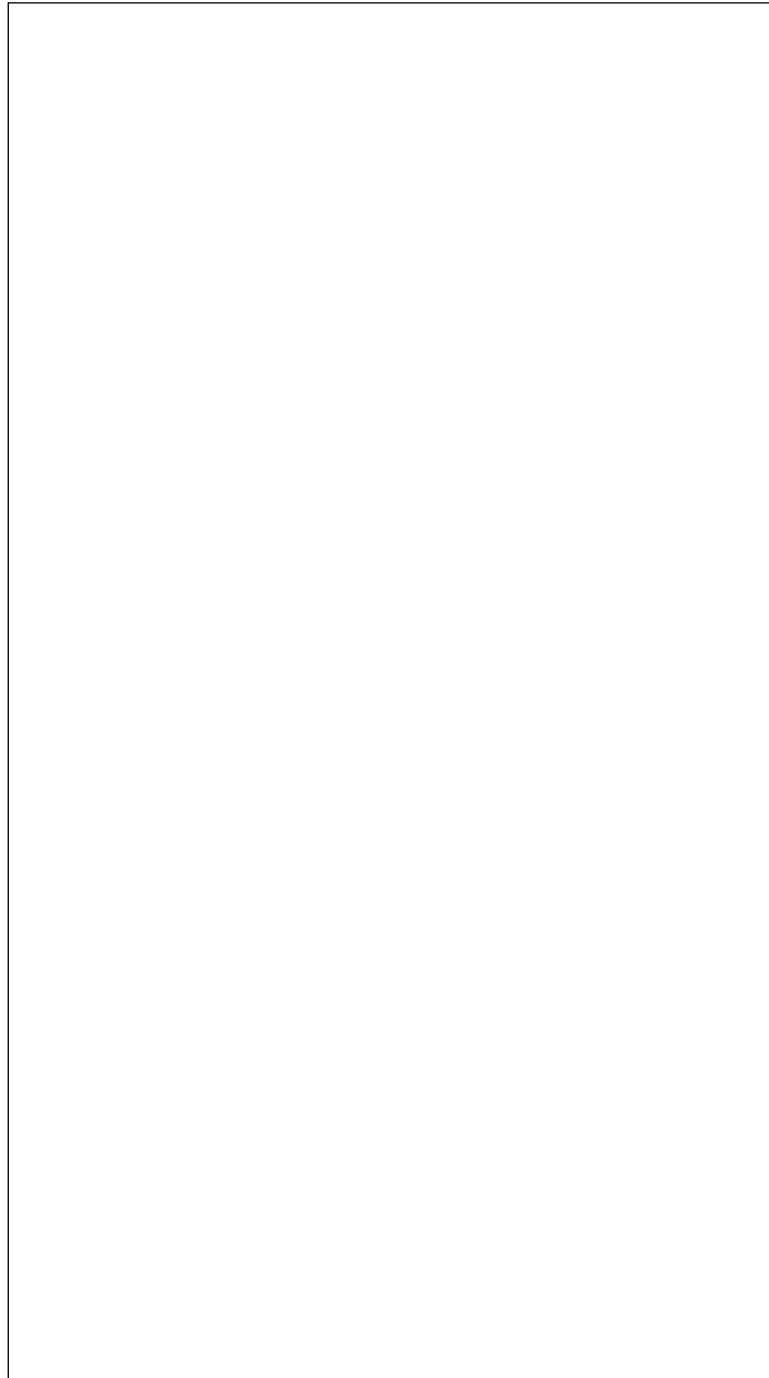
FIGURE 4-6. *Here is a fragment of a twelfth-century glossed Bible (Chicago, Newberry Library, Medieval Manuscript Fragment 53, recto) with a traditional layout, the gloss being distributed between the margins and interlines (Clemens and Graham 2007, 182).*

it is stated that:

> "to attain perfection in this way of life, there are the teachings
> of the holy fathers: by observing these a man will be led to the
> heights of perfection. For is not every page and every word of
> divine authority in the Old and New Testaments a most reliable
> guide to human life? Do not all the books of the holy catholic
> fathers resonate with a desire to show us the direct route to our
> creator? What are the *Conferences*, the *Institutes* and the *Lives
> of the Fathers* as well as the *Rule* of our holy father Basil, if not
> the tools of virtue for the monks who wish to lead a virtuous and
> obedient life?" (White 2008, 104).

The importance of these writings is apparent in late medieval records of book
ownership and book production, and also in contemporary catalogues in which they
are second in number only to the Bible (Wormald 1958, 24-5; Webber 2006a, 113;
Sharpe 2008, 202). For example, in a fragmentary mid-twelfth-century booklist from
Durham Cathedral Priory (Durham, Dean and Chapter Muniments, Misc. Charter 7143)
the first entries detail volumes of the Old and New Testaments and these are then
followed by groups of entries devoted to Jerome, Ambrose and Augustine (Figure
4-7) (Piper 1978, 213; Webber 2006a, 113).

Larger monasteries in particular were focal points of intellectual and artistic life,
especially from the twelfth century onwards (De Hamel 1997a, 80). Consequently,
around the core group of religious texts grew many monastic collections of medieval
works of theology, logic and philosophy, history, law and medicine (Wilson 1958,
94-105; Clark 2000, 57; Lawrence 2001, 112; Bell 2006, 129). A comprehensive monastic
library would have also held many Latin classics, such as the poetry, plays, letters,
speeches and histories of the Romans, with Virgil, Horace, Ovid, Seneca, Terence,
Cicero, the elder Pliny, Suetonius and Sallust most prominent (Wilson 1958, 97-9;
Knowles 1961a, 336-337; Butler 1979, 94; Harris 1995, 100). Other books for monastic
scholarship included books on the *ars grammatica*, the *ars dictaminis* and the *ars
predicandi* needed for the education of novices and for the study of different
religious texts (Wilson 1958, 101; Knowles 1961a, 335-6; Harris 1955, 99; Clark 2000,
61; Greatrex 2000, 44-5; Bell 2006, 129-30; Webber 2006a, 117). Between *c.*1100 and
1250, Gloucester Abbey, in particular, was an important centre of learning where
the seven liberal arts (grammar, rhetoric, logic, arithmetic, geometry, astronomy
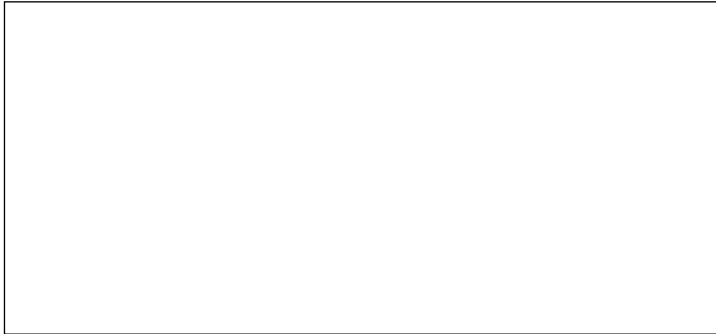
FIGURE 4-7. An extract covering Ambrose from the mid-twelfth-century booklist from Durham Cathedral Priory (Durham, Dean and Chapter Muniments, Misc Charter 7143) (detail) (Piper 1978, 214).

and the theory of music) were pursued with a high degree of dedication alongside biblical studies (Thomson 1997, 3). Of the limited number of surviving books from Gloucester, a high proportion is represented by the liberal arts. Although these books disproportionately represent the abbey's collections as a whole, they demonstrate that the abbey played an important role in the study and distribution of such works (Thomson 1997, 11).

In addition to the books that served the core requirements of religious houses, texts of a more diverse nature were often incorporated in monastic collections, presumably to meet more specific needs and more local or individual interests and tastes (Webber 2006a, 117). This is perhaps indicated by the small group of books containing texts on medicine and natural science from Bury St Edmunds Abbey and Waltham Abbey, Essex, and the Latin version of the astronomical tables of al-Khwārizmī (*c.*780-*c.*850) copied at Worcester Cathedral Priory (Harris 1995, 100; Webber 2006a, 117). In many Cistercian libraries, the miscellany, a book containing a collection of pieces of writing by different authors, was a popular type of book. Cistercian miscellanies often showed a marked taste for versification and the use of verse was also common in the works of Cistercian annalists and chroniclers (Cheney 1973, 336-7). Furthermore, works of local literature and history formed

a part of monastic collections, including chronicles from Benedictine houses that demonstrated venerable origins and the ancient gifting of contested lands (Luxford 2005, 40; Clanchy 2013, 102). Historical writings of local events and origin narratives frequently formed part of monastic collections, particularly those of the Cistercians (Cheney 1973, 339; Clanchy 2013, 102). For example, a late twelfth-century manuscript (Cambridge, Corpus Christi College, MS 139) that belonged to Sawley Abbey, West Yorkshire, contains a compilation of historical writings on the history of the north of England.

Many religious houses kept archival books in a similar fashion to those of the secular population for various administrative purposes (Ramsay 2008, 426-30). As discussed above (see 4.2.2), religious communities assembled daily in the chapter house to conduct religious and administrative business (Butler 1979, 68; Lawrence 2001, 110; Ramsay 2008, 426). Many of the larger and older religious houses, such as those of the Benedictines, kept custumals in which their administrative and liturgical practices were set out in great detail. For the majority of religious communities, however, while they gathered every morning in their chapter house to hear of the house's business, such matters were not necessarily recorded (Ramsay 2008, 426). Additionally, records of various kinds were kept to demonstrate monasteries' legal proprietary rights as they were dependent on the income and tithes from their estates, including manors and other landholdings, and the churches appropriated to the houses (Luxford 2005, 39; Ramsay 2008, 426). Although the great monastic houses made some financial records before 1200, accounts calculating the profits of manors were very rare until the second half of the thirteenth century and the majority of surviving documents were produced by the greater monasteries (Clanchy 2013, 95-6). The earliest examples of extant manorial records are the 1224-5 accounts of Canterbury Cathedral Priory, Kent, and the 1256-7 accounts of Norwich Cathedral Priory, Norfolk (Stone 1962, 26-7; Clanchy 2013, 95). Books containing collections of charters, known as cartularies, were also kept by monasteries as they documented foundation charters and additional manorial charters, as well as royal, episcopal and papal grants and privileges (Ramsay 2008, 426-8; Clanchy 2013, 103-4). Books of current parliamentary statutes and civil law were often found in the collections of the religious houses, particularly the larger Benedictine sites, so that the monks were familiar with changing legal rights and obligations relevant to the running of their estates (Luxford 2005, 39).

4.3.2 BOOKLISTS AND CATALOGUES

Monasteries increasingly kept records of their books as their collections expanded during the late medieval period (Talbot 1958, 77-8; De Hamel 1997a, 74). The twelfth and thirteenth centuries witnessed the development of booklists from simple lists into descriptive catalogues. These catalogues were essentially lists of books organised on certain bases, such as author, title, donor and catchword (Harris 1995, 101). The details included in booklists and catalogues are thought to reflect the purposes for making the records (Sharpe 2008, 199). It has already been demonstrated how lists of books were kept by the precentor or librarian at the annual Lenten distribution of books (see 4.2.3), but as book collections grew the recording of all the books kept by these individuals became a widespread custom (Sharpe 2008, 199). Also, such lists created in monasteries may have been kept to distinguish books used for different purposes, such as those for study and those necessary for the liturgy (Sharpe 2008, 197).

De Hamel (1997, 74) emphasises that all English medieval monasteries would have certainly had books, yet not all would have compiled inventories of their book collections, and that some catalogues that were written no longer survive. Nonetheless, large numbers of library catalogues from the late tenth century up to the mid-sixteenth century have been collated as part of the *British Medieval Library Catalogues* (BMLC) project, a collaboration between the British Academy and the British Library. To date, a total of thirteen volumes have been published that contain catalogues of the libraries belonging to the contemplative and mendicant orders, the libraries of Henry VIII, the university and college libraries of Cambridge, and Scottish libraries (Sharpe 1990-2008). One of the earliest late medieval catalogues, datable to 1122-3, is from Rochester Cathedral Priory, Kent, copied into a twelfth-century cartulary, the *Textus Roffensis* (Maidstone, Kent Archives Office, MS DRc/R1) (Sharpe *et al*. 1996, 469-92; Sharpe 2008, 199). A similar example of a twelfth-century monastic catalogue (London, British Library, Egerton MS 3031), which is often cited, is from the Benedictine abbey of Reading, Berkshire (Figure 4-8) (see Sharpe *et al*. 1996, 420-47; De Hamel 1997a, 74-82; Coates 1999; Webber 2006a, 110; Sharpe 2008, 200). It lists 204 volumes organised by the location of the books at the time it was drawn up, beginning with "*Hii sunt libri qui continentur in Radingensi Ecclesia*" (Sharpe *et al*. 1996, 421-47). Perhaps one of the best witnesses to the life of study of the Benedictine monks is the mass of detailed information from the booklists and extant
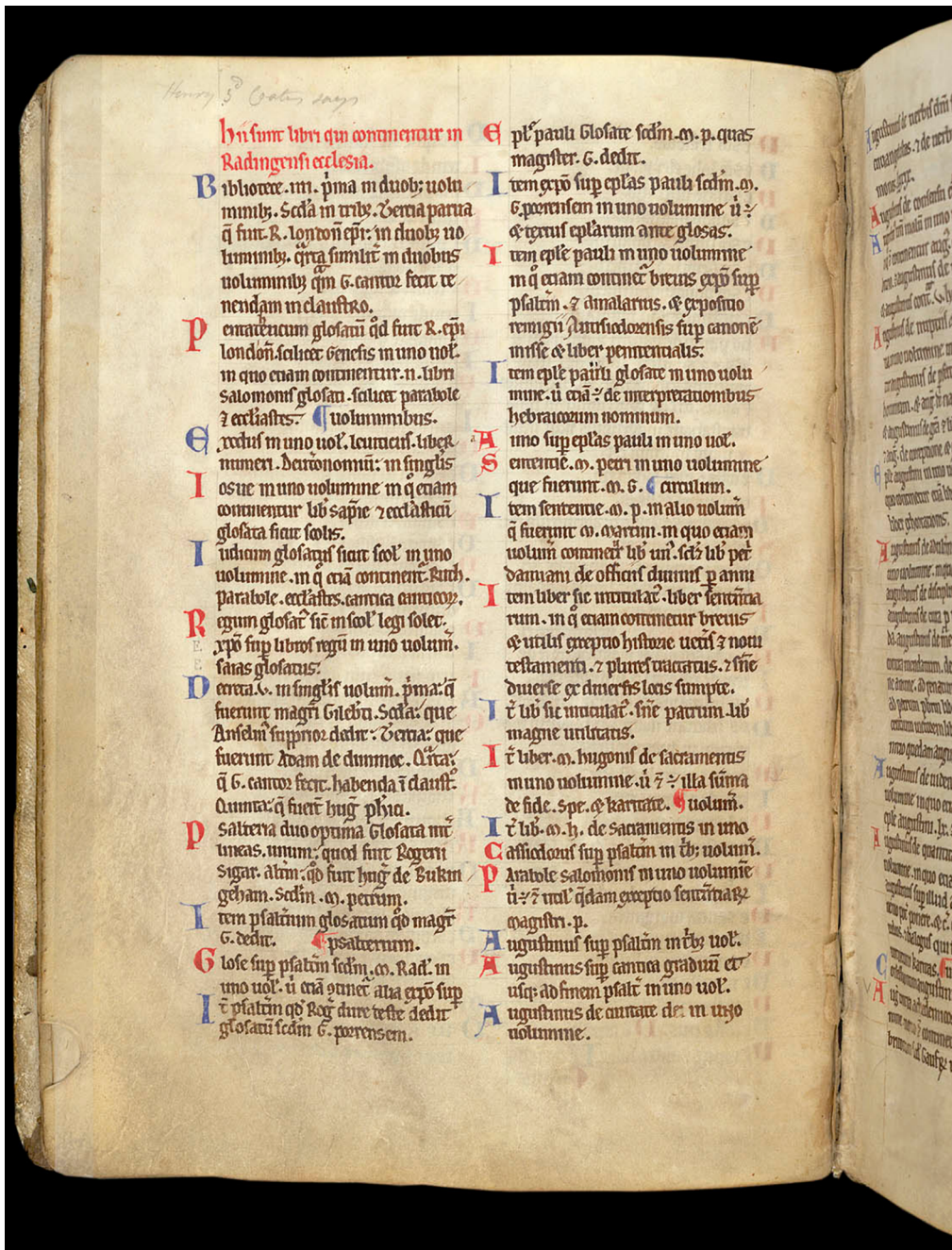
FIGURE 4-8. *An extract from the twelfth-century catalogue from Reading Abbey, Berkshire (London, British Library, Egerton MS 3031, fol. 8) (British Library Board 2015m).*

manuscripts from one of the richest abbeys in medieval England, St Augustine's Abbey, Canterbury, Kent. Barker-Benfield's work (2008) offers the first annotated edition of the catalogue, which provides detailed entries of nearly 2,000 volumes, and several other booklists written throughout the abbey's lifetime. The main catalogue of St Augustine's Abbey survives in a manuscript (Dublin, Trinity College, MS 360) dated towards the close of the fifteenth century, however, the analysis of its contents shows that this manuscript contains a copy of the original catalogue, first compiled between 1375 and 1420, with generations of additions, subtractions and corrections (Barker-Benfield 2008, 3). Barker-Benfield (2008, li) argues that the vast amount of information about the abbey's book collections acquired from the booklists and extant manuscripts offers the best insight into the life of study at the abbey, which was the duty of every Benedictine monk.

Although surviving contemporary library catalogues are of great importance for understanding medieval monastic book collections, there are some limitations that need to be taken into consideration when studying these documents. The entries in catalogues provide only evidence of the existence of books. It must be recognised that the books listed do not necessarily represent the texts that were read at the time of the writing of catalogues (Wilson 1958, 87; Cheney 1973, 341; Webber 1997, 33). Additionally, catalogues do not illustrate an entire history of a late medieval monastic collection; as Wilson (1958, 86) states, "they can give only a glimpse of the library at one particular time". Other difficulties include that catalogues often only list a portion of a monastery's collection, such as groups of books kept in particular places, and that identifying entries can be problematic as many books had no uniform titles (Clanchy 2013, 107). Furthermore, the diversity of medieval catalogues often make their analysis challenging as they are usually the work of one person, or a small team, who alone decided how to detail the books and organise the catalogue, occasionally being influenced by earlier lists or by experience in other libraries, but often simply by personal inclination (Sharpe 2008, 218).

Nevertheless, extant catalogues are crucial for the study of monastic book collections, particularly as the numbers of surviving books do not reflect the size of a collection, and indicate little about their overall contents (Bell 2006, 148). This is supported by, for example, the case of the Augustinian priory of St Peter at Thurgarton, Nottinghamshire. Until recently the only evidence of the priory's collections were two definite manuscripts (Cambridge, Trinity College, MS 290 and London, Royal College of Physicians, MS 358) and a possible third (Cambridge,

Trinity College, MS 105). The lack of knowledge of this monastery's book collections changed, however, with the identification of a fifteenth-century medical miscellany as having once belonged to Thurgarton Priory because it contains a list of books owned by the priory (London, British Library, Sloane MS 3548, fol. 158r) (Webber 1997, 27; Webber and Watson 1998, 414; Bell 2006, 149). Although fragmentary, the catalogue comprises nearly 50 volumes revealing a wide variety of subjects, including common theological works, biblical *distinctiones*, some common chronicles and volumes of canon law, a number of medical and astronomical texts, and several more uncommon devotional works. Whilst only four books survive from Thurgarton Priory, the booklist clearly demonstrates that the priory's collection of books was once much larger, adding significantly to our knowledge of the books owned by these Augustinian canons in the late medieval period (Webber 1997, 28). Even for many of the greater monasteries there is a paucity of surviving manuscripts and so contemporary catalogues are relied upon to create an image of their collections that numbered in the hundreds, and sometimes thousands. This is the case for Canterbury Cathedral Priory, Dover Priory, Kent, Glastonbury Abbey, Somerset, Leicester Abbey, Malmesbury Abbey, Wiltshire, Sherborne Abbey, Dorset, and Syon Abbey, Middlesex (Sharpe *et al*. 1996; Webber and Watson 1998; Stoneman 1999; Gillespie 2001).

4.3.3 BOOK ACQUISITION: DONATION AND PURCHASE

It has been stated that the "heart of monastic intellectual life was the monastery library" (Butler 1979, 93). Books were acquired by monasteries in three main ways: by copying, donation and purchase. In the eleventh and twelfth centuries, the transcription of texts by monastic scribes was of fundamental importance, but as book production moved away from monasteries into urban centres from the thirteenth century, the copying of texts within religious houses was supplemented or supplanted by other means of acquisition (Wormald 1958, 26-7; Bell 2006, 141; Webber 2006a, 119).

Donations, including bequests and reversions, were of major importance during the later medieval period, particularly from the thirteenth century (Knowles 1961a, 339; Jackson 1974, 77; Bell 2006, 142; Webber 2006a, 119). Gifts often came from monks entering a new religious house, demonstrating bonds of union between many religious houses. Visiting dignitaries, particularly bishops and archbishops,

wealthy patrons, and neighbouring scholars also commonly endowed monasteries and cathedral priories with large numbers of books (Wormald 1958, 27; Butler 1979, 94; Humphreys 1990, xx; Harris 1995, 99; Lawrence 2001, 112; Luxford 2005, 50; De Hamel 2008, 8). Monastic book collections of newly-founded monasteries were often first built on donated or inherited books. A good example of this is the collection of books belonging to the Benedictine community at Durham at its foundation in 1083 by Bishop William of St Calais; the Benedictine monks inherited the books from the previous community of St Cuthbert (Piper 2007, 87). To supplement the collection of the new Benedictine community, Bishop William himself donated 49 books of particularly high quality (Piper 2007, 88). In 1135 Hugh, Dean of York, joined the recently-founded community at Fountains Abbey, West Yorkshire, and in doing so improved their circumstances by bringing vast wealth and a library containing the important books required by a monastic community and these formed the beginnings of the monastery's collections (Cheney 1973, 330; Given-Wilson 1979, 237; Midmer 1979, 146). The acquisition of books through donations was unregulated and unreliable, which meant that this method of enlarging book collections was not always useful (Bell 2006, 143). Sometimes donations could transform entire collections or particular sections, yet they also tended to produce large quantities of duplicates of common works, which may have been cumbersome for some monastic houses (Bell 2006, 143).

Many volumes often came to monasteries as bequests on the death of their owners (Harris 1995, 99). In the case of the Benedictine abbey of Abbotsbury, Dorset, the will of Sir Humphrey Stafford II (c.1379-1442) not only indicated that he wished to be buried in the chapel dedicated to St Anne in the east end of the abbey church, which he had had recently constructed, it also gave a long list of ornaments and vestments for use in his chantry, which included a newly-purchased missal and breviary (Roskell et al. 1992, 441; Luxford 2005, 183). The popularity of the Franciscans also enabled them to accumulate large numbers of books through wills (Humphreys 1990, xx; Şenocak 2003, 16; Robson 2006, 97). From the second half of the thirteenth century, books were increasingly donated for the use of a particular friar, rather than directly to the monastic library. A good example of this is Cardinal Vicedomini's testament dated to 1276 that stipulated that the books bequeathed to the Franciscan monastery of Piacenza, Italy, were for the use of his nephew (Şenocak 2003, 17). Such donations often came with the condition that the books would go to the library of the monastery after the friar's death, as was the case for the books donated by Cardinal

John Cholet (1281-92) to Franciscan friar Peter in the convent of Songeons, France (Şenocak 2003, 17). Another example of this can be found in an inscription in the thirteenth-century 'Felbrigge Psalter' (London, British Library, Sloane MS 2400, fol. 2v), which belonged to the Franciscan nuns at Bruisyard Abbey, Suffolk (Figure 4-9). The inscription reads: "*Iste liber est sororis anne ffelbrygge ad terminum vite post cuius decessum pertinebit conventui minorissarum de Brusyerde*" ('This book is Sister Anne Felbrygge's until the end of her life, after whose death it will belong to the convent of Minoresses of Brusyerd') (British Library Board 2009).

Contemporary catalogues frequently demonstrate the significance of donated books. From the thirteenth century, the custom of including the details of donors in catalogues and booklists became a common practice, correlating with the increasing reliance on donations for the maintenance and expansion of monastic book collections (Barker-Benfield 2008, lix). For example, from the catalogue of St Augustine's Abbey the names of 240 people who presented a total of 1,287 volumes to the monastery in the late medieval period are known (De Hamel 2008, 8). Barker-Benfield (2008, 2263-86) provides a full index of these donors, expanding upon the previous work carried out by Emden (1968). In addition to recording the details of donors, the practice of organising catalogue entries by donor or having separate sections devoted to listing gifted books became common from the thirteenth century

(Jackson 1974, 77, 80; Lawrence 2001, 112). This is the case, for example, in the second part of the early fourteenth-century catalogue from Canterbury Cathedral Priory (London, British Library, Cotton MS Galba E IV, fols. 128-47) (Lawrence 2001, 112; James 2012, xxxix).

During the late medieval period, the purchase of books also became an increasingly common practice, with the mendicant friars being particularly fervent buyers of books. The Franciscans and the Dominicans were bound by a vow of poverty and book production was generally restricted, however, they were permitted to use donated money to pay for necessary books (Talbot 1958, 74; Jackson 1974, 73-4; Humphreys 1990, xx; De Hamel 1997a, 123; Lawrence 2001, 251; Derolez 2003, 29; Şenocak 2003, 21; Bell 2006, 142; Robson 2006, 89; Savage 2006, 30-1). In order to run an educational organisation the friars could not wholly rely on the use of the older monastic libraries or even the donations made to their collections, so books were regularly purchased for the continuity of the intellectual studies of their orders (Talbot 1958, 75; Jackson 1974, 72; Lawrence 2001, 251; Şenocak 2003, 21). Monastic accounts recorded by the sacrist or precentor occasionally survive indicating the purchase of liturgical books as at the cathedral priories of Norwich and Worcester (Wormald 1958, 29; Morgan 2008b, 293). Another example is the fourteenth-century accounts of Bolton Abbey, West Yorkshire (Wormald 1958, 29). These contain several references to the buying of books, including the purchase of a *Liber chronicorum* in York for 2s. (Chatsworth, Collection of the Duke of Devonshire, Bolton Abbey Accounts, fol. 294).

4.4 LOCATIONS OF MONASTIC BOOK STORAGE AND USE

In order to understand the spatial distribution of book fittings at English monasteries, it is important to consider where and how monastic books were used and stored. Details about the practical organisation for keeping books are ambiguous and the physical evidence is particularly inadequate (Gameson 2006, 13). This lack of evidence is partially remedied by the analysis of contemporary documentary, pictorial and architectural evidence. This section looks at various pieces of evidence in order to provide an overall view of the locations of monastic book storage and use. The evidence for the different types of furniture in which books were housed is first examined before turning to the evidence of location.

4.4.1 STORAGE FURNITURE

Prior to the fifteenth century and the introduction of what might be considered a library in modern terms, medieval monastic books were generally stored in free-standing cupboards, enclosed wall recesses and chests situated in various locations across the monastic complex (Harris 1995, 99; Petroski 1999, 42-6; Savage 2006, 52; Clemens and Graham 2007, 57). The precise meaning of the terms used to describe the storage of books is often unclear. Since antiquity a closed cupboard was known in Latin as an *armarium*. This word occurs frequently in the works of Cicero, and other classical writers, for a piece of furniture in which valuables of all kinds, and household paraphernalia, were stored; Vitruvius in the first century BC used an *armarium* for storing books (Clark 2008, 37). Over the centuries, when translated into English this term had many variants, including 'almery', 'aumbry' and 'armoire' (Petroski 1999, 31; Savage 2006, 52). By the late medieval period, *armarium* typically referred to either a free-standing cupboard or an enclosed wall recess with the purpose of keeping books, but it was also used to refer more generally to a collection of books (Harris 1995, 99; Gameson 2006, 14; Kerr 2009, 182). The difficulty in interpreting the exact meaning of *armarium* is demonstrated, for example, by the mention of a "*communis armarium claustri*" in records from the Cistercian abbey of Meaux, East Yorkshire, as it may refer to a collection of books housed in recesses built into the wall of the cloister or in free-standing cupboards backed against it (Gameson 2006, 14). Despite the ambiguous nature of the contemporary terminology, it is possible to comprehend the different types of furniture used to house books in monasteries by studying the various available sources of evidence.

Due to the physical characteristics of medieval chests and cupboards, and the destructive events of the first half of the sixteenth century that saw an end to the majority of monasteries in England, such pieces of monastic furniture very rarely survive. Consequently, the study of documentary and pictorial evidence is fundamental to envisage how these forms of book storage would have once looked and how they were used. Although there is a significant dearth of English examples of monastic book storage, it would be erroneous to say that medieval furniture for the storage of books does not exist at all. Therefore, the examination of surviving examples from religious sites other than monasteries, and examples that survive on the Continent, also help to further develop our understanding of late medieval

246
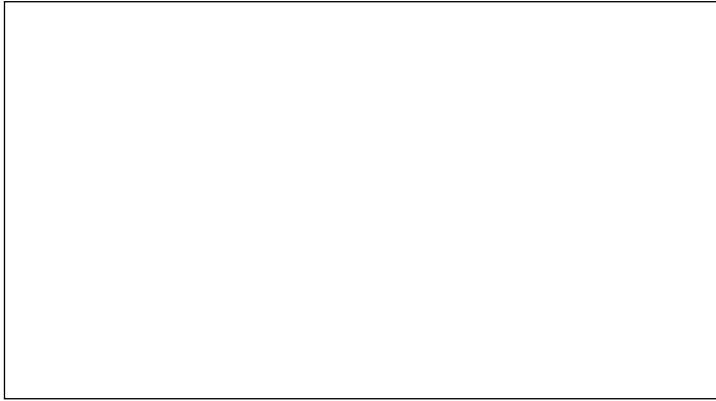
FIGURE 4-10. A fifteenth-century illustration of St Jerome in his study, which contains a free-standing cupboard (Chicago, Newberry Library, MS 102.2, fol. 3r) (detail) (Clemens and Graham 2007, 57).

book storage. Also, in some cases, surviving monastic building remains can provide evidence for wall recesses that may have been used to house monastic book collections.

FREE-STANDING CUPBOARDS

Deriving from the Latin term *armarium* via Old French, the thirteenth-century Middle English word '*presse*' came to be used increasingly to refer to a free-standing cupboard with the primary use of storing books (Petroski 1999, 31; Gameson 2006, 14). A depiction of an open free-standing book cupboard, for example, appears in the illustration of St Jerome in his study in a fifteenth-century copy of Jerome's *Epistolae* (Chicago, Newberry Library, MS 102.2, fol. 3r) (Figure 4-10). This manuscript was presented by Nicolas of Ancona in 1460 to the Franciscan convent of Ancona, Italy, and may demonstrate the nature of such furniture used in medieval religious houses (Saenger 1989, 209; Clemens and Graham 2007, 57). Additionally, the use of free-standing cupboards, and also chests, at the Benedictine abbey of Bury St Edmunds

is interpreted from an account of the 1327 infiltration of the monastery (Sharpe *et al.* 1996, 47; Gameson 2006, 19). It is stated that when the townsfolk "entered the cloister, they broke the chests (*cistulas, id est caroles*) and the cupboards (*armoriola*) and carried off the books along with everything else that was found in them" (Gameson 2006, 19).

As no examples of English monastic presses are known to survive, extant examples of medieval cupboards of other functions from the Continent are a useful source of evidence and supplement the manuscript evidence discussed above. At Bayeux Cathedral, France, a cupboard stands in the upper sacristy over the south transept (Clark 2008, 94), and there is another example in the Cistercian abbey of Obazine in central France (Clark 2008, 95; Roe 1902, 13). Whilst these cupboards may not have been made especially for book storage, it is argued that "as they belong to a period when the monastic system was in full, vigorous life, it is at least probable that they resemble those used by monks to contain their books" (Clark 2008, 95). These surviving pieces, in conjunction with the documentary evidence, provide a reasonable picture of the free-standing cupboards that may have once been used to house monastic books.

FIGURE 4-11. *The recess in the wall of the chapel off the north transept of Roche Abbey, North Yorkshire.*

Within the fabric of medieval monasteries, parish churches and cathedrals, there were several types of wall recesses. Several studies of English parish church and cathedral furniture demonstrate the different types, and various functions, of late medieval recesses used in these buildings and provide numerous examples of surviving pieces (see Cox and Harvey 1908; Cox 1923; Cook 1961b). For example, small square recesses or hutches fitted with wooden doors (also known as almeries), often found in the chancel, were for the housing of altar vessels, altar books, linen, relics, the chrismatory and other items necessary for various church services (Cox and Harvey 1908, 313-4; Cox 1923, 274-5; Cook 1961b, 169). At Roche Abbey, West Yorkshire, such a recess in the wall of the chapel off the north transept was most likely used for this purpose (Figure 4-11). That almeries were occasionally used for other purposes, notably the storage of books, may be supported by Thomas Malory's *Le Morte d'Arthur*, compiled in the second half of the fifteenth century, in which books are said to have been "put in almeries at Salisbury" (Roe 1902, 5).

Larger recesses, often in the walls of the cloister, however, were generally more commonly used for housing books, and were often known as aumbries, originating from the Latin *armarium* (Gameson 2006, 14; Savage 2006, 52). These recesses would have been lined with wood to protect the books from the dampness of the masonry and were divided vertically and horizontally by shelves (Wormald 1958, 22; Savage 2006, 52). The customs of the Augustinian order are especially detailed on the subject of books, including their storage. In the translation of the customs in use at Barnwell Priory, Cambridgeshire, the fourteenth chapter is headed 'Of the safe keeping of the books, and of the office of the librarian' (*De custodia librorum et officio armaria*) (Clark 2011, 62-9). It is believed that this passage represents the general practice of the Augustinian order as it occurs in the customs observed in France and Belgium (Clark 2008, 71; Streeter 2011, 45). On storing the books of the canons regular at Barnwell:

> "The press[2] in which the books are kept ought to be lined inside with wood, that the damp of the walls may not moisten or stain the books. This press should be divided vertically as well as horizontally by sundry shelves on which the books may be ranged

---

2   Clark (2011, 65) translates the Latin *armarium* as 'press'. Although *presse* was often used for a free-standing book cupboard as discussed, in this instance *armarium* is used in reference to a lined wall recess for the storage of books at Barnwell Priory.
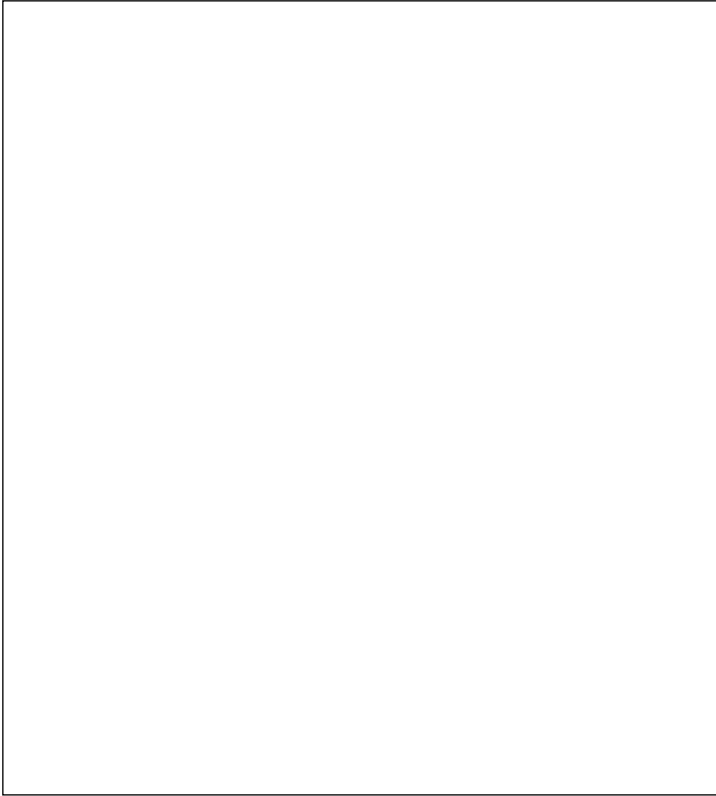
FIGURE 4-12. *Plan of Fountains Abbey, West Yorkshire (Gilyard-Beer 1970); the highlighted areas show several of the locations in which books were stored, including the wall recess in the wall of the south transept, the cupboards in the chapter house and the recess in the refectory.*

FIGURE 4-13. *The wall recess of a book cupboard in the wall of the arm of the south transept, near the south door to the church at Fountains Abbey, West Yorkshire.*

so as to be separated from one another; for fear they be packed so
close as to injure each other or delay those who want them" (Clark
2011, 65).

At Fountains Abbey, which has some of the best preserved monastic ruins, the large,
round-headed recess in the wall of the arm of the south transept was suggested by
Gilyard-Beer (1970, 41) to be a cupboard for the storage of books used by the monks
for reading and studying in the north alley of the cloister (Figures 4-12 and 4-13). At
Reading Abbey, Berkshire, indentations in the ruined east wall of the cloister may
indicate enclosed wall recess book cupboards, but it is possible that books were also
stored in free-standing cupboards and chests elsewhere within the cloister (De Hamel
1997a, 82). Similar recesses are also found at Chester Abbey, Cheshire, Beaulieu
Abbey, Hampshire, and Worcester Cathedral Priory (Thomson 2001, xxxii; Savage
2006, 53).
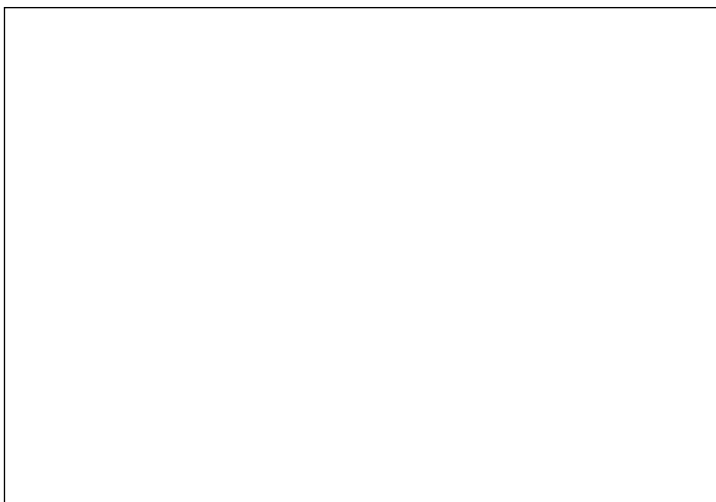
FIGURE 4-14. The mid-fourteenth-century carved book chest from Hereford Cathedral Priory (Mynors and Thomson 1993, Plate 19).
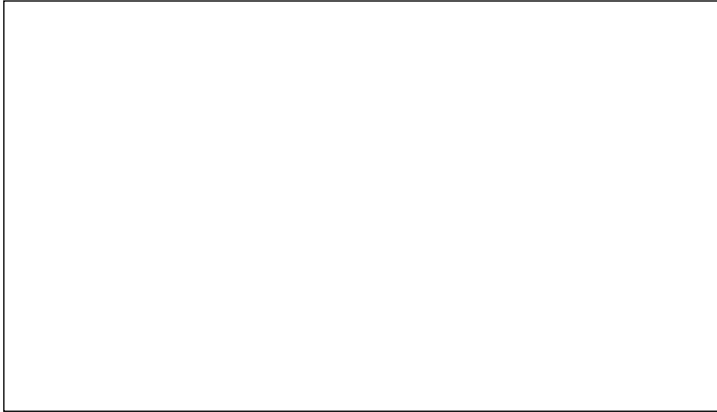
FIGURE 4-15. *The early fourteenth-century chest from Hereford Cathedral Priory thought to have been used to transport books (Streeter 2011, 118).*
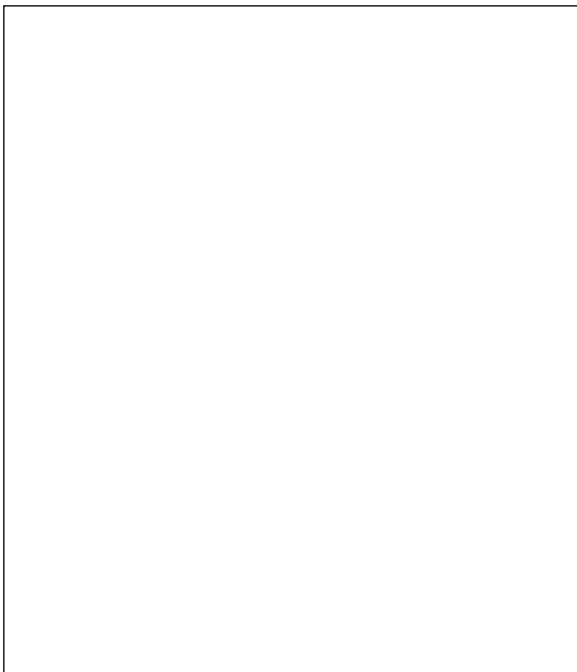
FIGURE 4-16. *The twelfth-century illustration showing Abbot Simon of St Albans Abbey sat at his bookchest (London, British Library, Cotton MS Claudius E IV, fol. 124) (detail) (Petroski 1999, 44).*

Chests

Chests are thought to have been in use contemporaneously with book cupboards, but were perhaps used for smaller collections and, in some cases, those that had to be transported (Petroski 1999, 42). It is possible that some collections of books housed in chests were the private collections of a monastery's abbot or prior and so were kept separate from the monastery's other collections. It is very rare for these book chests to survive, although two fourteenth-century examples survive from Hereford Cathedral Priory. One of the Hereford chests is elaborately carved, dated by the design of the carving to c.1360, it has three locks and it may have once contained a special collection of books (Figure 4-14) (Mynors and Thomson 1993, xxi; Petroski 1999, 42; Streeter 2011, 117). Such a chest locked by three keys held by three different individuals would have sufficiently protected the books from unauthorised borrowers (Petroski 1999, 42-3; Streeter 2011, 117). The second surviving chest is thought to date to the early fourteenth century, based on its ironwork, and it has been suggested that this chest was used for the travelling collection of a medieval bishop of Hereford (Figure 4-15) (Streeter 2011, 118). Unlike the carved chest, this example is constructed from poplar, a very light wood, and is provided with rings for a pole to be carried on men's shoulders. It is based on these structural features that it has been hypothesised that this chest was intended for transport and that it may have belonged to one of the cathedral's bishops, who would have travelled between his several residences and would have required not only his collection of service books but also books of law (Petroski 1999, 43; Streeter 2011, 118-9).

A fifteenth-century reference to a chest similar to the portable example from Hereford occurs in an inventory of the year 1464 for the church of St Mary, Warwickshire: "It. in the house afore the Chapter hous j old irebounde cofre having hie feet and rings of iron in the endes thereof to heve it bye. And therein liuth certein bokes belonging to the Chapter" (Cox and Harvey 1908, 300). Although this is a description of a book chest from a collegiate church rather than a monastery, it describes the type of furniture used to house ecclesiastical books in the late medieval period. An example of a chest in a monastic setting is in an illustration from a twelfth-century illuminated manuscript (London, British Library, Cotton MS Claudius E IV, fol. 124) (Figure 4-16). It shows Abbot Simon (1167-83) of St Albans Abbey seated before a book chest reading from a book, demonstrating his taste for books as well as the typical method of storing them (Petroski 1999, 43; Savage 2006, 29). Abbot Simon appears to be using the chest as a desk by supporting the book he is reading on its
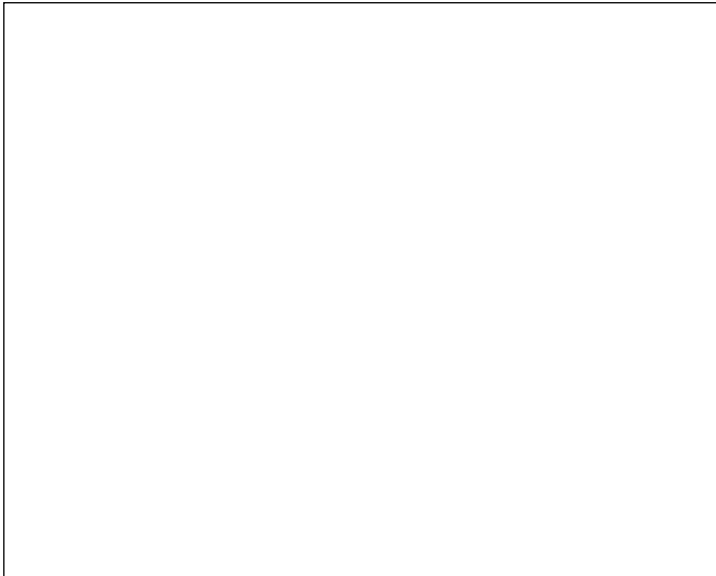
front edge, a practice that was perhaps common amongst abbots in the medieval period (Clark 2008, 292; Petroski 1999, 44). The chest in this image appears to have been deliberately raised off the floor by being set upon a type of frame, and it is thought that medieval book chests were raised off the ground in such a way, first to make it easier to pick up the chest for moving and transporting, and second to protect the chest and the books within from damp (Petroski 1999, 44-5).

4.4.2 LOCATIONS OF STORAGE

A synthesis of evidence indicates that, throughout the late medieval period, monastic books were stored in a variety of locations in or close to the places where they were used, such as the church, cloister, refectory and chapter house (Wormald 1958, 16-8; Piper 1978, 213; Clarkson 1993, 181-2; Harris 1995, 99; Gameson 2006, 16; Webber 2006b, 128-9). Surviving monastic documents in particular provide a picture of the different locations in which books were housed. An early piece of evidence is a late twelfth-century catalogue from Reading Abbey (British Library, Egerton MS 3031).
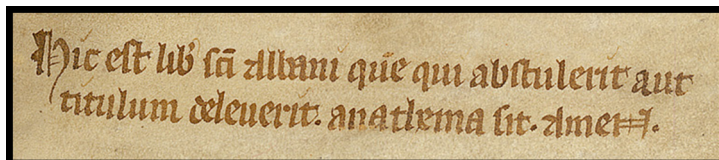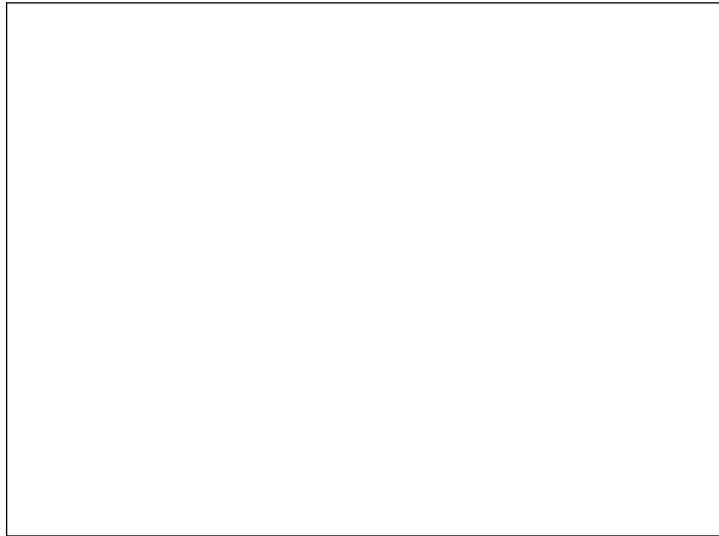
FIGURE 4-18. *(Above, top) Plan of Durham Cathedral Priory (Piper 1978, 222); the highlighted areas show the location of the books stored for use in the refectory and the location of purpose-built* libraria *above the parlour.*

FIGURE 4-19. *(Above, centre) The inscription notes that the manuscript was read in the refectory of Durham Cathedral Priory (Durham, Cathedral Library, MS B.II.34 fol. 1) (detail) (Piper 1978, 231).*

FIGURE 4-20. *(Above) The inscription details the location in which this twelfth-century breviary (London, British Library, Royal MS 2 A X, fol. 2r) was stored at St Albans Abbey, Hertfordshire (detail) (British Library Board 2015p).*

This booklist not only records the numerous types of manuscripts found within the monastery, but it also notes that the books were kept in several locations, including the cloister, refectory, slype, infirmary and abbey church (Figure 4-17) (Sharpe *et al*. 1996, 420-47; De Hamel 1997a, 82; Coates 1999, 24). Extant medieval catalogues from the Augustinian abbey of Leicester and the Cistercian abbey of Meaux also indicate the whereabouts of monastic books (Gameson 2006, 16; Savage 2006, 53). The late fifteenth-century catalogue from Leicester Abbey notes that books were kept in specific settings within the abbey church, such as the high altar, the choir and the pulpitum, and other areas of the monastic complex, such as the infirmary (Gameson 2006, 16). At Durham Cathedral Priory, books used for reading aloud in the refectory were kept in a cupboard next to the entrance to the infirmary at the south end of the west claustral walk, close to the refectory door (Figure 4-18); a rare inscription in an extant twelfth-century manuscript identifies that it was read in the refectory of the cathedral priory (Durham, Dean and Chapter Library, MS B.II.34, fol. 1) (Figure 4-19) (Piper 1978, 230; Gameson 2006, 17). The inscription "*De armariolo in choro*" in a twelfth-century breviary (London, British Library, Royal MS 2 A X, fol. 2r), and a similar inscription in a mid-thirteenth-century psalter (London, British Library, Royal MS 2 B VI), both from St Albans Abbey, indicate that the abbey church had a cupboard, most likely a free-standing one, in the choir for the storage of the liturgical books necessary for the religious services (Figure 4-20) (Wormald 1958, 16; Morgan 2008b, 292-3). Surviving fragmentary booklists also indicate that the book collections of the friars were similarly distributed throughout their monasteries, including the choir, sacristy, refectory and later communal library, sometimes called the *libraria studencium* (Humphreys 1990, xix; Lucas 2006, 247).

The cloister

The centre of monastic life was the cloister (Figure 4-21) (Clark 1894, 19; 1901, 80), and typically the largest collections of books were stored here to be close to the monks who generally read, transcribed and studied in the north claustral walk, which in many cases housed carrels (small, individual wooden enclosures or studies) or benches in the alcoves formed by the pillars separating the walkway from the cloister garth (Clark 2008, 90; Wormald 1958, 17; Irwin 1966, 115; Petroski 1999, 47). The northern side of the cloister was the most satisfactory place for studying, and therefore housing, books not only because it was nearest to the abbey church, but
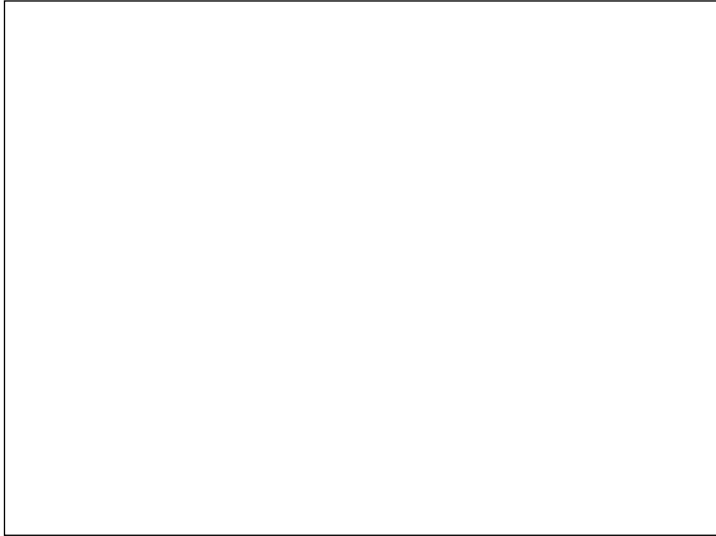
FIGURE 4-21. A manuscript illustration of the cloister (De Hamel 1997a, 82).

also as it was one of the warmest and most sheltered places in the cloister, as well as providing the best light for reading (Wormald 1958, 19; Irwin 1966, 122-3; Petroski 1999, 47). The description of the cloister at Durham Cathedral Priory in the *Rites of Durham* clearly explains how the north alley was used by the monks for the storage and use of books prior to the Reformation:

> "In the north syde of yᵉ cloister…in eūy wyndowe iijᵒ pewes or
> carrells where eūy one of the old monkſ had his Carrell seūeal
> by him selfe, that when they had dyned they dyd resorte to that
> place of cloister, and there studyed vpō there bookſ, eūy one in his
> carrell…And over against the carrells against the church wall did
> stand staine great almeries [or Cupbordſ, H. 45] of waynscott all
> full of Bookes…so that eūy one dyd studye…havinge the librarie at
> all tymes to goe studie in besydes there Carrellſ" (Fowler 1903, 83).

From this description it is clear that free-standing cupboards were located in the north claustral walk, situated against the south wall of the cathedral priory nave, and in fact they remained there until the Dissolution (Gameson 2006, 19-20). Monastic
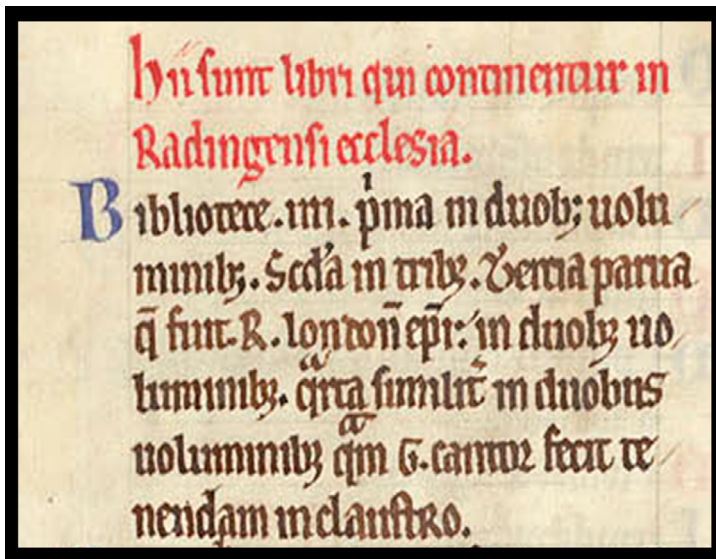
books themselves also carry inscriptions indicating that they were stored in the cloister. At Reading Abbey the twelfth-century booklist (London, British Library, Egerton MS 3031) notes that volumes of the Bible and a glossed copy of the book of Isaiah were housed in the cloister (Figure 4-22) (Sharpe *et al*. 1996, 421-2; De Hamel 1997a, 82). Evidence from the abbey of Bury St Edmunds includes nine known surviving manuscripts that all contain the location note "*de armario claustri*" ('of the cupboard of the cloister') in the hand of Henry de Kirkestede, librarian in the mid-fourteenth century (Wormald 1958, 19; Gameson 2006, 19). Another good example is from Worcester Cathedral Priory. It is recorded that among the books purchased by Prior William More (1519-36) in 1528 a copy of *Speculum spiritualium* was "delyverd to the cleyster awmery" (Sharpe *et al*. 1996, 672). Precentor rolls also indicate that books were stored in the cloister of Worcester Cathedral Priory as in 1388, for example, the precentor paid for the making of a "*liber consuetudinarum in claustro*" and in 1390/91 he paid 4*d*. for three sheepskins "*pro Bibliis in claustro*", presumably for their re-covering (Thomson 2001, xxxii).

Another important and contemporary source of information lies in the surveys and inventories that were made at the time of the suppression of English monasteries,

258

between 1535 and 1540, by Royal Commissioners for the Court of Augmentations. Importantly these documents supplement our existing knowledge of the layout of the monastic complex gathered from the plotting of surviving earthworks and from excavation (Coppack 1986, 100). The survival of such documents is haphazard, however, an important example survives from Rievaulx Abbey, North Yorkshire, which was suppressed in December 1538 and has been extensively surveyed and excavated. An inventory compiled for Thomas Manners, first Earl of Rutland, who is known to have acquired the site at the Dissolution, helps to reconstruct this religious house at the time of its suppression, expanding upon the information gathered from archaeological investigation (Coppack 1986, 101). For example, it is stated that, in the church, the south aisle of the presbytery had timber cupboards for holding books (Coppack 1986, 105). Another case in which sixteenth-century documents build upon existing knowledge established through survey and excavation of a monastery's layout is the Cluniac priory of Prittlewell, Essex. The annual net value of the priory is given in the *Valor Ecclesiasticus* as £155 11s. 2½d. (Page and Horace 1907, 140; Helliwell 1958, 84; Midmer 1979, 258). It was consequently dissolved in accordance with the Act of Parliament of 1536 and an inventory of the monastery's goods was taken on

8th June. In this inventory it is noted that, along with books in the church choir, "a chest and a desk" were located in the chapel besides the prior's chamber in the western range of the cloister (Fowler 1906, 385; Helliwell 1958, 84). It is possible, given the location of these pieces of furniture, that the chest was used by the prior for the storage of a private collection of books and the desk for his personal use.

Surviving monastic remains can show the locations in which monastic books were kept, particularly the cloister. Large recesses thought to have been suitable for housing books are typically found in the eastern wall of the cloister near to the church (Wormald 1958, 19; Irwin 1966, 115; Gameson 2006, 18). More specifically, many are located in the twelfth-century fabric in approximately the same location (at the north end of the east wall of the cloister, near the south door of the church) at several religious houses, including the Cistercian abbeys of Fountains (Figure 4-13), Kirkstall, West Yorkshire, and Rievaulx, the Cluniac priories of Castle Acre, Norfolk, and Monk Bretton, West Yorkshire, and the Augustinian abbey of Lilleshall, Shropshire (Gilyard-Beer 1970, 41; Clarkson 1993, 182; Gameson 2006, 18; Savage 2006, 53). Recesses used for housing books were also often found along the south wall of the church in the north claustral range; examples include Chester Abbey and Beaulieu Abbey (Savage 2006, 53). Smaller recesses found outside of the abbey church and cloister may have also been used for the storage of books. At Fountains Abbey there is a small recess in the wall at the entrance to the stairway that leads up to the pulpit within the western wall of the refectory and it is likely that this recess would have been the cupboard for the books read during mealtimes (Figure 4-23) (Gameson 2006, 16).

Book-rooms

Small 'book-rooms' are often situated in the claustral complex on the ground floor between the south transept and chapter house with the western end of the room adapted for storing books (Clark 1894, 24; 1901, 85; Wormald 1958, 19-20; Irwin 1966, 115; Gameson 2006, 21; Kerr 2009, 21). These rooms were often combined with, or adapted from, part of the sacristy or vestry and the little natural light that would have been available in these rooms confirms that they were essentially used for storage rather than consultation *in situ* (Clark 2008, 87; Gameson 2006, 21-3; Webber 2006b, 130). Examples of these rooms, often known as *armaria*, can be seen in the fabric of several twelfth-century houses, including Fountains Abbey, Rievaulx Abbey, Kirkstall

FIGURE 4-24. *Plan of Kirkstall Abbey, West Yorkshire (Owen 1955); the highlighted area indicates the location of the small book-room between the south transept and the chapter house.*

Abbey (Figure 4-24) and Bordesley Abbey, Worcestershire (Figure 6-4) (Clark 1894, 24; Owen 1955, 38; Wormald 1958, 20; Gilyard-Beer 1970, 41-2; Burrow 1983, 103; Lawrence 1986, 287; Gameson 2006, 21; Savage 2006, 53). Interestingly, this room at Thornton Abbey, Lincolnshire, does have stone benches suggesting that perhaps some reading did take place here (H. Willmott, *pers. comm.*).

Contemporary manuscripts are a vital source of evidence for demonstrating that these rooms were for the keeping of monastic books. In the case of Rievaulx Abbey, the location of this type of room and its use for storing manuscripts is supported by a late twelfth-century booklist (Cambridge, Jesus College, MS 34, fols. 1-5r) (Bell 1992, 89-121; Gameson 2006, 21). The existence of such rooms for the storage of books is further supported by a fifteenth-century description of the layout of Meaux Abbey. In this case, the room was called the '*commune almarium claustri*' and it is believed that it supplemented or replaced the cupboards in the northern walkway of the cloister (Wormald 1958, 20). Although this description is late in date, architectural remains demonstrate that book-rooms were already in existence in the twelfth century, particularly at the sites mentioned above.
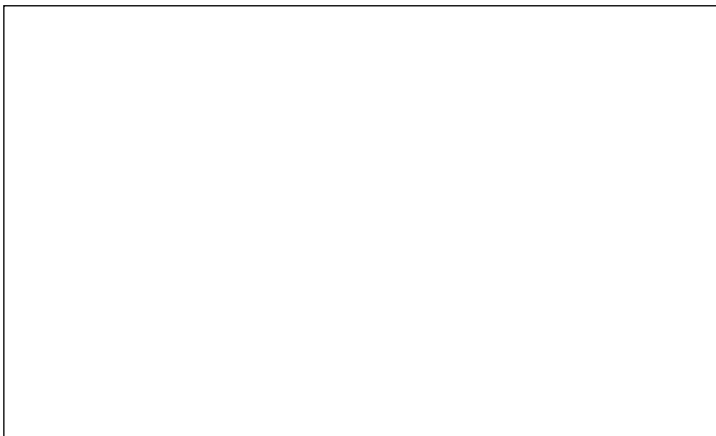
FIGURE 4-25. *Plan of Furness Abbey, Lancashire, showing the location of books stored in the chapter house (Clark 2008, 89).*

Similar small rooms for storing books were also frequently attached to the chapter house itself; Gameson (2006, 23) refers to these as "walk-in cupboards". At the Cistercian abbey of Fountains, in the twelfth century, two small square rooms were incorporated into the west end of the chapter house, situated on either side of the vestibule of the room (Figure 4-12) (Clark 2008, 89; Lawrence 1986, 287; Gameson 2006, 23; Savage 2006, 53). Similar features can also be seen in the thirteenth-century fabric of Furness Abbey, Lancashire (Figure 4-25) (Clark 2008, 87-8; Gameson 2006, 23; Savage 2006, 53).

Fifteenth-century libraries

Specific library rooms, in which books were not only housed but also read, were added to monastic complexes generally from the fifteenth century onwards, however, they usually only held a portion of the monastery's total collection (Clark 1894, 25; Wormald 1958, 20; Irwin 1966, 115; Harris 1995, 102; Gameson 2006, 38). Similar to *armarium* and its various derivatives, the term '*libraria*', or '*librarium*', also lacked a single, precise usage (Gameson 2006, 14). During the thirteenth and fourteenth centuries, *libraria* was used more generally to refer to a collection of books (Gameson 2006, 14). For example, a booklist collated in 1202 at Rochester Cathedral Priory records the main collection of the works of the Church Fathers under the heading '*Librarium Beati Andree*', followed by other collections each also called '*librarium*', the '*commune librarium*', the '*aliud librarium in archa cantoris*' and the '*Librarium Magistri Hamonis*' (Sharpe *et al.* 1996, 497-526). In the fifteenth century, however, the term *libraria* was most commonly used to refer to a separate room for both the storage and study of books (Gameson 2006, 14). Evidence that these library rooms were more frequently built at larger monasteries in the fifteenth century may explain this change in meaning[3].

In comparison to the small, poorly lit book-rooms situated on the ground floor between the south transept and chapter house, these new libraries for studying books were typically built at first floor level and equipped with large windows

---

3   Monasteries that had separate library rooms built in the fifteenth century include: Bury St Edmunds Abbey, Suffolk (Savage 2006, 54-5; Clark 2008, 108), Canterbury Cathedral Priory, Kent (Irwin 1966, 115; Clark 2008, 106), Durham Cathedral Priory (Irwin 1966, 115; Clark 2008, 107), Leicester Abbey (Webber 2006b, 130), Reading Abbey, Berkshire (Clark 2008, 106), St Albans Abbey, Hertfordshire (Irwin 1966, 115; Savage 2006, 54-5; Clark 2008, 108), and Worcester Cathedral Priory (Thomson 2001, xxxiv).

(Gameson 2006, 38). At Durham Cathedral Priory, between 1414 and 1418, a new, purpose-built *libraria* was constructed above the parlour that opened off the east claustral walk between the south transept and the chapter house (Figure 4-18) (Wormald 1958, 20; Piper 1978, 223-6; Savage 2006, 54; Piper 2007, 98). The catalogue of the collection of books housed in the library does not survive, however later notations against entries in the 1395 cloister inventory (Durham, Dean and Chapter Library, MS B.IV.46, fol. 25), for example, indicate which volumes were to be transferred to the new library collection (Figure 4-26) (Piper 1978, 225).

The survival of these monastic libraries is significantly limited mainly as a result of the Dissolution of the Monasteries and events thereafter. The fifteenth-century library at Fountains Abbey is believed to have been situated above the chapter house, although structural evidence for this no longer survives (Walbran 1875, 122). It is not uncommon for libraries to survive at sites that were re-established as secular cathedrals in the sixteenth century. At Worcester Cathedral Priory, for example, little is known about the dedicated library room; knowledge of the date of its construction and its whereabouts is incomplete (Thomson 2001, xxxiii-iv). There is some surviving documentary evidence regarding the possible library rooms of the cathedral priory, however, as Thomson (2001, xxxiii) explains, it is far from conclusive. In 1306 a record of the corrody, or pension, of John of Bromsgrove was said to be kept "*in librario*", implying a dedicated room, but perhaps one that was for the storage of books more than their use (Thomson 2001, xxxiii-iv). A record of the cellarer's payment in 1376/7 for 2,000 roof tiles, for window-bars (*repaguli*), and for 1,000 'lathenayls' for the *domus librarii* also survives (Thomson 2001, xxxiii). It is hypothesized that the 1306 record most likely refers to a small book-room where books and administrative records were simply stored rather than a library in which books would have been studied (Thomson 2001, xxxiii-iv). The later reference is interpreted by Thomson (2001, xxxiii-iv) to mean a chamber, now no longer in existence, that was situated above the late twelfth-century 'Norman Passage', which is in the church above the south aisle of the nave. Thomson (2001, xxxiv) further suggests that the present library, also situated above the south nave aisle, was built in the fifteenth century to accommodate more books and to provide a better environment for reading compared to the fourteenth-century rooms referenced.

It is important to recognise that whilst new libraries for the study of books were added to the complexes of religious houses in the later medieval period, books continued to be variously grouped, stored and listed according to use and
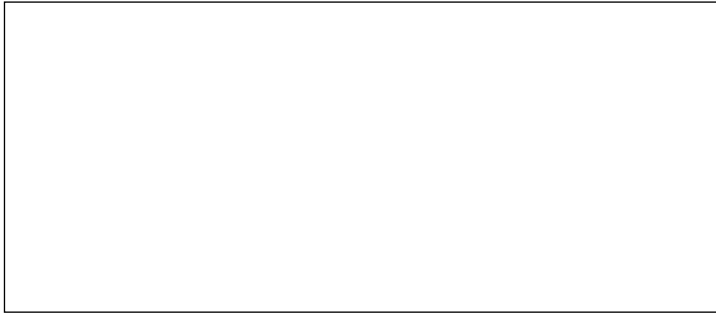
FIGURE 4-26. Later notations against entries in the 1395 cloister inventory (Durham, Dean and Chapter Library, MS B.IV.46, fol. 25) indicate the volumes that were to be transferred to the new library (detail) (Piper 1978, 225).

convenience (Gameson 2006, 48-9; Webber 2006a, 124). The continued storage and use of books within the cloister is particularly evident at Durham (Piper 1978, 228). Alongside the construction of the library in the fifteenth century, money was also spent on improving facilities in the cloister, including the construction of new carrels, repairs to an existing cupboard and the production of a new cupboard (Piper 1978, 228; Platt 1984, 166). In long-established institutions that had accumulated hundreds of volumes over the centuries, and thousands in some cases such as Canterbury and Durham, large numbers of books were housed not only in the fifteenth-century library but continued to be stored in the cupboards and chests located throughout the monastic complex (Gameson 2006, 49).

4.5 SUMMARY

The aim of this chapter has been to investigate medieval monasticism and the importance of books within religious houses, to consider the contents of book collections and the processes of book acquisition, and to identify the potential

locations for the use and storage of books. It has provided an overview of monasticism considering the rules that governed monastic life, notably those set out by St Benedict of Nursia in the sixth century. By examining the medieval practices of *lectio divina*, book distribution and ownership, it has been possible to discern the significance of books within monasteries. That books were a fundamental part of monastic life is also evident from the examination of monasticism from the twelfth century and the reforms it faced. From the development of new monastic orders and their reforms to the rise of the universities, book culture within monasteries changed as they witnessed a rise in spiritual and scholarly learning.

The changes in monastic book culture during the late medieval period are evident in the many and varied types of books that were kept in monastic collections. Religious houses gathered together collections of remarkable scope and depth, ranging from the fundamental texts of the Bible and service books, the works of the Church Fathers, and commentaries and glosses for the study of these religious texts, to pieces of work for more scholarly endeavours, including books of literature, history, law, medicine and grammar. The acquisition of books through donations and purchases, in addition to in-house book production, were the key ways in which monasteries created and expanded their collections.

Through the analysis of contemporary documentary, pictorial and architectural evidence, this chapter has demonstrated how books were used and stored in a number of different ways and in various locations. From this evidence it is clear how methods of book storage developed over the centuries, from chests and cupboards situated throughout the monastic complex to purpose-built library rooms. This understanding of book storage, along with knowledge of the types of books used and kept in religious houses, and an understanding of the roles and importance of books within medieval monasticism are vital for the analysis of book fittings. Only with this learning can the research clearly and accurately analyse and interpret this type of material culture in its wider social and cultural contexts.

5 BOOK FITTINGS ON MONASTIC SITES

5.1 INTRODUCTION

Prior to this research, the detailed analysis of late medieval book fittings had been largely non-existent as the description of individual items only took place on an occasional basis as part of wider specialist artefact reports. To address this situation, this chapter not only demonstrates what has been found and where, but it also analyses and interprets the material in order to fully understand this form of late medieval material culture. To begin, the initial comparison of the two main functional types of book fittings, fastenings and furnishings, is considered. Various factors that may have had an impact on the numbers of these two types in the catalogue are examined providing a consideration of book fittings in their wider contexts.

The next branch of analysis focuses on the monastic orders represented in the catalogue and the influences different orders may have had on the book fixtures excavated from their sites. This correlation focuses on the frequency and variations of these artefacts across sites belonging to different orders. This examination is used in conjunction with the historical evidence to consider the broader contexts of late medieval books and their fixtures, including how the nature of the book fittings excavated from religious houses may reflect the varying customs and attitudes of the monastic orders in England.

The geographical distribution of the recorded book fittings and how they varied across the country is also evaluated. This analysis focuses on the regional frequency of the various types, and the similarities and differences in form and decoration across regions. The material excavated from English monastic sites is also considered in terms of the wider Continental contexts of late medieval book furniture.

For the comprehensive analysis of the current material, it is necessary to recognise the limitations of the data and the implications these limitations may have on the conclusions drawn from its analysis. Consequently, an examination of the different types of book fittings that may be underrepresented in the catalogue is addressed. Following this is a consideration of extant medieval bookbindings and the types of fittings that are not classified, and the monastic orders not represented in the

catalogue, to support conclusions drawn where the direct research material is incomplete.

5.2 FASTENINGS AND FURNISHINGS

The artefacts recorded have been initially classified by function into two main types: fastenings and furnishings, which were used to keep books closed when not in use and to protect the covers, respectively. The initial comparative analysis of these two main types of book fittings has found that fastenings are more predominant in the catalogue than furnishings. This section discusses the results in more detail and considers the implications of this analysis in terms of the wider contexts of late medieval book furniture. In particular, the impact of changes in monastic book storage, and excavation and recovery biases, on the number of fastenings and furnishings found on English monastic sites is evaluated.

5.2.1 FASTENINGS

A total of 248 (74 per cent) of the 336 recorded book fittings have been identified as fastenings that were used to keep books closed when not in use. As explained in Chapter 2.6.1, fastenings functioned in two ways, either by the strap-and-pin mechanism or the hooked mechanism. Studies by Pollard (1962, 17) and Gullick and Hadgraft (2008, 105) suggest that, by the end of the fourteenth century, hooked fastenings had been introduced and became the more common form of mechanism on bindings, although "the older strap-and-pin arrangement was never entirely replaced" (Gullick and Hadgraft 2008, 105). The analysis of the research data clearly shows that both types of fastening mechanisms are almost equally represented in the database. Of the fastenings identified, 122 objects functioned via the strap-and-pin mechanism and 126 via the hooked method. As already discussed (see 2.7), the archaeological material, which indicates that strap-and-pin fastenings were continually used throughout the late medieval period, is supported by contemporary manuscript binding evidence.

The brief study of British bookbindings dated between 1100 and 1400 completed by Gullick and Hadgraft (2008) has demonstrated that the use of fastenings on

bindings increased over the late medieval period. It is stated that some, but not all, twelfth-century English bindings had a fastening system comprising one or two fittings that used the strap-and-pin mechanism (Gullick and Hadgraft 2008, 102-3). It is thought that, by the thirteenth and fourteenth centuries, nearly all English bindings would have had a fastening system (Gullick and Hadgraft 2008, 105). By the end of the fourteenth century, two straps with hooked fastenings were frequently used in England, although this practice was even more common on the Continent (Pollard 1962, 17; Gullick and Hadgraft 2008, 105). Furthermore, strap-and-pin fastenings continued to be used and were sometimes placed on all three outer edges of bindings, possibly under Continental influence as this practice occurs more frequently on bindings from southern Europe, especially those from Italy and the Iberian Peninsula (Gullick and Hadgraft 2008, 105). The increase in the use and the number of fastenings on bindings during the later medieval period may account for the large number of fastenings that have been identified during the completion of this research.

Given the large numbers of books that made up monastic collections, especially those of the larger religious houses, it is necessary to consider why more fastenings have not been found archaeologically on monastic sites. The twelfth-century catalogue of Rievaulx Abbey, North Yorkshire (Cambridge, Jesus College, MS 34, fols. 1-5r), the first Cistercian foundation in the north of England, indicates that the religious house had more than 220 manuscripts by the end of the century (Bell 1992, 89-137). Of these manuscripts just over 20 are known to survive today in libraries across England (Ker 1964, 159). Of the archaeological evidence for books at Rievaulx, only 13 identified book fastenings have been excavated to date (**282-294**). Similarly, a fragment of a substantial fourteenth-century booklist has been tentatively assigned to the Cluniac abbey and priory of Bermondsey, Surrey (Sharpe *et al*. 1996, 22). This fragment survives as a flyleaf in a twelfth-century volume of Ambrose (Oxford, Bodleian Library, MS Bodley 751) bound in the fifteenth century, which is thought to have also belonged to the Cluniac abbey (Sharpe 1996, 22-3). The physical format and content of this evidence is argued to represent a shelf-list inventory for checking stock rather than a catalogue for reference by readers (Sharpe *et al*. 1996, 22). Nonetheless, it contains entries for more than 100 volumes demonstrating that the monastery had a sizable collection (Sharpe *et al*. 1996, 22). From the collections of this monastery, six to eight late medieval manuscripts are thought to survive (Ker 1964, 9-10; Sharpe *et al*. 1996, 22). During excavations between 1984 and 1995, only six book fastenings

were recovered and have been subsequently identified as part of this research (**44-49**) (Egan 2011, 246, 253-4). The disparity between the potentially large numbers of books in monastic collections and the numbers of book fastenings that have been found archaeologically raises the question of whether or not book furniture was used on all books or just some. In the latter case, a further question is raised concerning the types of books on which fittings were used. Unfortunately, the condition of extant medieval monastic bindings is very poor, so it is very difficult to draw reliable conclusions on the matter from this material.

There are other factors, however, that may have also impacted upon the numbers of fastenings that are found archaeologically. As discussed in detail later (see 5.5), the sample of material collected is not wholly representative of all types of late medieval book furniture that was used on monastic books and this must necessarily be taken into consideration when drawing inferences from the detailed analysis. The methods of recovery and particular archaeological biases will have also had an influence on the number of book fastenings that have been found and recorded. Firstly, the monastic sites represented in the catalogue have not been excavated in full. Within the catalogue, almost all of the book fittings recorded have been recovered from religious houses that have only been partially surveyed and excavated. Differential preservation and recovery biases may have also affected the survival rate and subsequent identification of book fastenings. The discussion on monastic orders later in this chapter (see 5.3) examines, in more detail, the effects of archaeological investigations on the numbers of the different types of fastenings that have been found on sites of various monastic orders. As examined in more detail in Chapter 6, the late medieval destruction and dispersal of monastic books, and certainly that which occurred during the Dissolution of the Monasteries, had an effect on the numbers of monastic books, and subsequently the fittings, that are found archaeologically both on and away from monastic sites.

Changes in monastic book storage that occurred from the fifteenth century may also be a further factor in understanding the numbers of fastenings that have been found archaeologically. As discussed in Chapter 4.4, prior to the fifteenth century, monastic books were generally stored in chests or horizontally on the shelves of free-standing cupboards and enclosed wall recesses (Harris 1995, 99; Petroski 1999, 42-6; Savage 2006, 52; Clemens and Graham 2007, 57). Storage facilities of the larger monasteries began to change dramatically from the fifteenth century with the development of the 'modern' library, the practice of chaining books and the evolution of the

bookcase (Petroski 1999, 59). As monastic collections grew and books were being stored upright on shelves in purpose-built library rooms, the metal fastenings used to prevent books from distorting when stored were likely to have been removed; discarding the fastenings would have allowed the books to be placed on shelves more easily causing less damaged to the covers of neighbouring books. It is possible then that the recovery of book fastenings from monastic sites may, in some cases, provide evidence for the disposal of the obstructive fastenings in response to changes in book storage from the fifteenth century. This would suggest then that significant numbers of fastenings may be found archaeologically on monastic sites.

5.2.2 FURNISHINGS

Only 88 artefacts, just over a quarter of the total 336 fittings, have been classified as furnishings. Such objects were typically attached to the bindings of books in order to protect the leather or textile covers from abrasion (Szirmai 1999, 263; Dürrfeld 2000, 305). As with book fastenings, the methods of recovery and particular archaeological biases will have also had an impact on the number of furnishings that have been found and recorded. The extent to which monastic sites have been excavated, conditions of preservation, and other limitations and biases that may occur during archaeological investigations will have affected the number of artefacts that have been found and the subsequent identification of book furnishings.

When considering the number of potential furnishings that could have been used on bindings, it is perhaps surprising that such a small number are found archaeologically on monastic sites. In order to understand this, it has been necessary to investigate extant medieval bindings. Furnishings of certain types, namely bosses (B.1) and corner-pieces (B.4), were typically placed in the four corners, and sometimes the centre, of covers, often on both the front and back. Therefore, it can be surmised that a binding may have had between eight and ten furnishings. This number could in fact be increased if furnishings such as binding strips (B.5), chains (B.6) and bookmarks (B.7) were also added to bindings. This is in comparison to the one or two fastenings that were generally attached to English bindings. A manuscript that clearly demonstrates how late medieval books were often fitted with numerous furnishings to protect their covers is a German Cistercian breviary (San Marino, Huntington Library, MS HM 25777) produced at the beginning of the fifteenth century

(Figure 5-1) (Dutschke 1989, 635-6). In this instance, ten domed bosses (B.1) were originally affixed to the binding (eight survive *in situ*) and along the top, bottom and fore-edge of both covers binding strips (B.5) were used and remain largely intact. Another illustrative example is the binding of a twelfth-century *Glossa ordinaria* on Genesis (London, British Library, Add. MS 63077) that once belonged to Rievaulx Abbey. In this case, a total of nine furnishings (one domed boss (B.1) in each of the eight corners and a central title piece) were originally attached to the manuscript to protect the fur chemise. These examples clearly show the potential for the use of large numbers of furnishings on bindings. The archaeological evidence, however, does not necessarily reflect this.

The investigation of other examples of medieval bindings does provide some contrary evidence to the effect that potentially furnishings may not have been as widely used on book covers as the initial evidence suggests. The collection of medieval manuscripts at Hereford Cathedral is a useful collection for analysis. Although it is not strictly a monastic site, the contemporary evidence for the binding and storage of ecclesiastical books used by local and travelling clergymen and scholars is useful for this research. Hereford Cathedral's library contains 229 complete manuscripts dating from the eighth to the early sixteenth century (Mynors and Thomson 1993, xv). From the analysis of the catalogue, 125 or so retain their medieval bindings, but as few as 19 have remains or evidence of their original fittings. Having examined this small group of bindings, only five manuscripts demonstrate potential evidence of having once been fitted with furnishings. Two of these manuscripts (Hereford, Cathedral Library, MSS O. III. 12 and O. V. 5), which are both thirteenth-century in date, have evidence of a possible late medieval chain staple (Figure 5-2). Remnants of a centre-piece survive on the binding of a fourteenth-century copy of writings on Boniface VIII's *Sixth Book of the Decretals* (Hereford, Cathedral Library, MS O. VII. 5) (Figure 5-3) and the binding of the thirteenth-century copy of Rufinus of Aquileia's translation of Eusebius' *Historia ecclesiastica* (Hereford, Cathedral Library, MS P. IV. 14) has a nail/rivet, or evidence thereof, situated in each of its corners for the purpose of attaching furnishings (Figure 5-4). The binding of the manuscript containing Terentius' *Comoediae* and Petrarch's *Vita Terentii* (Hereford, Cathedral Library, MS L. VIII. 6) is later in date compared to the four just discussed, dating between 1473 and 1478, and has a title label under horn riveted to the back cover. Analysis of the bindings of the remaining Hereford manuscripts indicates the use of only fastenings. For example, an early thirteenth-century copy of Hugh of Fleury's *Historia ecclesiastica* (Hereford,

FIGURE 5-1. *Here is the fifteenth-century binding of a German Cistercian breviary (San Marino, Huntington Library, MS HM 25777) demonstrating that book covers were often protected by numerous furnishings (San Marino, The Huntington Library, 2003a). Scale 1:1.*

FIGURE 5-2. *(Above, top left) Here is a thirteenth-century binding with a possible late medieval chain staple (Hereford, Cathedral Library, MS O. III. 12) (detail). Scale 1:1.*

FIGURE 5-3. *(Above, top right) The binding of a fourteenth-century copy of writings on Boniface VIII's Sixth Book of the Decretals (Hereford, Cathedral Library, MS O. VII. 5) retains remnants of a centre-piece (detail). Scale 1:1.*

FIGURE 5-4. *(Above) In each of the corners of the thirteenth-century copy of Rufinus of Aquileia's translation of Eusebius' Historia ecclesiastica (Hereford, Cathedral Library, MS P. IV. 14) is a nail/rivet, or evidence thereof, for the purpose of attaching furnishings (detail). Scale 1:1.*

Cathedral Library, MS P. I. 13) retains its contemporary binding of tawed skin over chamfered oak boards with remains of its strap-and-pin fastening. As the original leather is relatively complete and well-preserved, it is clear to see that furnishings were not used on this binding. Similar specimens include the bindings of manuscripts O. I. 4, O. II. 11 and O. III. 8. If furnishings had been used on such bindings but have subsequently been lost, evidence would typically survive as stains on the leather, and signs of attachment, such as rivets, would normally remain. This sample of manuscripts clearly indicates that furnishings were not always used on the bindings of English ecclesiastical books.

Previous analysis of bookbindings from Continental Europe has also found that protective furnishings occur less frequently than fastenings (Szirmai 1999, 263). It is thought that the use of protective fixtures partially depended in the contents of the book (Szirmai 1999, 263). Typically the covers of large and heavy liturgical books were adorned with bosses (B.1), corner-pieces (B.4) and edge strips (B.5) for their protection (Szirmai 1999, 263; Adler 2010, 42). Nevertheless, customs may have differed across regions and countries. It has been found that furnishings were never used on the bindings of books belonging to St Gall Abbey, Switzerland, whereas it has been observed that almost all monastic workshops in Nuremberg, Germany, added protective fixtures to their bindings (Szirmai 1999, 263). In view of this, it is possible that the use of furnishings to protect the covers of monastic books was not as commonly practised in England as in other European countries.

In some cases, the archaeological recovery of furnishings from English monastic sites may signify the disposal of book furnishings in response to changes in book storage from the fifteenth century. Similar to fastenings, furnishings would have potentially caused damage to neighbouring books when stored upright on shelves of newly-built libraries. Furnishings were used on bindings to protect and prevent damage to the leather covers of books that were stored horizontally; however, they also prevented abrasions when books were in use. As monastic collections grew new methods of storage had to be developed. When books were chained and stored horizontally in purpose-built libraries using the 'lectern system' (rows of lecterns each with a horizontal shelf above or below the chain rod), minimal damage was caused to the bindings because of the furnishings (Figure 5-5). However, this method became inadequate for storing growing book collections in the fifteenth and early sixteenth centuries and so a better method was developed, which is now termed the 'stall system' (Figure 5-6) (Petroski 1999, 75-6; Clark 2008, 172; Streeter
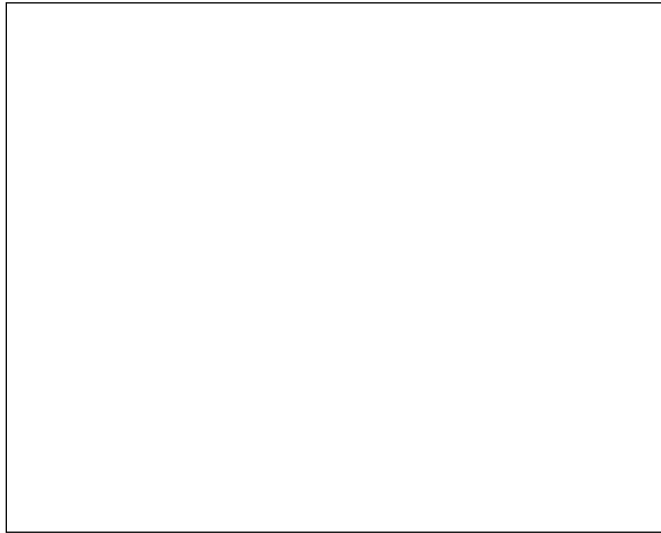
FIGURE 5-5. *(Above, top) A schematic drawing of the 'lectern system' used for the storage of chained monastic books in libraries from the fifteenth century (Szirmai 1999, 269).*

FIGURE 5-6. *(Above) A schematic drawing of the 'stall system' used from the fifteenth and sixteenth centuries (Szirmai 1999, 269).*
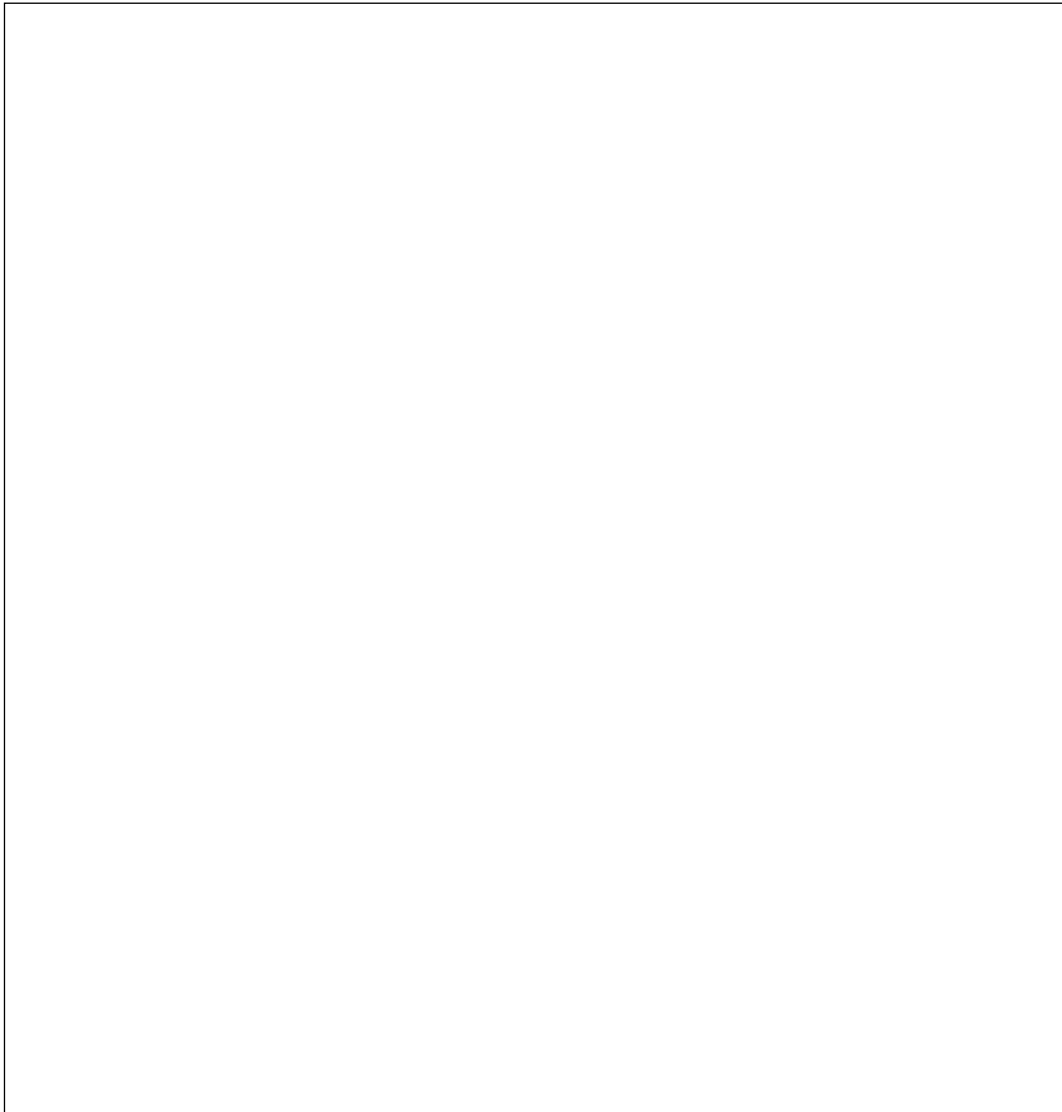
FIGURE 5-7. *Hereford Cathedral Library's original late sixteenth-century library furniture following the 'stall-system' (De Hamel 1992, 70).*

2011, 8-9). The characteristic features of this arrangement of books are rows of desks with shelves, or bookcases, attached. Two important examples of the 'stall-system' are in Duke Humphrey's room at the Bodleian Library, Oxford, and at Hereford Cathedral (Figure 5-7). In time, these shelves came to hold books in a vertical position, a practice that was not typically carried out prior to the introduction of this system, but soon became commonplace (Petroski 1999, 76). With this arrangement of books, protruding metal furnishings would have not only prevented books from being stored upright in a suitable fashion, but they would have caused damage to the covers of neighbouring books (Petroski 1999, 59; Adler 2010, 76). Therefore, it is likely that furnishings were removed from bindings, or not added to newly-bound books, as they became superfluous with the changing methods of book storage in larger monasteries. It is possible then that old, unnecessary metal fittings were thrown away, perhaps even off site, or melted down and reused for other purposes. An example of a damaged furnishing that may indicate its deliberate removal from its bindings for storage purposes is a type B.7.1 fitting from Rievaulx Abbey (**302**; Figure 5-8). Therefore, the archaeological evidence may signify the changes that some monastic bindings underwent at the end of the late medieval period.

The number of excavated book furnishings demonstrates that material culture expected to be found is often not recovered. Similar to the discrepancy in the numbers of book furnishings used on bindings and the numbers that are found archaeologically, recent research on late medieval dress accessories (Cassels 2013) found a similar pattern with belt mounts. It was established that there was a discrepancy in the numbers of belt mounts that are found archaeologically compared to the numbers that would have potentially been used on belts (Cassels 2013, 68). Cassels (2013, 68-9) argues that belt mounts are typically the smallest forms of dress accessory and so they may frequently go unnoticed during excavation, and that they may have been systematically recycled and therefore were never deposited in the ground. It is also argued that belt mounts were not used on belts as regularly in late medieval England as on the Continent, and that other decorative fittings may have been used on belts (Cassels 2013, 68-9). This reiterates that a number of factors can impact upon the numbers of late medieval artefacts that are found archaeologically, including book fittings.

302

FIGURE 5-8. Excavated from Rievaulx Abbey, North Yorkshire, is this damaged book furnishing, possibly dating to the late fourteenth/fifteenth century, which may demonstrate the deliberate removal of fittings from bindings to accommodate changes in storage at the end of the late medieval period (English Heritage, 85000334). Scale 1:1.

Monastic order	No. of fittings	%
Augustinian canons	16	4.8%
Austin friars	3	0.9%
Benedictine monks	73	21.7%
Benedictine nuns	1	0.3%
Carmelite friars	16	4.8%
Carthusian monks	10	3.0%
Cistercian monks	164	48.8%
Cluniac monks	10	3.0%
Dominican friars	25	7.4%
Franciscan friars	4	1.2%
Franciscan nuns	7	2.1%
Gilbertine canons	6	1.8%
Trinitarian friars	1	0.3%
Grand Total	**336**	**100.0%**

TABLE 5-1. Number of book fittings from the various monastic orders represented in the catalogue.

5.3 THE INFLUENCES OF MONASTIC ORDERS ON BOOK FITTINGS

From the analysis of the different types of book fittings (see 2.7), and the decorative techniques and styles that were used to embellish them (see 2.8), questions inevitably arose as to why there were such variations, and what influences drove them. From the investigation into late medieval monasticism (see Chapter 4), it was clear that the monastic orders had differing views and ideals on many aspects of cenobitic life, such as literary practices and the use of decorative and devotional objects, including books (Clark 2007b, 6). Consequently, it is reasonable to conclude that the order to which a monastic house belonged would have had an impact upon the material culture that was utilised by its community. This section therefore examines the book fittings catalogued for this study in terms of the religious houses from which they were excavated, and the monastic orders to which these sites belonged. The analysis examines how the religious order to which a monastery belonged may have had a bearing on the numbers of book fittings that have been found on site, and also the physical characteristics of the fittings themselves. This correlative analysis is used to consider the broader contexts of late medieval books in English monasteries.

The study of late medieval monasticism demonstrates that books were fundamental to monastic life. The archaeological evidence gathered demonstrates that book fittings were used across the sites of many different monastic orders, and that they were a relatively common type of material culture utilised by the religious houses of England during the late medieval period. The monastic orders represented within the catalogue comprise the majority of the main contemplative orders and a number of the key mendicant orders. Table 5-1 lists the different monastic orders represented in the catalogue and gives the numbers of book fittings that have been excavated from sites that belonged to these orders. Table 5-2 presents this data in terms of the different types of book furniture identified. From the analysis of this data, the following sections specifically focus on the different monastic orders, discussing patterns and correlations between the orders and the physical characteristics of book fixtures.

No. of Fittings	Type																		
Monastic order	A.1	A.2	A.3	A.4	A.5	A.6	A.7	A.8	A.9	A.10	A.11	B.1	B.2	B.3	B.4	B.5	B.6	B.7	Grand Total
Augustinian canons	-	3	6	1	-	3	1	1	-	-	1	-	-	-	-	-	-	-	16
Austin friars	1	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	3
Benedictine monks	9	3	12	8	3	9	8	2	-	-	2	5	7	3	-	2	-	-	73
Benedictine nuns	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1
Carmelite friars	1	-	7	-	-	4	2	-	-	-	2	-	-	-	-	-	-	-	16
Carthusian monks	-	-	2	-	-	1	2	1	1	-	2	-	-	-	1	-	-	-	10
Cistercian monks	12	-	35	4	5	12	27	5	2	1	8	30	6	2	3	4	1	7	164
Cluniac monks	1	1	-	-	-	-	3	-	-	-	1	3	-	-	1	-	-	-	10
Dominican friars	1	--	3	-	-	-	8	1	-	-	5	2	5	-	-	-	-	-	25
Franciscan friars	-	-	1	1	-	-	-	1	-	-	-	-	1	-	-	-	-	-	4
Franciscan nuns	-	-	1	1	1	1	-	-	-	-	-	1	-	-	1	1	-	-	7
Gilbertine canons	1	-	1	-	1	-	-	-	-	-	1	1	-	-	1	-	-	-	6
Trinitarian friars	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Grand Total	27	7	68	16	10	31	51	12	3	1	22	42	19	5	7	7	1	7	336

TABLE 5-2. The different monastic orders and the numbers of the various types of book fittings that have been excavated from sites that belonged to these orders.

281

5.3.1 AUGUSTINIANS

The majority of the contemplative orders, such as the Benedictines and Cistercians, were made up of organised communities of monks who lived a spiritual and ascetic life under religious vows (Lawrence 2001, 24). In comparison, the Augustinian order comprised congregations of clergy, or canons regular, who were generally committed to active pastoral work (Midmer 1979, 3; Lawrence 2001, 163). From the middle of the eleventh century, the Augustinians renounced private property and lived a fully communal life, observing a monastic timetable and sharing a common refectory and dormitory (Lawrence 2001, 161). Although the label of Augustinian canon regular covered a wide variety of religious establishments, including chapters serving cathedral churches, rural and urban priories, and hospitals, in essence the canonical observance was monastic and in practise there were few differences between houses of canons regular and houses of contemplative monks (Lawrence 2001, 163). In terms of the conduct of religious life, the Augustinian customs were not prescriptive and this led to a wide degree of variation in the manner in which each house put its precepts into practise (Webber and Watson 1998, xxiv). The text of the *Rule of St Augustine*, written around AD 397, comprises eight chapters and covers only a few pages. Its principal purpose was to offer important thoughts, based on the Scriptures, which could provide inspiration (Canning and van Bavel, 1986, 7). The nature of the text allowed it to be interpreted differently across communities. A section of the fifth chapter of the *Rule*, which is concerned with the hours of reading and the lending of books, in particular was interpreted differently by individual communities (Webber and Watson 1998, xxiv). This is supported by Richard of St Victor's *De questionibus regule sancti augustini solutis* and a twelfth-century commentary on the *Rule*, known as the *Bridlington Dialogue*. In the *Rule* it is stated that "*Codices certa hora singulis diebus petantur; extra horam qui petierit, non accipiat*" (Webber and Watson 1998, xxiv). Using a passage from Richard's *Questions*, the *Bridlington Dialogue*, however, explained that:

> "…some people who, because they like work but find reading
> or prayer distasteful, interpret this passage as meaning that
> the author of the Rule intended only one hour a day to be given
> reading, on the ground that it says in the Rule that "books are to
> be asked for at a certain hour, not at certain hours". But that does
> not follow. The use of the singular for the plural number is well

enough known both in the divine scriptures and in the poets… The piece that follows in the Rule, however, "Anyone who asks for a book at the wrong time is not to have it", is reckoned to be a harsh measure, which the Superior may modify by dispensation in case of genuine need" (Webber and Watson 1998, xxiv).

It was not until the thirteenth century with the introduction of General Chapters that the Augustinian order in England achieved any formal structure to enforce uniformity of practice. It was the General Chapter of 1234 that stipulated that each house should commit its observances to writing (Webber and Watson 1998, xxiv). An informative example is the *Book of Observances according to the Rule of St Augustine* for Barnwell Priory, Cambridgeshire, which survives in the 'Barnwell Cartulary' or the 'Barnwell Register' (London, British Library, Harley MS 3601), a history of the priory written at the end of the thirteenth century (Clark 2011, x). On the matter of the priory's books, the fourteenth chapter describes the many roles of the librarian, who was also the precentor, the procedure for the annual Lenten distribution of books, the locations for the use and storage of books, the maintenance of the books themselves and the types of books to be read (Clark 2011, 62-9).

It is understood that, from as early as the twelfth century, the Augustinian order pursued knowledge linking the student to God through balanced study, incorporating the study of the Scripture and the seven liberal arts (Taylor 1961, 3; Jackson 1974, 65; Roberson 1996, 212-3). This is supported, for example, by the twelfth-century educational programme, *Didascalicon*, of Hugh of St Victor and later written observances of Augustinian houses, such as those of Barnwell Priory. Towards the end of the late medieval period, fourteenth- and fifteenth-century catalogues recorded of a wide variety of books demonstrating the intellectual and religious vitality of Augustinian houses (Webber and Watson 1998, xxvi).

From the end of the eleventh century to the Dissolution of the Monasteries in the 1530s, between 200 and 250 houses of Augustinian canons were founded in England. The number of identified Augustinian catalogues and lists of books, however, is very small. Only 41 records of book collections, many of which are very brief, have thus far been identified from 34 different Augustinian houses (Webber and Watson 1998, xxii). This is paralleled by a similar pattern with regard to the survival of Augustinian books themselves (Webber and Watson 1998, xxii). With the exception of Llanthony Secunda Priory, Gloucestershire, from which over 100 manuscripts survive, only

ten other Augustinian houses have more than ten extant volumes (Webber and Watson 1998, xxii-xxiii). The surviving documentary evidence contributes to our knowledge of the religious and intellectual life of the Augustinian communities in late medieval England, yet it provides very limited information with regard to the physical characteristics of the books themselves. The only exception is the substantial late medieval catalogue that survives from the Augustinian abbey at Leicester, one of the richest houses of the order by the 1530s. Originally drawn up between 1477 and 1494 by William Charyte, precentor and prior of the monastery, a fine copy of the catalogue survives at Oxford (Bodleian Library, MS Laud Misc. 623). This catalogue not only provides a comprehensive account of all the communal books at the abbey, it also includes descriptions of many of the bindings of the books (Webber and Watson 1998, 107; Gullick 2006, 147). There are a significant number of binding descriptions and these have been previously studied by Gullick (2006). The descriptions, which Gullick has classified into three groups (stiff-board, limp and miscellaneous bindings), occasionally give additional details about the physical characteristics of the books, such as the size of the volumes and the nature of their writing surfaces, however, none of the descriptions mention book fittings, although it is thought these were common on later medieval English bindings (Gullick 2006, 152). Therefore, it is the archaeologically recovered book fittings from Augustinian houses that enhance our knowledge of the bindings of the books that formed the collections of the Augustinian canons in England during the late medieval period.

Compared to the numbers of book fittings excavated from Benedictine and Cistercian sites, only 16 artefacts recorded in the catalogue have been recovered from Augustinian sites. Given the importance of study and learning to Augustinian canons and that there have been large-scale excavations on many Augustinian sites, such as Holy Trinity Priory, Aldgate, London (Schofield and Lea 2005), and Holywell Priory, Middlesex (Bull 2011), it may be reasonable to expect to find large numbers of book fittings on such sites. However, this research seems to suggest that this is not the case. For example, from Merton Priory, Surrey, one of the wealthier Augustinians sites recorded in 1535, only two book fittings have been identified from the site (Egan 2007, 224), and similarly as yet only a single book fitting has been recovered during recent excavations at Thornton Abbey, Lincolnshire, another wealthy Augustinian site (H. Willmott *pers. comm.*). It may be that the Augustinians did not use fittings on the bindings of their books as frequently as other orders, however further examination of the finds from additional excavated Augustinian houses would be advantageous to

corroborate this hypothesis.

The group of 16 book fittings recorded from Augustinian houses in this study is largely composed of hooked fastenings and their corresponding anchor-/catch-plates. A total of six fishtail (A.3) and one rectangular (A.4) hooked fastenings, and three anchor-/catch-plates (A.6) have been classified. Of the fishtail hooked fastenings (A.3.1) all but one are decorated with engraved designs, the more common pattern being concentric, compass-engraved circles around blind-drilled holes. Two examples from St Frideswide's Priory, Oxford, are decorated with a combination of different designs and patterns, including engraved transverse zigzag lines, engraved lines in chevron-shaped and herring-bone/feather-like arrangements, decorative drilled and blind-drilled holes, and compass-engraved concentric circles (**275** and **276**; Figure 3-46) (Scull 1988, 39). In comparison, the anchor-/catch-plates and strap-and-pin fastenings are undecorated.

Across the Augustinian assemblage the predominance is of fastenings that functioned by the hooked method, however, the assemblage also includes smaller numbers of other pieces. From Norton Priory, Cheshire, a single example of

89

270

271
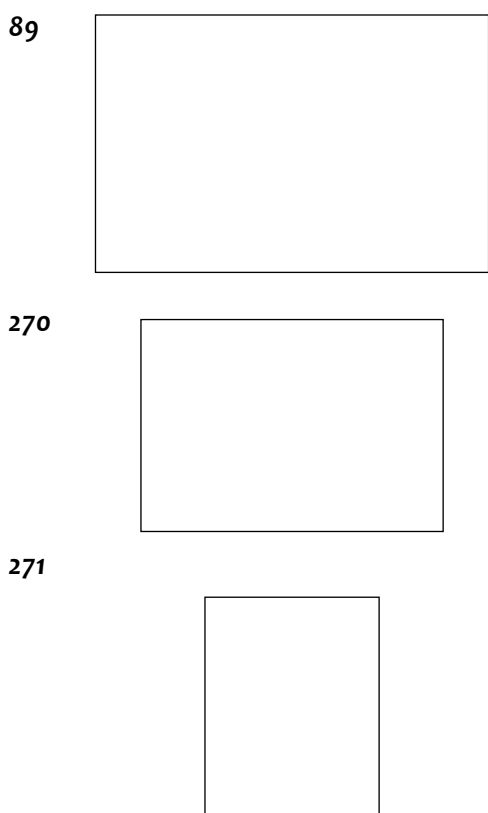
FIGURE 5-9. Examples of Augustinian strap-and-pin book fastenings: 89 from St Gregory's Priory, Kent (Hicks and Hicks 2001, 269, no.10), 270 and 271 from Norton Priory, Cheshire (Brown and Howard-Davis 2008, 380, nos.26 and 25). Scale 1:1.

fastening type A.7.1 (***270***) and a single pin and base-plate of type A.11.1 (***271***) have been categorised (Figure 5-9) (Brown and Howard-Davies 2008, 381-2), as have three examples of type A.2 (***86-88***; Figures 2-9 and 2-70) and a fitting of type A.8 (***89***; Figure 5-9) from St Gregory's Priory (Hicks and Hicks 2001, 270). The three Augustinian examples of type A.2 from St Gregory's Priory were excavated from Dissolution and post-Dissolution contexts providing little information as to the dating of the use of these objects. Although from sixteenth-century Dissolution contexts, two of these artefacts were found at the site of the prior's lodge (***87*** and ***88***) (Hicks and Hicks 2001, 270-1). The excavators have argued that "there is little doubt that they are fourteenth-century objects" (Hicks and Hicks 2001, 271). Based on the analysis of the form of similar book fittings, and associated archaeological and manuscript evidence, it is possible that they could be earlier in date. Despite the uncertainty of the date of these Augustinian objects, the fact that they were found within the site of the prior's lodge perhaps indicates that they were attached to manuscripts that were used personally by the prior of St Gregory's. These items of book furniture provide archaeological evidence for the existence of manuscripts at this Augustinian site. The recovery of three bone parchment-prickers and a lead point from this monastery

277

278
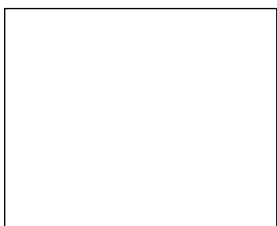
FIGURE 5-10. *Book fittings excavated from the Augustinian priory of St Frideswide in Oxford (Scull 1988, 40, nos.3, 4 and 5). Scale 1:1.*

279

also provides evidence for various stages of their production (Hicks and Hicks 2001, 278). Consequently, this assemblage of artefacts provides important evidence for the production and the bindings of books used in an Augustinian house during the late medieval period, which is surprisingly scarce.

The 16 book fittings from Augustinian houses were excavated from across six sites in England. A proportion of these fittings (five examples) were recovered during excavations in 1985 of the cloister of the Augustinian priory of St Frideswide in Oxford (Scull 1988, 39). The majority of these were excavated from contexts dated between the late fourteenth and early sixteenth centuries (Scull 1988, 39). The group of book fittings from this priory comprise three examples of hooked fastenings of type A.3.1 (**275-277**; Figures 3-46 and 5-10) and two corresponding anchor-/catch-plates of type A.6.2 (**278** and **279**; Figure 5-10) (Scull 1988, 39). The archaeological evidence that these particular types of book fittings were in use between the fourteenth and sixteenth centuries further supports conclusions both from this research's analysis of their form and from discussions in previous studies (see Pollard 1962, 17; Szirmai 1999, 251; Gullick and Hadgraft 2008, 105; Adler 2010, 25). A school is believed to have been attached to the priory from the twelfth century, and it is has been suggested that the earliest religious teachings that occurred in the cloister of St Frideswide's Priory demonstrate a possible, albeit tenuous, connection with the origins of the University (Page 1907, 98; Midmer 1979, 248). Despite the requirement to hold sufficient books for the religious and intellectual practices that took place at this priory, only one known manuscript written in the first half of the thirteenth century (Paris, Bibliothèque Nationale, Français 24766) remains from its collections, and it survives in an undated parchment binding (Ker 1964, 141; Bibliothèque Nationale de France 2013-14). The priory was suppressed in 1524 by Cardinal Wolsey (*c.*1473-1530) for the endowment of his new foundation of Cardinal College, although the building of the college was stopped following Wolsey's downfall in 1529 (Midmer 1979, 248). The lack of documentary and extant manuscript evidence therefore highlights the importance of the archaeological evidence for the development of our understanding of the manuscripts of the Augustinian priory at Oxford and the types of fittings that were used for their bindings.

Given the nature of the organisation of the Augustinian houses, their attitude towards learning, and the surviving documentary evidence for their book collections, it is clear that the types of books used by different Augustinian houses were many and varied. On this basis, it could therefore be hypothesised that the book

fittings used by the Augustinian canons on their books would also be varied. The archaeological evidence, however, suggests that this was not the case. Whilst only a relatively small assemblage of book fittings from Augustinian houses has been identified, the material evidence clearly demonstrates that the hooked mechanism was the predominant method by which 63 per cent of the fastenings functioned.

The limited nature of the documentary evidence for the devotion and learning of the Augustinian order in England is emphasised by the paucity of evidence from one of the largest and most influential Augustinian houses in England, the priory of St Mary Merton, Surrey (Webber and Watson 1998, xxvii). This house is one of the best represented in the early fourteenth-century *Registrum anglie de libris doctorum et auctorum veterum* (over 230 titles are recorded), yet only 29 manuscripts and printed books survive from what is believed to have been a substantial library, and the majority of these do not survive in their original bindings (Ker 1964, 130-1; Rouse and Rouse 1991, 252-4; Webber and Watson 1998, xxvii). As a result, the particularly

256

FIGURE 5-11. Hooked fastening of type A.3.1 excavated from Merton Priory, Surrey (Egan 2007, 139, no.S46). Scale 1:1.
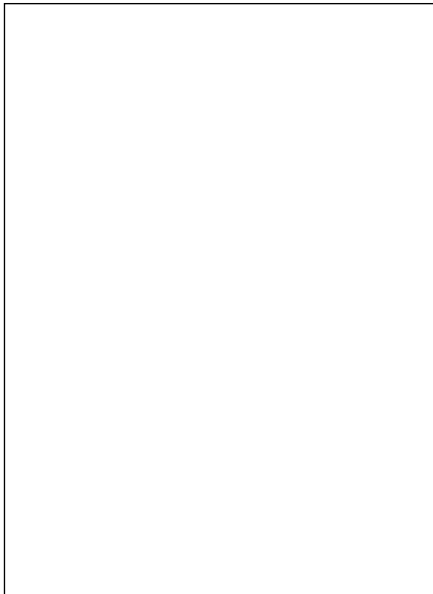
FIGURE 5-12. Parchment-pricker and two lead points excavated from Merton Priory, Surrey (Egan 2007, 139, nos.S37, S41 and S42). Scale 1:1.

extensive archaeological investigations that have been completed at this site in previous years are significant for further understanding the nature of the books, and their bindings, that were housed at this Augustinian monastery. From Merton Priory two hooked fastenings of type A.3.1 have been excavated (**256** and **257**) (Figure 5-11) (Egan 2007, 224). Both were excavated from post-medieval contexts (Egan 2007, 224), however, the physical characteristics of these two fixtures indicate that they are late medieval in date. In addition to the items of book furniture that provide evidence for the bindings of books, artefact evidence for the production of manuscripts has also been excavated from Merton (Egan 2007, 223). These include a bone parchment-pricker, eight lead points for the ruling and drafting of texts and four shell palettes, which still retain paint, for the illustration of manuscripts (Figure 5-12) (Miller and Saxby 2007, 136-7). The archaeological evidence for the production of manuscripts at Augustinian houses in England is supported by a twelfth-century dialogue concerned with the *Rule of St Augustine*, which discusses the tasks that canons could undertake. These included "'*libros scribere illuminare regulare notare emendare atque ligare*' ('writing, illuminating, ruling, notating, correcting and also binding')" (Gullick 2006, 161). Another artefact excavated from Merton Priory can be classified as a book fitting of type A.7.1, however, the archaeological evidence from this particular site indicates that such objects were not always used on book covers. From the grave of an older adult male at Merton Priory, situated in the north-east corner of the aisle crossing, an assemblage of seven copper-alloy dress accessories were recovered (Egan 2007, 229). Within this group was a buckle, three sexfoil plates, a strap loop, a sheet mount with contiguous paired crescents, and finally an object comprising two rectangular plates held together by four separate rivets (three of which survive) with a large central perforation (Egan 2007, 229). Based on this research's typology this last item can be classified as type A.7.1. In the excavation report, it is argued, however, that this artefact was a dress accessory rather than a piece of book furniture (Egan 2007, 229). That this rectangular fitting was found in a grave alongside a number of other dress accessories suggests that it was used on a belt. Nevertheless, the archaeological and manuscript evidence analysed in this research in conjunction with the discovery of a further example of type A.7.1 fitting from the Augustinian priory of Norton (**270**; Figure 5-9) (Brown and Howard-Davies 2008, 381-2) clearly demonstrates that such objects were used on the bindings of late medieval books. There is a possibility that this individual at Merton Priory was buried with a book, however, the potential use of books as grave goods by English monastic communities in the late medieval period is as yet an unexplored subject.

11

12

71

72

119
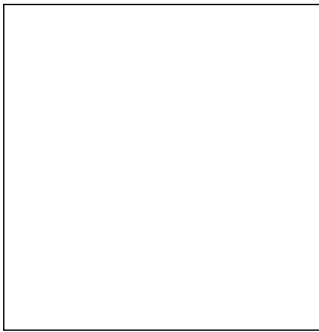
245
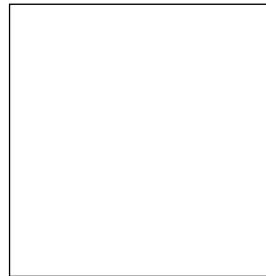
FIGURE 5-13. *Book fastenings from Benedictine sites:* **11** *and* **12** *from Battle Abbey, East Sussex (English Heritage, 801972 and 802172),* **71** *and* **72** *from St Augustine's Abbey, Kent (English Heritage, 7716151A and 777547),* **119** *from Eynsham Abbey, Oxfordshire (Allen 2003, 266, no.52),* **245** *from the Leicester Austin Friars (Clay 1981, 135, no.33). Scale 1:1.*

5.3.2 BENEDICTINES

The analysis of the catalogued material has found that examples of certain forms of book fastenings are more concentrated at Benedictine sites. A total of 73 book fittings recorded in the catalogue have been excavated from across eight Benedictine houses in England. Type A.4 is the only type of fitting in the entire catalogue where the largest numbers of examples have been excavated from Benedictine sites; fittings of every other type are more strongly represented across the sites of other orders. A total of 16 fittings of type A.4 have been catalogued, and 50 per cent of these have been excavated from across three English Benedictine houses. Four examples have been excavated from Battle Abbey, East Sussex (*9-12*) (Figures 2-12 and 5-13) (Geddes 1985, 160), two from St Augustine's Abbey in Canterbury, Kent (*78* and *79*) (Figure 2-12) (Henig and Sherlock 1988, 193; Henig and Woods 1988, 215), and two from Eynsham Abbey, Oxfordshire (*119* and *120*; Figures 2-12 and 5-13) (Allen 2003, 265). The significance that all of these fittings have come from Benedictine sites situated in the south of England is addressed separately (see 5.4).

Of the total fittings of type A.4 recorded in the catalogue, six examples are decorated with various engraved and punched designs and motifs. The majority of these six decorated fixtures have come from Benedictine houses; three are from Battle Abbey (*10-12*; Figures 2-12 and 5-13) (Geddes 1985, 160) and two are from Eynsham Abbey (*119* and *120*; Figures 2-12 and 5-13) (Allen 2003, 265). The remaining decorated fixture of type A.4 was excavated from the site of the Austin Friars in Leicester (*245*; Figure 5-13) (Clay 1981, 133). The recording of these decorated book fittings from the Benedictine sites of Battle Abbey and Eynsham Abbey perhaps demonstrate that these wealthy monastic houses used more ornate fittings on the bindings of books within their collections. Nonetheless, whilst the majority of decorated fittings of type A.4 have been excavated from Benedictine sites, it is important to recognise that not all Benedictine examples of type A.4 are decorated; there are three other examples from sites belonging to this order that are not decorated. It is possible that the use of both decorated and undecorated hooked fastenings of type A.4 were used on different types of Benedictine books. For example, the decorated fittings may have been used for the liturgical books and undecorated fittings were used for study or administrative books. The lack of surviving English Benedictine bookbindings with their original fixtures, however, makes this hypothesis difficult to corroborate.

Although the archaeological evidence demonstrates the high proportion of type

A.4 fittings that have been found on Benedictine sites, this does not mean that such fixtures were not often used on the bindings of books from monasteries of other orders. Eight examples of this type have been excavated from a total of seven sites that belonged to the Augustinian, Cistercian and Franciscan orders, and an example of this type of fitting survives on a fourteenth-/fifteenth-century book of grammar (London, British Library, Add. MS 62132 A) that once belonged to the Cistercian abbey of Fountains, West Yorkshire (Figure 2-13, B.). This evidence clearly indicates that such items of book furniture, whilst predominately found on Benedictine sites, were used by members of other monastic orders.

Although the more prevalent form of book fitting on Benedictine sites is type A.4, the same number of fittings of type A.2 has been recovered from both Augustinian and Benedictine sites. Of the seven fastenings of type A.2 recorded in the catalogue, three were excavated from a single religious house that belonged to the Benedictines, St Augustine's Abbey (*71-73*) (Figure 5-13) (Henig 1988, 181; Henig and Woods 1988, 211). The analysis of fittings from Augustinian sites above has shown that the same number of type A.2 fixtures have also been excavated from St Gregory's Priory. The remaining example of this type of book furniture was excavated from the Cluniac priory and abbey of St Saviour Bermondsey, Surrey (*45*; Figure 2-9) (Egan 2011, 246). The significance that all of the examples of type A.2 fastenings were excavated from three sites in the southeast of England, two of which are in Canterbury, is considered later (see 5.4).

In the discussion on the analysis of the form of book fittings recorded in the catalogue (see 2.7.1) it was suggested that artefacts of type A.2 are likely to date from as early as the twelfth century. The form of this type of fastening, which is more elaborate in nature than that of type A.1, suggests perhaps that book fittings of this type were in use in wealthier houses, such as those of the Benedictines and Augustinians. As new material is discovered, analysed and classified, it will be possible to draw more substantiated conclusions.

Of the Benedictine houses included in the catalogue, substantial documentary evidence survives concerning the book collections of St Augustine's Abbey, which was founded at the end of the sixth century and was one of the richest religious houses in late medieval England with a net value of £1,413 4*s*. 11*d*. in 1535 (Page 1926, 131). Surviving in a late fifteenth-century manuscript (Dublin, Trinity College, MS 360) is a corrected and extended catalogue, which was originally compiled between 1375

and 1420 (Barker-Benfield 2008, 3). This record provides detailed entries of nearly 2,000 volumes that were held in the abbey's collection. St Augustine's Abbey was suppressed in 1538 and a select list of the abbey's texts was noted by John Leland (*c.*1503-52) in his *Collectanea* (Oxford, Bodleian Library, MS Top. Gen. c. 3, fol. 5-7) during his national search of monastic libraries during the 1530s (Barker-Benfield 2008, 1673-93). Although St Augustine's Abbey had a long history, and has a surviving catalogue from the early fifteenth century, considering the vast numbers of books that this major Benedictine abbey once held, only a relatively small number of book fittings (18 examples) have been found archaeologically.

5.3.3 Cistercians

From the examination of the different monastic orders and the emerging results from the analysis of the research material, it became clear that the numbers of book fittings excavated from sites of the Cistercian order warranted further investigation. A total of 164 examples (nearly 49 per cent) of the catalogued book furniture has been excavated from Cistercian houses. There are a number of factors that may suggest why large numbers of Cistercian examples have been recorded in this catalogue. Whilst the scale of the archaeological investigations has to be taken into account, a potential explanation for the higher proportion of book fittings from Cistercian monasteries may be that the substantial and wealthy Cistercian monasteries, especially those in the north of England, had larger numbers of books compared to many religious houses of other monastic orders throughout the country. However, when one considers the wealth and status of many of the larger Benedictine houses across the country, some of which had the largest libraries in the country (Ramsay 2004, 125), it is likely that other factors would have affected these results. Comparing Benedictine and Cistercian houses from across the country in terms of their wealth and their book collections would be useful for understanding why from this research more book fittings have come from Cistercian sites. This is hampered, however, by the very limited resources on the late medieval libraries of the Cistercians in England. Of the 64 male Cistercian houses founded in England that survived to the end of the late medieval period, contemporary catalogues are extant from only three: Flaxley Abbey, Gloucestershire, Meaux Abbey, East Yorkshire, and Rievaulx Abbey, North Yorkshire (Bell 1992, xxiii). Taking Rievaulx Abbey as the example, two late twelfth-century catalogues survive in a thirteenth-century

manuscript (Cambridge, Jesus College, MS 34) containing a miscellaneous collection of *theologia* and *moralia*, and an *ex libris* inscription demonstrating that it was owned by Rievaulx Abbey (Bell 1992, 87). Together these two booklists demonstrate that this Cistercian abbey, which was founded in 1132, had a book collection of more than 220 volumes by the end of the twelfth century (Bell 1992, 89-137). Considering Rievaulx was one of the wealthier abbeys in England, it is reasonable to believe that, by the time it was dissolved in 1538, it had a substantial collection of books, although no contemporary catalogue survives; only a select list of works belonging to Rievaulx was recorded in the first half of the sixteenth century by Leland (see Bell 1992, 138-40). Given the likelihood that Rievaulx Abbey had large collections of books by the end of the medieval period, 22 book fittings have been identified and recorded in the catalogue from this site. Comparing the evidence from the Cistercian abbey of Rievaulx with that from a Benedictine abbey may demonstrate a correlation between the size of a monastery's book collection and the number of book fittings that have been found archaeologically. Within the scope of this research, there is one Benedictine monastery that has sufficient evidence for this comparison, St Augustine's Abbey. However, as discussed above (see 5.3.2), this Benedictine abbey was founded at the end of the sixth century, centuries before the foundation at Rievaulx, it was one of the richest religious houses in late medieval England and the catalogue was compiled by the early fifteenth century, several centuries after the Rievaulx Abbey catalogue. Given the documentary evidence from these two abbeys, the book fittings that have been recovered from each site cannot reflect the extent of their book collections. Whilst other lesser monasteries would have had smaller book collections compared to those of the greater houses, from the analysis of the 336 pieces comprising this catalogue and the documentary evidence it is interpreted that the numbers of book fittings that may be found on a site can in no way indicate the size of a monastery's book collection. Consequently, other factors must have affected the numbers of book fittings that have been found at monastic sites, particularly those belonging to the Cistercian order, from which larger quantities have been excavated.

The increased numbers of book fittings excavated from Cistercian sites may reflect the circumstances of their destruction and deposition during the late medieval period and also during the first half of the sixteenth century when the monasteries were suppressed and their belongings dispersed and destroyed. Given the nature and complexity of this branch of analysis, the results and discussion of the spatial

distribution of book fittings within monastic sites is the focus of Chapter 6.

Given the significant numbers of book fittings excavated from Cistercian sites, it is important to consider the influence of the archaeological investigations undertaken at such sites. Nearly 49 percent (164 examples) of the recorded book furniture has been excavated from Cistercian houses. When compared to the Benedictines, only 77 items of book furniture has been excavated from these houses. This significant difference in numbers may have resulted from the fact that the Cistercian book fittings were excavated from across 13 sites in comparison to the eight sites from which Benedictine items were found. On this basis it could simply be concluded that there are more Cistercian book fittings as more Cistercian sites have been examined. Further analysis, however, has shown that this is not the reason for the higher number of Cistercian artefacts. Analysis of the figures has determined the average number of fittings per Benedictine and Cistercian site. Within the scope of this research study, the results indicate that on average 10.4 book fittings have been found per Benedictine site and 12.6 per Cistercian site. Whilst these averages are seemingly similar, within the catalogue 21 per cent more fittings have in fact been recovered from Cistercian sites than Benedictine sites. Other archaeological factors, however, may have influenced the results of this analysis. A number of archaeological biases are likely to have played a part in the recovery of book furniture, even though an average percentage of fittings per Cistercian and Benedictine site have been established. One factor that may have contributed to the difference in numbers of book fixtures from these two types of sites is that English religious houses have only been partially excavated; this is the case for houses of all monastic orders not just the Cistercians and Benedictines. The implication of this is that parts of a monastic complex in which book fittings are perhaps more likely to be found are not always fully investigated, and so examples of this type of material culture are absent or under represented in the archaeological record. Another aspect is that, as at sites of other monastic orders, the material may not be found during excavation, perhaps due to inadequate excavation techniques, differential preservation and problematic sampling, resulting in an incomplete and therefore biased assemblage.

For the investigation of the large number of Cistercian examples of book furniture, it was important to consider the nature of Cistercian attitudes towards the ornamentation of monastic furnishings, for which there is substantial documentary evidence. The General Chapter of this order created rules and regulations, *statuta* and *capitula*, which defined all manner of Cistercian activity, including the content,

production and use of books (Burton and Kerr 2011, 35). According to the strict rules of uniformity, the types of books to be used by Cistercian monks were among the first concerns in early *capitula*; the *c.* AD 1098-1100 chapter *Quos Libros non Licet Habere Diverso* lists all fundamental texts for liturgical use (Norton 1986, 319; Lawrence-Mathers 2003, 201). The Cistercians also developed an interest in the appearance of these books, which is evident in legislation from the first quarter of the twelfth century (Norton 1986, 323; Lawrence-Mathers 2003, 201). This was coincident with the *capitula* of *c.* AD 1109-19, *Quid liceat vel non liceat nobis habere de auro argento gemmis et serico* ('What we may be allowed or not allowed to have out of gold, silver, precious stones, and silk'), which restricts the use of gold and silver within the monastery (Geddes 1986, 256; Norton 1986, 323; Lawrence-Mathers 2003, 201). More specifically in the *c.* AD 1109-19 chapter, the statute *De firmaculis librorum* forbade the use of solid gold or silver book fittings; only the use of silver or gold plate was permitted (Geddes 1986, 256; Norton 1986, 323; Lawrence-Mathers 2003, 201). This statute also notes that books were not to be covered with rich fabrics (Lawrence-Mathers 2003, 201). Consequently, these very early twelfth-century statutes were developed to stipulate and regulate the early Cistercian concern for the purity of liturgical texts and the simplicity of their bindings (Lawrence 1986, 285-6). The codification of 1202, the purpose of which was to unify and order all Cistercian regulations, detailed a compound statute, *De firmaculis librorum et litteris*, that reiterated the early prohibition of rich book fittings and covers (Norton 1986, 345; Lawrence-Mathers 2003, 202).

Changing Cistercian attitudes and a relaxation in rules concerning decoration evolved significantly from the thirteenth century, and this can be seen in later statutes (Geddes 1986, 256-7; Carter 2010, 272). Previous comparisons of documentary evidence have shown that documents postdating *c.*1160 generally testify to the gradual accumulation of material and artistic wealth by the Cistercians in England (Geddes 1986, 257). In comparison to early statutes, these later documents tend to be primary economic sources, such as bills and inventories. For example, an account from Louth Park Abbey, Lincolnshire, notes that, in 1239, William of Tournay, Dean of Lincoln, joined the community bringing with him costly vessels for the abbey's altars and books for its collections (Geddes 1986, 258). A more vivid image of the Cistercians' changed attitudes is provided by Bishop Langland of Lincoln's visitation to Thame Abbey, Oxfordshire, in 1526, from which a list of jewels and furnishings belonging to the abbey was collated (Geddes 1986, 259).

Expanding upon this documentary evidence, analysis has been completed on the archaeological material gathered to determine if Cistercian book fittings reflect the developments of Cistercian attitudes towards the ornamentation of their book collections. As part of this research it has been established that strap-and-pin fastening types A.1 and A.7 were used for the bindings of manuscripts from the twelfth century. When analysing in more detail the group of type A.7 fastenings, it was interesting to find that a significant proportion (27 out of 51) was excavated from religious houses belonging to the Cistercian order. A number of these (12 examples) were excavated from Fountains Abbey, one of the largest and wealthiest Cistercian houses in Yorkshire. On the analysis of its form, in conjunction with comparable European fittings and manuscript evidence (Szirmai 1999, 168), it has been interpreted that this type of book fixture is a simpler form of the hinged plate and loop fastening (A.1). The simple nature of this fastening, which is formed merely from two rectangular plates with a large central perforation and held together by rivets, lends itself well to being a type of book fixture that was utilised by the relatively austere Cistercians from the twelfth century.

Given the twelfth-century Cistercian rules on ornamentation, it would perhaps be reasonable to expect that examples of this early type of book fitting (A.7) are plain and unadorned. The archaeological evidence, however, demonstrates that this was not always the case. A total of 12 Cistercian examples of type A.7.1 carry some form of decoration. These fastenings are adorned with engraved, punched or drilled designs, but the overall nature of the decoration is relatively simple and uncomplicated. Of these decorated examples, seven have been excavated from Fountains Abbey (*160, 162, 163, 165, 166, 167* and *170*; Figures 2-65 and 5-14). That more decorated examples of type A.7.1 have come from this particular Cistercian site is perhaps an indication of the abbey's wealth and status. Although these items of book furniture may have been used throughout the later medieval period, the fact that greater numbers of Cistercian fittings of type A.7.1 are plain may be indicative of early Cistercian attitudes towards the ornamentation of their monastic furnishings.

Hooked book fittings of varying types were generally used on English bookbindings from the end of the fourteenth century (see 5.2.1). The hooked fishtail fastening (A.3) is not only the most prevalent form across the entire data, it is also the most common form found on Cistercian sites. A total of 35 out of 68 examples (52 per cent) were excavated from sites belonging to this major monastic order. Within this study's catalogue ten hooked elements of all-metal book fastenings (A.5) have been

160

162

163

166

170

FIGURE 5-14. *Decorated fastenings of type A.7.1 recovered from Fountains Abbey, West Yorkshire (English Heritage, 671214, 671212, 671144, 671114.3 and 671114.1). Scale 1:1.*

recorded and classified. Fifty per cent of these are Cistercian and were excavated from a single site, Fountains Abbey. The increasing numbers of these later forms of book fittings on Cistercian sites may indicate that the Cistercians increasingly used book furniture on the bindings of their books as their attitudes towards adornment became less strict.

In the previous discussion on decoration (see 2.8), it was established that as many as 46 objects of type A.3.1 are embellished with secondary decoration. In total 22 decorated fittings of this type were excavated from Cistercian sites. The style of decoration used on these Cistercian examples of type A.3.1 is not particularly elaborate compared to that used on some artefacts from sites of other monastic orders. They are generally adorned with just one style of ornamentation or motif, such as a ring-and-dot motif as on fitting **285** or an engraved longitudinal line running down the centre of example **126**, both of which are from Fountains Abbey (Figure 5-15). This simplicity in the decoration of the hooked fishtail fastenings (A.3.1) from Cistercian sites may signify a more restrained attitude towards decorative fittings, but they may represent earlier or cheaper examples of this type of fastening.

Earlier in this thesis (see 2.7.1) it was stated that as many as seven of the total

fittings of type A.5 were excavated from St Augustine's Abbey, Fountains Abbey and Battle Abbey, three of the richer monasteries noted in the *Valor Ecclesiasticus* in 1535. That five of these were excavated from the Cistercian abbey of Fountains is perhaps significant. This particular monastery was one of the largest and wealthiest Cistercian houses not only in Yorkshire but in the north of England, with a net income of £1,115 18s. 2d. by 1535 (Page 1913, 137; Cistercians in Yorkshire 2003a) and so may explain why more examples of this rare type of book fastening have been found at the Cistercian abbey. There is, however, the likelihood that excavation biases have resulted in a greater number of type A.5 fastenings being found at Fountains Abbey, which has been extensively investigated (English Heritage 2007). As a consequence, further archaeological investigations of Cistercian and other monastic sites in England and future analysis of book fittings will be necessary to fully understand the extent to which all-metal hooked fastenings were used on English monastic books.

Further analysis of the catalogue indicated that the four book fittings decorated with the sacred trigram of the letters 'ihc' (**201**, **202**, **252** and **302**) (Figures 2-27, 2-60, 2-74 and 5-8) were all excavated from Cistercian sites. From the late thirteenth century, a 'cult' of the Holy Name began to develop in Western Europe and it gained widespread popularity from the mid-fourteenth century. In the development of the cult, the Cistercians played an important role (Carter 2010, 279). From the twelfth century, the spiritual significance of the devotion of the Holy Name was especially recognised by early Cistercian monks (New 1999, 23). St Bernard of Clairvaux (1090-1153) was an early and influential proponent of the cult and expressed devotion to the Holy Name in his fifteenth sermon on the Song of Songs, which would have been disseminated throughout the Cistercian order (New 1999, 23; Carter 2010, 279). St Aelred of Rievaulx (1109-67), a friend and follower of St Bernard and third abbot of Rievaulx Abbey, expressed his personal devotion to the Holy Name in his works, particularly *De spiritali amicitia* ('Spiritual friendship') in which he referred to the "honey of the sweet name of Jesus" (Dutton and Braceland 2010, Prologue 5) and the "mellifluous name of Christ" (Dutton and Braceland 2010, 1.7). Other evidence for the Cult of the Holy Name of Jesus can be seen at Fountains Abbey in the inscriptions on Huby's fifteenth-century bell tower and also the 'IHS' monogram etched into one of the cells beneath the abbot's lodgings rebuilt by Abbot John Darnton (Hope 1900, 337; Carter 2010, 279-80). This evidence for the Cistercian devotion to the Holy Name can be used to explain why book fittings adorned with the iconography of the cult in the catalogue have so far only been found at Cistercian monastic sites.

126

285

In addition to the analysis of several types of book fittings that can be seen to demonstrate evolving Cistercian attitudes towards the appearance of books, the examination of further types of fixtures has found that some are more common on Cistercian sites. Of the examples of domed bosses (B.1), which is the most common form of book furnishing and the third most common form of book fitting overall, a significant proportion (30 out of 42) was recovered from monasteries belonging to the Cistercian order. The remaining 12 fittings were found across Benedictine, Cluniac, Dominican, Franciscan and Gilbertine sites. It has already been established that on average, within this research data, more book fittings have been found on Cistercian sites than Benedictine sites, but this poses the question as to why so many domed bosses (B.1) have been found on Cistercian sites in particular. On the basis that as many as ten domed bosses (B.1) were sometimes used on late medieval bindings, it is not unreasonable that such numbers have been found archaeologically. Of these Cistercian examples, type B.1.1 is the most common variation of domed boss, although each variation given in the typology (B.1.2-B.1.7) is represented by at least one example from a Cistercian site.

Analysis of the domed bosses (B.1) has also found that 15 examples are decorated,

185

299

FIGURE 5-16. *Cistercian domed bosses of type B.1: **185** from Fountains Abbey, West Yorkshire (English Heritage, 671160.3 C), **299** from Rievaulx Abbey, North Yorkshire (English Heritage, 738609). Scale 1:1.*

and that all but two are from Cistercian sites. The 13 Cistercian examples were excavated from Fountains Abbey (**179**, **182**, **183**, **185**, **186**, **189** and **190**) (Figures 2-39, 2-69, 2-73 and 5-16), Rievaulx Abbey (**296-299** and **301**) (Figures 2-37, 2-43 and 5-16) and Roche Abbey, West Yorkshire (**317**). The remaining two decorated bosses were recovered from the Benedictine abbey of St Mary's in Coventry, Warwickshire (**97**; Figure 2-40) (Rylatt *et al.* 2003, 126) and the Dominican friary in Oxford (**273**; Figure 2-43) (Lambrick and Woods 1976, 216). The increased numbers of decorated domed bosses from Cistercian monasteries perhaps provide further evidence of the wealth and status of the northern Cistercian monasteries and their book collections.

Out of the total of the 30 Cistercian domed bosses (B.1), 15 were excavated from Fountains Abbey. This Cistercian abbey is one that has been extensively investigated and excavated, and this may be the cause of larger numbers of domed bosses being found. Nevertheless, Fountains Abbey was a particularly wealthy Cistercian monastery in late medieval England, most likely with a substantial collection of books with metal fittings to protect their bindings. As many as 41 late medieval manuscripts and early printed books survive from the collections of Fountains Abbey (Ker 1964, 88-9). A contemporary catalogue or list of the books that were owned by the

Cistercian monks at Fountains Abbey does not survive, however, given the wealth of the monastery and the relatively large number of books that survive to this day, it is likely that the collections must have been substantial.

Amongst the more unusual examples of the book fittings recorded and classified are those of type B.7 furnishings and it is perhaps significant that the seven examples recorded in the catalogue were all excavated from Cistercian religious houses. Excavated from Fountains Abbey are five artefacts classified as type B.7.1 (*199-203*; Figures 2-60, 2-74 and 5-17), and two were recovered from Rievaulx Abbey (*302* and *303*; Figures 5-8 and 5-17). From this research's analysis of form and decoration (see 2.7.2 and 2.8.4), this type of book fitting has been interpreted to date to the late fourteenth and fifteenth centuries. It is possible that such fittings were used solely by Cistercians; however, the identification and analysis of further examples will be necessary to fully understand the use of this type of furnishing in monasteries.

203

303

*FIGURE 5-17. Furnishings of type B.7.1 from Cistercian sites: **203** from Fountains Abbey, West Yorkshire (English Heritage, 671138), **303** from Rievaulx Abbey, North Yorkshire (English Heritage, 85000325.1 A). Scale 1:1.*

302

5.3.4 Carthusians

Within the catalogue, only a small proportion of fittings have come from sites that belonged to the Carthusian order. A total of ten pieces of book furniture have been identified and recorded. The first charterhouse in England was founded at Witham, Somerset, in 1180-1. From this site a book fitting of type A.8.5 (**330**; Figure 2-24) was excavated from a cell situated at the northern part of the west cloister range (Burrow and Burrow 1990, 173). A single example of type A.9.1 (**248**; Figure 2-27) has been excavated from the site of the London Charterhouse, which was founded in 1371 (Blackmore 2002, 103). In comparison to the single fittings from these two sites, eight book fittings (**258-265**; Figure 5-18) of varying forms have been recovered from Mount Grace Priory, North Yorkshire, which was founded at the end of the fourteenth century (Coppack and Keen 2002, 89, 92-3).

Within this assemblage of Carthusian book fixtures, there are a number of different types represented: A.3, A.6, A.7, A.8, A.9, A.11 and B.4. From the identification and analysis of this range of forms it is possible to see how book fittings were used across the late medieval period. It is worth noting, however, that a relatively small number of charterhouses have received archaeological investigation. Strap-and-pin fastenings comprising types A.7 and A.11 were likely to have been used on manuscript bindings from as early as the twelfth century. Hooked fastenings (A.3) and their associated anchor-/catch-plates (A.6) were in use from the end of the fourteenth century. Similarly, it has been established that fittings of type A.9 were in use during the fourteenth and fifteenth centuries. The finding of these later book fixtures at the London Charterhouse and Mount Grace Priory, both of which were established towards the end of the fourteenth century, is significant. It demonstrates that English Carthusians were using types of book fittings that were current and popular in England and continental Europe during the fourteenth and fifteenth centuries.

Of all the monastic orders, the Carthusian order was the strictest and the most austere, yet the Carthusians regarded reading and writing as the most important form of labour (Sargent 1976, 225; Midmer 1979, 6). Substantial evidence for the production of manuscripts in a Carthusian house has been found at Mount Grace Priory (Coppack and Keen 2002, 310). As discussed in Chapter 3, oyster shells containing red and green pigments have been excavated, and similar colours, used for illustrations, have been found in surviving manuscripts attributed to the site (Coppack and Keen 2002, 310). The finding of book fittings at Mount Grace Priory,

258
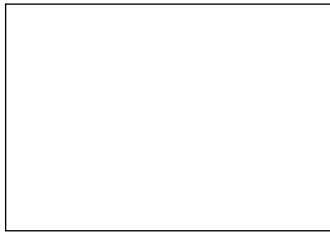
259
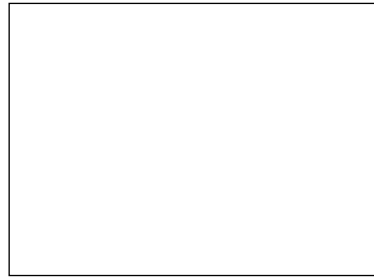
260
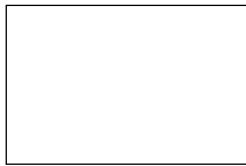
261
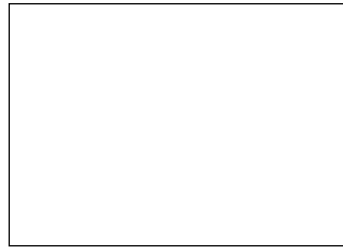
262
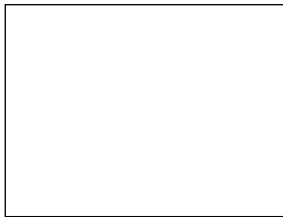
263
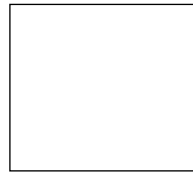
264
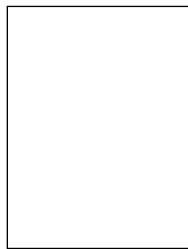
265

FIGURE 5-18. *Book fittings excavated from the Carthusian house of Mount Grace Priory, North Yorkshire (258-264: Coppack and Keen 2002, nos.145, 146, 150, 151, 143, 101, 142 and 144; 265: English Heritage, 88212255). Scale 1:1.*

however, provides evidence for the final products of the Carthusian monks' labours and expands upon the very limited evidence for contemporary bindings of Carthusian manuscripts.

5.3.5 CLUNIACS

The Cluniac order was a reformed order that followed the *Rule of St Benedict*. Cluniac monks believed in the need for closer communion with God and endeavoured to achieve this through the regular practice of the reformed liturgical service (Midmer 1979, 8; Knowles 2010, 149; Burton 2012, 161). Burton (2012, 160-1) has created a reconstruction of the monastic day according to the *Regularis Concordia*, a code of law devised by Æthelwold around 970. This code was based on the strict observance of the *Rule of St Benedict* and reformed regulations, which would, with some variations, have been in force from the early to mid-eleventh century. The *districtio ordinis* of Cluniac monks and their rigorous observance of the liturgy meant that they were occupied in the choir, which reduced their time for other activities, particularly manual labour and study (Knowles 2010, 149; Dyson *et al*. 2011, 2; Burton 2012, 159-60, 164). The Cluniac order also believed in the "right use of wealth", which was in contrast with the austerity of the Cistercians of the twelfth century (Midmer 1979, 8). Processions became a more common feature of liturgical practice; Cluniac monks used every means of chant, ceremony and rich ornament to make the service not only more solemn but also more splendid (Knowles 2010, 149; Burton 2012, 162). As a result, Cluniac churches were often built with "immense visual splendour" (Midmer 1979, 8), although the English houses did not match the splendour of Cluny Abbey, Saône-et-Loire, France (Burton 2012, 39). The Cluniacs' wealth was used for helping the poor, needy, travellers and pilgrims as well as the development of their houses (Midmer 1979, 8). Given the Cluniac attitude towards wealth and the grandeur of their churches and services, it is not unlikely that they used part of their wealth to produce and acquire books of similar standards for their religious services.

The analysis and interpretation of the archaeological evidence collected during this thesis can be used to further develop our understanding of the nature of the bindings of the monastic books of the Cluniacs in England. Although all the Cluniac book fittings within the catalogue have been excavated from only a single site, Bermondsey Abbey (Dyson *et al*. 2011), this assemblage is important for considering

the nature of Cluniac book furniture. The priory and abbey of St Saviour Bermondsey was originally founded in the 1080s by Alwyn Child, an eminent citizen of London, as an alien priory of the abbey of La Charité-sur-Loire, France (Midmer 1979, 65; Dyson *et al.* 2011, 1-2; Burton 2012, 37). In 1381/1399 the priory received letters of its new denizen status and became independent of its mother-house. By the formulation of the *Valor Ecclesiasticus* in 1535, Bermondsey was one of the richest houses of the Cluniac order in England with a net income of £474 (Midmer 1979, 65; Dyson *et al.* 2011, 3), and so it is perhaps not surprising that as many as ten book fittings have been found at this one site.

From Bermondsey Abbey the ten book fittings were excavated between 1984 and 1995 (Dyson *et al.* 2011) and as part of this research they have been classified into six different types of book fittings (A.1.1, A.2.1, A.7.1, A.11.1, B.1.2 and B.4.1). Similar book fittings to those recovered from Bermondsey Abbey have been found at many other monastic sites belonging to other orders across England. Consequently, what can be concluded from these fittings from Bermondsey Abbey is limited. Nevertheless, there are certain aspects of this Cluniac assemblage of book furniture that warrant more detailed consideration. First, this collection of artefacts indicates that a wide range of fixtures were used on late medieval books. Types A.1.1, A.2.1 and A.7.1 all functioned via the strap-and-pin mechanism so it is appropriate that a pin and base-plate (A.11.1) (**49**; Figure 2-32), although incomplete, has also been found at this site. Second, it is unusual that no hooked fastenings, such as type A.3.1 which is the most common form of book fitting in this database, have been found at this site. The absence of this type of book fitting, which was introduced and used from the end of the fourteenth century, would perhaps suggest that fastenings were not used as frequently at this site in the latter centuries of the late medieval period. It is also possible that earlier forms were reused on new bindings, reducing the need for new fittings in contemporary forms. The nature of several of the fittings excavated, however, indicate that new book fittings continued to be used by the Cluniac monks at Bermondsey throughout the late medieval period. This is supported by the corner-piece (B.4.1), which was found at the site of the infirmary of the abbey (**53**; Figure 2-53) (Dyson *et al.* 2011, 73-88). As previously discussed (see 2.8.2), the analysis of the style of the ornamentation on this particular example has suggested that it dates to *c.*1520 (Egan 2011, 246). This specific object demonstrates that the Cluniac monks not only continued to furnish their books with copper-alloy fittings, but used ones that were decorated in a style that was in regular use in the early sixteenth century.

It has already been shown (see 2.7.2) that comparable fittings to the domed bosses (B.1.2) from Bermondsey Abbey (*50, 51* and *52*; Figure 2-39) have been found on late fourteenth to mid-sixteenth-century northern German and Belgian bookbindings (Adler 2010, 40, 104). Comparative fittings on manuscripts produced on the Continent indicate the possibility that such fittings found in England were influenced or produced by mainland Europeans or that books with these fittings were imported. The examination of this assemblage of book fittings from the Cluniac abbey of Bermondsey has demonstrated that the earlier strap-and-pin fastenings of varying forms may have been favoured by monks belonging to this order as later hooked fastenings have not been found on site.

Another Cluniac house that has undergone archaeological investigations is Pontefract Priory, West Yorkshire (Bellamy 1965). Similar to Bermondsey Abbey, Pontefract Priory was relatively wealthy; by 1535 the monastery had a net income of £335 12s. 10½d. (Page 1913, 186). Unlike Bermondsey Abbey, however, no books fittings have been identified from the excavation reports, although a probable twelfth-century copper-alloy stylus was recovered from a make-up of a floor level in the north cloister walk, which was used as a scriptorium (Bellamy 1965, 124). It is possible that the use of book fittings varied greatly across Cluniac sites, and so other Cluniac houses will need to be analysed in order to fully understand the use of late medieval book fittings in Cluniac houses and to give a more complete picture of the different types of book fittings utilised by the Cluniac order in England during the late medieval period.

5.3.6 Gilbertines

Only a small assemblage of book fittings has been excavated from a single site that belonged to the Gilbertine order, St Andrew's Priory in York, North Yorkshire, as this is the only more modern excavation of a Gilbertine house (Kemp 1996; Ottaway and Rogers 2002). As such, those from St Andrew's Priory cannot give a complete view of all the different types of book fittings that were used by the Gilbertines across all of their sites in England. This evidence can only provide a snapshot of the types of fixtures that were attached to Gilbertine books. Six book fittings (*331-336*; Figures 2-5, 2-15, 2-32 and 5-19) were found at this particular site during excavations, and each of these artefacts represents a different classification in this research's typology (A.1.1, A.3.1, A.5.1, A.11.1, B.1.1 and B.4.2). The range of forms, which includes examples of the

earlier strap-and-pin fastenings and the later hooked fastenings, demonstrates that book fittings were used throughout the late medieval period at this site.

Unlike several of the contemplative orders, the Gilbertines, who drew their inspiration from the Cistercians, did not transcribe anything other than service books without the permission of the Master of the order (Golding 1995, 179-80). Whilst little is known about the monastic libraries of this English order, its members would have needed sufficient books for their religious services in the church. In addition to book fittings, a number of different types of material culture associated with the production of manuscripts have been found at this particular Gilbertine site. These include five bone parchment-prickers and three lead points (Figure 6-14) (Kemp and Graves 1996, 114; MacGregor *et al.* 1999, 1974; Ottaway and Rogers 2002, 2936, 2989). The presence of these artefacts and the items of book furniture demonstrate the on-site production and the bindings of books.

The simplicity of architectural forms, paintwork and glazing at St Andrew's Priory is thought to emphasise the Gilbertine concern to avoid elaboration in order to pursue a rigorous religious life (Kemp and Graves 1996, 157). This attitude may be reflected

332

335

336
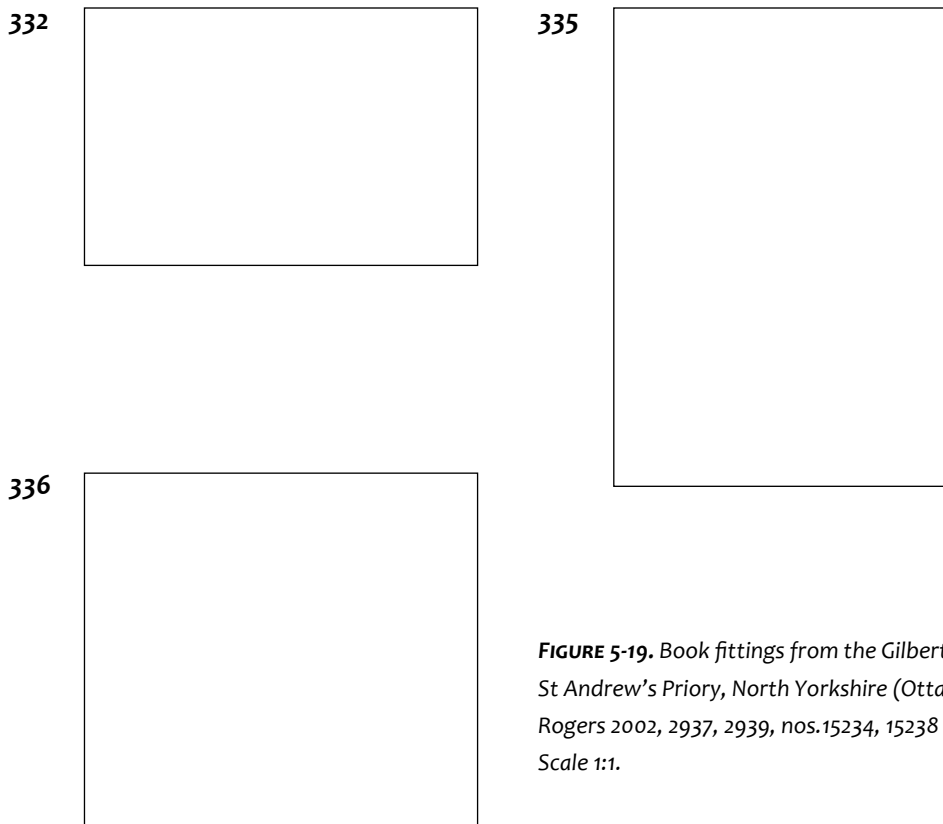
FIGURE 5-19. *Book fittings from the Gilbertine site of St Andrew's Priory, North Yorkshire (Ottaway and Rogers 2002, 2937, 2939, nos.15234, 15238 and 15240). Scale 1:1.*

308

in the book fittings that have been recovered from this Gilbertine house. Of the six fittings excavated from this site, only one is decorated (**332**; Figure 5-19). This example is a hooked fishtail fastening (A.3.1) and is decorated with a simple ring-and-dot motif comprising of a central blind-drilled hole with compass-engraved concentric circles (Ottaway and Rogers 2002, 3147). The general absence of decoration on the book fittings excavated from this site may reflect, to a certain extent, the Gilbertine pursuit of an "authentic monastic life" (Kemp and Graves 1996, 157) through the avoidance of ostentatious ornamentation. It is also probable that the wealth of this Gilbertine site influenced the numbers of book fittings that were used and their nature. According to the *Valor Ecclesiasticus* of 1535, St Andrew's Priory had an income of £47 14s. 3½d. (Page 1913, 256). Compared to other Gilbertines houses, such as Watton Priory, East Yorkshire, which had an income of £360 16s. 10½d. in 1535 (Page 1913, 255), St Andrew's Priory was particularly poor. Therefore, this is likely to have impacted upon the books, and their fittings, used in this particular house.

5.3.7 MENDICANT ORDERS

Of the data collected, a total of 56 artefacts excavated from across 15 sites of mendicant friars and nuns in England have been identified and recorded as book fittings (Table 5-3). As with houses of the contemplative orders, it is important to recognise that English mendicant houses have not been fully excavated, and that other archaeological biases will have had a bearing on the numbers and types of book furniture that have been excavated from these sites. When analysing mendicant sites, a unique problem is that these houses were generally located in urban centres and so have faced extensive demolition and subsequent redevelopment. Nevertheless, the nature of the mendicant way of life will most certainly have had an impact. A significant proportion of these 56 artefacts have come from sites of the friars of the Dominican order (the Order of Preachers). A total of 25 pieces of book furniture have been collected and recorded from across five excavated sites. An important aspect of Dominican practice was the emphasis on study and the establishment of a programme of theological training for the strengthening of the Church against ignorant and heretical beliefs (Jackson 1974, 73; Midmer 1979, 12; De Hamel 1997, 123). Unlike the contemplative monastic orders, the pastoral mission of the Dominican friars presented problems for the traditional monastic lifestyle. Consequently, mitigations allowed the friars freedom to move from one house to another,

Monastic order	Site	No. of fittings
Austin friars	Leicester, Austin Friars	3
Carmelite friars	Coventry, Whitefriars	12
	Maldon, Whitefriars	1
	Newcastle-upon-Tyne, Whitefriars	1
	Oxford, Whitefriars	2
Dominican friars	Beverley, Blackfriars	3
	Chelmsford, Blackfriars	1
	Chester, Blackfriars	4
	Guildford, Blackfriars	14
	Oxford, Blackfriars	3
Franciscan friars	Gloucester, Greyfriars	1
	Lewes Friary	1
	Northampton, Greyfriars	2
Franciscan nuns	Denny Abbey	7
Trinitarian friars	Thelsford Priory	1
Grand Total		56

TABLE 5-3. *The number of book fittings excavated from sites of the mendicant orders.*

releasing them from lengthy offices and manual labour to pursue study, lecturing and preaching (Midmer 1979, 12; Lawrence 2001, 255). Like other monastic orders, Dominican friars needed books to carry out their mission. Bound by a vow of poverty, the Dominicans, along with other mendicant friars, were fervent buyers of books that were required for the continuity of their intellectual studies. The friars needed easily portable books for travelling and preaching (Talbot 1958, 74; Jackson 1974, 73; Clement 1995, 18; Derolez 2003, 29). This requirement, in addition to the friars' limited resources, would have most likely influenced the nature of the books that were purchased, including their condition and the types of book furniture that would have been affixed to their bindings. It is also likely that friars purchased many books that had humble bindings and consequently no fittings at all.

A large quantity of the Dominican fittings (14 examples) has come from the site of the Blackfriars in Guildford, Surrey (*205-218*; Figures 2-20, 2-32, 2-33, 2-49, 2-65, 2-67 and 5-20) (Poulton and Woods 1984, 79). All of these book fittings, thought to be from choir books, were excavated from dust layers beneath the choir stalls in the

206
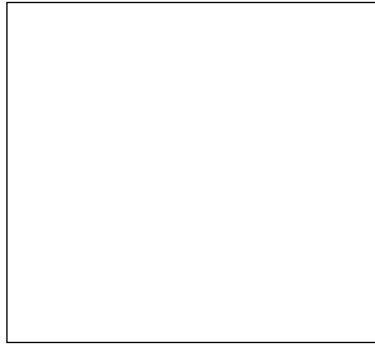
207
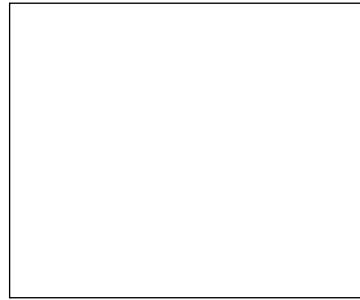
208

213
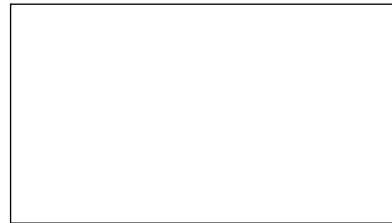
214
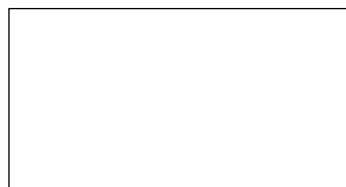
216
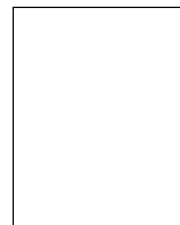
FIGURE 5-20. *Book fittings excavated from the site of the Guildford Blackfriars, Surrey (Poulton and Woods 1984, 74-7, nos.13, 14, 15, 27, 28 and 2). Scale 1:1.*

friary church alongside other forms of personal items, including dress accessories, and are thought to have been lost during the daily round of offices (Poulton and Woods 1984, 79). Although quite a number of book fittings have been found at the site of the Blackfriars in Guildford, the nature of the assemblage suggests that the friars' books were not fitted with particularly elaborate or ornate pieces of book furniture compared to many from sites of other monastic orders. The prevalence of simple rectangular strap-and-pin fastenings (A.7) and their corresponding pins and base-plates (A.11), and the absence of hooked fastenings, such as type A.3, from Guildford's Dominican friary perhaps indicate the poverty of the friars. The possible penury of the friars is also suggested by the reuse of materials to produce new book fittings. The engraved decoration of an example of type A.7.1 (**205**; Figure 2-65) and that of a belt fitting both indicate that these two objects were made from the same recycled copper-alloy plates (Poulton and Woods 1984, 79).

Across the total fittings from Dominican sites, only three artefacts have been classified as hooked fishtail fastenings (A.3.1). Two have come from the friary in Chester, Cheshire (**92** and **93**; Figure 2-9) (Lloyd-Morgan 1990, 166), and one from Beverley, North Yorkshire (**54**; Figure 5-21) (Goodall 1996, 158). Despite this, fittings of this type are in fact prevalent across the artefacts recorded from mendicant sites. Twelve examples of this type from mendicant sites have been classified within the catalogue. Other forms of hooked fittings have also been recorded and identified. There are three examples of type A.4 recorded, one each from Denny Abbey, Cambridgeshire, which was occupied by Franciscan nuns between 1342 and 1539 (**112**; Figure 5-21) (Christie and Coad 1980, 255), the house of the Austin Friars in Leicester (**245**; Figure 5-13) (Clay 1981, 133) and the Franciscan friary in Northampton (**267**; Figure 5-21) (Williams 1978, 149). A single example of type A.5 was also excavated from Denny Abbey (**113**; Figure 5-21) (Christie and Coad 1980, 257). A total of six anchor-/catch-plates (A.6) (**104-106, 114, 246** and **266**) have also been identified from the finds of excavated mendicant houses. In total, 22 pieces of book furniture that formed parts of fastenings that functioned via the hooked mechanism have been recovered from mendicant sites and recorded in the catalogue. Given that hooked fastenings were used in England from the end of the fourteenth century, it is to be expected that they have been found on the sites of mendicant orders, which were increasing in numbers from the thirteenth century.

This does not mean, however, that earlier forms of book fixtures were not utilised by the mendicant orders. A total of 21 book fixtures that worked via the strap-and-

54

91
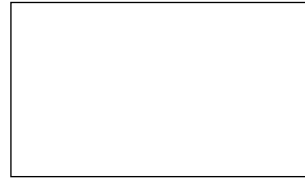
94
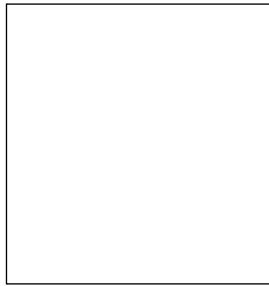
112
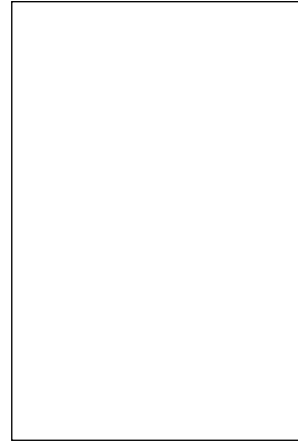
113
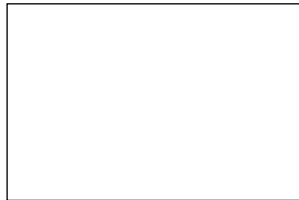
267

*FIGURE 5-21. Book fittings from sites of the mendicant orders: **54** from the Beverley Blackfriars, East Yorkshire (Foreman 1996, 156, no.893), **91** and **94** from the Chester Blackfriars, Cheshire (Ward 1990, 167, no.16 and 15), **112** and **113** from Denny Abbey, Cambridgeshire (Christie and Coad 1980, 256, 258, no.4 and 42), **267** from the Northampton Greyfriars (Williams 1978, 148, no.12). Scale 1:1.*

pin mechanism have been recorded from the religious houses of the mendicant orders. These comprise four hinged plate and loop fittings (A.1) (*91, 244, 280* and *326*), ten double rectangular fastenings (A.7) (*55, 94, 107, 108* and *205-210*), and seven corresponding pin and base-plates (A.11) (*109, 110, 212-215* and *272*) onto which these two forms would have fitted. As has already been shown (see 2.7.1), these strap-and-pin fastenings were used as early as the twelfth century, however, they continued to be utilised throughout the late medieval period. Consequently, the examples from sites of the mendicant orders are difficult to date based on the analysis of their form. Unfortunately, the stratigraphic evidence for these artefacts cannot provide more clarification. Of those excavated from datable contexts, the majority have come from Dissolution and post-medieval phases, such as two examples from the site of the Chester Blackfriars (*91* and *94*; Figure 5-21), which were excavated from layers dating to the demolition of the friary church in the sixteenth century (Lloyd-Morgan 1990, 168). The type A.1.1 fastening from the Austin friary at Leicester (*244*; Figure 2-5) was excavated from a late fourteenth- to early fifteenth-century context in the location of the western range of the little cloister (Clay 1981, 133). Whilst this gives an earlier, pre-Dissolution date for its deposition, demonstrating that the object was lost or disposed of by the early fifteenth century at the latest, a more accurate date for the manufacture or use of this particular object cannot be given. Nevertheless, these strap-and-pin fittings demonstrate that mendicant friars used older forms of fittings for their bindings as well as those that became more common from the end of the fourteenth century.

The archaeological evidence also indicates that there is a prevalence of fastenings over furnishings. Within the catalogue, a total of 45 fastenings have been identified from mendicant sites in comparison to 11 furnishings. This may be a result of the way in which the friars used books. As mendicant friars needed books that were suitable for traveling and preaching, it is probable that furnishings, which were used to protect covers from abrasion on desks, lecterns and shelves, were not as necessary as fastenings, which kept books shut when not in use, perhaps during traveling. In general the relatively small number of identified fittings that have been recovered from the sites of the mendicant orders may suggest that the friars used fewer books with fittings attached to them. Furthermore, the fact that friars were often away from their friary preaching or studying at university most likely had an impact on the numbers of books that were housed within the friary itself. It is possible then that smaller numbers of book fittings are likely to be found archaeologically at the friaries

compared to the houses of the contemplative orders.

All the mendicant orders had similar aims, and previous analysis of evidence from extant manuscripts and surviving catalogues suggests that there was little difference in their academic interests (Humphreys 1990, xv). One piece of documentary evidence that provides an idea of the types of books required by the friars for their religious and scholarly needs is the *Constitutions* of Humbert of Romans, a French Dominican friar who served as the fifth Master General of the order from 1254 to 1263 (Talbot 1958, 75). In this rule it is stipulated that all the houses of Dominican friars were to have the following types of texts: Bibles, glossed Bibles, concordances, commentaries, *Summae* of theology and canon law, *Quaestiones*, ecclesiastical decrees, the *Decretals*, *Distinctiones morales*, sermons for various times of year, biblical and secular histories, systematic *Sentences* such as that of Peter Lombard, chronicles, hagiographical works and "many other books of a like nature, in order that the brethren may find ready to hand whatever they need" (Talbot 1958, 75).

It is believed that only three manuscripts survive from the medieval library of the Chester Blackfriars (Ker 1964, 50; Ward 1990b, 171). Of these three manuscripts, all of which were written in the early thirteenth century, only one survives in its original thirteenth-century binding (Ward 1990b, 171). This manuscript (Shrewsbury, Shrewsbury School, MS I), which contains glossed texts of *Sapientia* and *Ecclesiasticus*, bears an inscription indicating that it once belonged to Master Alexander de Stavensby, Bishop of Lichfield and Coventry between 1224 and 1238; however, the inscription "*Iste liber est fratrum predicatorum Cestrie*", shows that this manuscript was subsequently owned by the Dominicans of Chester (Ward 1990b, 171). As described by Ward (1990b, 171) the binding comprises bevelled oak boards covered with white leather and a thick white chemise. There is evidence of a central strap-and-pin fastening, which is now missing, and the binding bears the mark of seventeenth-century chain staples on both the front and back covers (Ward 1990b, 171). From this site two forms of strap-and-pin fastenings (A.1.1 and A.7.1) were excavated from an area just to the west of the church (*91* and *94*; Figure 5-21) (Lloyd-Morgan 1990, 168). This archaeological evidence can expand upon the very limited evidence of the bindings of the manuscripts that belonged to the Dominican friars at Chester. With the knowledge that the surviving thirteenth-century binding once had a central strap-and-pin fastening, the two artefacts that have been found archaeologically provide clear evidence for the types of fastenings that would have been used on manuscripts held by the Blackfriars at Chester.

A total of 16 book fittings of varying forms excavated from across four Carmelite friaries have been recorded. A large number of these (12 fittings) were found in the 1960s and 1970s at the site of the post-medieval Free Grammar School, originally the site of the Carmelite friary, at Coventry, Warwickshire (Woodfield 1981, 94-7). The friary was founded in 1342 and was suppressed two centuries later in 1538. In 1544, the buildings, excluding the church, were bought by John Hales who founded Coventry Free Grammar School (Woodfield 1981, 81-2; Soden 2003, 282). The book fittings were recovered from the earliest period of the school, c.1545-c.1557/8 (Woodfield 1981, 94-7). These finds represent the deposition of books in a post-medieval phase; however, they may represent the reuse of late medieval monastic books. The analysis of the various forms of book furniture found at this site indicates that these artefacts are late medieval in date, some of which may date back to as early as the twelfth century. Two fixtures of type A.7.1 (*107* and *108*; Figures 2-20 and 5-22) and two of type A.11.1 (*109* and *110*; Figure 2-32) all demonstrate the use of earlier strap-and-pin fastenings on bookbindings. Given the nature of the site and that such fittings continued to be used throughout the late medieval period, however, it is difficult to give a more accurate date for these fittings. The finding of larger numbers

108

204

FIGURE 5-22. *Book fittings from sites of the mendicant orders:* **108** *from the Coventry Whitefriars, Warwickshire (Woodfield 1981, 92, no.46),* **204** *from the Gloucester Greyfriars (English Heritage, 0850-00003245). Scale 1:1.*

of hooked fishtail fastenings (A.3.1) and associated anchor-/catch-plates (A.6) ties in with the date of the friary. As has been shown, such fittings date from the end of the fourteenth century and continued to be used for the remainder of the late medieval period and on into the early post-medieval period. The dating of these objects corresponds with the dating of the Carmelite friary, which was founded in the middle of the fourteenth century, the occupation of which continued after the dissolution of the religious house.

Of the 12 examples of type A.8, only two were excavated from sites of the mendicant orders, one being the Dominican friary in Guildford (*211*; Figure 2-67) (Poulton and Woods 1984, 79) and the other the Franciscan friary in Gloucester (*204*; Figure 5-22) (Ferris 2001, 124). The remaining ten objects of this type were recovered from sites of Benedictine monks and nuns, and Carthusian and Cistercian monks. The analysis of these artefacts and the monastic orders from which they were found indicates that there is little correlation between this type of fastening and the monastic order of the sites from which examples have been excavated. Nevertheless, it is noteworthy that the two fittings from the friaries are the only decorated examples of type A.8 fixtures; those from the houses of the contemplative orders are plain. The example from the site of the Guildford Blackfriars was recovered from dust layers beneath the choir stalls (*211*), along with other examples of book furniture as already discussed (Poulton and Woods 1984, 79). The artefact of this type from the house of the Gloucester Greyfriars was also found in the friary church (*204*) (Ferris 2001, 124). In addition to the complexity and wide variations in form of type A.8 fittings, their relative rarity on English monastic sites and on surviving English manuscripts suggests that the few examples that have been found are bespoke items. In the case of the two decorated examples of the Guildford Blackfriars and Gloucester Greyfriars, they perhaps demonstrate the purchase of previously owned books or particular books of interest.

5.3.8 Summary

The analysis of the correlation between book fittings and the religious order of the sites from which they have been excavated has found that certain forms of book fastenings and furnishings were more commonly used on sites of particular monastic orders. Most notably, it has been shown that a greater number of fixtures have been

recovered from Cistercian houses compared to houses of other orders. Furthermore, given the large numbers of Augustinian houses that were founded in England during the late medieval period, it is interesting that only a relatively small number of fittings recorded in the catalogue have come from sites belonging to this order. This analysis has also found that future investigations need to be undertaken, taking into consideration a greater number of monastic sites from all monastic orders, in order to further develop the interpretations discussed in this research.

5.4 GEOGRAPHICAL DISTRIBUTION

From the examination of the total of 336 book fittings recorded in the catalogue, 155 artefacts were excavated from monastic sites in the North of England, 38 from the Midlands, and 143 from the South of the country (Figure 5-23). As a consequence of the nature and quantity of the materials submitted for this research it must be recognised that it is unsafe to draw significant conclusions from any statistical analysis of the fundamental geographical distribution of the pieces. Examining the catalogued material excavated from Benedictine and Cistercian sites, larger quantities of Cistercian fittings have come from the North whilst greater numbers of Benedictine fittings have come from the South. The distribution of the sites from which these fittings have been recovered and also the distribution of all Benedictine and Cistercian sites founded in England in the late medieval period, however, does mean that only limited conclusions can be drawn from this observation. Nevertheless, despite the limitations of the sample of data, the different forms of fittings that have come from the northern, southern and central areas of England have been analysed. From this it has been possible to make some comments on the distribution of certain types of fixtures. The analysis of the recorded archaeological material has demonstrated that there are several potential correlations between the different types of book fittings and the geographical locations in which they were found. This section discusses these findings, considering the broader interpretations of the use of book fittings on monastic books across late medieval England.

Notwithstanding the broader distribution outlined above, the majority of the book fittings recorded have been excavated from two regions, the South East (105 examples) and Yorkshire and the Humber (142 examples). From the South East, identified book fittings have been recovered from 11 monastic sites. A large
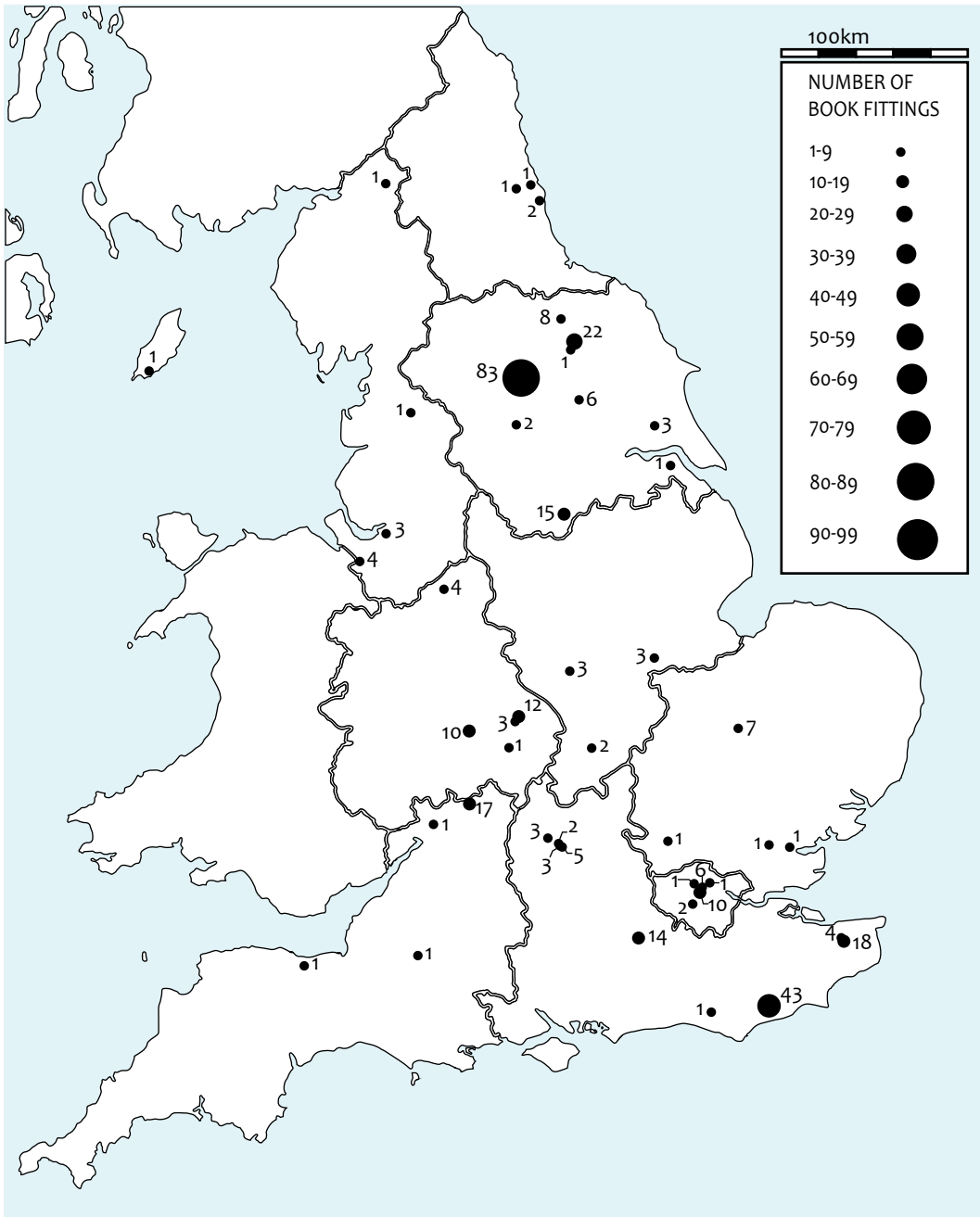
FIGURE 5-23. *Map showing the distribution of the 336 catalogued book fittings.*

proportion of fixtures from this region (41 per cent) have come from the Benedictine abbey of Battle, East Sussex. From the Yorkshire and Humber region, ten religious houses have had book fittings excavated from their sites, the majority (58.5 per cent) having been found at the Cistercian abbey of Fountains, West Yorkshire. It has been argued that the Cistercians were the most significant order in medieval Yorkshire, with many of their foundations having extensive libraries (Friedman 1995, xvii). The recovery of large numbers of book furniture from Battle Abbey and Fountains Abbey may simply reflect the more extensive excavations that have been undertaken in previous years. Nevertheless, given the wealth and status of these two major sites, the finding of significant quantities of this type of late medieval material culture demonstrates that these two sites most probably used many books that had fittings attached. Given the limited surviving evidence of contemporary bindings from these sites, these archaeological artefacts expand upon our understanding of the nature of monastic bookbindings.

Examining the data in more detail, the analysis of the different areas from which book fittings have been excavated does demonstrate that certain types of book fittings are more predominant in certain areas or regions. In the discussion on the correlations between book fittings and monastic orders (see 5.3), it was demonstrated that equal numbers of type A.2 fastenings were recovered from both Augustinian and Benedictine sites. This is especially noteworthy as the sites from which these particular fixtures have come from, St Augustine's Abbey and St Gregory's Priory, are both located in Canterbury, Kent, in the South East region of England. The single example that was not found in Canterbury was, however, excavated from a site also in the South East region of the country, the Cluniac priory and abbey of St Saviour Bermondsey, Surrey (*45*; Figure 2-9) (Egan 2011, 246). Whilst archaeological practices may have affected the numbers of book fittings that have been found and recorded during data collection, the archaeological material suggests that this type of book furniture was used, and possibly even manufactured, within the South East region of the country, and possibly in Canterbury itself.

From the analysis of the different forms of book fittings and the types of monastic houses from which they were excavated, it became evident that of the 18 main categories in the typology all but one are represented by artefacts excavated from Cistercian sites. Within the catalogue, the only type of book furniture that has not been recovered from a Cistercian site is type A.2, and as discussed, fittings of this type were excavated from Augustinian, Benedictine and Cluniac houses. In view of the

large numbers of the wide variety of book fixtures that have been recovered from Cistercian houses, the absence of type A.2 from Cistercian sites warranted further investigation. It has already been established that type A.2, which is similar to but more elaborate in form than type A.1, was likely to have been used throughout the late medieval period from as early as the twelfth century. From the investigation into the customs of the different monastics orders, it is difficult to establish why this type of book fitting has so far not been found archaeologically on any Cistercian sites. It is possible that the Cistercian attitude towards the use of ostentatious ornamentation may have prohibited the use of composite strap-and-pin fastenings with looped spacers (A.2). It is known, however, that Cistercian rules on the use of ornate book furniture began to relax from the mid-twelfth century (Geddes 1986, 257), and so it is likely that Cistercian attitudes towards decoration do not explain the absence of type A.2 fastenings on Cistercian sites. Archaeological biases and inaccuracies may have influenced this finding, although it has already been established within the scope of this study that on average more book fittings have been recovered archaeologically from Cistercian houses (see 5.3.3). The analysis of the geographical locations of the sites at which fittings of type A.2 have and have not been found perhaps provides an answer. That all the examples of type A.2 identified have come from monastic sites in the south of England has been discussed above. It is interesting then that fittings of type A.2 have not been found in the north of England, nor at Cistercian sites, many of which were founded in the north of England. Consequently, it may be that this particular type of fitting was used, and possibly manufactured, solely in the South East of England. The recovery and classification of further examples will help to further substantiate this hypothesis.

Type A.3 is the largest category with 68 examples identified and recorded from 24 monastic sites in England (Figure 5-24). The geographical distribution of these hooked fastenings is relatively uneven; 47 per cent (32 examples) has been recovered from the Yorkshire and Humber region. The largest assemblage of this type of fastening from this region was excavated from Fountains Abbey, from which 19 examples have been identified (*126-144*). Within this region, such artefacts were also recovered from the Cistercian sites of Rievaulx Abbey, North Yorkshire (*284-289*), and Roche Abbey, West Yorkshire (*308-310*). Examples from the Yorkshire and Humber region, however, were not solely from Cistercian sites. Hooked fishtail fastenings (A.3.1) were also excavated from the Dominican friary at Beverley, East Yorkshire (*54*) (Goodall 1996, 160), the Carthusian priory of Mount Grace, North Yorkshire (*258* and *259*)
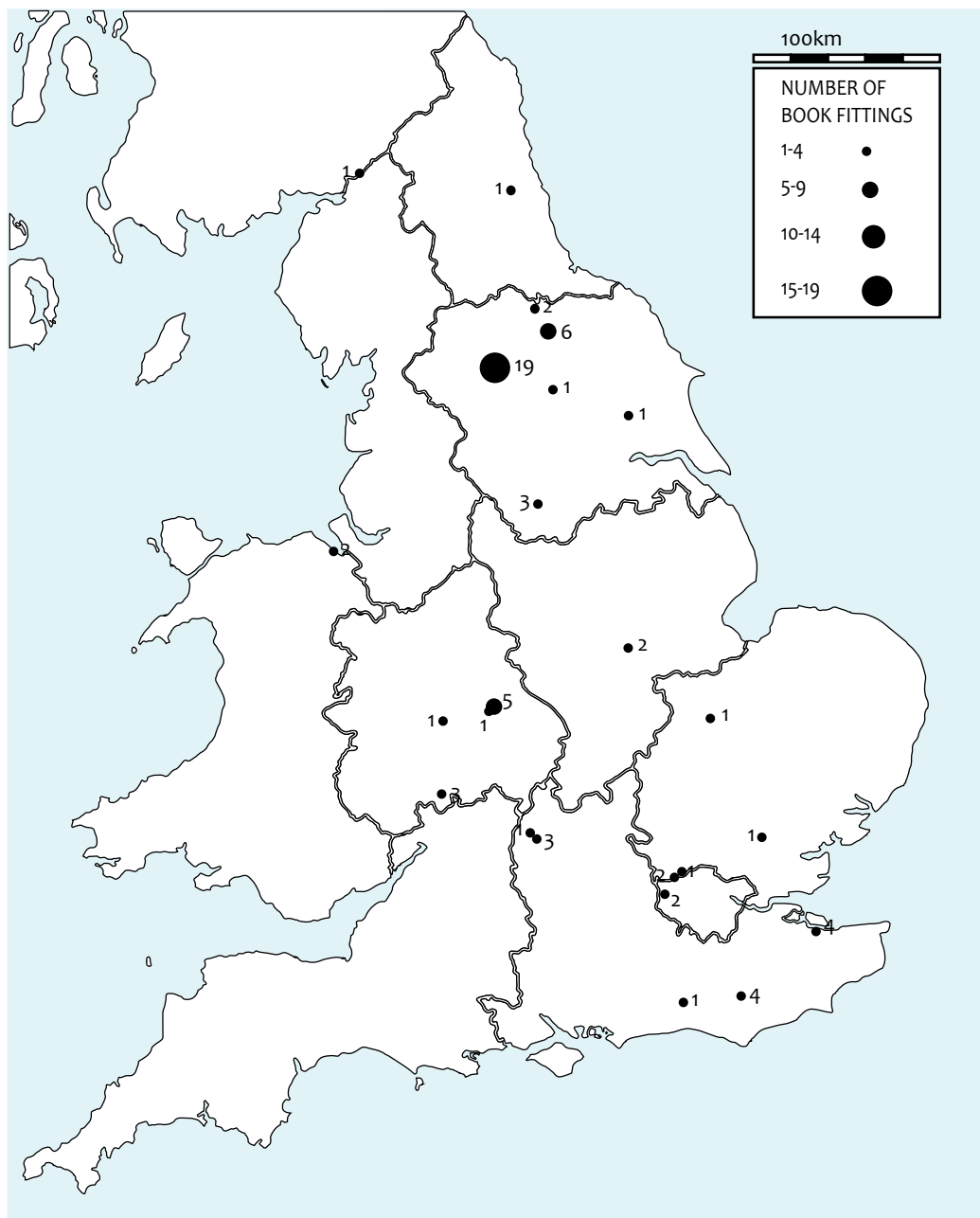
FIGURE 5-24. *Distribution map of catalogued examples of fastening type A.3.1.*

(Coppack and Keen 2002, 92), and the Gilbertine priory of St Andrew's in York, North Yorkshire (*332*) (Ottaway and Rogers 2002, 3147). Whilst a significant proportion of type A.3.1 fastenings have been excavated from several sites in counties of the Yorkshire and Humber region, the remaining 36 examples have been excavated from sites located in 13 counties across eight other regions of England. Therefore, based on the distribution of these fittings, it is clear that they were used on monastic books throughout the country by religious houses of various orders.

Of the ten examples of the hooked elements of all-metal fastenings (A.5.1), seven have been recovered from the north of England. Six of these were recovered from the Yorkshire and Humber region, with five from Fountains Abbey (*147-151*) and one from St Andrew's Priory (*333*) (Ottaway and Rogers 2002, 3147). The seventh example, also from the north of the country, was excavated from Jarrow Priory, Durham, in the North East region (*240*) (Cramp 2006, 248). The remaining three examples, from the south of the country, were found in the South East and East regions, one from Battle Abbey (*13*), one from St Augustine's Abbey (*80*) (Henig and Woods 1988, 216) and the other from Denny Abbey, Cambridgeshire (*113*) (Christie and Coad 1980, 257). The geographical spread of these artefacts does not overtly suggest that this type of book furniture was used in a particular region, nevertheless, as already discussed, the discovery of these fittings at several of the richer monasteries noted in the *Valor Ecclesiasticus* in 1535, such as St Augustine's Abbey, Fountains Abbey and Battle Abbey, may indicate that they were utilised by some of the wealthy monastic houses that had large book collections.

The regions with the highest proportions of anchor-/catch-plates (A.6) are the South East (ten examples) and Yorkshire and the Humber (11 examples) (Figure 5-25). From the South East region, eight examples of such fittings were excavated from Battle Abbey (*14-21*) (Geddes 1985, 162) and two from St Frideswide's Priory, Oxfordshire (*278* and *279*) (Scull 1988, 39). Excavated from sites located in the Yorkshire and Humber region are seven examples of type A.6 from Fountains Abbey (*152-158*), one fitting from Mount Grace Priory (*260*) (Coppack and Keen 2002, 93), another from Rievaulx Abbey (*290*) and two from Roche Abbey (*312* and *313*). The remaining ten fittings of this type have been excavated from sites located in six other regions across the country. The wide distribution of the anchor-/catch-plates recorded in the catalogue demonstrates the commonality in use of these fittings across late medieval religious houses. This corresponds with the distribution of hooked fastenings, particularly the fishtail form (A.3), for which type A.6 fittings were an important
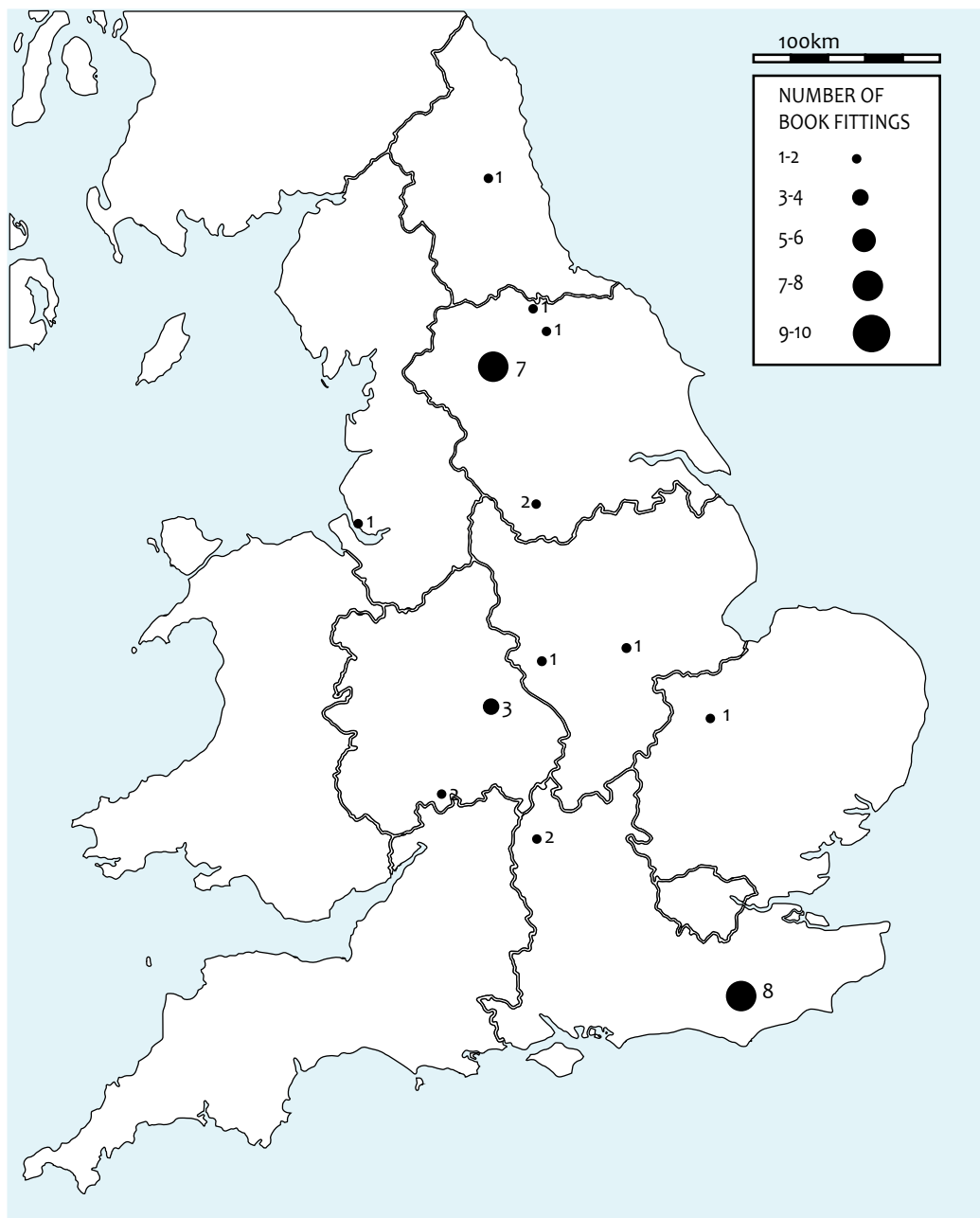
FIGURE 5-25. *Map displaying the locations of fittings of type A.6.*

associated part.

Within the catalogue, only three examples of type A.9 have been identified. Despite the limited sample for this type, it is noteworthy that all three fittings have been excavated from London sites. The single specimen of type A.9.1 was excavated from the Carthusian charterhouse (**248**; Figure 2-27) (Blackmore 2002, 103). The two examples of type A.9.2 were both excavated from the Cistercian abbey of St Mary Graces (**252** and **253**; Figure 2-27) (Stevenson *et al.* 2011, 150). It is significant that the examples of type A.9 were not only excavated from monastic sites in London but that they were found at monasteries that were founded in the fourteenth century, which is relatively late compared to the foundation dates of most major monasteries. St Mary Graces Abbey was founded in 1350 by King Edward III, whereas the vast majority of Cistercian foundations in England were made before 1152 when the General Chapter forbade further expansion (Grainger and Phillpotts 2011, 74). Few Cistercian foundations were made after the turn of the thirteenth century and these included Netley Abbey, Hampshire, in 1239, and Hailes Abbey in 1246. Between the founding of Rewley Abbey, near Oxford, in 1281 and St Mary Graces in 1350, no other Cistercian house was founded (Grainger and Phillpotts 2011, 74). The London Charterhouse was founded by Edward III's friend and courtier Sir Walter Manny in 1371. In previous studies, close links have been made between the foundations of these two sites (Midmer 1979, 206; Barber and Thomas 2002, 70; Grainger and Phillpotts 2011, 75). Both houses were founded on and around the sites of Black Death cemeteries, a phenomenon known to have occurred only in London; there are no other known monastic foundations on former epidemic cemeteries (Barber and Thomas 2002, 70). The Cistercian abbey was founded on the site of a large Black Death cemetery and chapel in East Smithfield, and thought to act as a memorial or mausoleum to all those who died of the plague, to those buried in the cemetery, and to Thomas Bradwardine, friend and confessor of the king, who died of the plague in 1349 (Grainger and Phillpotts 2011, 75). The Carthusian monastery was founded as a memorial to the dead on and around the Black Death cemetery and chapel in West Smithfield (Barber and Thomas 2002, 1; Grainger and Phillpotts 2011, 75). Grainger and Phillpotts (2011, 75) view both foundations as "acts of extreme piety on the part of the Court in the post-plague environment, and part of a general return to favour of the 12th-century reforming orders among the echelons of society".

Only one fitting of type A.10.1 has been classified in the catalogue, and it was excavated from Fountains Abbey (**174**; Figure 2-30). As already shown (see 2.7.1), a

comparable example of type A.10 has been recorded through the PAS. This fitting (SWYOR-D9A074; Figure 2-31) was found in Fulford, an historic village on the outskirts of York, North Yorkshire. The analysis of these two fittings, discussed in earlier sections (see 2.7.1 and 2.8.5), has shown that they are similar not only in form but also in terms of decoration, as both are decorated with engraved designs and coloured Limoges-style enamels, and therefore possibly date between *c.*1150 and 1400. As this object was recovered from the same region as that excavated from Fountains Abbey, it is possible that they demonstrate a regional market for such decorative pieces of book furniture. As commercial book production in urban centres largely replaced production within the monasteries by the mid-thirteenth century, it is argued that people travelled, for example to York, to purchase or commission books (Friedman 1995, xix). York was England's second largest city during the late medieval period and there is ample documentary evidence that it became a centre for the northern book trade (Friedman 1995, 2). It is also possible that the fitting found in Fulford originated from Fountains Abbey and was first used on a book in the monastery's collections that was later removed from the abbey, possibly as a result of its closure in 1539. The potential excavation and classification of more book fittings of type A.10 will help to determine if such objects were solely produced or used in the Yorkshire and Humber region.

The more common forms of fastenings that functioned via the strap-and-pin mechanism (A.1, A.7 and A.11) make up nearly one third of the total data collated. This research has so far demonstrated that such fittings were used on manuscript bindings from the twelfth century and continued to be used throughout the later medieval period. It has also shown that they were used by various monastic orders, although more predominately by the Cistercians. The examination of the geographical distribution of these strap-and-pin fittings has shown that many examples have been excavated from several sites located in the South East (35 fittings) and Yorkshire and the Humber (38 fittings) regions. The location of large, wealthy religious houses that had substantial book collections in the South East and the Yorkshire and Humber regions, such as Battle Abbey, St Augustine's Abbey and Bermondsey Abbey situated in the former, and Fountains Abbey, Rievaulx Abbey and Roche Abbey in the latter, all of which have been extensively excavated, is a probable reason for the increased numbers of examples of types A.1, A.7 and A.11 in these regions. Nevertheless, substantial, rich monasteries were established during the late medieval period in many other regions and fixtures of these types have been found

across the country. The fact that such items of book furniture have been found in monasteries across the country is perhaps testament to the continued use of strap-and-pin fittings throughout the late medieval period, despite the introduction of new hooked forms from the end of the fourteenth century.

Analysis discussed in the previous section (see 5.3.3) demonstrated that a significant proportion of domed bosses (B.1) (30 out of 42) were recovered from monasteries belonging to the Cistercian order. Of these, 87 per cent (26 examples) has been found across four sites in the Yorkshire and Humber region. Whilst 15 of these have been excavated from Fountains Abbey (*177-191*), domed bosses (B.1) have also been recovered from Rievaulx Abbey (*295-301*), Roche Abbey (*315-317*) and Byland Abbey, North Yorkshire (*67*). The fittings of type B.1 that have come from Cistercian sites in other regions of the country comprise two from Bordesley Abbey, Worcestershire, in the West Midlands (*62* and *63*) (Rahtz 1983, 179), one from Cleeve Abbey, Somerset, in the South West (*95*) (Guy 1999, 29) and a single example from St Mary Graces Abbey in the London area (*254*) (Stevenson *et al*. 2011, 151). In the catalogue, domed bosses have been classified into seven subcategories (B.1.1-B.1.7). The analysis of the geographical distribution of these various forms has found that all 23 examples

No. of fittings	Type						
Region	**B.1.1**	**B.1.2**	**B.1.3**	**B.1.5**	**B.1.6**	**B.1.7**	**Grand Total**
East	-	1	-	-	-	-	1
London	-	-	-	-	1	-	1
South East	-	4	1	-	1	-	6
South West	-	-	-	1	-	-	1
West Midlands	-	-	1	-	2	-	3
Yorkshire and the Humber	23	1	1	-	-	1	26
Grand Total	**23**	**6**	**3**	**1**	**4**	**1**	**38**

TABLE 5-4. *The number of domed bosses (B.1) recovered from different regions.*
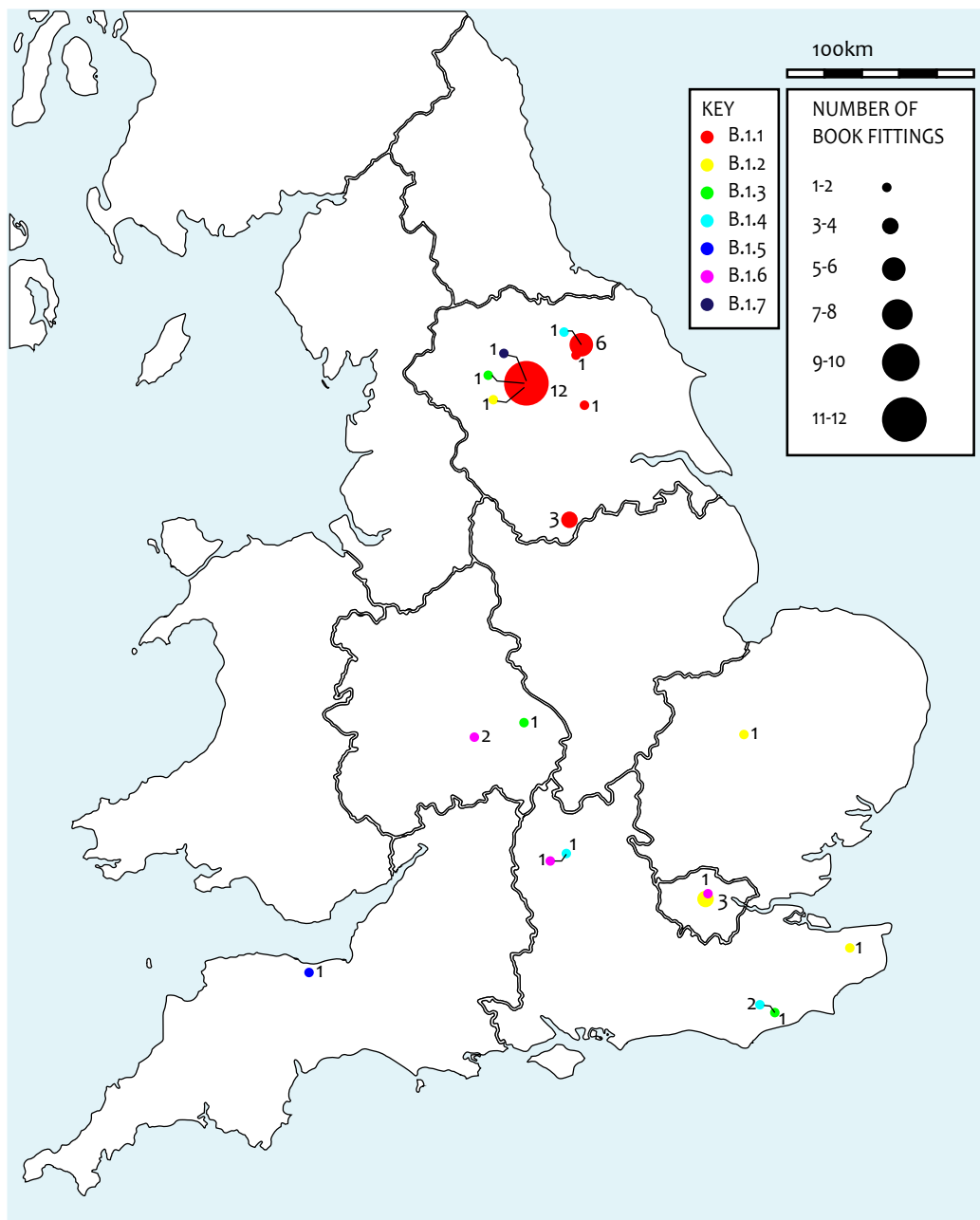
FIGURE 5-26. *Map showing the distribution of domed bosses (B.1.1-B.1.7).*

FIGURE 5-27. *Map illustrating the locations of type B.2 furnishings.*

of the most common form, type B.1.1, have been excavated from the Yorkshire and Humber region in the north of England (Figure 5-26). Some examples of the less common variations of domed bosses have also been excavated from this region, such as the type B.1.3 furnishing from Fountains Abbey (*190*); however, the majority of types B.1.2-B.1.7 have been recovered from sites located across five other regions of the country, including the South East and the West Midlands (Table 5-4; Figure 5-26). Therefore, based on the distribution of type B.1 fittings, it is clear that type B.1.1 was more frequently used in the Cistercians houses in the Yorkshire and Humber region, whilst the less common variations of domed bosses (B.1.2-B.1.7) were used in other regions of the country.

In comparison to domed bosses (B.1) discussed above, the majority of circular furnishings of type B.2 (15 out of 19) have been excavated from five sites situated across five different counties, all of which are in the south of England (Figure 5-27). These comprise six examples from Battle Abbey (*35-40*) (Geddes 1985, 160), four from Hailes Abbey (*232-235*), three from the site of the Guildford Blackfriars (*216-218*) (Poulton and Woods 1984, 79) and a single example each from St Augustine's Abbey (*84*) (Henig and Woods 1988, 220) and the Dominican site in Chelmsford, Essex (*90*) (Drury 1974, 56). Of the 19 recorded examples of type B.2, a single book furnishing of type B.2.4 has been excavated in the Yorkshire and Humber region of the north of England, from the site of the Dominican friary at Beverley, East Yorkshire (*56*) (Goodall 1996, 159). From the Cistercian abbey of Fountains, the site at which the largest number of book fittings has been found, no examples of type B.2 have thus far been excavated. This is interesting as although fixtures of type B.2 have been recovered from Cistercian sites, none have yet been recovered from the major sites in the Yorkshire and Humber region that have received extensive archaeological investigations. The Cistercian examples of such pieces have been found at Bordesley Abbey (*64* and *65*) (Rahtz 1983, 175) and Hailes Abbey (*232-235*). Although the majority of type B.2 fittings have been recovered from southern monastic sites, the distribution of these fittings across a number of counties, including several in the North and the Midlands, demonstrates a commonality in their use across sites of different monastic orders and different regions.

Corner-pieces (B.4) frequently survive on late medieval bindings, but only a small number have been identified in the archaeological data collected for this study. Seven examples have been recorded from seven different monastic sites. The analysis of the sites from which these artefacts have been excavated, and the monastic orders

to which they belonged, found that such fittings were used across sites belonging to several orders. The examination of the location of these sites has shown that there may have been a more regional use of corner-pieces (B.4). A single fitting of type B.4.1 was excavated from Bermondsey Abbey (*53*) (Egan 2011, 246) and a further single example from Denny Abbey (*116*) (Christie and Coad 1980, 257), which are located in the South East and East regions of the country respectively. The remaining five sites from which corner-pieces have been found, however, are all located in the Yorkshire and Humber region. The five corner-pieces from this northern region were recovered from Roche Abbey (*318*), St Andrew's Priory (*336*) (Ottaway and Rogers 2002, 2939), Mount Grace Priory (*265*) (Coppack and Keen 2002, 92), Fountains Abbey (*193*) and Sawley Abbey, West Yorkshire (*320*) (Coppack *et al.* 2002, 86-7). The prevalence of these fittings in this region may be a reflection of the extensive archaeological investigations that have taken place at monastic sites in the region, although there have been large-scale excavations elsewhere, particularly the South. That these pieces of book furniture have been excavated from five individual religious houses perhaps suggests that such fittings were more commonly used in the Yorkshire and Humber region. Nevertheless, the recovery of two corner-pieces (B.4) from two sites in other areas of the country demonstrates that such fittings were not solely used in the Yorkshire and Humber area. The survival of this particular type of book furnishing on contemporary manuscripts from the Continent also raises the possibility that these archaeologically recovered furnishings from English monasteries were imported. For example, the probable fifteenth-century binding of a German copy of Bede's *Breuis Explanatio Euangelii secundum Matheum* (London, British Library, Add. MS 23931) retains its corner-pieces of type B.4.3 (Figure 2-54, A.), which are similar to those excavated from Fountains Abbey (*193*; Figure 2-53) and Mount Grace Priory (*265*; Figure 5-14) (Coppack and Keen 2002, 92).

The analysis of the recorded book fittings discussed so far has demonstrated that the artefacts identified as type B.7 have all been excavated from Cistercian religious houses. Five artefacts classified as this type (B.7.1) have been excavated from Fountains Abbey (*199-203*), and two were recovered from Rievaulx Abbey (*302* and *303*). The recovery of such fittings, which are likely to date to the fourteenth or fifteenth centuries, is thought to demonstrate a relaxation in Cistercian attitudes towards ostentatious art and architecture. The decoration on several pieces has also been interpreted as signifying a particular Cistercian devotion to the Holy Name of Jesus throughout the late medieval period. The analysis of these objects has also

highlighted that the two Cistercian houses from which they have been excavated are both located in the Yorkshire and Humber region. As discussed above (see 5.3.3), the Cistercian order played a significant role in the development of the Cult of the Holy Name, and book fittings decorated with the monograms of the cult that have been excavated from Cistercian sites provide further evidence of the Cistercian devotion to the Holy Name. By 1500, the cult was well established in England, particularly in the north of the country (Friedman 1995, 186-7; Blake *et al.* 2003, 176; Carter 2010, 279-80). This can be used to explain why the book furnishings of type B.7 in the catalogue, which carry this iconography, have been found at the Cistercian abbeys of Fountains (*201* and *202*) and Rievaulx (*302*), both situated in the Yorkshire and Humber region in the north of England. The influence of the Cistercians in the Yorkshire and Humber region and their devotion to the Holy Name is further evident from the analysis of other forms of material culture. For example, a black-glazed, closed-form fragment of early sixteenth-century Cistercian ware from the Cluniac priory of Pontefract, West Yorkshire, carries a yellow-glazed relief medallion with 'ihc' and 'J[e]sue' (Blake *et al.* 2003, 184). The letters of the Holy Name also occur in several northern manuscripts reflecting a wide general interest in this motif for decorative and meditational purposes (Friedman 1995, 190). One example from York is a Book of Hours (York, Minster Library, Add. MS 2), written between 1405 and 1445, that belonged to John Bolton, merchant and mayor of York in 1445 (Friedman 1995, 188). Therefore, the recovery of type B.7 furnishings, several of which are decorated with the sacred trigram, from Cistercian houses in the Yorkshire and Humber region demonstrate the Cistercian devotion to the Holy Name of Jesus, the cult of which was popular in the north of England during the late medieval period.

The examination of the geographical distribution of the catalogued book fittings has found that certain types of book fittings are more predominant in certain areas or regions, with significant proportions recorded from the South East and Yorkshire and the Humber regions. That several of the richer monasteries studied are located in these two regions may indicate that larger numbers of certain types of book fittings were utilised by the wealthy monastic houses that had large book collections. However, the nature of the dataset collated is likely, to a certain extent, to have impacted upon these interpretations, and so the examination of supplementary monastic sites and book fittings across the country will be important to further build upon this research.

5.5 An incomplete assemblage?

This chapter so far has considered the initial comparison of book fastenings and furnishings, the various types of fittings and styles of decoration, the correlation between these and the monastic orders of the religious houses from which the fittings have been excavated, and their geographical distribution. This analysis in conjunction with extant medieval binding evidence from England and the Continent has demonstrated that the archaeological material available for this study is not wholly representative of all types of book furniture that were used on late medieval monastic books. Therefore, this section discusses the different types of book fixtures that are perhaps underrepresented in the archaeological assemblage and also those that are missing entirely.

The analysis of the different types of book furniture recorded and classified addressed the frequency of the various forms and distinguished those that are more common than others. Understanding how these different variations functioned has raised the possibility that a number of categories of book fixtures are underrepresented in the database. Identified in the catalogue are hooked book fastenings of varying types (A.3, A.4 and A.5) and the corresponding anchor-/catch-plates (A.6) to which they would have attached. The recorded examples of the hooked fittings amount to 94 pieces in total; 68 of these have been identified as type A.3, 16 as type A.4 and ten as type A.5. A total of 31 recorded items have been classified as type A.6. Given the relative commonality of hooked fastenings, it is surprising that such a comparatively small number of anchor-/catch-plates have been recorded. As fixtures of type A.6 were a necessary part of all hooked fastening systems, it is important to establish why more have not been found archaeologically. One possibility raised by this thesis is that hooked fastenings of type A.3 and A.4 were lost from bindings more frequently than anchor-/catch-plates as a result of the way in which they were attached to book covers. The hooked fastenings of these types were attached to bindings via a strap, typically made of leather, whereas the anchor-/catch-plates were riveted directly onto the wooden boards. Consequently, the fastenings would more likely be lost from bindings than the anchor-/catch-plates, and so would be found archaeologically more frequently. Additionally, due to the nature of the attachment of hooked fastenings and anchor-/catch-plates to bindings, it was probable that the fastenings and the straps onto which they were affixed would have been replaced more frequently due to wear and tear or damage. Whilst there is

the possibility that original fastenings were reused on new straps, on occasion new fittings must have been required as well as new straps, resulting in the disposal of the fittings, which can be seen archaeologically.

A total of 122 book fittings that functioned via the strap-and-pin mechanism have been recorded and identified in the database. It is interesting that 100 of these are classified as varying types of fastenings (A.1, A.2, A.7, A.8, A.9 and A.10) that would have been attached to the end of a strap and only 22 are identified as the corresponding pin and base-plates (A.11) onto which the fastenings would have fitted. A likely reason for the more frequent recovery of these particular types of fastenings is the development of book storage that occurred towards the end of the late medieval period. As discussed earlier in Chapter 4, purpose-built libraries developed from the fifteenth century and books were increasingly stored upright on shelves. It is probable that straps, and therefore their fastenings, were removed to accommodate these changes in storage. Pins and their base-plates were typically placed at the centre of front or back covers and so the associated fastenings were typically attached to the ends of long straps. Consequently, the fastenings would have been particularly obstructive when trying to house increasing numbers of monastic books on shelves and potentially damaging to the bindings of neighbouring books. The removal and disposal of the fastenings would suggest that they may be found archaeologically more frequently. The pins and base-plates (A.11) on bindings would have also hindered the efficient storage of books on shelves and so warranted their removal and subsequent disposal. The examination of surviving medieval bindings indicates, however, that the pins and base-plates were not always removed from bindings, as in the case of the late fifteenth- or early sixteenth-century binding of a twelfth-century Cistercian missal (London, British Library, Add. MS 46203) and the contemporary binding of the thirteenth-century cartulary of Peterborough Abbey, Northamptonshire (London, British Library, Egerton MS 2733). The infrequency of artefacts of this type in the archaeological record may have also been affected by excavation and recovery biases and differential preservation more so than the associated fastenings. Only three complete examples of type A.11 have been identified (*82, 109* and *110*), and of the remaining 19 fittings, only the base-plates survive. The lack of pins that survive with their base-plates in the archaeological record would largely have been caused by the physical characteristics of these objects. In comparison to other forms of book furniture identified during this study, the pin and base-plate (A.11) are generally smaller in size and relatively
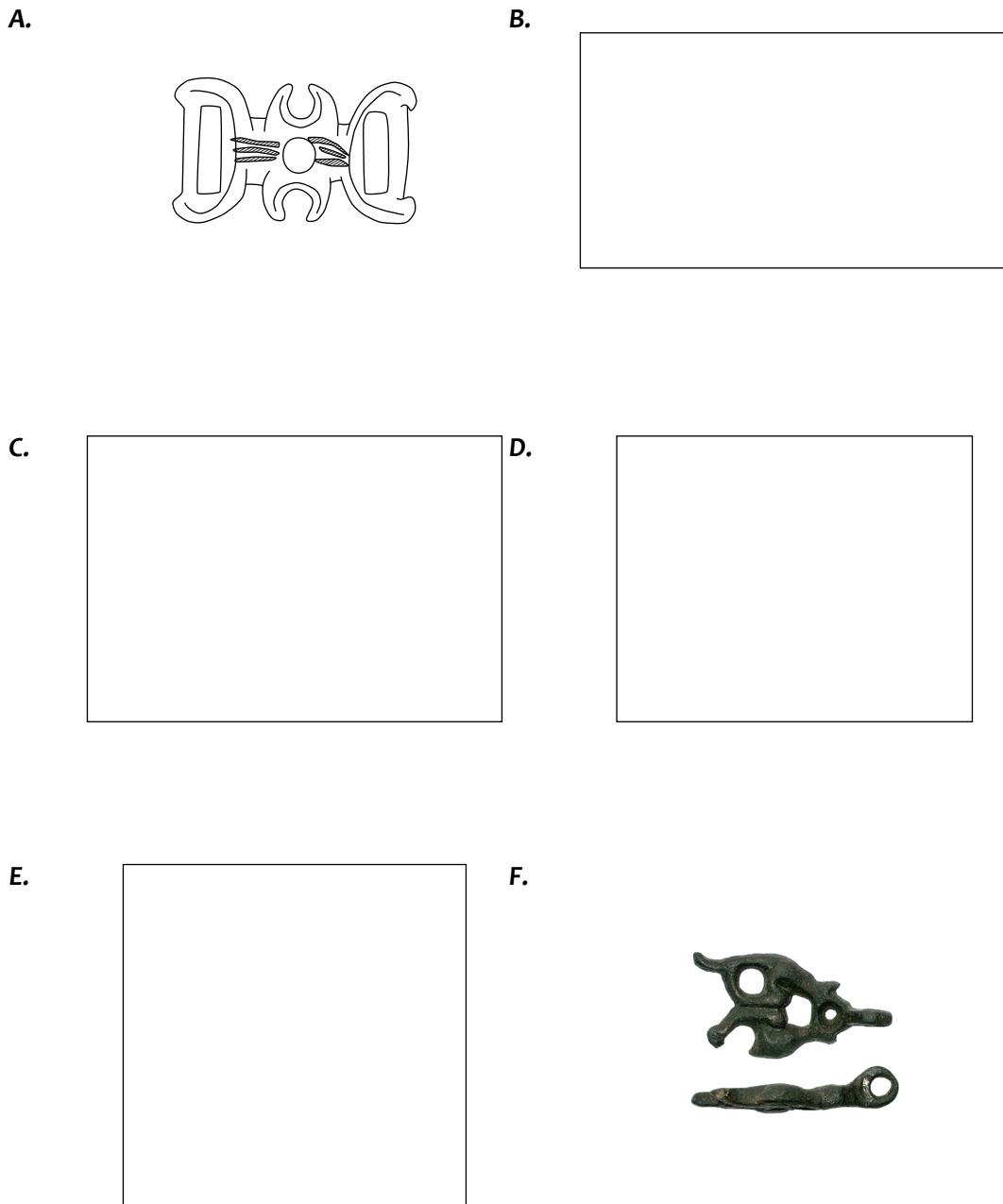
FIGURE 5-28. *Examples of different types of strap-and-pin fastenings not identified in the typology:* **A.** *from the fourteenth- or fifteenth-century binding of a copy of Bede's commentary on the* Gospel According to Luke *(London, British Library, Egerton MS 2204),* **B.** *from a thirteenth-fourteenth-century book of Sequentiae (St Gall, Stiftsbibliothek, Codex 383) (Adler 2010, 61),* **C.** *from the binding of a collection of eighth- to eleventh-century theological texts (Munich, Bayerische Staatsbibliothek, Clm 6433) (Adler 2010, 62),* **D.** *from a ninth-century book of theology (St Gall, Stiftsbibliothek, Codex 185) (Adler 2010, 63),* **E.** *from Winchester, Hampshire (Biddle and Hinton 1990, 757, no. 2323),* **F.** *from Guildford, Surrey (SUR-ECCA57) (PAS/Trustees of the British Museum, 2003-2015i). Scale 1:1, except B., C. and D.*

fragile compared to other larger, cast pieces of book furniture. Therefore, their removal from bookbindings would likely have resulted in their damage. Furthermore, differential preservation and biases during recovery may have affected the survival rate and identification of the pins compared to the base-plates. The recovery of the pins alone would most likely result in their misidentification. Consequently, only a limited number of pin and base-plates (A.11) have been identified.

Several observations can be made as a result of the comparison of the archaeologically recovered book furniture from English monastic sites and the fittings that survive on extant late medieval books, including those from the Continent. It has shown that the key mechanisms through which the excavated book fittings functioned are fundamentally the same as those that still survive on original bindings. The examination of surviving medieval bindings through the study of English research collections, and recent research on Continental evidence (see Szirmai 1999; Adler 2010), has shown that there are types of book fastenings and furnishings that have not been identified from the study of the archaeological material. A particularly atypical form of book fastening is found on the fourteenth- or fifteenth-century binding of a twelfth-century copy of Bede's commentary on the *Gospel According to Luke* (London, British Library, Egerton MS 2204), which belonged to the Benedictine abbey of Reading, Berkshire. Whilst this example functioned via the strap-and-pin mechanism, the form it takes is completely different to those identified in the catalogue (Figure 5-28, A.). The fitting was likely to have been cast, and it has a rectangular perforation at each terminal to receive straps and has a central hole to allow the fitting to fit over the pin situated at the centre of the back cover. Also strap-and-pin fastenings on Continental manuscripts dating between the ninth and mid-thirteenth centuries, as demonstrated by Adler (2010, 61-6), show several simpler variations of type A.1 that have not been identified in this research. These examples may simply exhibit earlier Continental forms of book furniture that would not be found on English monastic sites (Figure 5-28, B., C. and D.). One example given by Adler (2010, 65-6) was in fact recovered from an archaeological site in Winchester, Hampshire, and is thought to date to the twelfth century (Figure 5-28, E.) (see Biddle and Hinton 1990, 755-8). A comparable fitting has been recorded in the PAS database; this book fitting, which would have functioned via the strap-and-pin mechanism, was recovered from Guildford, Surrey (SUR-ECCA57; Figure 5-28, F.) (PAS/Trustees of the British Museum, 2003-2015i). Due to the seemingly limited number of fittings of this type in England compared to the Continent, it is possible that these two
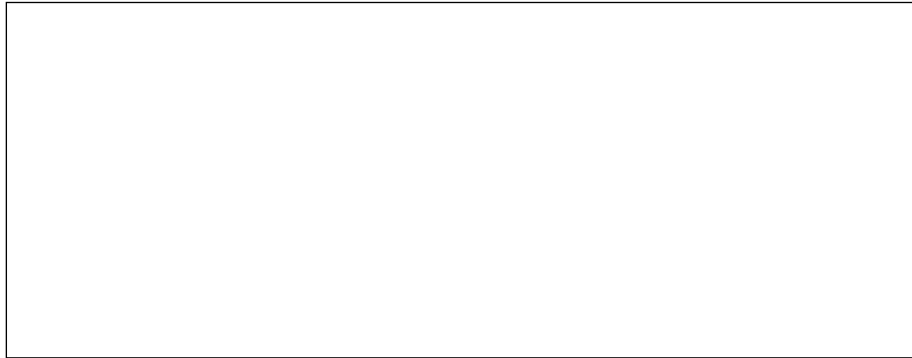
FIGURE 5-29. *An example of a hooked fastening and its corresponding catch-plate used on sixteenth-century bindings held in the Librije St Walburgskerk, Zutphen (Szirmai 1999, 256).*

English examples signify a cultural exchange in forms and styles or, more likely, the importation of Continental book fittings. Nevertheless, the evidence from manuscript bindings in conjunction with the archaeological material demonstrates the varied nature of late medieval strap-and-pin book fastenings.

Different variations of Continental catch-plates have been described in both Szirmai's (1999, 251-2) and Adler's (2010, 21-5) studies, however, several of these have not been identified from the examination of the recorded archaeological material from English monastic sites. In this research's typology (see 2.6.1) four variations of anchor-/catch-plates (A.6.1-A.6.4) have been created. Szirmai (1999, 254-62) recognises several variations of catch-plates from fifteenth- and sixteenth-century German and Dutch bookbindings, the majority of which are different to those defined in the typology. A notable variation of sixteenth-century catch-plates used on the Continent is the fishtail catch-plate that mirrors the form and decorative style of the associated hooked fishtail fastening (Szirmai 1999, 256-7; Adler 2010, 96-7). Examples include those on two sixteenth-century bindings from the Netherlands (Zutphen, Librije St Walburgskerk, M 117/2 and M 117/4) (Figure 5-29) (Szirmai 1999, 257), and they also can be seen on the sixteenth-century binding of a memorial book of the Holy Spirit

FIGURE 5-30. *The back cover of a thirteenth-century French Bible (London, British Library, Add. MS 28626), bound in the sixteenth century, retains its two fishtail catch-plates (British Library Board 2015h). Scale 1:1.*

A.

B.

*FIGURE 5-31. Fishtail catch-plates recorded through the Portable Antiquities Scheme: **A.** from Brewood and Coven, Staffordshire (PAS/Trustees of the British Museum, 2003-2015j, WMID-DFA4E1), **B.** from Chichester, West Sussex (PAS/Trustees of the British Museum, 2003-2015k, SUSS-0E6821). Scale 1:1.*

from Leiden in the Netherlands (The Hague, Koninklijke Bibliotheek, MS 73 E 41), written in the early years of the century (Adler 2010, 101). The fifteenth-/sixteenth-century binding of a thirteenth-century French Bible (London, British Library, Add. MS 28626) also provides evidence for this form of catch-plate (Figure 5-30). There are several possibilities why similar fittings have not been identified from the material excavated from English monastic sites and foremost among these is quite simply the possibility that these Continental styles were never adopted in England. The dating of these sixteenth-century items is also a probable reason for the lack of such artefacts found archaeologically on English monastic sites, which were suppressed in the 1530s. On the other hand, the survival of catch-plates identical to sixteenth-century Dutch and German examples identified by Szirmai (1999, 256-7) and Adler (2010, 96-7) on English contemporary bindings demonstrates that catch-plates with a fishtail form were used in England as well as in mainland Europe. A good example is the original binding of the early sixteenth-century cartulary of Waltham Abbey, Essex (London, British Library, Add. MS 37665) (Figure 2-18, B.), which was the last religious house in England to be closed during the Dissolution of the Monasteries (Cook 1961a, 253). It has already been suggested in this thesis (see 2.7.1) that this particular manuscript

and its Continental-style catch-plates may signify a cultural exchange of forms and styles or the importation of foreign objects or craftsmen, especially since no comparable examples have been recorded in the catalogue. Nevertheless, this does not negate the possibility that such fittings were used more frequently on English books towards the end of the late medieval period. Additionally, the identification of several highly-decorated hooked fishtail fastenings (A.3) in the catalogue (*93, 111, 255, 275* and *276*) (Figures 3-46 and 2-63) would perhaps suggest that corresponding catch-plates with similar designs would have been used on the bindings. Furthermore, several catch-plates similar to those found on Continental bindings have been recorded in the PAS database, demonstrating that such book fittings were used on English books during the late medieval period (Figure 5-31). Consequently, as with other forms of book furniture, factors such as changing practices in book storage, excavation and recovery biases, and differential preservation and sampling, may have affected the numbers that are found archaeologically.

There are also types of anchor-plates that have not been identified from the archaeological record. As has already been shown (see 2.7.1), it is difficult to accurately identify certain archaeological artefacts as anchor-plates due to the nature of their form. The examination of manuscript evidence, however, clearly indicates the different forms of anchor-plates that were used on late medieval bindings. Anchor-plates (A.6), as identified in the typology (see 2.6.1), were used as part of all-metal hooked fastenings and were hinged to the hooked fastening (A.5). Anchor-plates were also used to secure straps to book covers with either strap-and-pin or hooked fastenings. For example, the binding of a twelfth-century copy of Jerome's *Commentaries on Isaiah and Ezekiel* (London, British Library, Egerton MS 3776), which belonged to the Benedictine abbey of Bury St Edmunds, Suffolk, was altered in the sixteenth century with the addition of a white strap that was anchored to the front cover by means of a decorated metal plate (Figure 5-32, A.). Similar anchor-plates have also been found on surviving manuscripts on the Continent (Szirmai 1999, 252; Adler 2010, 36). It is thought that such objects were used alongside some of the earlier forms of book fittings from the eighth and ninth centuries and continued to be used until the eighteenth century (Adler 2010, 11). Adler's (2010, 36) recent research on book furniture from German-speaking countries, the Netherlands and Italy dating from the early Middle Ages to the present demonstrates how such fittings were used for various types of fastenings and took many forms and styles, which are thought to be indicative of different manufacturers. Examples of fifteenth- and sixteenth-century

A.
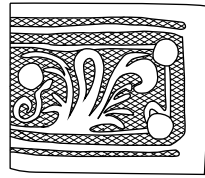
B.
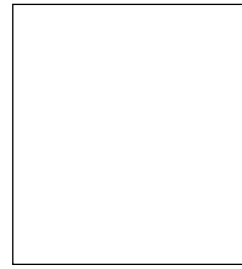
C.
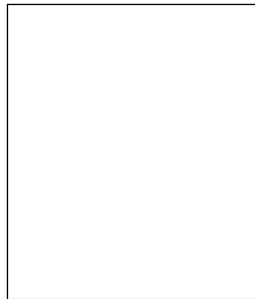
D.
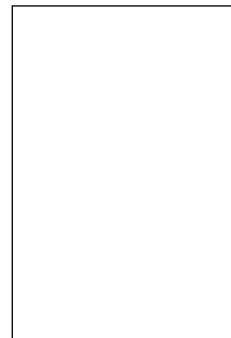
E.
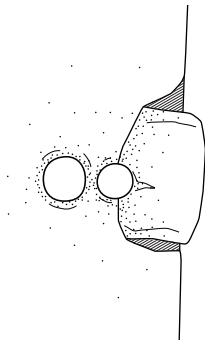
F.
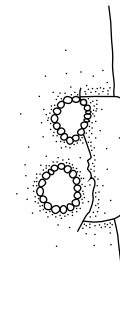
*FIGURE 5-32. Types of anchor-plates used to secure straps to book covers: **A.** from the binding of a twelfth-century copy of Jerome's* Commentaries on Isaiah and Ezekiel *(London, British Library, Egerton MS 3776), **B.** from a fifteenth-century Continental binding (Adler 2010, 36), **C.** from a fifteenth-century German binding (Adler 2010, 36), **D.** from fifteenth- and sixteenth-century German bindings (Adler 2010, 37), **E.** from the fourteenth- or fifteenth-century binding of a twelfth-century copy of Bede's commentary on the* Gospel According to Luke *(London, British Library, Egerton MS 2204), **F.** from the fifteenth-century binding of a book of grammar from Fountains Abbey, West Yorkshire (London, British Library, Add. MS 62132 A). Scale 1:1, except B., C. and D.*

FIGURE 5-33. *The fifteenth-century front cover of an eastern Mediterranean sacramentary (London, British Library, Egerton MS 2902). Scale 1:2.*

Austrian and German anchor-plates indicate that they were often of simple forms but could vary in decoration, ranging from completely undecorated to elaborately decorated with, for example, foliate and linear designs and intricate lettering (Figure 5-32, B., C. and D.) (Adler 2010, 36-7). In addition to plates that anchored fastening straps to bookbindings, large studs or rivets were also used. The fourteenth- or fifteenth-century binding of Reading Abbey's twelfth-century copy of Bede's commentary on the *Gospel According to Luke* (London, British Library, Egerton MS 2204) demonstrates that the strap is secured by two simple copper-alloy rivets to the front cover (Figure 5-32, E.). As well as being functional, such fittings often took more decorative forms. For example, the strap of the original fifteenth-century binding of a book of grammar from Fountains Abbey, West Yorkshire (London, British Library, Add. MS 62132 A), is secured to the front cover by two copper-alloy rivets with daisy-like heads (Figure 5-32, F.). On the Continent, decorative nails of varying forms were used to secure fastening straps throughout the late medieval period (Adler 2010, 35-6). As with other forms of book furniture discussed above, anchor-plates and studs/rivets such as these were not likely to have been easily lost from bindings, and their survival in the ground could vary greatly depending on various preservation conditions, and successful recovery is dependent on excavation methods and sampling. Also, such fixtures when removed from their bindings and examined out of context may be easily misidentified as other items of late medieval material culture, such as decorative pieces used on belts or boxes.

The analysis of both the archaeological and binding evidence has also demonstrated that there are many other types of protective and ornamental book furnishings that are not represented in the catalogue of archaeological material. One particular form is the small circular domed boss/stud that functioned in the same way to those classified as type B.1 by protecting the covers of books. These small studs were fitted, in all probability, onto covers through integral rivets in a similar fashion to fittings of type B.1.6. Such furnishings can be found on two manuscripts both with fifteenth-century bindings. One is an eastern Mediterranean sacramentary (London, British Library, Egerton MS 2902) first compiled in the mid-thirteenth century and the other a tenth-century German copy of Bede's exposition of the *Gospel According to Matthew* (London, British Library, Add. MS 23931). In the case of the sacramentary, the furnishings are grouped together in threes in a triangular formation and located in the corners and centre of the front and back covers (Figure 5-33). In comparison, on the copy of Bede a single stud is situated in each corner and at the centre of the

front cover (Figure 2-17). As these two specimens originated from mainland Europe and similar furnishings have not been identified within the scope of this research, it is possible that these small studs were not used on English manuscripts. Similar fixtures have been identified on Continental manuscripts and classified in Adler's (2010) typology of Continental book furniture, where it is stated that these *halbkugelform* ('hemispherical shape') fittings were used in central Europe between the mid-twelfth and sixteenth centuries (Adler 2010, 38). One example is a late thirteenth-century Italian manuscript (Berlin, Kunstgewerbemuseum, Inv.-Nr. K 4817 a) that has a Biccherna panel cover secured by these particular fittings (Figure 5-34) (Adler 2010, 76). Whilst examples of these furnishings have been identified on Continental manuscripts, it is possible that the range of material that is the basis of this research and the nature of these fittings as archaeological artefacts have restricted the identification of similar examples from English monastic sites.

In a similar fashion to binding strips (B.5), which protected the edges of book covers, other forms of furnishings were used to protect the tail edges of books. On the Continent these fixtures were typically made of iron or copper alloy and took various forms, including *kanten-* and *winkelleisten* ('edge and corner bars'), also known as 'shoes', and *Stehfüße* ('standing feet'), often referred to as 'heels' (Figure 5-35, A.) (Szirmai 1999, 263; Adler 2010, 45, 49). Also, edge and corner bars were often made in combination with heels and are sometimes known as 'heeled shoes' (Szirmai 1999, 263; Adler 2010, 49). These furnishings were common on large and heavy volumes, especially in Germanic countries, in order to protect the covers and create a distance between the bottom edges and the desks or lecterns on which the books were used and also the shelves on which they were stored (Szirmai 1999, 263; Adler 2010, 45, 109). Based on research of late medieval manuscripts and early printed books on the

A.
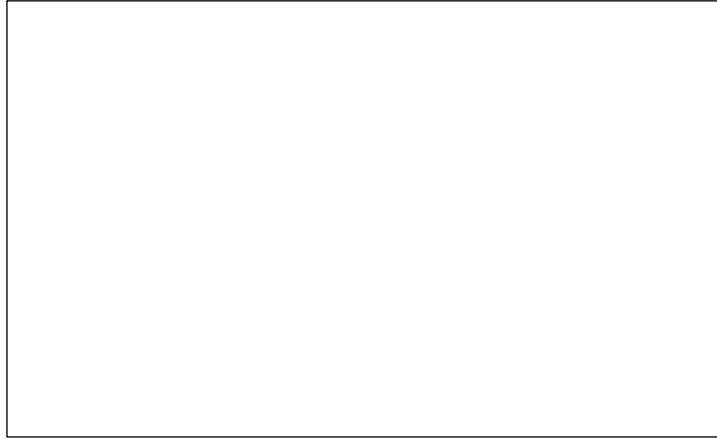
B.
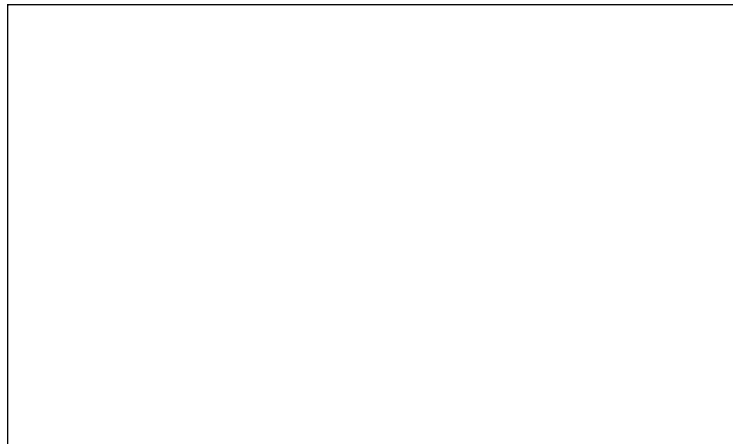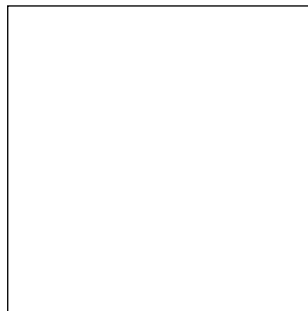
C. D.

FIGURE 5-35. *Examples of various forms of edge protectors:* **A.** *schematic drawings of shoes, heels and a heeled shoe (Szirmai 1999, 264),* **B.** *a mid-sixteenth-century book (Zutphen, Librije St Walburgskerk, M 453) has iron heels at the bottom edges of the covers, which are integrated with the copper-alloy corner-pieces (Szirmai 1999, 265),* **C.** *an example of an edge strip, one of the easiest and cheapest forms of edge protection (Adler 2010, 110),* **D.** *a late fifteenth-century German Dominican gradual (Graz, Universitätsbibliothek, MS 2067/1.2) with iron heels combined with the corner-pieces (Adler 2010, 111).*

Continent, it is thought that furnishings of these types were typically used during the late Gothic period, *c.*1450-1530, although later examples have been identified (Adler 2010, 103, 124). Surviving examples of these particular types of book furnishings on late medieval books are limited; however, a few have been noted in recent research on Continental bookbindings. For example, a mid-sixteenth-century book (Zutphen, Librije St Walburgskerk, M 453) bound by the Brethren of Common Life in Doesburg, in the Netherlands, has iron heels at the bottom edges of the covers, which are integrated with the copper-alloy corner-pieces (Figure 5-35, B.) (Szirmai 1999, 263-4). This is also the case for a German Dominican gradual (Graz, Universitätsbibliothek, MS 2067/1.2) copied and bound in the late fifteenth century (Figure 5-35, D.) (Adler 2010, 111). The iron heels are combined with the corner-pieces, creating a 20mm gap between the tail edge of the very large and heavy altar book and the surface on which it would have been stored (Adler 2010, 111). The attachment of heels all along the edges of covers, not just the bottom edges, was popular between the fourteenth and sixteenth centuries, particularly in Italy, for the protection of the bindings of missals, graduals, antiphons and other books of worship (Adler 2010, 124). This can be seen, for example, on a fourteenth-century missal housed in the Piccolomini Library
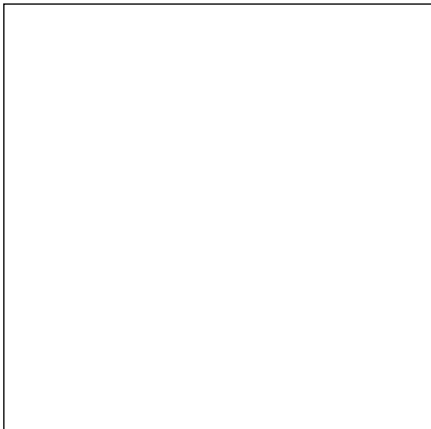
FIGURE 5-36. Multiple iron conical studs are riveted to an iron edge bar to protect the edges of a fourteenth-century missal housed in the Piccolomini Library of Siena Cathedral, Italy (Adler 2010, 124).

of Siena Cathedral, Italy; here multiple iron conical studs are riveted to an iron edge bar (Figure 5-36) (Adler 2010, 124). Compared to evidence from mainland Europe, the survival of such fittings on English manuscripts or early printed books is particularly scarce. It is possible that it was not customary to use such furnishings on bindings in England. If they were occasionally used on English bindings, they may still not be easily identifiable in the archaeological record as they are small, quadrate pieces of metal that could be overlooked during excavation and misidentified.

Metal frames were also used to furnish late medieval book covers to secure title labels of parchment or paper, which were usually protected by horn (Szirmai 1999, 263; Szirmai 2010, 50). It is thought that such arrangements were used on manuscript covers from the end of the twelfth century; they were particularly popular on the Continent during the late fifteenth century (Adler 2010, 50, 112). The date of these furnishings is difficult to determine more accurately as they were added after the binding of the book, often at a much later date, and it is thought that in some cases the parchment or paper labels were sometimes written later by a librarian rather than the bookbinder at the time (Adler 2010, 50). Several Continental examples have been identified in recent research (Adler 2010, 112). For example, a fifteenth-century Latin prayer book (Lübeck, Stadtbibliothek, MS theol. lat. 4° 152) was bound by the Lübeck bookbinder Heinrich Coster and has a handwritten label secured by a metal frame of several rectangular pieces. However, the title label and frame is thought to have been made separately by the subsequent owner or librarian as it is very rudimentary compared to the exact work of the bookbinder (Adler 2010, 112). Examples of English manuscripts with this type of furnishing indicate that they were not solely used on the Continent. A good example is a terrier of the Somerset estates of Glastonbury Abbey (London, British Library, Egerton MS 3034), written and bound in the early sixteenth century. The back cover of the manuscript has a label identifying the title, contents and ownership of the volume, which is covered with a horn plate and secured by a metal frame of thin rectangular plates (Figure 5-37). This particular example also demonstrates that the title of a manuscript or printed book was not always the only information given on these labels; other details included short summaries, contents and library references (Figure 5-38) (Adler 2010, 112). The fourteenth- to fifteenth-century binding of the late thirteenth-century cartulary of the Augustinian priory of Breton, Somerset (London, British Library, Egerton MS 3772), also has evidence indicating that it once had a title plate that was secured by rivets on its back cover. In some cases, labels and their protective horn covers were simply
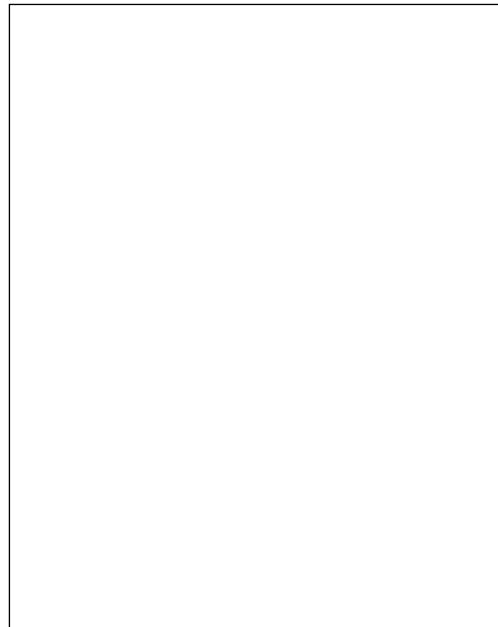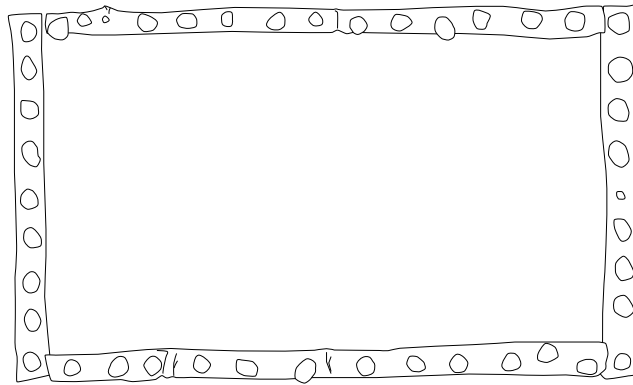
FIGURE 5-37. *(Above, top) The copper-alloy frame used to secure the title label and protective horn cover on the early sixteenth-century binding of Egerton MS 3034 in the British Library, London. Scale 1:2.*

FIGURE 5-38. *(Above) Two examples of title labels with varying details on late fifteenth-century bindings of German manuscripts (Adler 2010, 112).*

FIGURE 5-39. *Here the title label and its protective horn cover have been simply riveted to the cover of a fifteenth-century volume containing Terentius'* Comoediae *and Petrarch's* Vita Terentii *(Hereford, Cathedral Library, MS L. VIII. 6). Scale 1:1.*

riveted to the covers without metal frames. This is the case for a fifteenth-century manuscript containing Terentius' *Comoediae* and Petrarch's *Vita Terentii* (Hereford, Cathedral Library, MS L. VIII. 6) (Figure 5-39). The binding evidence, although limited, clearly shows that late medieval books were often furnished with metal frames to attach and protect written labels that provided details of the volumes on which they were used. The nature of the frames, however, would make them difficult to correctly identify in archaeological contexts as the organic elements of books do not typically survive archaeologically. In addition to the bindings and quires of medieval books, the parchment or paper labels and horn coverings would not generally survive alongside the metal frames. Consequently, the accurate identification of the frames as those used on books would be difficult, particularly if their own preservation is poor. Such metal finds, especially if they are broken or misshapen, could be easily misidentified by excavators, for example as box fittings.

Another factor that demonstrates that this assemblage is not wholly illustrative of all forms of book furniture used in late medieval English monasteries is that several monastic orders are underrepresented or not represented at all in the catalogue. Book fittings recovered from only a small number of sites that belonged to the

Carthusians, Cluniacs and Gilbertines have been examined. Also, book fittings from the male houses of the Premonstratensians, of which there were 31 that survived until the early sixteenth century, have not been recorded and identified. This may be a result of limited archaeological investigations undertaken at such sites and the fact that the English Heritage collections, which are a key source for this study, do not encompass material from all of these sites. Nonetheless, at Egglestone Abbey, North Yorkshire, for example, archaeological field investigation and survey of the surrounding area was completed by English Heritage in November 2000 (Historic England 2015); however, no book fittings were identified from this Premonstratensian site. Additionally, book fixtures from houses of other orders, such as the Bridgettines and Grandmontines, are not included in the catalogue. However, very few houses belonging to these small orders were founded in England during the late medieval period and few have received archaeological investigation, particularly in more recent years. As a result, there is a paucity of artefact evidence from these sites, especially evidence signifying the presence of books. Despite this lack of archaeological material, books must have been held at these monasteries for the religious services that would have taken place, and this is supported by the survival of contemporary books. However, the use and types of fittings on these books can only be hypothesised as the majority do not survive in their original bindings or those that do have insufficient evidence of the original book furniture. As the material studied for this research does not contain book fittings from houses representing all the monastic orders in late medieval England, nor in fact all the religious houses in England, the results and conclusions discussed throughout this chapter will be advanced by the future analysis of additional sites. It must also be considered that future excavations of monastic sites in England will potentially uncover more examples of late medieval book fittings. The platform for this study was the material held by English Heritage since this material had not been previously analysed or classified. Together with additional specifically published material, this work has now been done to provide a clearer understanding of this material culture and its place in the archaeological record, however, it must be recognised that this research has not comprised a fully comprehensive database of book fittings across England. Future work on the classification and analysis of new material will expand upon the analysis and interpretations made through this research. Nevertheless, this research provides an in depth analysis of a sample of book fittings enhancing our knowledge of this unique form of late medieval material culture.

5.6 SUMMARY

One of the key aims of this research has been the contextual analysis of late medieval book fittings excavated from English monastic sites. This chapter has focused on this analysis and various approaches that have been used to interpret this type of material culture in its wider social and cultural contexts. It is clear that the nature of the recovery of the archaeological material will have impacted upon the numbers of pieces recorded and identified. Nonetheless, as demonstrated in this chapter, other factors, such as the varying practices associated with the use of fixtures, the size of monastic book collections and the changes in book storage from the fifteenth century, will have also affected the numbers of book fittings that have been subsequently found through the archaeological investigations of English religious houses.

An important branch of analysis discussed in this chapter is the examination of the religious houses from which the book fittings have been excavated, focusing on the monastic orders to which these sites belonged. As a result of this examination, it has been possible to identify certain patterns and correlations between the monastic orders and the numbers of book fittings that have been found on their sites, and also the physical characteristics of the fittings themselves. Significantly, this research has shown that, within the catalogue, certain forms of fittings have been found more frequently on sites of particular orders. The possible reasons for these results, including differing attitudes towards decoration and the importance of books, as well as the nature of archaeological investigations, have been considered.

The analysis of the geographical distribution of the monastic sites and the pieces of book furniture that have been excavated from them has demonstrated that the majority of the book fittings have been recovered from two regions, the South East of England and the Yorkshire and Humber area. Although factors such as the extent of archaeological investigations in these regions and biases associated with recovery are likely to have had some impact on the material analysed, several correlations between the different types of book fittings and the geographical locations in which they were found have been identified.

Whilst it has been possible to analyse and comment on the forms of fittings classified, the influence of the order to which a monastery belonged and the geographical distribution of the fittings, it has been recognised that the assemblage is not wholly

representative of all types of late medieval book furniture. Neither the monastic orders to which the sites belonged, nor the geographical distribution of their fittings, are completely illustrative of all the monastic orders and their houses founded in England during the late medieval period. Additionally, from the evaluation of binding evidence in conjunction with the archaeological material, it has been established that the catalogue contains examples of the key types of late medieval book fittings, identifying the main ways in which they functioned. However, this investigation has also indicated that other forms of fixtures existed during the late medieval period. Nonetheless, the analysis discussed in this chapter has demonstrated that much can be gained from the examination of book fittings and that the future classification and analysis of this type of material culture can only enhance our understanding of late medieval books and their bindings.

6 THE DESTRUCTION OF MONASTIC BOOKS

6.1 Introduction

The nature of book use and storage within medieval monasteries has been the focus of a number of historical studies (see Harris 1995; Gameson 2006; Clemens and Graham 2007) and has been addressed in Chapter 4 of this work. However, an important aspect of the study of monastic libraries that has received considerably less attention to date is the manner of their dispersal and destruction, particularly at the Dissolution. Several works, such as Wright's *The Dispersal of the Libraries in the Sixteenth Century* (1958) and Humphreys' *The Loss of Books in Sixteenth Century England* (1986), have offered a broad understanding of this subject through the examination of contemporary documentary evidence. However, the destruction of monastic books has received little attention from archaeologists, despite being evident in contemporary accounts (see Ellis 1827; Gairdner 1886; Copinger 1895; Dickens 1959). Consequently, this chapter demonstrates the advantages of taking a new approach to gain a deeper understanding of this subject. It examines the issue of the destruction of monastic books and the deposition of late medieval book fittings by analysing and interpreting the spatial distribution of the artefacts catalogued for this research.

In order to interpret the distribution patterns of the deposition of the archaeological material, it is important to understand the nature of the dispersal and destruction of monastic books. This chapter begins with a consideration of how monastic books were often removed from their religious houses and how they were frequently repaired, replaced or discarded throughout the late medieval period, of which contemporary documents and extant manuscript bindings provide important supporting evidence.

Following this is an examination of contemporary written accounts for the dispersal and destruction of books that took place as part of the Dissolution of the Monasteries in the 1530s. A summary of the events and processes involved in the suppression of English religious houses is given to provide a foundation for understanding the fates of monastic books at this time. A more detailed investigation into the distribution of monastic books, and the damages they incurred, in the first half of the sixteenth

century is then addressed using important contemporary documentary sources that still survive today.

The main focus of this chapter is an in-depth discussion on the analysis of the spatial distribution of the 336 book fittings excavated from the sites of English religious houses. The several branches of analysis discussed in this work have considered the nature of the artefacts themselves and also their form and decoration in terms of their wider social and cultural contexts, including patterns across the sites of different monastic orders and their geographical distribution. The results from the analysis of the deposition of these objects are discussed and interpreted based on the archaeological and documentary evidence presented, demonstrating how the study of the deposition of late medieval book fittings can enhance our understanding of monastic books and their destruction.

The investigation of the spatial distribution of the archaeological material provides evidence for the destruction of monastic books on site; however, it is necessary to consider the evidence for their distribution and destruction away from the religious houses in which they were kept. Given the documentary evidence for this occurrence and that only a relatively small number of book fittings have been excavated from monastic sites, the final section of this chapter considers the reasons behind and the possible archaeological evidence for the destruction of monastic books away from their houses.

6.2 Medieval dispersal and destruction of monastic books

Throughout the late medieval period, the contents of monastic libraries continuously changed, not only through the production and addition of new volumes, but also as a result of the dispersal and destruction of others (Wright 1958, 148). A significant cause of the depletion of monastic collections was the failure on the part of other religious houses to return books loaned to them (Wright 1958, 148). De Hamel's (1997b) detailed study of the monastic library of Canterbury Cathedral Priory, Kent, identifies the various ways in which the cathedral priory's books were frequently dispersed between the fourteenth and sixteenth centuries. For example, an extant document detailing the annual inspection of the library in 1337-8 lists as many as 93 volumes that were missing, out on loan or unaccounted for. Of these 38 were in the

hands of members of the cathedral priory, another 38 had been lent to monks who had died whilst still in possession of them, and 17 had been lent to people outside the monastery (De Hamel 1997b, 264). Also, there is documentary evidence to show that books were often transferred from Canterbury to Dover Priory, Kent (De Hamel 1997b, 264).

As monasteries were major landowners, the management of estates involved a traffic of monks and tenants to and from the estates, the need for which could not be stemmed by the employment of lay officials (Hoyle 1995, 277). Given this, it is not unreasonable to believe that monks took with them the necessary books and papers for the completion of estate business. Additionally, as discussed in Chapter 4.4.1, monks travelling between houses, and bishops between residences, as may have been the case for the bishops of Hereford Cathedral, were likely to have carried a small number of books with them. Furthermore, monastic books were often transported between houses for use as exemplars in the production of books throughout the late medieval period (Clemens and Graham 2007, 22). Therefore, whilst books were transported or carried between locations for various reasons, it is possible that the books, particularly their bindings, became damaged and so may have warranted the disposal of their fittings away from their place of origin.

The growing numbers of university colleges also impacted upon the libraries of the monasteries (Wright 1958, 149). On occasion monastic collections were dispossessed of significant numbers of books that were to be collectively transferred elsewhere. In the case of Durham Cathedral Priory a collection of 36 volumes was transferred in two groups to Durham College at Oxford in 1409 (Wright 1958, 149). In the case of Canterbury Cathedral Priory, the foundation of Canterbury College at Oxford, which was first established in 1331, resulted in the relocation of considerable parts of the monastery's library. The college library is thought to have been largely stocked from Canterbury, and statutes of 1384 indicate that books were assigned on loan to individual student monks from the cathedral priory (De Hamel 1997b, 264-5). As increasing numbers of monks opted for training in the university college, more books were sent over to the college from the cathedral priory, and this is evident from the increasing number of books recorded in fifteenth-century inventories of Canterbury College (De Hamel 1997b, 266).

In addition to their dispersal, books inevitably became damaged or fell out of use and, as a consequence, they would have been continually repaired, replaced or discarded

(Clark 1894, 28-9; 1901, 53; Wright 1958, 148-9; Harris 1995, 102; Rundle 2004, 115; Carley 2006, 268). The poor physical condition or outdated nature of certain books at Canterbury Cathedral Priory in the fifteenth century, for example, caused some volumes to be discarded (De Hamel 1997b, 270-1). Similarly, some books housed in Canterbury College were subjected to particularly heavy use by students resulting in significant wear and tear so rendering them with little value (De Hamel 1997b, 267). This is evident from the 1521 inventory of Canterbury College that includes "*Item alia folia plurima dissuta ac lacerata*" (De Hamel 1997b, 267). Frequently, books that were no longer in use were deliberately mutilated and their leaves were used as pastedowns and flyleaves for the production and repair of other late medieval bindings (Wright 1958, 148-9; De Hamel 1997b, 270-1). Evidence of such actions is found in surviving medieval bindings, where, for example, leaves of a ninth- to tenth-century sacramentary were used to strengthen the Romanesque binding of the Winton Doomsday (London, Society of Antiquaries of London, MS 154) in the second half of the twelfth century (Wright 1958, 149). Large numbers of fifteenth- and early sixteenth-century examples demonstrate that this process was particularly common towards the end of the late medieval period (Wright 1958, 149; Foot 1999, 110). For example, the thirteenth- and fourteenth-century polyphonic music that comprised the 'Conductus Book' (Worcester, Cathedral Library, MS Add. 68), which belonged to Worcester Cathedral Priory, was broken up in the mid-fifteenth century and its pages were reused as flyleaves and pastedowns in several other bindings, including the binding of the thirteenth-century 'Worcester Psalter' (Oxford, Magdalen College, MS Lat. 100) (Thomson 2001, xlvi; Magdalen College Oxford 2015). Furthermore, antiquarian John Leland in his survey of the collections of St Augustine's Abbey, Kent, in the first half of the sixteenth century commented that "the age which followed [the fire of 1168] inflicted a far greater injury on the books, for the unlearned monks plucked pieces out of the Greek manuscripts, which they did not understand, and those Latin ones which were made unattractive by old age, for odd jobs around the bookshelves, to say nothing worse" (Carley 2006, 268). The analysis of the spatial distribution of late medieval book fittings, which is discussed in detail below (see 6.4), demonstrates that this material provides some evidence for the casual loss and deliberate disposal and deposition of fittings on monastic sites during the late medieval period. Nevertheless, as will become evident in the following section, monastic libraries remained for the most part intact until the 1530s.

6.3 THE DISSOLUTION OF THE MONASTERIES AND THE DESTRUCTION OF BOOKS

By far the most significant destruction of books occurred during the Dissolution of the Monasteries, 1536-1540 (Wright 1958, 148). Many historical studies have been completed on this subject, addressing the various motives behind and the processes involved in the closure of religious houses in England (see Knowles 1961b; Woodward 1966; Dickens 1967; Youings 1971; Hoyle 1995; Elton 1999; Duffy 2005; Haigh 2010; Bernard 2011). There have also been several studies that have taken historical approaches to understanding the extent of the dispersal and destruction of the books owned by monastic houses (see Wright 1951, 1958; Cook 1961a; Irwin 1966; Aston 1973; Ker 1985a; Humphreys 1986; De Hamel 1997b; Ramsay 2004; Carley 2006). For the purposes of this research, it is not necessary to debate the various causes of the suppression of English monasteries, but what is important is an understanding of the outcomes of the closure of the religious houses. Using previous studies and extant documentary evidence, this section provides a brief overview of the key procedures that brought about this event before considering what happened to the monasteries as a result, and more importantly the fate of their book collections.

In England, the 1530s marked the end of the monastic way of life (Cook 1961a, 245). In 1534 the passing of the Act of Succession secured the Crown to the children of Queen Anne Boleyn and further legislation forbade all payments, such as annates and Peter's pence, to Rome eliminating the authority and influence of the Pope (Cook 1961a, 245; Jackson 1974, 140). It was also proclaimed that an oath was to be taken by all subjects to uphold the Act of Succession that not only recognised the legality of King Henry VIII's marriage to Anne, but acknowledged the King as Supreme Head of the English Church (Cook 1961a, 246; Woodward 1966, 50). Following Henry's break from Rome, in July 1535, Thomas Cromwell (c.1485-1540) appointed commissioners to conduct visitations of all religious houses surveying monastic income and property, the details of which were compiled into the *Valor Ecclesiasticus* (Wright 1958, 149; Cook 1961a, 246; Woodward 1966, 59; Greene 1992, 179; Ramsay 2004, 126; Bernard 2011, 396). Acting upon the Commissioner's reports, an Act of Suppression was passed in 1536 by Parliament, which dissolved all religious houses with an annual income of less than £200 (Wright 1951, 208; Cook 1961a, 247; Woodward 1966, 79-80; Greene 1992, 178). At the same time the Court of Augmentations was founded to administer the monastic properties and revenues to be acquired by the Crown (Wright 1958, 149; Knowles

1961b, 393; Richardson 1961, 30; Woodward 1966, 79). Following the suppression of these lesser houses, the surrender and closure of the greater monasteries began at the end of 1537, and this was soon followed by the closure of the friaries from April 1538 (Wright 1951, 208; Cook 1961a, 251; Greene 1992, 180; Bernard 2011, 405). The Dissolution of the Monasteries ended in 1540 with the closure of the last remaining house, Waltham Abbey, Essex, and the passing of the Act for the Dissolution of the Greater Monasteries (Wright 1951, 209; Cook 1961a, 253). After a monastery was dissolved, royal agents appointed by the Court of Augmentations made an inventory and valuation of the property, all sources of income, and its movable possessions, and executed their transfer to the Crown (Wright 1958, 149; Cook 1961a, 254; Knowles 1961b, 393; Richardson 1961, 33; Woodward 1966, 79, 81; Greene 1992, 179; Bernard 2011, 408). The Court of Augmentations generated a vast amount of documentation for the whole process of seizure, administration and disposal of the monastic possessions (Ramsay 2004, 127). One of the more comprehensive studies of the Court of Augmentations is that completed by Richardson (1961), which extensively analyses and evaluates the documentary evidence for its activities. Whilst such records catalogued the treasures of the religious houses, such as gold and silver crucifixes, plate and chalices, and other items of value, including roof lead, bell metal and wooden furniture, the monastic books were not generally featured in the records of the Court of Augmentations (Richardson 1961; Ramsay 2004, 126-7). It is thought that this was the case as the majority of monastic books were regarded as being without financial value (Ramsay 2004, 127). The only occasion when books have been mentioned in inventories is in the context of the value of their storage furniture (see 4.4).

The first consideration of the agents was the treasures of gold and silver in the monastic sacristies, which included the sacred vessels, crucifixes, plate, censors, chalices, rings and jewelled gloves. In general, objects of great value were reserved by the Crown and taken to the royal treasury in London, where some were melted down and used to pay the expenses of the commissioners and agents (Cook 1961a, 255; Knowles 1961b, 383; Woodward 1966, 125; Greene 1992, 179; Doggett 2001, 166). The dismantling of the churches and conventual buildings of the monasteries followed the removal of the valuable objects. The surveys completed in 1536 also included the assessment of the value of structural features that could be removed (Woodward 1966, 81; Greene 1992, 179). All the conventual buildings were stripped of their furniture and of everything that would add value (Cook 1961a, 256-7;

Knowles 1961b, 383-4; Richardson 1961, 33). Although written some years after the Dissolution (*c.*1567-90), one of the more complete descriptions of these events survives in Michael Sherbrook's treatise *The falle of religiouse howses, colleges, chantreys, hospitals, &c.*, which includes a detailed account of the despoliation of Roche Abbey, West Yorkshire (Dickens 1959, 89-142). The material of greatest value in the fabric of monastic houses was the lead of the roofs, which was melted down and transported to nearby storehouses or to the coast for exportation (Cook 1961a, 257; Woodward 1966, 126). Additionally, bell-metal was equally valuable and was mostly reserved for royal use for the making of guns (Cook 1961a, 257; Woodward 1966, 125). Evidence of the removal of these valuable metals is sometimes found archaeologically. For example, in 1539, the lead from the roof of Rievaulx Abbey, North Yorkshire, had been cast into pigs and stacked at the west end of the nave to await removal, however, the high vault of the nave collapsed burying the lead before it could be taken away. The lead remained *in situ* until 1923 when it was discovered during excavations completed by Sir Charles Peers (Cook 1961a, 257). Archaeological evidence for the demolition process is also often found, during excavations, in the form of hearths for the melting of lead (Doggett 2001, 166). For example, at Sopwell
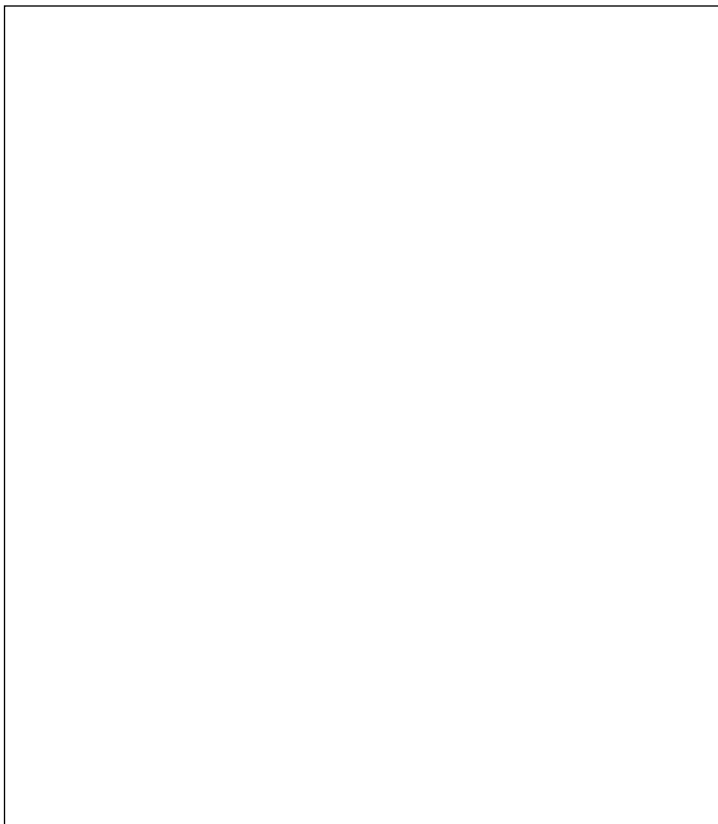
FIGURE 6-1. Plan and section of the lead hearth used for melting lead in the south range of the cloister of Sopwell Priory, Hertfordshire, following the closure of the priory (Johnson 2006, 19).

Priory, Hertfordshire, evidence of a circular bowl-shaped hearth for the melting of lead was excavated from within the south range of the cloister (Figure 6-1) (Johnson 2006, 19). The reuse of lead from Sopwell Priory at Henry VIII's manor house of The More near Rickmansworth, Hertfordshire, in the 1540s is documented in several of James Nedeham's building and repair accounts of the King's house now preserved in the Bodleian Library, Oxford (MSS Rawl. 776, 777, 779, 780, 781 and 809) (Biddle *et al.* 1959, 196-9; Doggett 2001, 166). Also, many monastic complexes were allowed to fall into decay and ruin (Cook 1961a, 262). A significant number of these derelict monasteries served as quarries from which material was removed to be used for other building purposes (Cook 1961a, 262; Woodward 1966, 128; Greene 1992, 183; Howard 2003, 221; Morris 2003, 237; Soden 2003, 283). The use of 40 clerestory windows from Rewley Abbey, Oxfordshire, which was dissolved in 1537, for a bowling alley at Hampton Court Palace, Surrey, is indicative of this practice, but it is thought that the recycling of monastic stonework was more common in more rural areas for economic reasons (Morris 2003, 237). Another well-documented example is the careful removal of the late fifteenth-century windows of stone, iron and glass from the nave at Rievaulx Abbey (Coppack 1986, 106; Morris 2003, 237). The commissioners noted this in their inventory together with details of how much the whole process would cost and the instruction that the windows were "to be bestowed in Helmsley Castell" (Coppack 1986, 106). The demolition of a monastic house, however, was rarely total (Greene 1992, 183; Doggett 2001, 166). In Hertfordshire, it is thought that commissioners were satisfied with despoiling the church and rendering the conventual buildings inhabitable by removing their roofs and stairs (Doggett 2001, 166). It has also been noted that there is a considerable contrast between the survival rates of monastic remains, for example, in Yorkshire with its abundant sources of building material and in Lincolnshire where very few monasteries have substantial remains above ground level (Greene 1992, 183). Another factor that determined the extent of the survival of monastic buildings was their proximity to centres of population (Greene 1992, 184). In the case of the monasteries of Yorkshire, the isolated rural sites of houses such as Byland, Fountains, Mount Grace and Rievaulx were not as frequently used as sources of stone compared to the urban monasteries of York (Greene 1992, 184). In contrast to the rural monasteries, the Gilbertine priory of St Andrew's, for example, which was founded outside the walls of the city of York in 1202, was thoroughly demolished and robbed in the years following its dissolution (Greene 1992, 184). In 1985-6 archaeological investigations of the site found evidence of this destruction, including robbed building foundations, demolition rubble and

deposits, and a large limekiln built at the centre of the cloister for the burning of pieces of limestone, such as window tracery and door mouldings, for their lime content presumably to be used for mortar in building programmes in the city (Greene 1992, 184-5; Kemp and Graves 1996, 214-8). As will be discussed in more detail later (see 6.4.2 and 6.4.3), the archaeological evidence for the demolition of this particular site is significant as all of the book fittings recovered from the Gilbertine priory were found in sixteenth-century demolition contexts.

The appropriation and reuse of monastic sites and their buildings has been the subject of several studies in recent years (see Knowles 1961b; Doggett 2001; Howard 2003; Morris 2003; Schofield 2003; Soden 2003; Ward 2003). The bulk of the land that came to the Crown was subsequently sold or leased (Cook 1961a, 260). Excluding the houses that were reconstituted as collegiate cathedrals and the monastic churches that were preserved for parochial worship, the new owners of monastic estates, some of whom were the leading courtiers of Henry VIII, incorporated parts of the conventual buildings into country houses they built on site (Cook 1961a, 261; Woodward 1966, 128; Greene 1992, 187; Doggett 2001, 169-72; Howard 2003, 223). One of the more frequently cited cases of conversion is that of Titchfield Abbey, Hampshire, for which several series of letters from agents on site to the abbey's new owner Sir Thomas Wriothesley (1505-50) survive charting the rapid process of converting the monastic complex (Knowles 1961b, 386; Platt 1984, 240; Howard 2003, 223). Not all monastic churches were entirely dismantled and destroyed but rather were retained to serve the needs of the local community typically as parish churches (Cook 1961a, 257; Woodward 1966, 128; Platt 1984, 239-40; Greene 1992, 193; Doggett 2001, 172; Schofield 2003, 313-4). In the case of cathedral priories, they ceased to be monasteries, but the majority were re-established as collegiate institutions served by chapters of secular priests (Cook 1961a, 259; Knowles 1961b, 389; Woodward 1966, 127). Of the monasteries situated in more urban environments, local authorities reused the houses for practical commercial and civic purposes, such as multi-tenanted buildings, spaces for communal meetings and civic business, and buildings for craft companies (Greene 1992, 192-3; Howard 2003, 229-30). A good example that has received archaeological investigation is the conversion of the site of the Carmelite friary in Coventry, Warwickshire, into a free grammar school and a house and grounds by John Hales (c.1516-72) in 1544 (Woodfield 1981).

The greatest loss resulting from the Dissolution has been argued to be the diminution of monastic books (Irwin 1966, 124; Aston 1973, 244; Humphreys 1986, 250; Ramsay

2004, 138). Only approximately 5,200 library and service books are believed to survive from the collections of the 800 or more monasteries, friaries and other religious houses of England that were suppressed between 1536 and 1540 (Ramsay 2004, 138). Collections of monastic books are occasionally mentioned in the Dissolution inventories of houses, but this is generally due to the value of the furniture that housed the books, as is the case for Rievaulx Abbey (Coppack 1986, 105) and the Greyfriars of Chichester, Sussex (Anon. 1901, 72; Ramsay 2004, 127). Shortly after the Dissolution, churchman and historian John Bale condemned the destruction of monastic books as particularly abhorrent and seemingly an act of vandalism since it took place "without consyderacyon" and that this destruction was and "wyll be vnto Englande for euer, a moste horryble infamy" (Copinger 1895, 18). Only 100 years later, Thomas Fuller (1608-61) echoed Bale's lament over the losses in his *Church History of Britain*, first published in 1655, detailing the misappropriation of monastic books and the loss of learning (Fuller 1845, 433-7).

The closure of the monastic houses brought about the dispersal of the majority of their libraries between 1536 and 1540 (Wright 1958, 149; Cook 1961a, 256; Irwin 1966, 125; Aston 1973, 244-5). Contemporary, sixteenth-century sources can reveal the varying fates of monastic books at the end of the late medieval period, one of the earliest and most insightful of these being *The Laboryouse Journey and Serche of John Leylande for Englandes Antiquitees* by John Leland and John Bale, first published in 1549 (Copinger 1895). Many books were removed from monasteries soon after the passing of the Act of Suppression, and one way in which monastic libraries were dispersed was through the sale of their collections (Cook 1961a, 256; Irwin 1966, 126; Humphreys 1986, 250). Details of transactions involving the sale of books to local gentry and the exportation of monastic books abroad are given by Leland and Bale who state that some books were "solde to the grossers and sope sellers, & some they sent ouer see to the bokebynders" (Copinger 1895, 19). In particular, Bale notes of a merchant who had purchased the contents of two noble libraries for 40s. and had been using the pages of the books as wrapping paper for ten years without having exhausted his supply (Copinger 1895, 19; Aston 1973, 245). Similarly, the 1538 accounts of the Stafford Greyfriars record various transactions involving the sale of books to local gentry (Humphreys 1986, 250).

In addition to the dispersal of monastic collections, the Dissolution often resulted in the purposeful destruction of their contents (Wright 1958, 149), and the destruction of liturgical and other books is thought to have taken place on an enormous scale

(Aston 1973, 244). It has been argued that large numbers of texts that were not readily sold were often thrown into the fires during the dismantling of the monastic sites (Cook 1961a, 256). As discussed in more detail later (see 6.4.2), at St Mary's Cathedral Priory in Coventry, Warwickshire, book fittings have been excavated from deposits of ash representative of the product of paper burning, providing evidence for the destruction of books following the suppression of the monastery (Rylatt and Mason 2003, 44). Ker (1986, 466-7), the principal historian of Oxford's libraries in the sixteenth century, has commented that "a bonfire would help to explain why no pastedown has been found which looks as if it might be from a university library book: if the books had been sold for what they would fetch one might expect binders to have got some of them and perhaps also that rather more would have survived in private hands". With religious texts being made redundant, the Crown took particular interest in those with valuable bindings (Ramsay 2004, 129). Biblical and liturgical books that had been expensively embellished with gold, silver and semi-precious stones were particularly at risk (Ramsay 2004, 130). Although writing in the mid-seventeenth century, and so warrants caution in terms of its accuracy, Fuller (1845, 434) describes how "the covers of books, with curious brass bosses and clasps, intended to protect, proved to betray them, being the baits of covetousness; and so, many excellent authors, stripped out of their cases, were left naked, to be burnt or thrown away". The seventeenth-century antiquarian John Aubrey (1626-97) has preserved a story, on the authority of his grandfather Isaac Lyte (1577-1660), of a day when the leaves of illuminated manuscripts from the despoiled abbey of Malmesbury, Wiltshire, "flew about like butterflies" through the streets of the town (Barber 1982, 15; Wright 1958, 151). Whilst these later accounts are useful, contemporary documents do in fact survive providing evidence of the fates of books during the closure of the monasteries and over the subsequent years. Following the initial mutilation of books, there were various uses for certain parts of the dismantled books and several, albeit base, functions are mentioned in a number of late sixteenth-century accounts (see Ellis 1827; Gairdner 1886; Copinger 1895). Leland and Bale themselves describe how elements of destroyed monastic books were "to serue theyr iakes, some to scoure theyr candelstyckes, and some to rubbe their bootes" (Copinger 1895, 19). Following his visit to Oxford, Richard Layton (c.1500-44) wrote to Thomas Cromwell stating that he "fownde all the gret quadrant Court full of the leiffs of Dunce, the wynde blowyng them into evere corner" and that Mr Grenefelde, a gentleman of Buckinghamshire, gathered up "bowke leiffs (as he saide) there to make him sewells or blawnsherres to kepe the dere within the woode, thereby to have the

better cry with his howndes" (Ellis 1827, 61-2; Gairdner 1886, 117-8; Aston 1973, 245; Ramsay 2004, 133). It is thought that pages of many books were used as firelighters; however, they were more typically used by local stationers as pastedowns, flyleaves or as strips to strengthen other bookbindings throughout the sixteenth and into the seventeenth century (Wright 1958, 154-5; Aston 1973, 245; Humphreys 1986, 256-7; Ramsay 2004, 133). Ker's (1954) survey of pastedowns, for example, identifies more than 2,000 fragments of discarded manuscripts that were used in Oxford bindings in the sixteenth century. This practice is also demonstrated by evidence from the collections of the descendants of Sir Francis Willoughby (*c.*1546/7-96) who developed coalmines near Wollaton, Nottinghamshire, and built Wollaton House (Wright 1958, 155). It has been found that Willoughby used manuscript leaves from monastic books to bind estate papers; still surviving are at least ten leaves from an early eighth-century Northumbrian Bible (London, British Library, Add. MS 45025) and fragments of an eleventh-century cartulary that belonged to Worcester Cathedral Priory (London, British Library, Add. MS 46204), which were all used in this manner. Furthermore, the wooden boards of larger books were often used for a variety of repairs. Although written some years after the Dissolution (*c.*1567-90), Michael Sherbrook, a sixteenth-century priest and rector of Wickersley, West Yorkshire, when describing the spoliation of Roche Abbey explained how some of the monastery's books were used to repair wagons. It is stated that "some took the Service Books that lied on the Church and laid them upon their Waine Coppes to peice the same" (Dickens 1959, 124). In addition to the dispersal and destruction of monastic libraries, it was not uncommon for books to be left in abandoned monasteries for many years (Clarkson 1993, 182; Carley 2002, 341-2). For example, an eleventh-century manuscript containing *Uita sancti Dunstani* (London, British Library, Cotton MS Cleopatra B XIII, fols. 59–90) that once belonged to St Augustine's Abbey, Kent, remained on site following the abbey's suppression in 1538 until it was later found in 1565 (Clarkson 1993, 182). It is this deliberate destruction of monastic books that forms an important part of this research. As will be discussed in detail later (see 6.4), this practice is argued to be evident archaeologically through the analysis of late medieval book fittings excavated from English monastic sites.

Despite the destruction of large numbers of monastic books, thousands did survive as successful attempts were made to save some of the collections in the years leading up to and following the closure of the monasteries (Irwin 1966, 125; Aston 1973, 246; Carley 2002, 340). It is thanks to the more general interest in history that

was becoming prevalent at the time and to men such as Leland and Bale that many texts were not wholly lost (Ramsay 2004, 139; Carley 2002, 340; 2006, 291). As early as 1533 Leland was given permission by Henry VIII "to peruse and dylygentlye to search all the lybraryes of monasteryes and collegies of thys your noble realme, to the entent that the monumentes of auncyent wryters, as wel of other nacyons as of your owne prouynce, myghte to brought out of deadly darkenesse to lyuelye lyght" (Copinger 1895, 33). Leland's booklists compiled during his travels were selective in nature illustrating his own personal interests; however, his sketches of monastic libraries do suggest widely differing conditions across the monastic houses and orders (Carley 2006, 265-6). Several years later, in a letter dated 16 July 1536, Leland pleaded with Cromwell for his assistance in continuing his searches of monastic libraries and the retrieval of dispersed books for the Royal Library (De Ricci 1930, 14; Wright 1958, 152-3; Carley 2006, 273-4). As a result of his efforts, some of the finer books, particularly those by English authors, were saved from the general dispersion for the Royal Library (De Ricci 1930, 14; Wright 1951, 210; Aston 1973, 246; Jackson 1974, 140; Humphreys 1986, 250; Ramsay 2004, 125; Carley 2006, 272). Similarly, the royal commissioner Sir John Prise took an interest in the libraries of the houses he dissolved in the west of England in late 1539 and early 1540 and formed a miscellaneous collection of historical and theological manuscripts (Ker 1964, xii, 1985b, 476; Carley 2002, 341; Ramsay 2004, 127). During the second half of the sixteenth century, antiquarians, such as Archbishop Matthew Parker, set about the retrieval of dispersed monastic books, many of which formed private collections, and a substantial number of these are now in national libraries (Wright 1958, 156-7; Irwin 1966, 126; Woodward 1966, 129; Jackson 1974, 140-1; Ker 1964, xi, 1985a, 464; Humphreys 1986, 256; Clarkson 1993, 182; Ramsay 2004, 139; Rundle 2004, 118-9; Evenden 2010, 103). De Hamel's (1997b) detailed analysis of the library of Canterbury Cathedral Priory, Kent, which was one of the largest in England at the end of the late medieval period, considers the post-Dissolution fate of part of its contents. The dispersal of the monastic libraries coincided with the rise of the private scholar who built his own book collection from which he worked (Ramsay 2004, 139). It is evident from extant monastic books that historical, patristic and biblical manuscripts of the twelfth and thirteenth centuries survived more frequently compared to volumes of scholastic theology and philosophy, and canon and civil law (Ker 1985a, 464; Ramsay 2004, 139; Carley 2006, 291). For example, the surviving books that belonged to the Augustinian canons of Cirencester Abbey and Llanthony Secunda Priory, both in Gloucestershire, are mainly volumes containing patristic

texts and later works of scholarship, which are thought to reveal as much about the interests of their sixteenth-century collectors as the nature of the collections of their medieval owners (Webber 1997, 35-6). This is also thought to be the case for the books that survive from Buildwas Abbey, Shropshire, which comprise mainly biblical texts, commentaries and patristic works (Cheney 1973, 332-3). Only occasionally do extant books contain inscriptions and notes written by the collectors of dispersed monastic books. A twelfth-century manuscript containing *Libro oeti Gregorij Nazianzeni* (London, British library, Royal MS 5 E XXII) belonged to Byland Abbey, North Yorkshire, as indicated by the inscription "*Liber Sancte Marie de Bellalanda*" (fols.1, 4) (British Library Board 2015i). Also inscribed in this manuscript are the names of Yorkshiremen John Nettleton and Henry Savile, both of whom were collectors of monastic books (Hicks 1990, 214). In 1581 Nettleton and Savile were entrusted with a number of books from Byland Abbey that had been saved after the abbey's suppression on 30 November 1538 by the prior Robert Barker who was later presented to the vicarage of Driffield, East Yorkshire, on 15 December 1541 (Cross 1989, 281-2; Carley 2006, 285; Cistercians in Yorkshire 2003b).

It was not uncommon for the members of religious houses to protect their collections in the years leading up to the Dissolution and to reacquire their old books in the following years. Although there is little surviving evidence concerning the nature of English monastic libraries in the years prior to the closure of religious houses in the 1530s, documentary evidence indicates that books were often deliberately removed from the collections of monasteries and therefore had more chance of survival (Humphreys 1986, 255; Carley 2006, 265). Ker (1985a, 469) has hypothesised that "the removal of books by individual inmates at the moment of the Dissolution caused, no doubt, a wider dispersal of the libraries of some houses than of others", but recognised that more evidence needed to be collected and analysed. Recent research on the dispersal of monastic books in Yorkshire (see Cross 1989; Cross and Vickers 1995) is thought to lead the way in supporting Ker's supposition (Carley 2006, 284-7). Also, Selwyn's (1997) detailed examination of the provenance of the medieval manuscripts and early printed books owned by Thomas Cranmer has discussed the likelihood that Cranmer, along with other key figures involved in the Dissolution, received books and other religious items as gifts from members of religious houses to secure favourable terms on the closure of their houses.

It was not unusual for the former members of religious houses to purchase back some of their collections (Ramsay 2004, 128; Carley 2006, 284). Following the closure

of Monk Bretton Priory, West Yorkshire, in November 1538, the priory's possessions were sold and of these more than 140 books were bought by the former prior, sub-prior and two monks (Wright 1958, 160-1; Ker 1964, xii; Woodward 1966, 129; Humphreys 1986, 256; Ramsay 2004, 128; Carley 2006, 284). In some cases the lands of former houses were given to senior members of those houses, such as the abbot of Alnwick Abbey, Northumberland, who retained the lands of his former abbey, and presumably much of its contents, including its library, and founded a country house for his relatives (Wright 1958, 150). Similarly, it is thought that Prior Hart of Llanthony Secunda Priory retained a significant part of the priory's book collections in his manor house at Brockworth, four miles south-east of Gloucester, which was granted to him by the King (Wright 1958, 160). That some monastic churches became parish or secular cathedral churches did not guarantee the survival of their libraries, however, the service books often remained (Wright 1958, 164; Irwin 1966, 125). Also, many of the abbots and priors who received cathedral positions or were absorbed into the parochial clergy took with them monastic books, plate and vestments (Wright 1958, 159; Irwin 1966, 126; Carley 2006, 285-6). From this discussion it is evident that various approaches were made to save large numbers of monastic books from destruction, however, from the documentary evidence it is clear that this was not always the case. In the following section, this research demonstrates that the analysis of late medieval book fittings excavated from English monastic sites can be used to provide further evidence for the deliberate on-site destruction of monastic books.

6.4 THE SPATIAL DISTRIBUTION OF BOOK FITTINGS

Offering a new approach to the understanding of the use and destruction of medieval monastic books, the analysis of the spatial distribution of late medieval book fittings excavated from English monastic sites forms an important part of this research. This section discusses in detail this analysis, taking into consideration the various locations in which book fittings have been found and focusing on the nature of the archaeological contexts from which they have been excavated. The wider social contexts of the data are also considered, interpreting the evidence for both the late medieval and sixteenth-century destruction of monastic books. For this analysis, it is important to recognise the possibility that not all of the archaeological material studied has been excavated from primary deposits. It is possible that some of the finds, particularly those recovered from Dissolution or later contexts, may be residual

Find site	No. of fittings	%
Abbot's/prior's lodge and gardens	4	1.2%
Ancillary building	4	1.2%
Armarium/vestiarium	4	1.2%
C16th Dissolution building	1	0.3%
Cell (charterhouse)	4	1.2%
Cellarium	2	0.6%
Cemetery	4	1.2%
Chapter house	5	1.5%
Church	51	15.2%
Cloister	24	7.1
Dormitory	3	0.9%
Infirmary	1	0.3%
Kitchen	1	0.3%
Lay brother's refectory	3	0.9%
Monastic precinct	3	0.9%
Parlour	1	0.3%
Refectory	1	0.3%
Reredorter and drain	62	18.5%
Unknown	156	46.4%
Warming house courtyard and drain	2	0.6%
Grand Total	**336**	**100.0%**

TABLE 6-1. The book fittings that have been found archaeologically in various locations within the monastic complex.

having been deposited later than the date of their origin or redeposited subsequent to the date of their original deposition.

For this research, 336 book fittings recovered from 47 monastic sites across England have been collated. From 44 of these religious houses, 180 book fittings (54 per cent) with sufficient archaeological information as to the locations in which they were deposited have been examined in greater depth. Analysis of these artefacts has shown that they were found in a variety of different locations, including the more typical areas such as the church, the chapter house and the dormitory, but also more unusual locations such as ancillary buildings, the cemetery and the monastic gardens. Table 6-1 gives the numbers of book fittings that have been found archaeologically in various locations within the monastic complex. By differentiating the locations in which book fittings have been found, a clear pattern has emerged (Figure 6-2). Of the 180 objects found across the 44 sites analysed, the predominant areas in which book fittings have been found are the communal latrine, the reredorter, its drain and their immediate surroundings, where 62 fittings (34 per cent) have been found, and the church with 51 fittings (28 per cent). The remaining 67 pieces (37 per cent) were found scattered across 22 other locations within the monastic complex, with larger quantities being found in the chapter house, the cloister and various buildings within the claustral ranges.

The analysis of the distribution of different types of book fastenings and furnishings within the monastic complex has found that, across the monastic church and the reredorter and drain, there is a relatively even distribution of the more common forms of fastenings identified in the typology. Taking types A.1, A.3 and A.7 into consideration (Figure 6-3), four examples of hinged plate and loop fastenings (A.1) have been recovered from the church and seven from the reredorter and drain, of hooked fishtail fastenings (A.3) ten artefacts have been found in the church and 12 from the monastic reredorter, and ten rectangular strap-and-pin fastenings (A.7) have been excavated from the church and eight from the reredorter and drain. There are, however, differences in the numbers of anchor-/catch-plates (A.6) and pin and base-plates (A.11) from these two locations (Figure 6-3). A total of 12 examples of type A.6 have been recovered from the reredorter and drain compared to four from the church, and in terms of pieces of type A.11, 11 have been excavated from the site of the church in comparison to a single example from the reredorter and drain. It is likely that the nature of such fittings being directly riveted onto the wooden boards of late medieval bindings, and the fact that they would not have been easily removed or

KEY

A - Church
B - Armarium/vestiarium
C - Chapter house
D - Parlour
E - Cloister/cloister walk
F - Dormitory/day room (below)
G - Reredorter
H - Warming house
I - Refectory
J - Kitchen
K - Cellarium
L - Lay brothers' refectory/dormitory (above)
M - Guest houses
N - Ancillary buildings
O - Infirmary
P - Abbot's/prior's lodge and gardens
Q - Cemetery
R - Other

NUMBER OF BOOK FITTINGS

1-9
10-19
20-29
30-39
40-41
50-59
60-69

FIGURE 6-2. *Plan of a monastery (based on Fountains Abbey) showing the distribution of the 180 catalogued book fittings with known locations of deposition.*

A.1.1
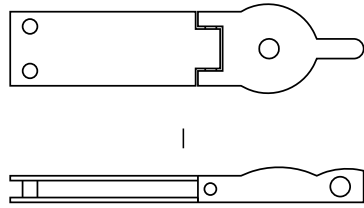
A.3.1
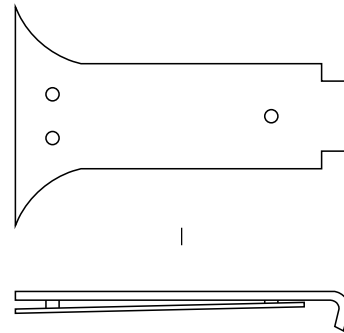
A.6.2
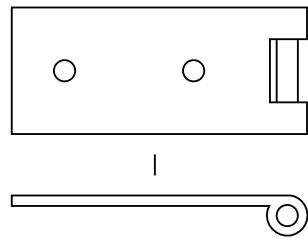
A.7.1
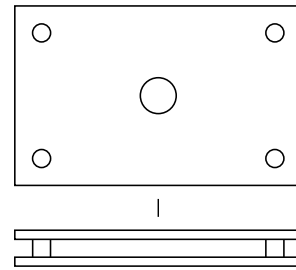
A.11.1
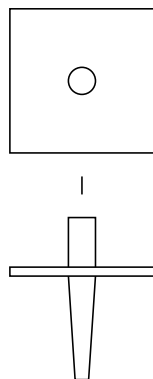
B.1.1
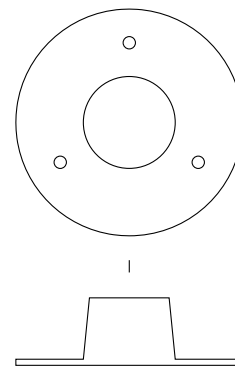
FIGURE 6-3. *Schematic drawings of the more common types of book fittings found across monastic sites.*

lost, has affected these figures rather than any conscious decision to deposit fittings of these two types in either the church or reredorter and drain. In terms of the different types of book furnishings, just over half (20 out of 39) with known locations of deposition are domed bosses (B.1). Despite this, there is a relatively even spread of furnishings of type B.1 across various locations of the monastic complex, including three from the church and five from the reredorter and drain.

Given the relatively even distribution of the different types of book fittings, particularly across the church and reredorter, it has been important to analyse and interpret the nature of the archaeological contexts in which the artefacts have been found. Of the 180 fittings analysed, 22 per cent (39 artefacts) were found during the first half of the twentieth century in clearances completed by the Ministry of Works. Consequently, these objects have little specific associated context information, apart from the general location of the finds. This makes it difficult to determine the dates that these book fittings were deposited. However, the remaining artefacts with identified sites of recovery were found during more modern excavations that generally produced additional information concerning the circumstances in which they were found. By further investigating the book fittings that have been excavated from dated archaeological contexts, it has been possible to consider these artefacts in their wider social and cultural contexts. Furthermore, that the contexts or sites of deposition are not known for 46 per cent (156 fittings) of the total 336 items in the catalogue must not be overlooked as this demonstrates a limitation of the use of this archaeological material. Nevertheless, from the contextual and distribution analysis of the suitable data, in conjunction with the documentary evidence, it has been possible to make inferences on the nature of the deposition of book fittings from English monastic sites.

6.4.1 Medieval loss and disposal

Within the catalogue, there is a relatively low number of book fittings recovered from the more typical locations of late medieval book use and storage, such as the north claustral walk, the chapter house and the *armarium*, and these are likely to indicate the late medieval casual loss or discarding of fittings no longer attached to books due to the books' poor condition or the removal of ragged bindings. Such finds may also represent the results of the recycling of disused and outdated books, during the

late medieval period, whereby the leaves were subsequently reused as pastedowns and flyleaves (Wright 1958, 154-5; Humphreys 1986, 256-7). Interestingly, this seems to be the case at Bordesley Abbey, Worcestershire. During excavations between 1971 and 1975, three book fittings (**62, 63** and **66**) were recovered from layers of trodden surfaces, dated between *c.*1260 and *c.*1400, at the site of the Cistercian abbey's *armarium,* which is located in the eastern claustral range of the complex between the south transept and the chapter house (Figure 6-4) (Burrow 1983, 119). It has already been demonstrated in Chapter 4.4.2 that small rooms located in this position were used for the storage of monastic books and are often seen in the fabric of twelfth-century houses, especially those of the Cistercian order. In addition to the location of this room, evidence of timber partitions, perhaps for free-standing cupboards, and two wall recess cupboards at its western end also indicate the room's function as an *armarium* (Burrow 1983, 119). As in other medieval monasteries, Bordesley Abbey's *armarium* was combined with the *vestiarium* situated to its east, and both rooms are thought to have had little natural light (Burrow 1983, 119). Therefore, the nature of the *armarium* together with the recovery of book fittings from late medieval contexts within this room clearly indicate that a collection of the monastery's books were
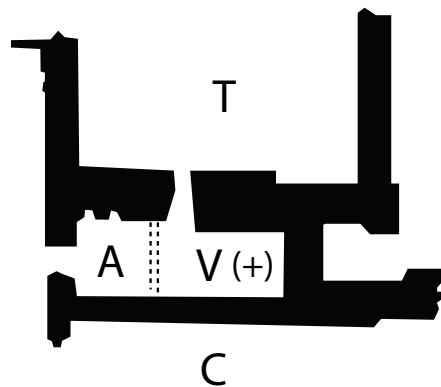
FIGURE 6-4. *Plan of Bordesley Abbey, Worcestershire, showing the location of the* armarium *(A), the* vestiarium *(V) and an altar (+) situated between the south transept (T) and the chapter house (C). Redrawn from Burrow (1983, 117).*

stored here, but not necessarily consulted *in situ* (Burrow 1983, 121). Also at Bordesley Abbey, a fourth piece of book furniture (**59**) was excavated from a make-up deposit of rubble and soil, with some compacted trodden surfaces, in the room just east of the *armarium* and *vestiarium* (Figure 6-4) (Burrow 1983, 116). In addition to this book fitting, an iron stylus and several sherds of Tudor Green ware were also deposited in this material, suggesting a fifteenth-century date for this context (Moorhouse 1979, 54; Burrow 1983, 116). Therefore, the analysis of these four book fittings excavated from late medieval contexts in the *armarium* and in an associated room at Bordesley Abbey clearly demonstrates that the study of the spatial distribution of book fittings on monastic sites, together with other archaeological evidence, can provide physical evidence for the location of the storage of monastic book collections and the loss of book fittings.

Within the monastic church, books formed a key part of the daily religious services and documentary evidence has shown that books used for such purposes were often stored within the church itself (see Chapter 4). Whilst many fittings recorded in the catalogue have come from sixteenth-century Dissolution contexts, which are examined later (see 6.4.2), a small number have been recovered from late medieval contexts. Three fittings recovered from a late medieval context inside a monastic church were excavated from the Cistercian site of Bordesley Abbey (**57, 60** and **61**) (Lloyd-Morgan 1983, 177, 181). As discussed in Chapter 2.7.1, a hooked fastening of type A.3.1 (**57**) was excavated from a fifteenth-century layer of dirt in the sub-floor space below the south choir of the abbey church along with a collection of other small metal objects, including a copper-alloy pen nib and a lead stylus (Hirst and Wright 1983, 55). The two other fittings found within Bordesley Abbey's church, one being a rectangular strap fastening (A.7.1) (**60**) and the other a base-plate for a pin (A.11.1) (**61**), were both excavated from a layer of rubble, plaster, mortar and charcoal (Figure 6-5). This layer has been interpreted as builders' debris from the destruction and reconstruction of the south choir stall during the fifteenth century (Hirst and Wright 1983, 86). The assemblage of metal small finds excavated from the church has been interpreted as having fallen through the gaps in floorboards of the choir (Hirst and Wright 1983, 55). Given the close association of these two fittings based on their form and strap-and-pin function, and their recovery from the same context inside the church, it is possible that they were both used on the same binding. It is likely that these three examples represent the casual loss of book fittings from the bindings of books used by monks during the daily religious services of the monastery. This may

60
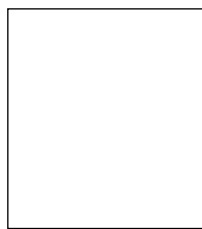
61
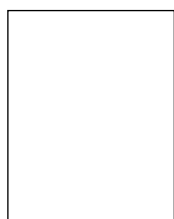
FIGURE 6-5. *Two book fittings excavated from the church of Bordesley Abbey, Worcestershire (Rahtz 1983, 176 CA28b). Scale 1:1.*

also have been the case at the site of the Dominican friary at Guildford, Surrey. A total of 14 book fittings of different types were excavated from dust layers beneath the choir stalls (**205-218**) (Poulton and Woods 1984, 79). Whilst a date for their deposition is not given in the excavation report, it is thought that they were used on the friars' choir books and were lost, having fallen through the floorboards, during the daily round of offices performed in the church (Poulton and Woods 1984, 79). In addition to this large assemblage of book fittings, other artefacts found beneath the choir stalls include objects that the friars would have worn and carried during their daily routines, such as buckles and other belt fittings, paternoster beads, knives and pins (Poulton and Woods 1984, 79). A group of 15 jettons was also found together with these personal items of the friars, and these range in date from the 1330s to the 1520s (Poulton and Woods 1984, 79). This corpus of material culture clearly demonstrates the loss not only of personal items but also book fittings during the daily routines of the Dominican friars at Guildford throughout the late medieval period.

The excavation of book fittings from the site of the monastic chapter house and the abbot's or prior's lodge may also indicate the locations in which monastic books were used and stored. It is well established that the chapter house served many

20 **96**
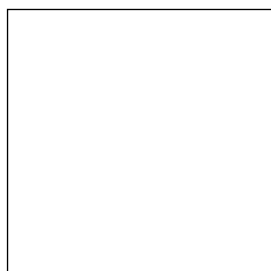
237
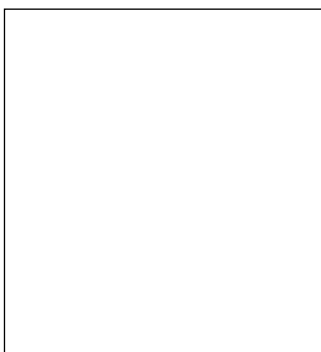
*FIGURE 6-6. Book fittings excavated from the chapter house: **20** from Battle Abbey, East Sussex (English Heritage, 793382), **96** from St Mary's Cathedral Priory in Coventry, Warwickshire (Hobley 1971, 120, no.2), **237** from Hulton Abbey, Staffordshire (Boothroyd 2004, 159, no.34). Scale 1:1.*

important purposes for the day-to-day running of a monastery and often housed a collection of books (see Chapter 4). Two fixtures from Battle Abbey (**20** and **43**), a single example from St Mary's Cathedral Priory in Coventry, Warwickshire (**96**) (Hobley 1971, 119), and another from Hulton Abbey, Staffordshire (**237**) (Klemperer 2004, 24), were recovered from the site of their monastery's chapter house (Figure 6-6). From Rievaulx Abbey, North Yorkshire, one book fitting was excavated from the area just to the east of the abbey's chapter house (**282**). Whilst these five examples have not come from datable contexts, it can be suggested that their presence in/around the chapter house signifies the use of books in this particular location and possibly the accidental loss of fittings from the bindings of books that would have been in constant use in this important room. At the Augustinian priory of St Gregory in Canterbury, Kent, three book fittings (**87-89**) were excavated from the site of the prior's lodgings located in the western claustral range (Figure 6-7) (Hicks and Hicks 2001, 270-1). These examples were recovered from contexts dating to the Dissolution and so may be interpreted as evidence for the destruction of the priory's books. Whilst representing their destruction and deposition in the sixteenth-century, it is also possible that these particular artefacts simultaneously signify the location of the
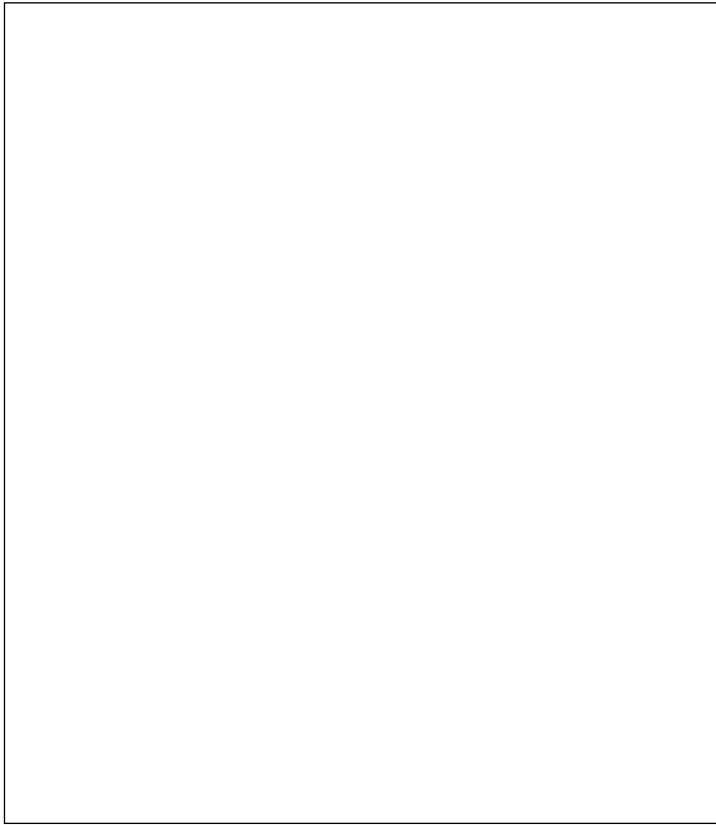
FIGURE 6-7. Plan of St Gregory's Priory, Canterbury, Kent (Hicks and Hicks 2001, 25); the highlighted area indicates the location of the prior's lodge.

storage of a collection of books used personally or kept by the prior during the latest phase of the site.

The excavation of an incomplete book fastening of type A.1.1 (**249**; Figure 2-67) from a chalk-walled pit in the probable gardens of the abbot of the Cistercian abbey of St Mary Graces in London may indicate its loss or more probably its disposal during the late medieval phase of the site. As explained in the excavation report (Grainger and Phillpotts 2011, 53-4), in the area interpreted as the possible gardens of the monastery's abbot, a chalk-walled pit was dug adjacent to and in line with a similar pit within the building used as the abbot's lodgings (Figure 6-8). The earliest fill of the garden pit is thought to have been a waste deposit, and this was capped by a thick layer of clay in order to seal the waste deposit after the pit had gone out of use. This layer was in turn sealed by a deposit of silt and rubble, which contained some fragments of fourteenth- or fifteenth-century pottery and the book fitting (**249**) (Grainger and Phillpotts 2011, 54). The two pits from the abbot's lodgings and garden are thought to have been associated in some way with water management, serving originally as soakaways or storage tanks and then possibly as small private latrines, suggesting developments were made to the domestic accommodation in this area of
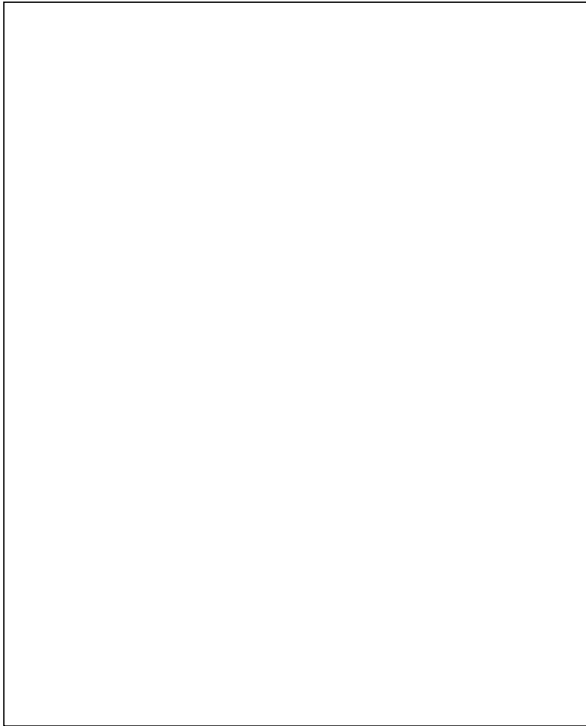
FIGURE 6-8. Plan of the chalk-walled pits located in the abbot's lodging and garden of St Mary Graces Abbey, London (Grainger and Phillpotts 2011, 41).

the cloister (Grainger and Phillpotts 2011, 57-8). The changing functions of these pits and the small amount of imported pottery in the disuse fills suggest that they were associated with the abbot's lodgings and with private chambers perhaps for more important monks or corrodians, or possibly servants (Grainger and Phillpotts 2011, 57-8). The recovery of this incomplete strap-and-pin book fastening of type A.1.1 (**249**) from the probable fourteenth- or fifteenth-century context in the pit located in the abbot's gardens clearly suggests that it was deliberately disposed of during the latter phase of the monastery's occupation before its closure in 1539. That this artefact is incomplete may be a result of its conditions of preservation; however, it may provide a clue for the reason for its deposition in a waste pit. Of this fitting only the cast loop survives; the plate onto which it would have hinged is lost. That the metal bar of the loop is intact suggests that it may have been the metal plate element of the strap-and-pin fastening that was damaged, which warranted the disposal of the loop.

Within the monastic complex, the cloister lay at the centre of the ritual and contemplative life of the monastery (Kerr 2009, 24). Within the catalogue, a total of 12 book fittings have been excavated from within the cloister garth and walk. Of these only a single example can be seen to indicate the casual loss or disposal of a

378

piece of book furniture that occurred during the late medieval period prior to the Dissolution. The remaining examples were all excavated from sixteenth-century or later contexts and so are discussed separately (see 6.4.2). The artefact in question is an anchor-/catch-plate (A.6.2) that was recovered from St Frideswide's Priory cloister garth (*278*) (Scull 1988, 39). It was found within the cloister garth in a layer dated to the late fourteenth-century to early sixteenth-century phase of the site (Scull 1988, 66). This context consisted of gravelly loam and sealed the fill of earlier features, which in turn were cut by later pits (Scull 1988, 66). This layer is thought to have been dumped following the rebuilding of the cloister and its surrounding buildings, which was completed by 1499, to raise the level of the garth that was necessitated by subsidence caused by the settling of the fills of earlier features (Scull 1988, 66). As discussed later (see 6.4.2), several other pieces of book furniture have been excavated from the cloister garth; however, these were recovered from later contexts associated with the suppression of the priory in 1524. Given the stratigraphic evidence of the priory's cloister garth, it is likely that the anchor-/catch-plate of type A.6.2 was lost or disposed of during the early sixteenth century but before the closure of the priory took place.

Unusually, two book fittings, one rectangular strap fastening (A.7.1) (*241*) and one base-plate for a pin (A.11.2) (*242*), were recovered during the 1951 excavations of Kirkstall Abbey, West Yorkshire, from the site of the warming house courtyard (Figure 6-9) (Hume and Owen 1955, 19; Duncan and Moorhouse 1987, 132). Fitting *242* was recovered from a drain located in the courtyard, however, a date for its context is not stated in the excavation report, and fitting *241* is recorded as unstratified. Whilst little information is known for the deposition of these two book fixtures, it is possible to speculate on the nature of their disposal. In many later medieval Cistercian houses the muniment room was located above the warming house, as was the case at Fountains Abbey, West Yorkshire (Figure 6-10), Byland Abbey and Rievaulx Abbey (Cistercians in Yorkshire 2003c; 2003d; 2003e; Gilyard-Beer 1970, 50). The purpose of the muniment room was to house the monastery's administrative records, including title deeds, leases and estate papers, court rolls and ministers' accounts, and often the deeds and treasures of local families, such as at Fountains Abbey (Dunning 1964, 104-5; Gilyard-Beer 1970, 51; Coppack 2009, 65). Situated above the warming house, the muniment room was dry due to the warming house being one of the few monastic rooms that could have a fire burning throughout the day, especially during the winter months, making it one of the warmest places in the complex (Cistercians
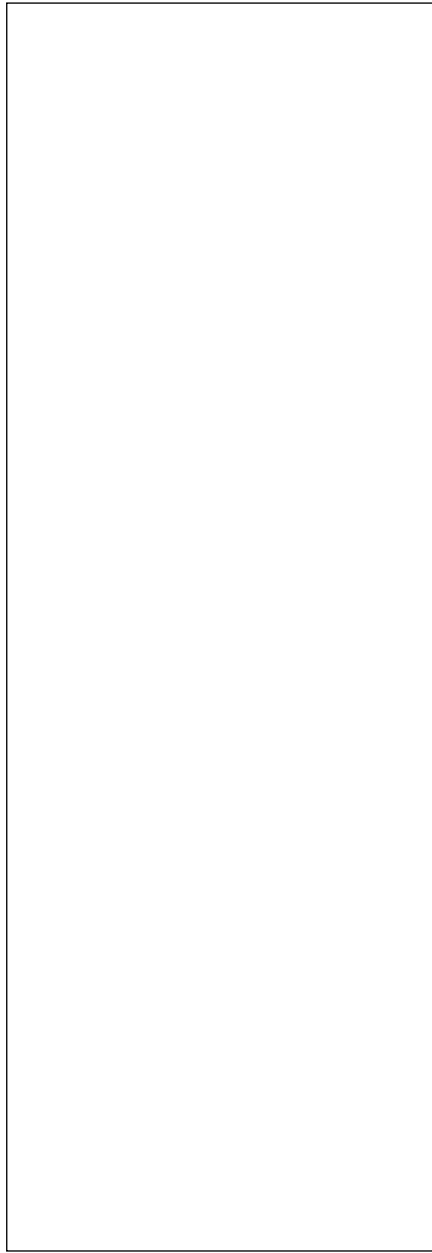
FIGURE 6-9. *Plan of the warming house and warming house courtyard at Kirkstall Abbey, West Yorkshire (Moorhouse and Wrathmell 1987, 14).*
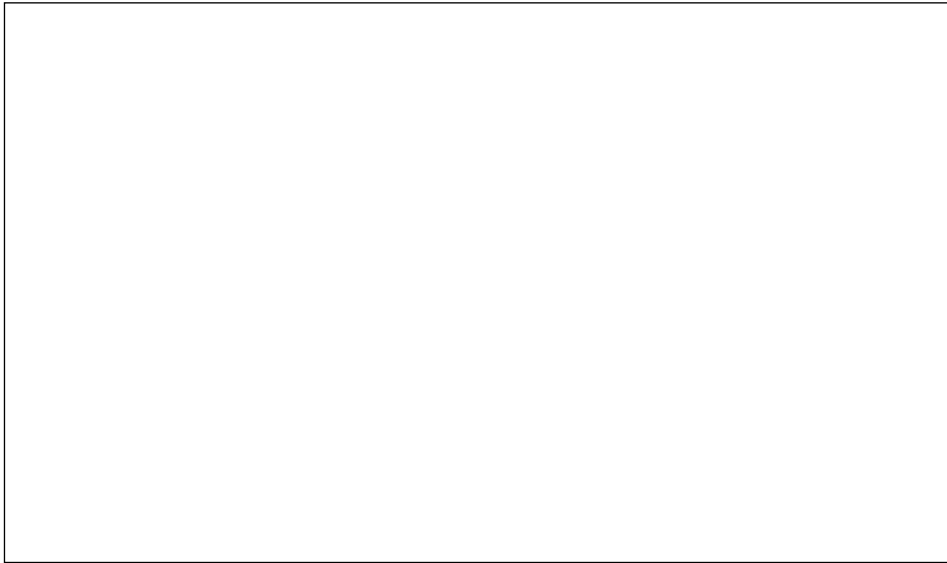
FIGURE 6-10. *Plan of the warming house, with the muniment room above, at Fountains Abbey, West Yorkshire (Gilyard-Beer 1970).*

in Yorkshire 2003c; Gilyard-Beer 1970, 48-51). The documents held in the muniment room were particularly valuable and demanded careful and safe storage as they provided evidence of legal titles to properties and estates (Dunning 1964, 105). At Fountains Abbey, the muniment room was particularly large, due to the wealth and status of the Cistercian abbey, containing more than 3,500 title deeds to its extensive estates. The room was made secure with windows fitted with iron grilles and strong doors, and also by having the prior's chamber nearby so he could control access to the room (Gilyard-Beer 1970, 50-1; Coppack 2009, 66). Similar to other Cistercian monasteries, Kirkstall Abbey also had a room located above the warming house, which is thought to have housed the abbey's muniments (Hope 1907, 45). In terms of the book fittings excavated from the warming house courtyard at this site (Figure 6-9), it could be suggested that they were disposed of in the courtyard having fallen off or been removed from a binding within the muniment room, however, this can only be speculated on as a consequence of the lack of stratigraphic evidence.

6.4.2 Dissolution and destruction

The archaeological evidence, as discussed above (see 6.4.1), clearly demonstrates that the analysis of the distribution and archaeological contexts of late medieval book fittings provides some evidence for the casual loss and disposal of book fittings throughout the late medieval period. However, the distribution of the majority of the book fittings analysed as part of this study is unlikely to represent the locations in which books were used and stored. The significant numbers excavated from sixteenth-century contexts, and the large numbers of such objects from the site of the reredorter and drain, suggest that late medieval casual loss and deliberate disposal of book fittings by the members of religious houses were not the only reasons for their deposition on English monastic sites.

Of the 62 book fittings found associated with the reredorter and drain, 29 of these (47 per cent) have been excavated from dated contexts. All but one of these stratified items are known to have been recovered from demolition contexts commonly dating to the first half of the sixteenth century and are generally considered to be associated with the Dissolution. For example, at Battle Abbey, East Sussex, nine book fittings were found just outside the reredorter in deposits of building debris, domestic refuse and unwanted goods that had once belonged to the monastery (*5*, *10*, *11*, *12*, *22*, *23*, *38*, *41* and *42*) (Figure 6-11) (Hare 1985, 42-3). The nature of these deposits suggests that they are from the time immediately after the Dissolution when several of the monastery's buildings were beginning to be dismantled (Hare 1985, 42-3). At Sawley Abbey, West Yorkshire, a book fitting was found in the reredorter in a demolition deposit that was dated to the destruction of the monastery, which occurred following its suppression in 1536 (*320*; Figure 6-11) (Coppack *et al.* 2002, 25, 86-7). Similar occurrences of fittings can also be seen at Bermondsey Abbey, Surrey (*45*) (Dyson *et al.* 2011, 91-4), Cleeve Abbey, Somerset (*95*) (Guy 1999, 24), and the Dominican Friary in Chelmsford, Essex (*90*; Figure 6-11) (Drury 1974, 51). At the Benedictine house of St Leonard's Priory in Stamford, Lincolnshire, one hooked fastening (A.3.1) (*322*) and an anchor-/catch-plate (A.6.2) (*324*) were both excavated from Dissolution contexts in the priory's reredorter drain (Mahany 1977, 22). A third book fitting (*323*), also identified as type A.3.1, was excavated from the reredorter, but it was recovered from an unstratified context and so the date of its deposition is unknown. However, given this fitting's similarity in form to the other hooked fastening that was found, it is likely that it was deposited alongside

320

FIGURE 6-11. Book fittings recovered from Dissolution contexts in the reredorter and drain: 5 from Battle Abbey, East Sussex (English Heritage, 793244), 90 from the Chelmsford Blackfriars, Essex (Drury 1974, 58, no.15), 320 from Sawley Abbey, West Yorkshire (Coppack et al. 2002, 85, no.123). Scale 1:1.

the two artefacts just mentioned (**322** and **324**). The recovery of such fittings from the reredorter drain of this Benedictine house is particularly interesting as these three fittings were found alongside several fragile fragments of laminated material thought to be remains of manuscript pages (Mahany 1977, 22). The single fitting excavated from the site of the reredorter that was not found in a Dissolution context is that from Norton Priory (**270**), where the layer in which this artefact was found was broadly dated to the medieval phase of the site (1134-1536) (Brown and Howard-Davis 2008, 381-2). The extensive stone robbing, rebuilding and landscaping that occurred on the site throughout its occupation has led to a high level of residual finds causing the dating of the finds to be tentative (Brown and Howard-Davis 2008, 377). Given the location in which this artefact was deposited, the nature of the stratigraphy of the site and the fact that significant numbers of book fittings have been excavated from the reredorter, it is possible that this object was also deposited around the time of the closure of the priory.

Considering both the archaeological artefacts and documentary evidence, book fittings found in the area of the reredorter and drain in suppression and later contexts strongly indicate the destruction and disposal of late medieval books as part
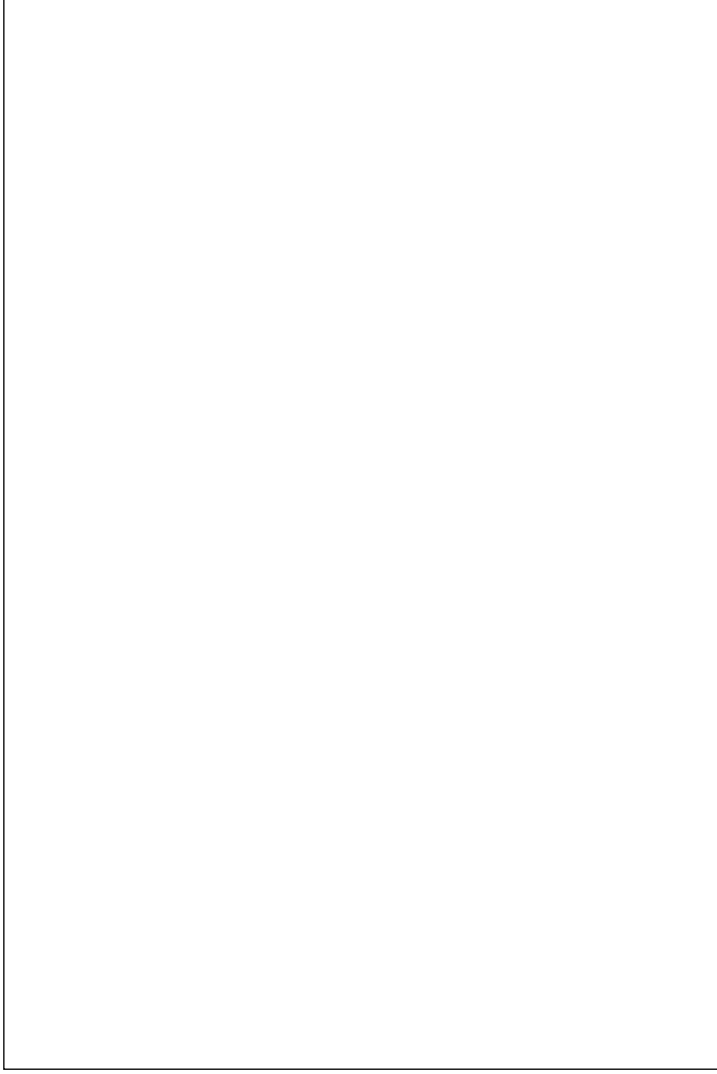
FIGURE 6-12. *Plan of Roche Abbey, West Yorkshire (Fergusson 1999, 16-7); the highlighted areas indicate the locations of the reredorter and the Malty Beck, which acted as the monastery's drain, from which book fittings have been recovered.*

384

of the Dissolution as it is most unlikely that books were stored and used in this area of the monastic complex during the late medieval period. At Roche Abbey, for example, book fittings were found concentrated in the bank of the Maltby Beck west of the lay brothers' refectory (*315-317*) and in the reredorter drain itself (*304-311, 314* and *318*) (Figure 6-12). The area near the south-west corner of the lay brothers' refectory and the bridge over the river was almost certainly a prime route taken by the wagons involved in the dismantling of the monastery during the sixteenth century (S. Harrison, *pers. comm.*). Given the archaeological evidence and Michael Sherbrook's sixteenth-century account of the despoliation of Roche Abbey, which describes how wooden boards were used to repair wagons (Dickens 1959, 89-142), it is an intriguing possibility that at least some of the abbey's books were destroyed and elements of their bindings reused and discarded in this area of the monastery.

From the detailed examination of the 51 artefacts excavated from inside the monastic church at 14 sites, it is evident that 57 per cent (29 fittings) have been recovered from dated archaeological contexts. Of these pieces, the majority has come from sixteenth-century deposits associated with the Dissolution. For example, two fittings excavated from the Gilbertine priory of St Andrew's, York, were found in waste

236

239

247

FIGURE 6-13. *Book fastenings recovered from sixteenth-century deposits at the site of the monastic church:* **236** *and* **239** *from Hulton Abbey, Staffordshire (Boothroyd 2004, 159, 161, nos. 32 and 41),* **247** *from the Lewes Greyfriars, Sussex (Gardiner et al. 1996, 112, no.63). Scale 1:1.*
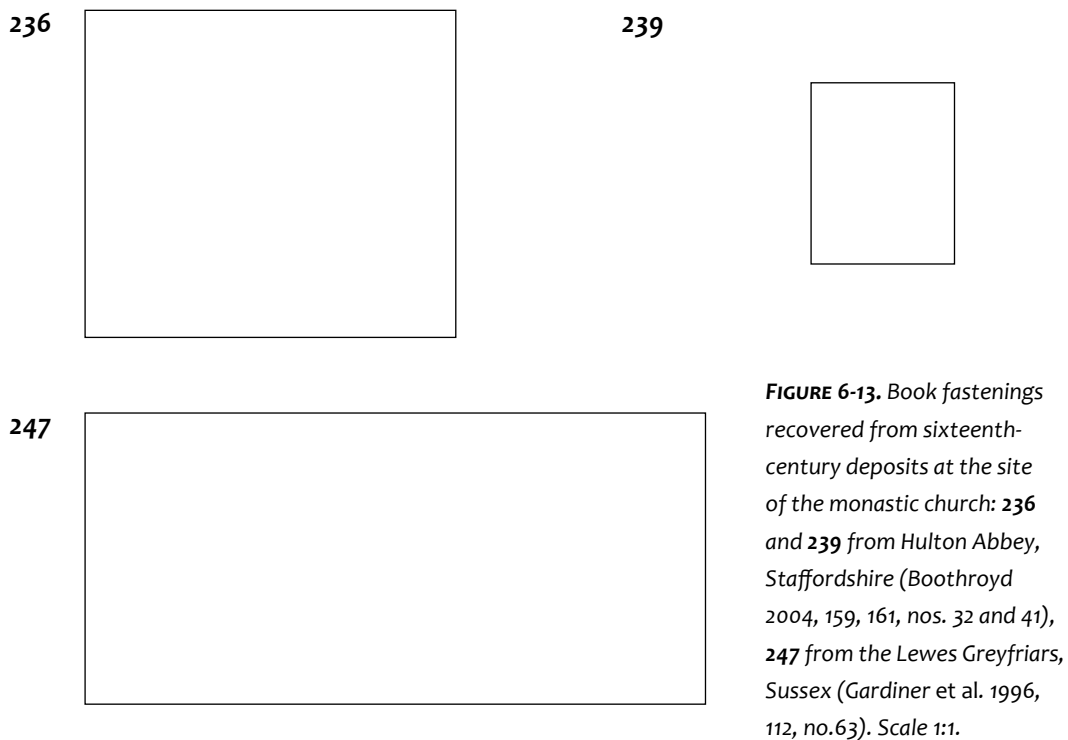
deposits relating to the demolition and robbing of the church in the mid-sixteenth century (*333* and *334*) (Ottaway and Rogers 2002, 2939-40). At the site of the Dominican friary at Chester, Cheshire, one hooked fastening (A.3.1) was recovered from a layer of the fill of a pit located inside the monastic church (*92*) (Ward 1990a, 59). This layer comprised a mix of soil and sand with ash and cinders. It has been interpreted that this represents rubbish burning during the demolition of the church that took place following its suppression in 1538 (Ward 1990a, 59). Book fittings have also been found in church demolition deposits at Hulton Abbey (*236* and *239*; Figure 6-13) (Klemperer 2004, 32), Norton Priory (*271*) (Brown and Howard-Davies 2008, 381), and the Franciscan friary at Lewes, Sussex (*247*; Figure 6-13) (Gardiner *et al*. 1996, 113).

Significant numbers of book fittings have been excavated from contexts associated with the Dissolution in several other areas of the monastic complex and so may represent the deliberate destruction of monastic books. In addition to the two fittings excavated from demolition deposits in the church of St Andrew's Priory, two further fittings were found in similar deposits in the dormitory in the eastern range of the cloister (*331* and *332*) (Kemp and Graves 1996, 114; Ottaway and Rogers 2002, 2936, 2939). It is also worth noting that an additional two book fittings were excavated from elsewhere on this site, both from contexts associated with the demolition and robbing of the priory in the mid-sixteenth century (*335* and *336*) (Ottaway and Rogers 2002, 2939-40). As discussed in the previous chapter (see 5.3.6), a number of other artefacts associated with the production of manuscripts have also been found alongside the two book fittings within the eastern range of this particular Gilbertine site. These include three bone parchment-prickers for the laying out of margins and one lead point for writing and drawing lines on parchment (Figure 6-14) (Kemp and Graves 1996, 114; MacGregor *et al*. 1999, 1974; Ottaway and Rogers 2002, 2935-6, 2989). Although the stratigraphic evidence for these objects indicates their deposition during the demolition of the Gilbertine priory, the presence of this assemblage of artefacts in this area of the eastern range strongly suggests that manuscripts were produced in this area of the monastery.

A number of book fittings recorded in the catalogue have been excavated from sixteenth-century contexts in the cloister garth: one from Bermondsey Abbey (*50*) (Egan 2011, 246), two from the Dominican friary at Beverley, East Yorkshire (*54* and *55*) (Goodall 1996, 160), and three from St Frideswide's Priory, Oxfordshire (*275*, *276* and *279*) (Scull 1988, 39). The three book fittings excavated from the cloister of the Augustinian priory of St Frideswide were all found in dumping layers of sandy silt and
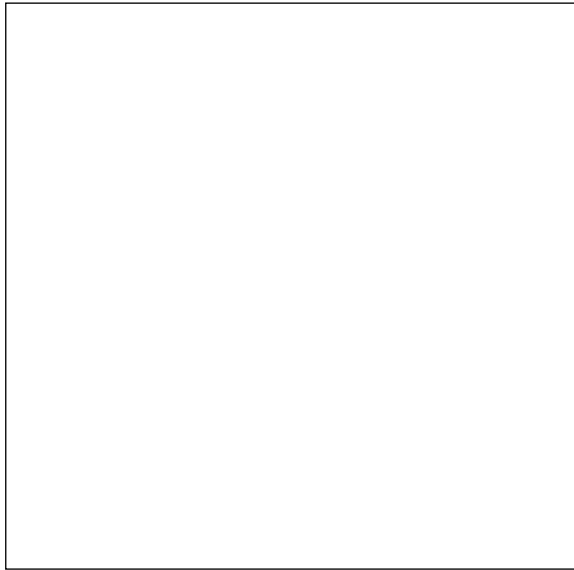
FIGURE 6-14. *A parchment-pricker (MacGregor et al. 1999, 1974, 8157) and a lead point (Ottaway and Rogers 2002, 2935, no. 15286) excavated from the eastern range of St Andrew's Priory, North Yorkshire. Scale 1:1.*

55
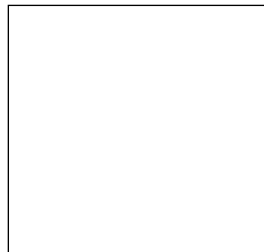
FIGURE 6-15. *One of two book fittings excavated from a sixteenth-century context in the cloister garth of the Dominican friary at Beverley, East Yorkshire (Goodall 1996, 156, no.892). Scale 1:1.*
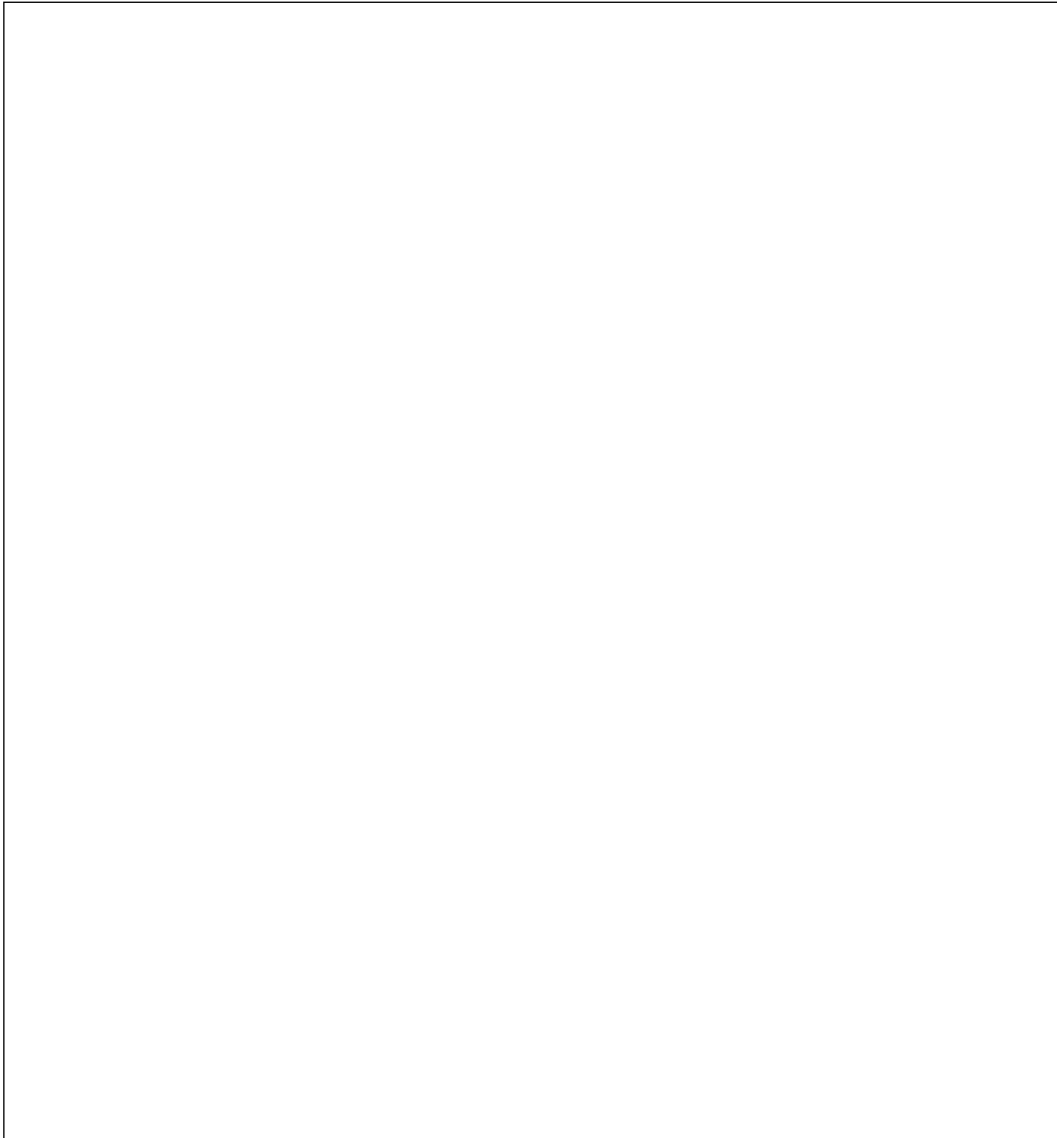
FIGURE 6-16. *Plan of Bermondsey Abbey, c.1430-1538 (Dyson et al. 2011, 92); the highlighted area shows the location of the cloister garth, which was later used as a garden for Bermondsey House.*

powdered mortar post-dating 1525, a time when the west end of the church and the west claustral range were demolished and work began on the building of Cardinal Wolsey's college following the suppression of the monastery in 1524 (**275, 276** and **279**) (Scull 1988, 23, 68; O'Sullivan 2006, 228-9). Whilst these artefacts were deposited prior to the main period of the closure of English monasteries that took place in the 1530s, they can be seen to signify the destruction of monastic books. In the case of Bermondsey Abbey, a domed boss (B.1.2) (**50**) was excavated from a context dated to the 1538-1650 phase of the site, during which the Cluniac abbey was closed and the Tudor mansion, Bermondsey House, developed (Egan 2011, 246). Throughout this period of post-medieval occupation, the original site of the monastic cloister garth was used as a mansion garden (Figure 6-16) (Dyson *et al.* 2011, 163-4). Whilst more specific details and a more exact date for the context from which this artefact was found are not given in the excavation report, it is possible that this particular fitting was deposited during the earlier part of this phase, in the years immediately following the closure of this Cluniac monastery. At the site of the Dominican friary at Beverley, one fitting (**54**) was found in an accumulation of clay, loam and rubble in the little cloister garth, which was dated to the end of the monastic occupation of the site in the early sixteenth century (Foreman 1996, 88). The occurrence of window cames, rubble and late medieval pottery in this deposit is thought to link this context to the phase of demolition activity attributed to the Dissolution (Foreman 1996, 88). At the Blackfriars' house in Beverley, another fitting (**55**; Figure 6-15) was recovered from the cloister garth, however, it was found in an earlier underlying context that accumulated over a considerable time between the fourteenth and sixteenth centuries and comprised a homogenous layer of gritty, grey clay-silt that formed the surface of the garth sealing earlier buildings (Foreman 1996, 49). The similarity in the nature of the finds excavated from these two contexts is thought to indicate that the underlying context contains material from the final occupation of the claustral ranges, which was cleared out at the close of occupation during the Dissolution (Foreman 1996, 88-9).

During recent excavations at the site of the Augustinian abbey of Thornton, Lincolnshire, a book fitting (**327**), identified as a hooked fastening of type A.4.2 , was excavated from the site of at least one sixteenth-century building located to the west of the abbey church (Willmott and Townend 2012, 14-5). The recovery of large quantities of window glass and lead window cames, pottery, and a number of small finds, including the book fitting and a bone parchment pricker, from a series of

mixed dumping layers has led to the interpretation that the building was associated with the demolition and clearance of the monastery during one or more phases of activity immediately following its suppression (Willmott and Townend 2012, 15). Also associated with this building is a small hearth made from fired clay and roof tiles that contained melted lead and a residual ashy layer, leading to the conclusion that the hearth was used for melting lead, a process that was common across monastic sites at the time of the Dissolution (Willmott and Townend 2012, 15). The excavation of a late medieval book fitting from such a location of Dissolution activity raises the possibility that some of the abbey's books were being destroyed following its closure.

As discussed in Chapter 4, reading in the refectory during mealtimes was a significant part of daily monastic life, and in some late medieval monasteries, small groups of books were kept either in or just outside the refectory so that they were to hand. Within this catalogue, only one book fitting is recorded as having been excavated from these areas. During excavations between 1962 and 1966 at the Benedictine nunnery of Sopwell Priory, Hertfordshire, a fastening of type A.8.4 (*321*) was recovered from the refectory in the south claustral range (Figure 6-17) (Johnson 2006, 17). The nunnery was closed in the spring of 1537 and, in 1538, the church and conventual buildings were dismantled and materials removed or sold for the profit of the Crown (Weaver 2006, 1). The Royal Commissioners' survey found the buildings to be in a fair state but contained little of value other than the lead on the roofs, which was valued at £40, and four bells worth £18 (Weaver 2006, 1). The roofing lead, the most valuable item from the site, was stripped from the buildings and melted down on site for use elsewhere (Weaver 2006, 1). Within the south claustral range an almost circular bowl-shaped hearth was cut into the floor, and all mortar floor levels showed extensive patches of burning that were thought to have been associated with the hearth (Johnson 2006, 17, 19). In the bottom of the hearth lay a cake of lead and above this a thick mass of partly fused slag containing surprisingly large amounts of lead (Johnson 2006, 19). Overlaying the mortar floor levels was a layer of destruction debris, which contained the only example of a book fitting from the Benedictine site, in addition to many bronze pins and a scabbard chape (Johnson 2006, 17). This evidence clearly demonstrates that the refectory in the south claustral range was a focal point of demolition activities associated with the dismantling of the site, and that a book fitting has been excavated from a sixteenth-century context in this same location may indicate the simultaneous destruction of some of the monastery's books.
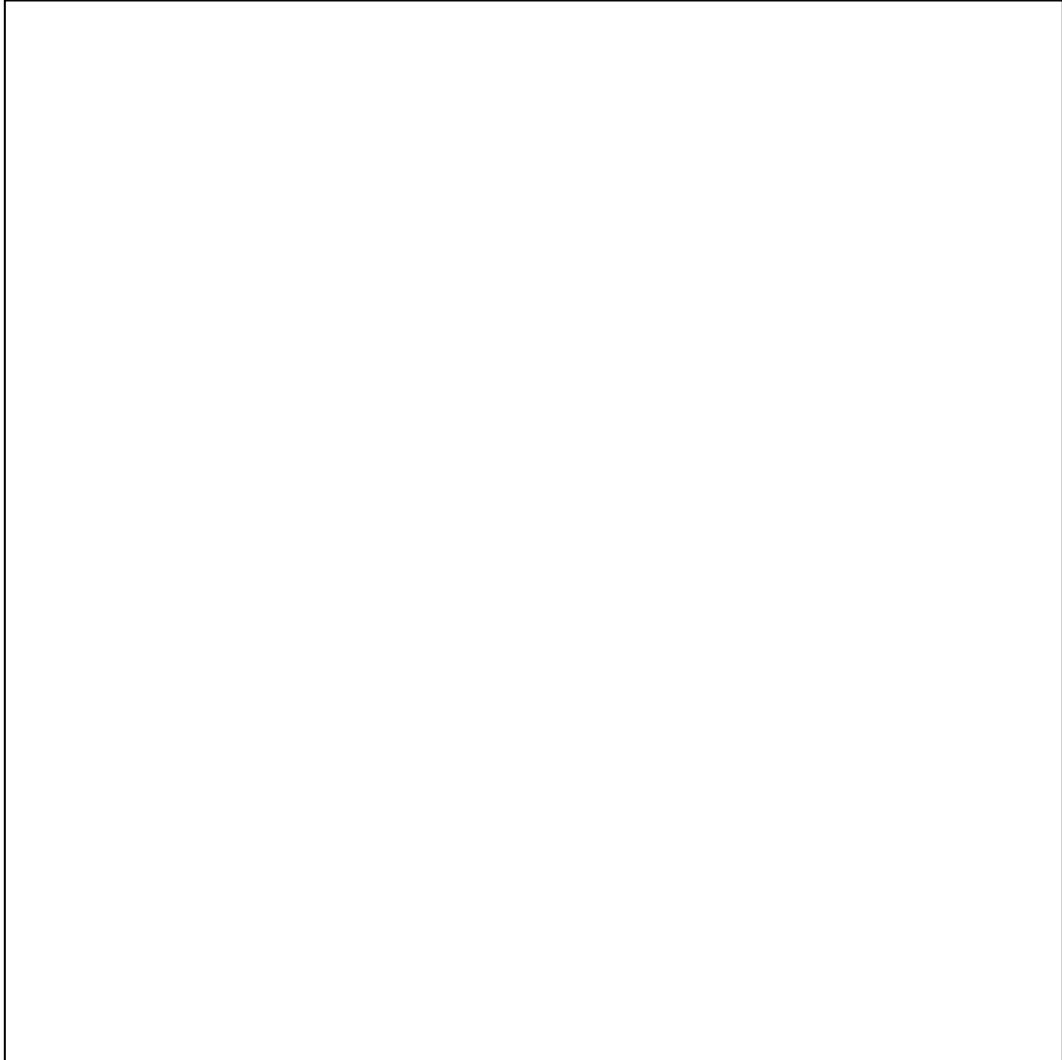
FIGURE 6-17. *Plan of Sopwell Priory, Hertfordshire (Johnson 2006, 13); the highlighted area indicates the location of the refectory in the south claustral range.*

Other, less typical, locations within the monastic complex in which book fittings have been excavated from Dissolution contexts, and are thought to indicate the destruction of monastic books, include the monastic kitchen, the cemetery, and ancillary buildings such as storerooms. At St Mary Graces Abbey, a domed boss (B.1.6) (*254*) was recovered from the site of the former monastic kitchen (Grainger and Phillpotts 2011, 63). At the western end of the building were three small irregular-shaped cuts, all of which contained ash and charcoal representing the debris of fires, and it was in the fill of one of these cuts that this book furnishing was found (Grainger and Phillpotts 2011, 63). The activities that led to the deposition of this book fitting occurred during the Dissolution and manor house phase of the site, between 1539 and 1560. It is thought that if these fires were *in situ* then they were insubstantial and may have been lit by workmen dismantling and converting the building after the suppression of the abbey (Grainger and Phillpotts 2011, 63). Another example of a more unusual location in which several book fittings have been excavated is the monastic cemetery at Bermondsey Abbey, the site of which was later used as a garden for the post-medieval mansion (Dyson *et al*. 2011, 163). A fragment of a fastening of type A.1.1 (*44*) was recovered from a sixteenth-century demolition deposit, which also contained ceramics dated c.1350-c.1500 (Dyson *et al*. 2011, 139). Three further pieces of book furniture (*49, 51* and *52*) were also excavated from similar deposits in this location (Egan 2011, 246, 253). At the site of Eynsham Abbey, Oxfordshire, two late medieval book fittings (*118* and *119*) (Figure 6-18) were excavated from an area of the south-east section of the cloister walk. The two artefacts were excavated from contexts dated to the immediate post-Dissolution phase of the site (1539-1660) (Hardy 2003b, 155). Another example of a more atypical find site of this type of material culture is the north-south undercroft at St Mary's Cathedral Priory, Coventry, Warwickshire, which was situated to the north of the chapter house in the eastern range of the cloister (Figure 6-19). From this location two book fittings have been excavated (*97* and *98*) (Rylatt and Mason 2003, 43-4). Based on the archaeological evidence, this area of the monastery was the focus of a period of post-Dissolution activity (Rylatt and Mason 2003, 43). Deposits were found on and around the hearth of the undercroft and are thought to indicate incidents of burning. The domed boss (B.1.3) (*97*) was found in a post-Dissolution deposit of fine, light grey ash characteristic of the product of paper burning (Rylatt and Mason 2003, 43-4). This burning deposit was sealed when the undercroft was filled with rubble by the mid-sixteenth century (Rylatt and Mason 2003, 44). It is thought that the undercroft was filled with rubble shortly after the dissolution of

FIGURE 6-18. One of two book fittings excavated from a Dissolution context in the south-east corner of the claustral walk at Eynsham Abbey, Oxfordshire (Allen 2003, 259, no.18). Scale 1:1.

the monastery as there was an absence of pottery post-dating the middle of the sixteenth century (Rylatt and Mason 2003, 44). It was from this demolition debris that the book furnishing of type B.3.1 (*98*) was recovered (Rylatt and Mason 2003, 44). The discovery of these two fittings in such deposits suggests that books were being destroyed in this area of the monastic complex shortly following the closure of the monastery in 1539 (Rylatt and Mason 2003, 44).

6.4.3 MONASTIC ORDERS

Having determined that a large proportion of the catalogued book fittings are associated with the destruction of books as a consequence of the Dissolution, it became apparent that there were some differences in the deposition of book fittings across monasteries of differing religious orders. It must be taken into consideration, however, that a large proportion of the sites analysed were Cistercian and Benedictine houses and that nearly 72 per cent of the total number of fittings examined came from such houses. As already discussed in Chapter 5.3, a number of different factors have been established to account for the higher proportion of book fittings from such monastic sites, including the possibility that the often large and wealthy Benedictine and Cistercian houses had larger numbers of books, and that the material used for this research and archaeological excavation biases will also have affected the numbers of book fittings recovered across sites of different religious orders. It is clear that these factors need to be taken into consideration for the analysis of the distribution of late medieval book fittings.

Of the 164 book fittings recorded in the catalogue that were excavated from Cistercian sites, 58 pieces have established locations of deposition and 59 per cent
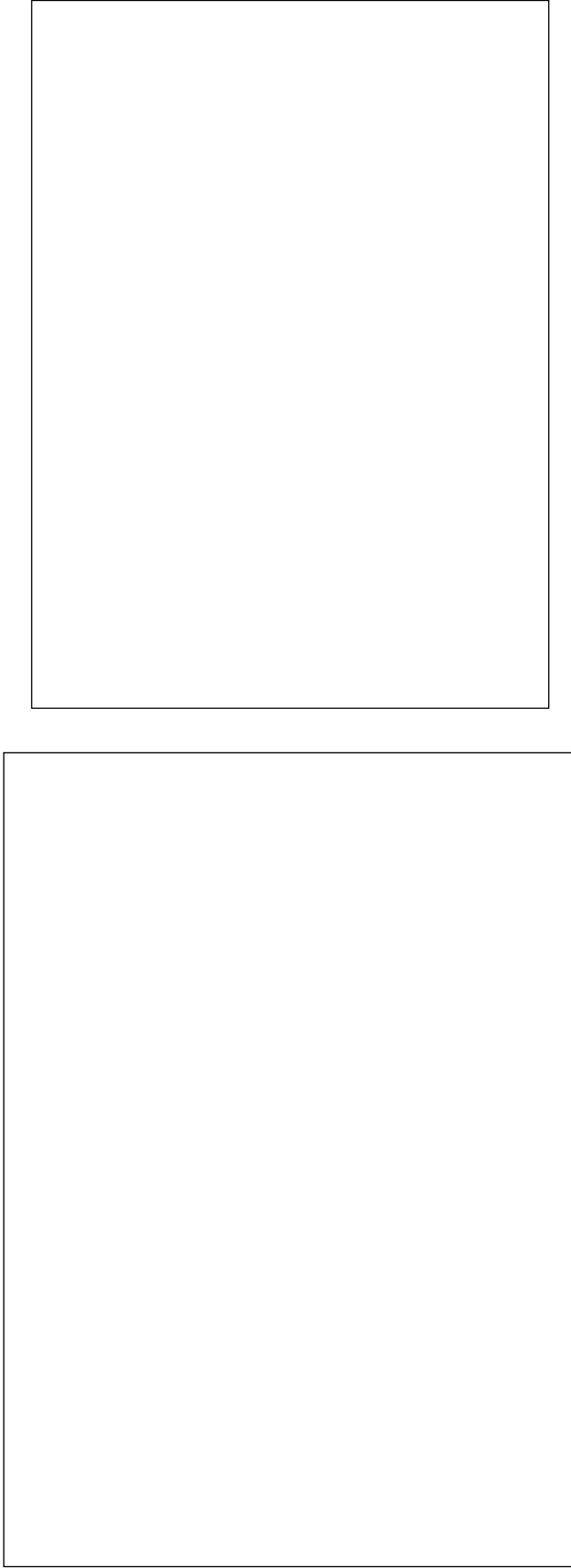
FIGURE 6-19. *Plan of St Mary's Cathedral Priory, Coventry, Warwickshire (left), with a more detailed plan of the north-south undercroft located to the north of the chapter house (Rylatt and Mason 2003).*

of these (34 fittings) were recovered from the area of the reredorter and drain. In terms of Benedictine book fittings, 59 per cent of those with known find sites (23 out of 39) were also excavated from the site of the monastic reredorter and drain. The distribution plans shown in Figures 6-20 and 6-21 clearly demonstrate that at both Cistercian and Benedictine sites significant quantities of book fittings were found in this area of the monastic complex. The concentration of reredorter finds from Dissolution and demolition contexts at these types of houses clearly demonstrates that this depositional practice was followed on Cistercian and Benedictine sites.

In comparison to the sites of Cistercian and Benedictine monks, at the sites of other monastic orders the reredorter and drain is not the main location in which book fittings have been found. Within the catalogue, six monasteries of the Augustinian canons have been analysed. A total of 16 fittings from Augustinian houses have been recorded and the locations in which they were deposited are known for 15 of these artefacts. From the Augustinian sites 40 per cent of fittings (six examples) were found in the vicinity of the cloister and only 13 per cent (two fittings) were recovered from the area of the reredorter and drain. Across the sites of the Carmelite and Dominican friars, 87 per cent (13 out of 15) and 83 per cent (20 out of 24) of book fittings, respectively, were excavated from within the friary church. Initially, these results may point to alternative reasons for the distribution of books fittings in these areas. It could be interpreted that these objects indicate the causal loss or discarding of damaged or superfluous book fittings. However, having analysed the contexts in which they were found, it has been found that the overwhelming majority of those excavated from dated contexts were recovered from contexts dating to the sixteenth century or later and many were from deposits associated with the Dissolution. Although the ten book fittings (*44-53*) representing the Cluniac order in the catalogue were excavated from a single site, Bermondsey Abbey (Egan 2011, 246, 253-4), an understanding of their deposition is important for this analysis. Specific locations of deposition are given in the excavation report for seven of the ten book fittings identified from this Cluniac house (*44, 45* and *49-53*) (Egan 2011, 246, 253-4), and these have already been discussed in this chapter (see 6.4.2). That six of these (*44, 45* and *49-52*) were excavated from sixteenth-century demolition contexts in areas of the site that underwent extensive remodelling following the suppression of the monastery is clearly demonstrative of the destruction of monastic books during the sixteenth century. The seventh fitting (*53*) from the site, which is thought to be early sixteenth-century in date but was found intruding into an earlier context
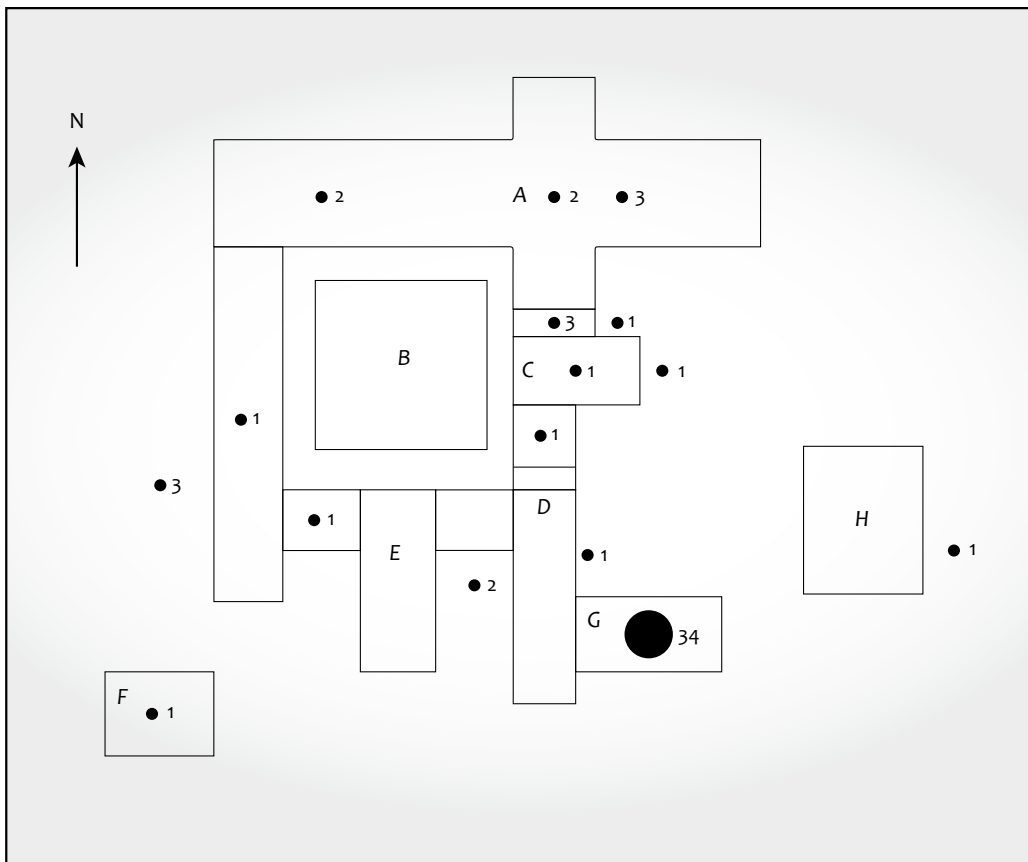
FIGURE 6-20. *Plan of a typical Cistercian monastery showing the locations of book fittings excavated from Cistercian sites.*

FIGURE 6-21. *Plan of a typical Benedictine monastery showing the locations of book fittings excavated from Benedictine sites.*

(Egan 2011, 246), is also likely to be indicative of the destruction of the abbey's book collections. This is also the case for the Gilbertine priory of St Andrew's in York, where all six book fittings recovered from the monastery were excavated from contexts of sixteenth-century demolition debris (*331-336*) (Kemp and Graves 1996, 114; Ottaway and Rogers 2002, 2936-40, 3147-8). Therefore, whilst book fittings have been found in various locations across the houses of different monastic orders, they are typically from contexts associated with the Dissolution of the Monasteries or later and so, like the fittings from their Benedictine and Cistercian counterparts, they most likely represent the deliberate destruction of monastic books, albeit in different locations.

6.4.4 POSSIBLE REASONS FOR THE DESTRUCTION OF BOOKS AT THE DISSOLUTION

It is clear from the archaeological evidence that there is a distinctive pattern in the spatial distribution of the catalogued book fittings, with a large proportion being located within the reredorter and its drain, and within the monastic church. Given the documentary evidence and contextual dating where available, such finds can in all probability be interpreted as being deposited during the Dissolution of the Monasteries. Book fittings from similar contexts in other locations of the monastic complex can also be seen as evidence for the disposal of monastic books at the time of the Dissolution. A variety of factors are likely to have influenced the deliberate destruction and deposition of books and their fittings on monastic sites during the suppression of the religious houses and the years immediately following. It is possible that specific types of books, such as foundation charters, were being destroyed on site and this may have been an intentional action designed to aid the dissolution process by delegitimising the foundation of a monastery. As already discussed in this work (see Chapter 5), it is particularly difficult to associate certain types of book furniture with particular types of monastic books due the scarcity of their survival in their original late medieval bindings. Despite this, by considering the importance of monastic books towards the end of the late medieval period, it has been possible to speculate on the motivations behind their destruction in the 1530-40s.

It is thought that prior to the Dissolution monastic libraries were in "decline by mundane neglect" (Rundle 2004, 115). Throughout the late medieval period, monastic libraries mainly contained manuscripts and only a relatively small number

of monasteries owned early printed books by the beginning of the sixteenth century (Irwin 1966, 138). The development of the printing press is thought to have made some manuscripts obsolete or out-dated and so liable to be neglected or discarded (Ker 1964, xv; Rundle 2004, 115). From the mid-fifteenth century, this new technology led to the publication of more accurate texts that were also easier to read and use, so making older manuscript copies redundant (Ramsay 2004, 138; Rundle 2004, 115). Although manuscript production did not die out with the invention of printing (see 3.6), it is probable that the changing culture of manuscripts and printed books had an impact upon the fate of monastic collections, especially their manuscripts, at the time of the Dissolution (Rundle 2004, 115).

Additionally, by considering the importance of monastic muniments, especially foundation charters, it has been possible to speculate on the reasons for the deliberate destruction of monastic books. As part of the suppression of the monasteries, the muniments, including the original foundation charter of each house, were sought out by the Crown's commissioners in 1535 (Wright 1951, 209; Ramsay 2004, 126). As noted by Ramsay (2004, 126-7), a royal register of foundation charter texts was maintained and some extant charters carry inscriptions that indicate that they were taken for copying into this register. It is thought that this exercise was completed so that the commissioners could identify the founder of the monastery as this gave a hereditary right of patronage to the founder's heirs (Ramsay 2004, 126). The relationship between monasteries and their patrons at the time of the Dissolution has been investigated in detail by Thompson (1994). This information was significant at the time of the Dissolution as the heirs of some monastic patrons sought to use the legal validity of charters as an argument for preventing the closure of a particular house or for their being granted the option to buy its site (Wright 1951, 209; Thompson 1994, 119; Ramsay 2004, 126-7). It is also possible that the interests of the commissioners who carried out the visitations of the religious houses influenced the selective survival of the contents of monastic book collections. For example, it is thought that Sir John Prise, the historically-minded lawyer and royal commissioner who initiated and managed the recording and collection of the charters of the monasteries in the west of England, had a desire to simply record these historical documents (Ker 1985, 472; Ramsay 2004, 127). It was equally important for the Crown to appropriate the various documents of a monastery's muniments collection since they provided evidence of the Crown's title to a monastery's various properties (Dunning 1964, 109). In the case of Syon Abbey, Middlesex, their precious belongings,

including their valuable libraries, were scattered, however, the extensive collection of muniments did not immediately suffer the same fate (Dunning 1964, 109). Following the abbey's surrender to the Crown in November 1539, the buildings and their contents, together with lands valued at over £1,730, came under the care of the Court of Augmentations (Dunning 1964, 108-9). Whilst the abbey lands were leased by the Crown to various tenants, the deeds remained in the custody of the Crown as evidence of the Crown's title of the Bridgettine abbey's numerous estates (Dunning 1964, 109).

Given the significance of foundation charters and similar documents that were held in monasteries, it is unlikely that such documents were being destroyed on site during the suppression of the religious houses by the Royal Commissioners. It is possible that the monks themselves were destroying such volumes to slow down the closure process, although this is difficult to corroborate without written evidence. It is more likely that other types of books within monastic collections, such as service books and volumes of scholarly reference texts, were being deliberately dismantled on site. It is further possible that volumes containing foundation charters, title deeds and similar records were not bound to the same extent as other types of books and so they may not have been fitted with metal fastenings or furnishings, however, considerable work on the study of such bindings would have to be completed to substantiate this hypothesis.

It has also been argued that the wanton destruction of the more religious texts of monastic collections, primarily old service books, in fact took place several years after the Dissolution during the reign of Henry VIII's successor Edward VI (r.1547-53) (Wright 1958, 165; Irwin 1966, 124; Roberts 2010, 31-2). The Act of Uniformity of 1550 forbade the use of old religious service books and these were seized by officials removing all rivals of the new Book of Common Prayer, first published in 1549 (Wright 1958, 165). Its operative clause stated:

> "Be it therefore enacted…that all books called antiphoners, missals, grails, processionals, manuals, legends, pies, portuises, primers in Latin or English, couchers, journals, ordinals, or other books or writings whatsoever heretofore used for the service of the Church, written or printed in the English or Latin tongue, other than such as are or shall be set forth by the King's Majesty, shall be by authority of this present Act clearly and utterly abolished,

extinguished, and forbidden for ever to be used or kept in this
realm or elsewhere within any of the King's dominions" (Wright
1958, 165-6).

The Act ordered that these books be defaced or completely destroyed, often by burning (Irwin 1966, 124; Rundle 2004, 115). This later act of destruction is thought to have resulted in greater losses than the dispersal and destruction that occurred in the 1530s (Irwin 1966, 124). It is also thought that the volumes that had survived the Dissolution and were sent to the Royal Library under Henry VIII were later ordered to be stripped of their book fittings of gold, silver and other precious materials (Irwin 1966, 124).

6.5 DESTRUCTION OFF SITE

The analysis of the spatial distribution of late medieval book fittings on English monastic sites, which is the main focus of this chapter, has clearly demonstrated that the archaeological material provides evidence for the casual loss, disposal and deliberate destruction of monastic books and their fittings within the monastic precinct throughout the late medieval period and during the Dissolution of the Monasteries in the sixteenth century. However, given the large collections of books that many religious houses often owned, it is surprising that more book fittings have not been excavated from monastic sites, particularly from sixteenth-century demolition contexts. The simplest explanation, based on the historical sources (see 6.3), is that the dispersal of books at this time resulted in fewer books being destroyed on site. The written accounts clearly indicate that large numbers of monastic books were taken and destroyed off site to serve other secondary purposes, such as pastedowns and flyleaves. Also, the survival of significant numbers of books in the private collections of sixteenth- and seventeenth-century antiquarians, and subsequently in research libraries, demonstrates that many were not destroyed on site during the closure and dismantling of the monasteries. Consequently, fewer book fittings are likely to be found archaeologically. There is, however, another source of archaeological material that may be used to understand why seemingly few book fittings are found on monastic sites. Large numbers of book fittings have been recorded in the database of the Portable Antiquities Scheme (PAS), a voluntary scheme to record archaeological objects found by members of the

public from England and Wales (PAS/Trustees of the British Museum 2003-2015b). It is this material that may provide some evidence for the removal and destruction of monastic books off site. The objectives and timescales of this research have not allowed for the thorough investigation of the material recorded in the PAS database. However, a pilot study (Howsam 2011) completed prior to the undertaking of this current research demonstrated the importance of this source of material for the study of late medieval book fittings through the preliminary analysis of a sample of data recorded by the PAS. For the purposes of this research, this section discusses the nature of the PAS material and the findings from the previous study, before considering the potentiality of the PAS material as evidence for the destruction of monastic books away from monastic sites.

When the term 'book fitting' is used to search the PAS database, more than 1,700 results are available[1]. Of these nearly 1,350 artefacts are classified as book fittings. The remaining objects are identified as various other items, such as strap fittings, mounts, clasps and furniture fittings; however, for many of these items it is likely that they are book fittings. Of the approximately 1,350 items identified as book fittings in the PAS database, nearly 700 are noted as being late medieval in date. These objects are broadly dated between the twelfth century and the early sixteenth century, although more narrow estimated dates are given in the individual records of the objects. In order to analyse and interpret data collated by the PAS, it is important to understand the limitations of this source of material. The key drawback of this evidence is the nature of its recovery. As opposed to being excavated from archaeological sites, many of the recorded objects have been found by metal-detector users, but also by people whilst out walking, gardening or going about their daily work (PAS/Trustees of the British Museum 2003-2015b). As a consequence, the material recorded in the PAS database is without extensive supporting contextual evidence and this makes the dating of the deposition of the artefacts, and the artefacts themselves, more difficult. Another factor that must also be considered when analysing this type of data is the accuracy of the identification of the artefacts. It is likely that not all items recorded as book fittings are correctly identified and that other recorded items, such as strap ends and mounts, are in fact book fittings. Additionally, the geographical locations in which large numbers of artefacts have been found will impact upon the analysis of this data. This is due to the fact that large areas of rural landscape, such as arable land in Norfolk or Lincolnshire for example, are likely to present more artefacts for

---

1   Accurate as of 1 September 2015.

the general public to find rather than more urban locations. It is also these areas that have more active and effective relationships between metal-detectorists and Finds Liaison Officers of the PAS (H. Willmott, *pers. comm.*).

Despite these limitations, the analysis of a sample of material recorded in the PAS database was successfully completed during the initial study of late medieval book fittings (Howsam 2011). One of the key aims of this study was to collect a sample of PAS material and develop a typology on the basis of the different functions and forms of the artefacts to be analysed (Howsam 2011, 36-49, 76-96). The study of the PAS book fittings provided the first opportunity to analyse a body of archaeological objects and allowed the analysis of characteristics, such as form and decoration. From the analysis of this data, variations in form and decoration across different types of book fastenings and furnishings were established, differentiating the patterns and similarities amongst the PAS artefacts (Howsam 2011, 49-72). Due to the nature of recovery of the material recorded through the PAS, there is no associated context information for the book fittings analysed except for the locations in which they were found (Howsam 2011, 7). To achieve a more comprehensive investigation, the PAS artefacts were also examined alongside some examples of book fittings that have been recovered from excavated religious houses and secular urban sites. From this it was noted that, within the catalogue of PAS material, a large proportion of the types of book fittings and styles of decoration used on them were comparable to finds from published excavation reports (Howsam 2011, 50). Furthermore, this initial study provided some insight into the dating of the PAS objects. Whilst considering the issues surrounding the dates applied to the PAS material due to the unsystematic and inaccurate nature of its recovery, the examination of the PAS artefacts in conjunction with published excavation reports and previous historical studies demonstrated that the broad late medieval date given to the PAS material was generally corroborated (Howsam 2011, 54-5, 71). This does not rule out the possibility that there is some inconsistency with the dates given to the PAS artefacts. On this basis it has been argued that forms and decorative styles of book fittings used during the late medieval period were likely to have been used in subsequent centuries, making the dates given to a proportion of the book fittings in the database of the PAS more unreliable (Howsam 2011, 55). Nevertheless, the comparison of the PAS material with excavated artefacts from known archaeological contexts has demonstrated that many of the PAS book fittings are generally late medieval in date (Howsam 2011, 55).

This initial analysis of book fittings was an important stepping stone towards an

understanding of the material culture directly associated with medieval books and their bindings, and provided a solid foundation on which to build this research. Whilst this study analysed only a small sample of book fittings recorded in the PAS database, it was recognised that the knowledge gained from the analysis of PAS book fittings can be used in conjunction with known historical and archaeological evidence to further develop our understanding of the wider social and cultural contexts of late medieval books (Howsam 2011, 72). It is for this reason that it is important to consider as part of this current research this source of material for the analysis of book fittings excavated from monastic sites and particularly the destruction of monastic books away from their respective houses. That almost 1,350 book fittings have been found and recorded through the PAS across the landscapes surrounding monasteries, rather than within the monastic complexes themselves, raises questions over their deposition away from these key sites of book ownership. Due to the lack of stratigraphic and contextual evidence for the PAS material, it is especially difficult to establish when such artefacts were deposited. Despite this, potential reasons for the deposition of book fittings away from monasteries can be hypothesised. A significant number of book fittings in the PAS database are likely to represent the casual loss and also the disposal of fittings from late medieval monastic bookbindings, especially those that were damaged or disused. However, it is the circumstances by which these fittings came to be in the surrounding landscapes of English monasteries that need be considered. As already discussed above (see 6.2), it is known that monastic books were often removed from their religious houses throughout the late medieval period, for example with travelling monks or for use as exemplars elsewhere. It is not unreasonable to believe that their fittings often became damaged in transit and so were subsequently lost or removed and discarded. It may be then that a proportion of the late medieval book fittings in the PAS database represent the loss or removal and deposition of fittings, some of which may have been damaged, whilst monastic books were on the road. Further examination of the condition of book fittings in the PAS database may help to determine the extent to which these artefacts were deposited due to damage.

Given the events of the 1530s, it is probable that a significant number of the PAS book fittings represent the largescale dispersal and destruction of monastic books following the closure of the monasteries. As explained earlier in this chapter (see 6.3), sixteenth-century accounts for the fate of monastic books explicitly express how monastic books were often sold to local gentry and to local merchants and

craftsmen, such as grocers and bookbinders, whereby leaves of monastic books were used as wrappings or as flyleaves and pastedowns. Surviving books and associated records also demonstrate that large numbers of monastic books were acquired for the private collections of interested antiquarians. That monastic books suffered these fates is significant when considering the deposition of the PAS book fittings. It is likely that a significant proportion of such artefacts represent the dismantling of monastic books, and the disposal of their bindings and fittings, following their dispersal at the closure of the English monasteries.

The Act of 1536 allowed provisions to be made for the 'governors' of monastic houses who could not have been allowed to become martyrs but had to be encouraged to retire contentedly (Youings 1971, 44). In section VIII of the Act, it is stated that they were to be provided with "such yearly pensions and benefices as for their degrees and qualities shall be reasonable and convenient" (Youings 1971, 158). However, by the late spring of 1538, the practice of providing pensions to each member of a dispersed religious community had become established and the great majority of houses were dissolved on terms that gave monks and nuns pensions that were assessed fairly, although they varied in quantity from house to house (Youings 1971, 62-3; Butler 1979, 119; Hoyle 1995, 283). Many former members of religious communities drew their pensions, found new employment, not least in parish communities, or re-joined secular society (Butler 1979, 120). As discussed by Butler (1979, 120), most monks in priest's orders, i.e. canons, were licensed to become incumbents of parish benefices or chaplaincies or secular cathedrals, although it is not known how many former canons acquired such positions. As discussed above (see 6.3), it has been argued that many of the abbots and priors who received cathedral positions or were absorbed into the parochial clergy would have taken with them monastic plate and vestments, and also books (Wright 1958, 159; Irwin 1966, 126; Carley 2006, 285-6). It is also probable that many who found other occupations or who retired to nearby towns and villages will have also taken with them a small number of books from their former monasteries. On these bases, it can be hypothesised that many of the book fittings recorded in the PAS database signify the deposition of fittings that have been lost or removed from the bindings of old monastic books after the 1530s.

The various ways in which monastic books were dispersed and acquired by safekeeping hands, rather than being dismantled for menial purposes, following the Dissolution have already been discussed above (see 6.3). When considering such

fates of monastic books, it is possible to see how large numbers of book fittings have been found away from monastic sites in the nearby landscape. In the case of Monk Bretton Priory, as discussed, the former prior, William Browne, the sub-prior, Thomas Frobisher, and two former monks, Thomas Wilkinson and Richard Hinchcliff, acquired 148 books from their monastery (Wright 1958, 160-1; Ramsay 2004, 128; Carley 2006, 284). Following the suppression of the priory, Browne established himself at Worsborough, West Yorkshire, approximately 2.5 miles away from Monk Bretton, in a kind of community in exile along with Frobisher, Wilkinson and Hinchcliff (Carley 2006, 284). When Browne died in 1557, he passed the books on to several of his former colleagues, and it is possible that the collection next went to the last surviving monk, Robert Scoley, who, in his will of 10 January 1579, left his books to his godson Robert Helm (Carley 2006, 284-5). Similarly, in the case of Byland Abbey, books were acquired by the prior Robert Barker and were passed on to another Robert Barker who was vicar of Driffield from 1558 until 1581/2 (Carley 2006, 285). It is likely that the monastic books of such collections, which came to be housed away from the religious sites following the Dissolution, became outdated and the bindings damaged and their fittings lost or removed. Furthermore, that some former religious members took with them parts of collections to their new country homes, such as Prior Hart of Llanthony Secunda Priory (Wright 1958, 160), can also be used to explain how late medieval book fittings have become so widely distributed. Given this, it is likely that a significant proportion of the PAS book fittings were once used on monastic books that were housed elsewhere, particularly in more rural locations, following the Dissolution.

The examination of book fittings recorded through the PAS can not only tell us about the distribution of different forms, styles of decoration, and the various materials from which they are made, but also the nature of their deposition in conjunction with the geographical distribution of monasteries. Egan (2008, 317-8) uses such an approach when examining a late medieval pen recorded in the PAS database. A late fifteenth-/early sixteenth-century copper-alloy pen is recorded as having been found in Chettle, Dorset (Figure 6-22), and Egan (2008, 317-8) argues that the pen was located near the site of a monastery and was most likely in use at the religious house as material evidence for clerkly practices is often found on such ecclesiastical sites. This approach can be applied to the analysis of the book fittings recorded through the PAS. The thorough investigation of the exact locations in which PAS book fittings were found and the locations of monasteries may determine if such

objects are associated with nearby religious houses. The results of this analysis can be considered in terms of their wider social and cultural contexts to further enhance our understanding of the book fittings recorded through the PAS and the dispersal and destruction of monastic books.

The preliminary analysis of the PAS material together with the book fittings catalogued in this work clearly demonstrates the variety of forms and decoration that late medieval book fittings took, enhancing our knowledge of the nature of late medieval book furniture. Yet the study of book fittings, both those from excavated monastic sites and those recorded through the PAS, can also provide some insight into the wider contexts of these artefacts. As demonstrated, the investigation into the geographical distribution of these artefacts away from monastic sites and their analysis in association with the locations of monasteries can be used to understand more about their deposition and the dispersal and destruction of monastic books.

FIGURE 6-22. A late fifteenth-/ early sixteenth-century copper-alloy pen found in Chettle, Dorset, and recorded through the Portable Antiquities Scheme (PAS/ Trustees of the British Museum, 2003-2015l, DOR-173638).

6.6 SUMMARY

This chapter has demonstrated that the analysis of the spatial distribution of late medieval book fittings found during archaeological investigations of monastic sites contributes to the wider understanding of the destruction of monastic books, both complementing and expanding upon the documentary evidence. The results of this analysis strongly indicate a distinct pattern in the deposition of book fittings within the reredorter and its associated drain, and within the monastic church. It is evident that a large proportion of these, especially those excavated from the reredorter, were deposited during the first half of the sixteenth century. In conjunction with the documentary evidence, the archaeological data has been interpreted as representing the destruction of books that occurred as a result of the Dissolution of the Monasteries during the 1530s. Although the archaeological material indicates that the Dissolution was the cause of the deposition of a large number of book fittings in the catalogue, a proportion of the material recovered from other locations of the monastic complex also reflects the casual loss of book fittings and the breaking up and recycling of books that occurred during the late medieval period.

Whilst this approach of analysis has highlighted significant archaeological evidence for both the casual loss and deliberate destruction of monastic books both during the late medieval period and the Dissolution, the analysis of book fittings excavated from monastic sites is not wholly informative of the fate of the monastic books, and their fittings, that were dispersed and subsequently destroyed off site. This chapter has highlighted that the in-depth analysis of late medieval book fittings recorded in the PAS database can not only bring to light other potential types of book fittings and styles of decoration, but can also provide some insight into the destruction of monastic books away from their houses. The detailed analysis of the PAS assemblage of book fittings was not within the scope of this research and the conclusions of this research are primarily drawn from English Heritage and published material. However, it has been recognised that the PAS database is an important source of evidence and may, to a certain extent, demonstrate the destruction and deliberate disposal of late medieval monastic book fittings.

7 CONCLUSIONS

7.1 A TYPOLOGICAL STUDY

This research on the archaeology of late medieval book fittings has been undertaken to develop a better understanding of this particular form of material culture, which has previously been overlooked in the study of the late medieval book. Given the largely organic composition of books, the survival of pages and bindings in archaeological contexts is particularly rare. Yet, as this research has demonstrated, the metal fittings of books are archaeologically visible and these have been found on a large number of sites. One of the principal aims of this research has been to develop the first comprehensive typology for late medieval book fittings that have been recovered from English monastic sites. The typology provided in Chapter 2 successfully categorised the pieces of book furniture identified from the collections of English Heritage and those published in more recent archaeological excavation reports. Whilst the typology comprises the main forms of book fittings recorded for this research, it became evident that the archaeological material analysed is not wholly representative of all the variations that such items often took. Through the examination of extant late medieval bookbindings housed in English research libraries and the analysis of recent studies on book fittings used on the Continent, this research has demonstrated many of the other forms of book fittings used during the late medieval period that are not included within the typology (see 5.5).

As discussed at the beginning of this work (see 1.2), one of the principal aims of this work was to record and classify the collections of English Heritage as book fittings have been incorrectly identified in their database and that there are large quantities of other mounts, fittings, unclassified copper-alloy objects and objects currently classified as strap-ends that are actually types of book furniture (S. Harrison, *pers. comm.*). From the classification system created for this research (see 2.6), it has been possible to re-identify the incorrectly identified artefacts held in the English Heritage collections and also many artefacts in published reports as late medieval book fittings. Furthermore, this typology can be used as a future reference for the identification and classification of book fittings held in other collections and also those recovered from future excavations of archaeological sites in England.

The creation of a database of book fittings, and their subsequent classification, has

allowed for the in-depth analysis of the physical characteristics of this type of material culture. In Chapter 2.7, the detailed analysis of the 336 artefacts recorded for this research has demonstrated the many and varied forms that book fixtures took, and it has established the two principal functions of these objects; either as fastenings or as furnishings. It has recognised the principal mechanisms through which fastenings functioned, namely the strap-and-pin and hooked mechanisms, and the key variations in form. Similarly, this analysis has demonstrated the main purposes of the different types of furnishings that were used on late medieval bookbindings, including domed bosses (B.1) to protect the leather or textile covers from abrasion, and corner-pieces (B.4) and binding strips (B.5) to protect the very edges of the covers. As demonstrated in Chapter 2.7, among the more common types of book furniture found archaeologically in England are the strap-and-pin fastenings of types A.1 and A.7, the hooked fastening of type A.3 and the domed boss furnishing of type B.1. The archaeological analysis of such fittings, in conjunction with the examination of previous literature and extant medieval bindings, has helped to provide information on the chronology of these forms. The study of extant bindings has also provided the opportunity to examine the types of monastic books that utilised similar fittings, although insufficient surviving evidence has meant that it was not possible to establish any correlation between the types of fittings and the contents of books on which they were used.

The evaluation of late medieval book furniture in Chapter 2 has also focused upon the use of decoration, and lack thereof, on different types of furniture (see 2.8). It has found that a number of techniques commonly used to decorate metalwork, particularly dress accessories (see Egan and Pritchard 2002), during the late medieval period were also used to embellish book fittings. It has been identified that the most common technique used on this particular type of material culture is engraving (see 2.8.1), but this was often used in combination with other methods, such as punching or stamping (see 2.8.2). It is also evident from this element of the analysis that certain designs and motifs were used on different forms of book fittings, particularly those used on fastenings of types A.1 and A.3, which were often decorated with series of punched dots and annulets, and foliate designs. Furthermore, the investigation into the symbolic meaning of the monograms used to decorate fittings of types A.9 and B.7 (see 2.8.4) found that the use of the sacred trigram on such artefacts demonstrates a direct reference to the Holy Name of Jesus and its associated cult, which was at its height of popularity in late medieval English society during the

fourteenth and fifteenth centuries (Blake *et al*. 2003, 176; Carter 2010, 279-80).

7.2 A CONTEXTUALISED STUDY

Contemporary documentary and pictorial evidence of monastic books, late medieval library catalogues, and extant books themselves, all demonstrate the importance of books and the written word within late medieval religious life. For this research, the collation of the archaeological artefacts has provided not only the opportunity to classify and typologically study book fittings, but also to place such material into its broader contexts. It is clear that the nature of the recovery of the archaeological material will have impacted upon the results and interpretations drawn. As discussed in Chapter 5, the extent to which monastic sites have been excavated, conditions of preservation, and other limitations and biases that may have occurred during archaeological investigations, such as problematic sampling and misidentification, will have affected the numbers of book fittings that have been found and subsequently identified. Nevertheless, using a synthesis of available evidence it has been possible to contextualise the data. Having identified the book fittings catalogued and completed an analysis of the wider social and cultural contexts of these objects, this research can be used by English Heritage to re-evaluate and re-interpret their collections and museum displays. The results and interpretations from the analysis completed for this research have already been applied to the redevelopment of the museum displays at Rievaulx Abbey, North Yorkshire.

To consider the wider social and cultural contexts, this research has brought together both archaeological and historical evidence for the investigation of late medieval book fittings, illustrating the importance of books in late medieval culture and society. By examining previous studies on monasticism and surviving monastic library catalogues, Chapter 4 has shown that, throughout the late medieval period, there was a considerable range of books being produced for the religious sector, which for a long time took place mainly within monasteries (Doyle 1990, 1; Brown 1994, 88; De Hamel 1997a, 85-6; Webber 2006a, 119; Thomson 2008b, 136; Scase 2010, 563). Additionally, the investigation into the technology of book production, as discussed in Chapter 3, has provided an insight into the various processes involved in this craft, which has been supported by a range of evidence, such as contemporary written recipes and instructions for making pigments and inks, and also parchment-prickers,

styli, lead points and shells, which are often recovered archaeologically. Chapter 3 has also demonstrated the significance of book production and its transformation during the late medieval period, from monastic book production (see 3.4) to the development of secular and commercial book production in urban centres (see 3.5), and then the impact of the printing press (see 3.6). Furthermore, this research has found that there is very little direct evidence for the production of late medieval book fittings (see 3.3). However, given the documentary and archaeological evidence for general metalworking in the late medieval period (Goodall 1981; Egan 1996; Jones 2001), especially for dress accessories (Egan and Pritchard 2002; Cassels 2013), and the analysis of the catalogued book fittings themselves, it has been possible to consider the various materials, manufacturing methods, and decorative styles and techniques used to produce late medieval book fittings (see 3.3). Despite this, it has not been possible, given the available evidence, to determine potential makers of book fittings or identify locations of manufacture.

In addition to establishing if certain types of book fittings were being used by particular monastic orders or in particular regions of England, an aim for this research has been to determine if it was possible to associate the various types of book fittings with the many and varied books used within monasteries. Given the often extensive and varied nature of monastic book collections, the significant paucity of original late medieval bindings, and the varied nature of the book fittings that have been analysed for this research, it has not been possible to establish a correlation between the types of fittings and the types of books on which they were used. The analysis of surviving monastic library catalogues and contemporary bookbindings also found that the number of book fittings found on site is not representative of the numbers of fittings that may have once been used during the late medieval period (see 5.5).

A further approach of this research has been to correlate the various monastic orders and the different forms and decorative styles of book fittings they used (see 5.3), and also the geographical distribution of these variations, placing the objects in their wider social and cultural contexts (see 5.4). This analysis was supported with comparative examples of book fittings found on extant late medieval bindings. Although this research analyses a sample of material from a number of monastic sites, it has been possible to draw conclusions based on the evidence gathered. As discussed in Chapter 5.3, whilst the research has found that no particular type of book fitting or style of decoration was solely utilised by a single monastic order, it has been demonstrated that particular types of fittings have been found more frequently

on sites of certain monastic orders and that larger numbers of book fittings have been excavated from Cistercian sites. Although the nature of the archaeological investigations completed at monasteries varies from site to site, from the evaluation of the ideals and practices of different monastic orders, it has been suggested that varying attitudes towards the importance of books and scholarship, and also the ornamentation of monastic furniture, may have influenced the numbers and types of book fittings that have been recovered archaeologically from such sites. As in Chapter 5.3.3, it is clear that the Cistercians, particularly during the eleventh and twelfth centuries, had strict attitudes towards the use of ostentatious decoration, especially for the vestments, and which included books (Geddes 1986, 256; Norton 1986, 323; Lawrence-Mathers 2003, 201-2). Although Cistercian attitudes relaxed from the thirteenth century (Geddes 1986, 256-7; Carter 2010, 272), the archaeological evidence analysed in this thesis clearly demonstrates that the book fittings from Cistercian sites were particularly simple in form and had little or no decoration.

The analysis of the geographical distribution of the book fittings (see 5.4) has offered the opportunity to examine the regional and patterned use of the various types of book fittings and styles of decoration across late medieval England. At a macro level, relatively similar numbers of book fittings can be shown to have come from sites across the whole of the North and South of England. Examining the data in more detail, however, did establish that certain types of book fittings are more predominant in certain areas or regions. With significant proportions of book fittings recorded from the South East and Yorkshire and the Humber regions, the discovery of larger numbers of fittings at several of the richer monasteries noted in the *Valor Ecclesiasticus* in 1535, such as St Augustine's Abbey, Kent, Fountains Abbey, West Yorkshire, and Battle Abbey, East Sussex, may indicate that they were particularly utilised by some of the wealthy monastic houses that had large book collections.

Another of the key aims of this research has been to investigate the nature of the deposition of book fittings on English monastic sites. As discussed in Chapter 4.4.2, there is substantial evidence, notably documentary and architectural, for the locations in which monastic books were stored and used, with the monastic church, cloister walk, chapter house, refectory and *armarium* being some of the more typical places in which books were used and stored (Wormald 1958, 16-8; Piper 1978, 213; Clarkson 1993, 181-2; Harris 1995, 99; Gameson 2006, 16; Webber 2006b, 128-9). The analysis of the spatial distribution of book fittings within the monastic complex, which has been the focus of Chapter 6, has found that the locations in which some

book fittings have been found signify the locations in which they were used or stored. This analysis has also found that artefacts excavated from late medieval contexts across various locations within the monastic complex provide archaeological evidence that reflects the casual loss of book fittings in places of use and storage (see 6.4.1).

From the examination of the deposition of the catalogued artefacts, it has also been possible to contribute to the understanding of the destruction of late medieval monastic books, both before and during the Dissolution, complementing and expanding upon the documentary evidence. In addition to providing evidence for the locations of the use and storage of books, the analysis of book fittings excavated from late medieval contexts has provided evidence that signifies the breaking up and recycling of books that occurred during the late medieval period (see 6.4.1). However, it soon became clear that an important factor in the deposition of a large proportion of fittings was the Dissolution of the Monasteries in the 1530s. As discussed in Chapter 6.3, the examination of the contemporary written accounts clearly demonstrates that monastic book collections were broken up and their contents often deliberately destroyed. From the archaeological evidence analysed for this research, it is evident that many monastic books were destroyed on site as a large proportion of book fittings were deposited during the first half of the sixteenth century across various locations within the monastic complex, most significantly the reredorter and the church (see 6.4.2). This spatial distribution of book fittings clearly represents the on-site destruction of monastic books that occurred as a result of the Dissolution. Despite this significant finding, the analysis of book fittings excavated from monastic sites does not provide evidence for the fate of many monastic books, and their fittings, which were dispersed and destroyed away from the monastic complex (see 6.5). Given the large numbers of books held in many English monasteries, particularly the larger houses, and the significant numbers of books fittings recorded across England through the Portable Antiquities Scheme, it has been concluded in Chapter 6.5 that many of these artefacts must represent the dispersal, destruction and disposal of monastic books and their fittings away from their monastic houses.

7.3 Future research

This research has demonstrated that the typological and contextualised study of late medieval book fittings excavated from English monastic sites can provide important insights into the nature of this type of material culture and its wider social and cultural contexts. However, there are ways in which the study can and should be developed in the future.

7.3.1 New sources of material

The initial scope of this research has meant that this study has focused on book fittings held in the collections of English Heritage, supported by those available in published excavation reports. As a result, additional sources of archaeological evidence could be analysed to further develop this database of late medieval book fittings in England. As discussed in Chapter 6, this research on late medieval book fittings can be used to aid the future analysis of comparable artefacts recorded by the Portable Antiquities Scheme (PAS), including the accurate identification of book fittings and the analysis of their geographical distribution. With the ever-increasing numbers of objects recorded through the PAS, it will be possible to continue to expand our understanding of late medieval book fittings with continued research. Furthermore, museum collections offer the potential for the expansion of the database of book fittings used in English monasteries. The study of newly published reports of archaeological investigations undertaken at monastic sites, such as Glastonbury Abbey, Somerset (Gilchrist and Green 2015), and St Mary's Abbey, Holme Cultram, Cumbria (Walker and Graham 2013), will also provide additional material for the study of this type of material culture. The typology created for this research (see 2.6) can be used as a basis for identifying and cataloguing book fittings from these additional sources of material, providing a platform from which future researchers can study this form of material culture.

7.3.2 The production of book fittings

During the completion of this research, it also became evident that there is little information and evidence for the production of late medieval book fittings, including

contemporary written accounts and archaeological finds, such as moulds and waste material (see 3.3). As concluded above, it has been possible to make some inferences on the manufacture of book fittings, notably on the materials and manufacturing and decorative techniques used; however, it is clear that this is a vital area that needs future investigation.

7.3.3 BOOK FITTINGS EXCAVATED FROM SECULAR SITES

Another approach to studying this particular type of material culture would be to consider book fittings in other social and cultural contexts away from the religious houses. Publications of excavations undertaken at secular sites, such as the late medieval castles of Beeston, Cheshire (Ellis 1993), and Launceston, Cornwall (Saunders 2006), and the early sixteenth-century fort, Camber Castle, near Rye, Sussex (Biddle *et al*. 2001), indicate that fittings were used on books held at these sites. Future research on such material would provide the opportunity to study late medieval book fittings that were utilised in various locations other than monasteries. Book fittings from urban monastic sites, which often belonged to the mendicant orders, have been included in this research's catalogue, however, fittings excavated from other sites in urban centres, such as London (Egan and Pritchard 2002; Egan 2005), Norwich (Margeson 1993), Southampton (Platt and Coleman-Smith 1975) and Winchester (Biddle 1990), would be useful as an additional body of material for future study and analysis.

7.3.4 THE POST-MEDIEVAL PERIOD

Given the source of material used for this study, this research has focused on the late medieval period, approximately between 1066 and 1540. This broad date range has allowed for the examination of the changes in types of book fittings used on monastic books and has provided the opportunity to consider the fate of monastic books and their fittings during the closure of the monasteries in the 1530s. Yet, this has meant that fittings used after this time, in the early post-medieval period, have not been considered. As extant bookbindings indicate, fittings continued to be used throughout the sixteenth and seventeenth centuries, and on into the eighteenth and nineteenth centuries although less frequently. The recording and classification of

post-medieval book fittings would not only enable the analysis of such artefacts in their own right, but would also allow for their comparative analysis with those dating between the mid-eleventh and mid-sixteenth centuries.

7.3.5 EXTANT LATE MEDIEVAL BOOKBINDINGS

This study has also demonstrated the importance of extant late medieval bindings in the study of late medieval book fittings. There have been many studies completed in previous years that have focused on late medieval bookbindings (see Dürrfeld 1996, 2000; Foot 1999; Szirmai 1999; Gullick and Hadgraft 2008; Adler 2010; Gillespie 2011; Gullick 2012) and there have been more recent analyses of the holdings of individual libraries (see Watson 1979; Dutschke 1989; Mynors and Thomson 1993; Thomson 2001). This research has found, however, that these studies on the whole have paid little attention to the nature of book fittings that survive, especially in English collections. In comparison to the Continent, it is evident that England has significantly reduced numbers of extant books with their original bindings, and even fewer with fittings. Despite the paucity of English monastic books that survive in their original bindings, this research has clearly demonstrated the importance of such evidence for the analysis of late medieval book fittings. To further expand upon this research, it would be advantageous to have a comprehensive catalogue of existing monastic bindings that retain their original fittings or sufficient evidence of such features. Based on the archaeological evidence analysed for this research, it has been suggested that not all monastic books may have had fittings attached to their bindings (see Chapter 5). Whilst these metal fittings are the more archaeologically visible elements of bookbindings, they are only an element of monastic bookbindings. Whilst rare, it is not unknown for the organic elements of monastic books and their bindings to be found archaeologically, including parchment book pages from St Leonard's Priory, Lincolnshire (Mahany 1977, 22). Therefore, the future in-depth study of monastic bindings both in archaeology and extant in libraries would offer further opportunities for the contextualised study of monastic books.

7.3.6 ASSOCIATED MATERIAL CULTURE

It is also evident from this research that there are other forms of material culture

that need to be considered for a wider understanding of the broader contexts of late medieval books. Specifically, an investigation of the archaeology of book production is necessary. This approach could involve the in-depth analysis of parchment-prickers and awls, lead plummets, styli, pens, inkwells and palettes, all of which were necessary for the production of books and are often excavated from monastic sites. Other items that may also be studied in greater depth are those associated with storage and reading, such as aestels, library chains and page-holders, which are occasionally excavated from religious sites but are also evident from documentary and pictorial evidence.

7.3.7 Female literacy in monasteries

The undertaking of this research has highlighted the very limited archaeological evidence for book fittings in late medieval female monastic houses. It is evident that few English nunneries have received recent archaeological survey and excavation compared to the more predominant male houses. It would therefore be beneficial in the future to investigate these female religious houses to gain a better understanding of their houses and their way of life, and in particular the practices and material culture associated with literacy and books.

7.3.8 The European context

The archaeological evidence collated for this research has laid the foundation for a wider contextualised study of late medieval monastic books. This research could be expanded upon through the widening of the geographical boundaries studied to include the rest of the United Kingdom. Additionally, a significant development would be to place the material in its wider European setting. This research has shown that many forms of book fittings commonly found on English monastic sites have similar counterparts on surviving bookbindings from across Europe. Adler's (2010) recent classification and contextualised study of book fittings from German-speaking countries, the Netherlands and Italy, dating from the early Middle Ages to the present, clearly demonstrates not only that such artefacts survive in significant quantities on the Continent, but that much can be gained from their analysis. Using Adler's study, it would be efficacious to expand upon the research of this thesis on

book fittings excavated from English monastic sites by undertaking a comparative study of book fittings found archaeologically and on extant bookbindings across England and mainland Europe. By comparing English and Continental book fittings in detail, it may be possible to make inferences on the dissemination of production techniques, different types of late medieval book fittings and styles of decoration across regions and countries.

7.4 SUMMARY

In conclusion, this investigation of an archaeological assemblage of book fittings demonstrates the types of objects that were used on late medieval monastic books and illustrates the wider contexts of books during the late medieval period. This research has not only created a typology that can be used and expanded upon for the future identification and classification of late medieval book fittings, but it has also established that a wide variety of fittings were used on monastics books across the collections of different monastic orders in different regions of England. In addition to understanding the nature of late medieval book fittings, this research has found that the analysis of their deposition has provided new evidence for the destruction of monastic books during the late medieval period and as part of the Dissolution of the Monasteries. Whilst there are many opportunities to expand upon this research, this study has clearly illustrated the advantageous use of archaeological material for a new understanding of book fittings and the archaeology of late medieval books as a whole.

CATALOGUE

The entries in this catalogue are ordered by site and then by type. For all catalogued items, the first number is the catalogue number, followed by the object type created specifically for this research and a date where available. Following these details are descriptions of form and decoration, including details of secondary decorative materials where applicable. Each catalogue item is made from a copper alloy unless otherwise stated in individual entries. These descriptions are then followed by the dimensions of the artefacts: length x width x thickness/height mm or, for circular fittings, diameter (d) x thickness/height mm. Details of the location and stratigraphic phasing of the objects are also given where available. The final detail provided in each catalogue entry is the English Heritage database number and/or the reference to the publication in which the item can be found. For catalogued items that are illustrated in the text, figure numbers are also given.

BATTLE ABBEY. *East Sussex, South East, South. Benedictine monks.*

Type A.1

1   A.1.1. Rectangular plate with concave edge, two rivet holes; sub-circular loop domed with flat back, central perforation and projecting terminal loop; bevelled edges. Terminal loop in a stylised animal head. 31x7x3mm. Reredorter; 18th century onwards. English Heritage, 802135. Geddes 1985, 158, no.37. Figure 2-70.

2   A.1.1. Rectangular plate with concave edge, two rivets; sub-circular loop domed with flat back, central perforation and projecting terminal loop. 31x7x3mm. English Heritage, 802190. Geddes 1985, 158, no.40. Figure 2-5.

3   A.1.1. Rectangular plate; sub-circular loop domed with flat back, central perforation and projecting terminal loop; loop with three lugs rather than two. 31x7x3mm. English Heritage, 802191. Geddes 1985, 158, no.39.

4   A.1.1. Incomplete. Plate missing; sub-circular loop domed with flat back, central perforation and projecting terminal loop. Punched annulets. 18x12x4mm. English Heritage, 802223. Figure 2-67.

5   A.3.1. 14th-16th century. Two plates held together by four rivets; front plate: one end developed into a hook with a pair of transverse lateral projections, attachment end splayed with undulating edge; bevelled edges. Two decorative holes. Remains of leather. 33x8/13x2mm. North of reredorter; Dissolution. English Heritage, 793244. Geddes 1985, 160, no.65. Figure 6-11.

6   A.3.1. 1450-1530. Two plates held together by one rivet; front plate: one end developed into a hook, attachment end splayed with deep central notch and two shallow notches. Central blind-drilled dot with concentric compass-engraved circles; two decorative holes. 43x17/32x2mm. Reredorter drain; Dissolution and Post-Dissolution. English Heritage, 793371. Geddes 1985, 160, no.66. Figure 2-63.

7   A.3.1. 15th century. Two plates held together by three rivets; front plate: one end developed into a hook, attachment end splayed with undulating edge. Engraved zigzag lines in form of saltire cross; series of other zigzag and straight lines. Gilded.

56x15/23x2mm. Reredorter drain; Dissolution and Post-Dissolution. English Heritage, 793365. Geddes 1985, 160, no.67.

8   A.3.1. Incomplete and heavily corroded. Two plates held together by two rivets?; front plate: one end with projection (hook?), attachment end splayed with undulating edge. 38x13/25mm. English Heritage, 793360.

Type A.4

9   A.4.1. Incomplete. Rectangular plate with one end developed into a hook; two rivet holes. 29x20mm. English Heritage, 793356.

10   A.4.2. 1450-1530. Incomplete. Two rectangular plates held together by a rivet and one riveted lug with horizontal loop near hook (missing); front plate: one end developed into a hook, attachment end with trefoil cut-out and two cusps in edge. Engraved cabling along edges with linear border. 38x26x4mm. North of reredorter; Dissolution. English Heritage, 793339. Geddes 1985, 160, no.69. Figure 2-12.

11   A.4.2. Two rectangular plates held together by two rivets and

one riveted lug with horizontal loop near hook; front plate: one end developed into a hook. Edges of front plate serrated; surface with lots of (punched?) dots of varying sizes. Remains of leather. 26x18x4/8mm. North of reredorter; Dissolution. English Heritage, 801972. Geddes 1985, 160, no.71. Figure 5-13.

12   A.4.2. 16th century. Two rectangular plates held together by two rivets and one riveted lug with horizontal loop near hook; front plate: one end developed into a hook, attachment end with elaborate cut-out edge. Engraved cabling along edges. 46x30x6mm. North of reredorter; Dissolution. English Heritage, 802172. Geddes 1985, 160, no.70. Figure 5-13.

Type A.5

13   A.5.1. Medieval-16th century. Incomplete. Rectangular plate with one end developed into a hook, attachment end broken. 29x5x1mm. Reredorter; Dissolution and Post-Dissolution. English Heritage, 793204. Figure 2-15.

Type A.6

14   A.6.1. Medieval-16th century.

Rectangular plate that slightly tapers to one end, with rectangular perforation at other; two rivets? holes. 19x14x1mm. Reredorter; Dissolution and Post-Dissolution. English Heritage, 793265.

15   A.6.2. Rectangular plate with pointed end, widens at end with two projecting lugs holding bar; two rivet holes; bevelled edges. 34x8x3mm. Reredorter drain; Dissolution and Post-Dissolution. English Heritage, 793372. Geddes 1985, 162, no.72.

16   A.6.2. Rectangular plate with pointed end and two projecting lugs holding bar; two rivets (only one *in situ*); bevelled edges. 26x9x1mm. Reredorter drain; Dissolution and Post-Dissolution. English Heritage, 793362. Geddes 1985, 162, no.73.

17   A.6.2. Medieval-16th century. Incomplete. Rectangular plate folded with rectangular cut-out to form two integral projecting lugs; one rivet. Three decorative holes. 21x12x1/7mm. Dormitory. English Heritage, 844686.

18   A.6.2. Medieval-16th century. Incomplete. Rectangular plate with projecting lugs (broken);

three rivet holes. 33x15x1mm. Reredorter; Dissolution and Post-Dissolution. English Heritage, 793255.

19 A.6.2. Medieval-16th century. Rectangular plate with two projecting lugs; two iron rivets. 26x15x1mm. Reredorter; Dissolution and Post-Dissolution. English Heritage, 793275. Figure 3-43.

20 A.6.3. Incomplete. Triangular plate with rectangular perforation; one rivet hole. 17x17x1mm. Chapter house. English Heritage, 793382. Figure 6-6.

21 A.6.3. Triangular plate with rectangular perforation; one rivet hole. 25x17x1mm. English Heritage, 793383. Geddes 1985, 160, no.51.

Type A.7

22 A.7.1. Incomplete. Rectangular plate with central perforation; four rivets. Engraved foliage with linear border. 31x21x1/4mm. North of reredorter; Dissolution. English Heritage, 801973. Geddes 1985, 160, no.45. Figure 2-65.

23 A.7.1. 16th century. Two rectangular plates with central perforation, held together by four rivets. Engraved cabling along edges. Remains of leather. 29x19x3mm. North of reredorter; Dissolution. English Heritage, 802155. Geddes 1985, 160, no.46.

24 A.7.1. Medieval-16th century. Two rectangular plates with central perforation, held together by two rivets. Remains of leather. 26x9x3mm. Reredorter; Dissolution and Post-Dissolution. English Heritage, 793266.

25 A.7.1. Two rectangular plates with central perforation, held together by four rivets; NB. reused sheet. Engraved foliage design; engraved cabling around edge. Remains of leather. 31x19x4mm. English Heritage, 785976. Geddes 1985, 158, no.33.

26 A.7.1. Two rectangular plates with central perforation, held together by four rivets. Remains of leather. 34x16x4mm. English Heritage, 802150.

27 A.7.1. Two rectangular plates with central perforation, held together by four rivets. 27x20x2mm. English Heritage, 802248. Geddes 1985, 160, no.47.

28 A.7.1. Incomplete. Rectangular plate with central perforation;

four rivet holes. 31x17mm. English Heritage, 793324.

Type A.8

29   A.8.1. Incomplete. Rectangular plate with broken integral loop; central perforation; two rivets, one *in situ*. 23x14x1mm. English Heritage, 785961.

30   A.8.3. Incomplete. Rectangular plate, edge with notches; opposite end with integral sub-circular loop, central perforation and broken terminal loop. 44x18mm. Reredorter drain; Dissolution and Post-Dissolution. English Heritage, 793359. Geddes 1985, 160, no.68.

Type A.11

31   A.11.1. Incomplete. Square plate with central perforation; central notch in two opposite edges. 12x12mm. English Heritage, 793370.

Type B.1

32   B.1.3. Incomplete. Square plate with central domed boss; four rivet holes. 34x32x2mm. English Heritage, 802203.

33   B.1.4. Square domed boss with four pointed tabs, two with rivet holes. 22x22x6mm. English

Heritage, 802164. Figure 5-47.

34   B.1.4. Square domed boss with four pointed tabs, two with rivet holes. 23x22x6mm. English Heritage, 802168. Figure 2-43.

Type B.2

35   B.2.2. Circular domed plate with central perforation; two rivet holes. d16mm. 802127.

36   B.2.2. Circular domed plate with central perforation. d25mm. English Heritage, 793357.

37   B.2.2. Circular domed plate with central perforation; two rivet holes. d17mm. English Heritage, 785971.

38   B.2.4. Sexfoil domed plate with central perforation; two rivets (only one *in situ*). Engraved triangular pattern on petals. d18mm. North of reredorter; Dissolution. English Heritage, 801976. Geddes 1985, 160, no.55.

39   B.2.4. Incomplete. Sexfoil domed plate with central perforation; one rivet hole remains. Engraved lines defining petal design. d17x2mm. English Heritage, 793368. Geddes 1985, 160, no.54.

40   B.2.4. Incomplete. Sexfoil domed plate with central perforation;

one rivet surviving. Engraved triangular pattern on petals. d17x3mm. English Heritage, 802210. Geddes 1985, 160, no.56.

Type B.3

41   B.3.1. Circular plate with relief petal design. d18x3mm. North of reredorter; Dissolution. English Heritage, 802246. Geddes 1985, 160, no.57.

Type B.5

42   B.5.1. Incomplete. Rectangular plate folded lengthways along one edge. Foliate scroll design. Gilded; vernis brus. 123x15mm. North of reredorter; Dissolution. English Heritage, 801969. Geddes 1985, 147-8, no.4. Figure 3-51.

43   B.5.1. Medieval-16th century. Rectangular plate folded lengthways; rivet? for attachment. Remains of leather? (organic material). 60x11x3mm. Chapter house. English Heritage, 802118. Figure 2-56.

BERMONDSEY ABBEY. *Surrey, South East, South. Cluniac monks.*

Type A.1

44   A.1.1. Incomplete. Plate missing;

sub-circular loop domed with flat back, central perforation and projecting terminal loop. Terminal loop in a stylised animal head. Gilded. 18x8mm. Cemetery; 1538-1650. Egan 2011, 246, <S45> A<861>. Figure 2-5.

Type A.2

45   A.2.1. Early 15th century? Two rectangular plates held together by two rivets, edge with circular aperture and two cusps; spacer extending into sub-circular loop domed with flat back, central perforation and projecting terminal loop. Remains of leather. 57x31mm. Reredorter; Dissolution and Post-Dissolution. Egan 2011, 246, <S46> A<911>. Figure 2-9.

Type A.7

46   A.7.1. Two rectangular plates with central perforation, held together by four rivets; short edges with deep central notch and cusp either side; long sides have paired transverse notches flanking a longer bevel. Remains of leather. 36x28mm. Egan 2011, 254, <S140> A<394>.

47   A.7.1. Two rectangular plates with central perforation, held together by four rivets; short

edges with central circular aperture and cusp either side. Engraved line extending from apertures in edges. Remains of leather. 35x20mm. Egan 2011, 254, <S141> A<1550>.

48 A.7.1. Later medieval. Two rectangular plates with central perforation, held together by four rivets; short edges with three cusps. Engraved line extending from central cusp in edges; engraved linear border with transverse hatching. 33x22mm. Egan 2011, 254, <S142> A<866>.

Type A.11

49 A.11.1. Incomplete. Square plate with central perforation; central notch in each edge; bevelled edges. 18x18mm. Cemetery; 1538-1650. Egan 2011, 253, S<135> A<567>. Figure 2-32.

Type B.1

50 B.1.2. Incomplete. Circular domed boss with four pointed tabs each with a rivet hole, one rivet *in situ* (tab missing). d22x9mm. Cloister garth; 1538-1650. Egan 2011, 246, <S42> A<802>. Figure 2-39.

51 B.1.2. Incomplete. Circular domed boss with four pointed tabs each with a rivet hole. d24x9mm. Cemetery; 1538-1650. Egan 2011, 246, <S43> A<561>. Figure 2-39.

52 B.1.2. Incomplete. Circular domed boss (top missing, worn or for gem/stone?) with four trefoil tabs each with a rivet hole (two tabs broken). d50(est.)x9mm. Cemetery; 1538-1650. Egan 2011, 246, <S44> A<360>. Figure 2-39.

Type B.4

53 B.4.1. c.1520+. Incomplete. Sub-square plate with two adjacent down-turned sides, other two sides with scalloped edges; domed boss with top missing, worn?; two rivet holes. Renaissance-style; punched border of beading between lines; foliate scrolling in tooled field. 40x40mm. Infirmary; 1330-1430. Egan 2011, 246, <S40> A<999>. Figure 2-53.

BEVERLEY BLACKFRIARS. *East Yorkshire, Yorkshire and the Humber, North. Dominican friars.*

Type A.3

54 A.3.1. 16th century. Incomplete. Front plate: one end developed into a hook, attachment end

splayed with deep central notch in edge (edge broken); two rivets surviving; bevelled edges. Engraved longitudinal line down centre, extending from central notch. 43x10x1mm. Cloister garth; early 16th century. Goodall 1996, 156, no.893. Figure 5-21.

Type A.7

55   A.7.1. Two rectangular plates with central perforation, held together by four rivets. 24x14x4mm. Cloister garth; 14th-16th century. Goodall 1996, no.892. Figure 6-15.

Type B.2

56   B.2.4. Sexfoil plate, slightly domed, with central perforation; two rivets, one remaining. d15x1/5mm. Little cloister; late 14th-16th century. Goodall 1996, no.881.

BORDESLEY ABBEY. *Worcestershire, West Midlands, Midlands Cistercian monks.*

Type A.3

57   A.3.1. Two plates held together by three rivets; front plate: one end developed into a hook, attachment end splayed with undulating edge. 52x9/17x1/3mm. Church – choir; 15th century. Rahtz 1983, 181, no.CA96. Figure 2-9.

Type A.7

58   A.7.1. Two rectangular plates with central perforation, held together by four rivets; three notches in short edges. Engraved linear decoration. 45x27mm. Wright 1976, 202, no.CA35.

59   A.7.1. Two rectangular plates with central perforation, held together by four rivets. remains of leather. 35x20x3mm. East of *armarium* and *vestiarium*; 15th century. Rahtz 1983, 177, no.CA20.

60   A.7.1. Incomplete. Rectangular plate with central perforation; two rivet holes. 17x14x0.5mm. Church – choir; 15th century. Rahtz 1983, 177, no.CA28b. Figure 6-5.

Type A.11

61   A.11.1. Incomplete. Square plate with central perforation; central notch in each edge. 13x13mm. Church – choir; 15th century. Rahtz 1983, 177, no.CA28a. Figure 6-5.

62 B.1.6. Octagonal domed boss. d11x15mm. *Armarium*; c.1260-c.1400. Rahtz 1983, 179, no.CA65. Figure 2-44.

63 B.1.6. Octagonal domed boss. d11x15mm. *Armarium*; c.1200-c.1401. Rahtz 1983, 179, no.CA66.

Type B.2

64 B.2.3. Cinquefoil plate with central perforation. d20x0.5mm. Rahtz 1983, 175, no.CA7.

65 B.2.4. Sexfoil plate, slightly domed, with central perforation; two rivets. Engraved? lines defining petal design. d27x1mm. Rahtz 1983, 175, no.CA10.

Type B.3

66 B.3.1. Lozenge-shaped plate; two iron rivets. Series of punched opposing triangles bordering fitting; central inset of vitreous enamel. 39x19x3mm. *Armarium*; c.1260-c.1400. Rahtz 1983, 177, no.CA57. Figure 3-48.

BYLAND ABBEY. *North Yorkshire, Yorkshire and the Humber, North. Cistercian monks.*

Type B.1

67 B.1.1. 12th-14th century. Circular domed solid boss with flange; three rivet holes; two perforations in underside at centre. d30x12mm. East of day room. English Heritage, 742006.1.

CANTERBURY, ST AUGUSTINE'S ABBEY. *Kent, South East, South. Benedictine monks.*

Type A.1

68 A.1.1. Rectangular plate with five notches in edge, two rivets; sub-circular loop domed with flat back, central perforation and projecting terminal loop. Terminal loop in a stylised animal head. 34x11mm. East of north transept; Post-medieval. English Heritage, 7716149. Henig 1988, 181, no.10. Figure 2-5.

69 A.1.1. Incomplete. Plate missing; sub-circular loop domed with flat back, central perforation and projecting terminal loop; loop missing one lug/arm. Engraved five-petal rosette with concentric bordering circle. Gilded. 28x19x6mm. English Heritage, 777590. Henig and Woods 1988, 215, no.50. Figure 3-51.

70 A.1.1. Rectangular plate with concave edge, two rivets; sub-circular loop domed with flat back, central perforation and projecting terminal loop. Terminal loop in a stylised animal head. 39x10mm. East of north transept. English Heritage, 7716156B. Henig 1988, 181, no.11.

Type A.2

71 A.2.1. Two rectangular plates held together by one rivet; forked spacer extending into sub-circular loop domed with flat back and central perforation, terminal loop missing. NB. In two parts plates loose. Remains of leather. 34x13x3mm. East of north transept; Post-medieval. English Heritage, 7716151A. Henig 1988, 181, no.9. Figure 5-13.

72 A.2.1. Two rectangular plates held together by one rivet, concave edge; spacer extending into sub-circular loop domed with flat back, central perforation and projecting terminal loop. Plate with engraved linear motif. 25x7mm. English Heritage, 777547. Henig and Woods 1988, 211, no.31. Figure 5-13.

73 A.2.1. Medieval. Two rectangular plates held together by one

rivet; spacer extending into sub-circular loop, domed with flat back, central perforation and projecting terminal loop. Plate with engraved cabling; terminal loop in a stylised animal head. 33x9x4mm. English Heritage, 765747. Henig and Woods 1988, 211, no.30. Figure 2-70.

Type A.3

74 A.3.1. Incomplete. Two plates held together by two rivets; front plate: hooked end missing, attachment end splayed with convex edge with three notches. 35x12/21x3mm. South of nave; 16th century. English Heritage, 756296. Henig and Sherlock 1988, 193, no.24.

75 A.3.1. Medieval. Incomplete. Two plates held together by three rivets; front plate: hooked end missing, attachment end splayed with deep central notch and cusp either side in edge. Gilded. 63x10/23x3mm. English Heritage, 775157. Henig and Sherlock 1988, 193, no.23. Figure 2-75.

76 A.3.1. Medieval. Incomplete. Two plates held together by three rivets; front plate: hooked end missing, attachment end splayed with notch and two cusps in

edge. 40x13/22x3mm. English Heritage, 782510. Henig and Woods 1988, 215, no.49. Figure 2-9.

77 A.3.1. Two plates held together by three rivets; front plate: one end developed into a hook, attachment end splayed with scalloped edge. Compass-engraved concentric circles; engraved lines in chevron-shaped arrangement. 55x10/23mm. English Heritage, 7716156A. Henig 1988, 179, no.3. Figure 3-46.

Type A.4

78 A.4.1. Two rectangular plates held together by three rivets, concave edge; back plate: one end developed into a hook; front plate: circular aperture in edge. Remains of leather. 32x18mm. South of nave; 16th century. English Heritage, 756297. Henig and Sherlock 1988, 193, no.22. Figure 2-12.

79 A.4.2. Medieval. Two rectangular plates held together by one rivet and one riveted lug with horizontal loop near hook; front plate: one end developed into hook, attachment end with circular aperture and two notches in edge. 21x17x4mm.

English Heritage, 765729. Henig and Woods 1988, 215, no.51.

Type A.5

80 A.5.3. Rectangular plate with one end developed into hook, attachment with two projecting lugs to hold bar; riveted lug with horizontal loop near hook. 60x9mm. English Heritage, 777612. Henig and Woods 1988, 216, no.54.

Type A.7

81 A.7.1. Two rectangular plates with central perforation, held together by four rivets; notch and two cusps in short edges. Engraved cross-hatching at short edges. 34x24x3mm. English Heritage, 765720. Henig and Woods 1988, 211, no.32.

Type A.11

82 A.11.1. Square plate with pin. Engraved lines dividing plate into quarters. 12x13x19mm. English Heritage, 7716151D. Henig 1988, 181, no.15.

Type B.1

83 B.1.2. Circular domed boss with three trefoil tabs each with a rivet hole. d26x6mm. English Heritage, 765715. Henig and

Woods 1988, 215, no.46. Figure 2-39.

Type B.2

84   B.2.2. Circular domed plate with central perforation; two rivet holes. d23x4mm. English Heritage, 765795. Henig and Woods 1988, 220, no.89.

Type B.3

85   B.3.1. Incomplete. Circular plate with relief six-petal design. d34mm. English Heritage, 794514. Henig and Sherlock 1988, 195, no.46.

CANTERBURY, ST GREGORY'S PRIORY. *Kent, South East, South. Augustinian canons.*

Type A.2

86   A.2.1. Medieval. Incomplete. Plates missing; forked spacer extending into sub-circular loop domed with flat back, central perforation and projecting terminal loop. Terminal loop in a stylised animal head. 36x13x5mm. Post-medieval. Hicks and Hicks 2001, 270, no.7. Figure 2-70.

87   A.2.1. 14th century. Incomplete. Two rectangular plates held together by two rivets, concave edge; spacer extending into sub-circular loop domed with flat back, central perforation, terminal loop missing. 40x15x5mm. Prior's lodge; Dissolution. Hicks and Hicks 2001, 270, no.8. Figure 2-9.

88   A.2.1. 14th century. Two rectangular plates held together by one rivet, concave edge; spacer extending into sub-circular loop domed with flat back, central perforation and projecting terminal loop. Terminal loop in a stylised animal head. 46x13x4mm. Prior's lodge; Dissolution. Hicks and Hicks 2001, 270, no.9. Figure 2-70.

Type A.4

89   A.8.4. 14th century. Rectangular plate folded widthways, held together by three rivets (only one surviving); rectangular attachment end extending into dome with projecting terminal loop at fold; perforation in underside of dome. 43x13x4mm. Prior's lodge; Dissolution. Hicks and Hicks 2001, 270, no.10. Figure 5-9.

CHELMSFORD, BLACKFRIARS. *Essex, East, South. Dominican friars.*

Type B.2

90   B.2.3. Cinquefoil plate with
central perforation; remains
of two iron rivets. d15x1mm.
Reredorter; Dissolution. Drury
1974, 56, no.15. Figure 6-11.

CHESTER, BLACKFRIARS. *Cheshire, North West, North. Dominican friars.*

Type A.1

91   A.1.1. Rectangular plate, one
rivet; sub-circular loop domed
with flat back, central perforation
and projecting terminal loop.
25x5x4mm. Church; Dissolution
and Post-Dissolution. Lloyd-
Morgan 1990, 168, no.16. Figure
5-21.

Type A.3

92   A.3.1. 16th century. Two plates
held together by two rivets; front
plate: one end developed into a
hook, attachment end splayed
with scalloped edge. Compass-
engraved concentric circles;
engraved feather-like motifs.
Iron back plate. 54x12/17x2mm.
Church; Dissolution and Post-
Dissolution. Lloyd-Morgan 1990,
166, no.3. Figure 2-9.

93   A.3.1. Incomplete. Front plate:

one end developed into a hook,
attachment end splayed with
four notches in edge; two rivets?
Central compass-engraved
concentric circles; five decorative
drilled holes each with a
compass-engraved concentric
circle; engraved zigzag lines;
engraved lines in chevron-shaped
arrangement. 69x18/34x1mm.
Post-medieval. Lloyd-Morgan
1990, 166, no.4. Figure 3-49.

Type A.7

94   A.7.1. Incomplete. Rectangular
plate with central perforation;
four rivet holes. Engraved
cabling along long edges; lightly
engraved lines along short edges.
25x21x1mm. Church; Dissolution
and Post-Dissolution. Lloyd-
Morgan 1990, 168, no.15. Figure
5-21.

CLEEVE ABBEY. *Somerset, South West, South. Cistercian monks.*

Type B.1

95   B.1.5. Incomplete?/broken.
Triangular plate with central
dome; notch in each edge; three
rivet holes; slightly bevelled
edges. d27x1/2mm. Reredorter;
Post-Dissolution. English

Heritage, 823137. Guy 1999, 29, SF22. Figure 2-47.

COVENTRY, ST MARY'S CATHEDRAL PRIORY. *Warwickshire, West Midlands, Midlands. Benedictine monks.*

Type A.3

96   A.3.1. Incomplete. Front plate: one end developed into a hook, attachment end splayed with three notches in edge; two rivets; bevelled edges. 27x8/16x1mm. Chapter house. Hobley 1971, 119, no.2. Figure 6-6.

Type B.1

97   B.1.3. Square plate with central domed boss; decoratively cut edges; four rivet holes. Decorative holes? 24x24x9mm. Undercroft; Post-Dissolution. Rylatt *et al.* 2003, 126, no.m SF135. Figure 2-40.

Type B.3

98   B.3.1. Sub-rectangular plate with one end developed into a semi-circle and the other with circular terminal and projecting knop; semi-circular projections half way down length; four rivet holes. Engraved linear design bordering mount; engraved

linear foliate design. Enamelled. 88x20/40x3mm. Undercroft, Post-Dissolution. Rylatt *et al.* 2003, 126, no.k SF6. Figure 2-51.

COVENTRY, WHITEFRIARS. *Warwickshire, West Midlands, Midlands. Carmelite friars.*

Type A3

99   A.3.1. Incomplete. Front plate: one end developed into a hook, attachment end splayed with deep central notch and two smaller notches, one either side; two rivets; bevelled edges. 44x11/25x1mm. Church – choir; Post-Dissolution. Woodfield 1981,94, no.48.

100   A.3.1. Incomplete. Two plates held together by three rivets; front plate: one end developed into a hook (broken), attachment end splayed with deep central notch and undulating edge; bevelled edges. Central blind-drilled hole with compass-engraved concentric circles. 28x12/23x2.5mm. Church – choir; Post-Dissolution. Woodfield 1981, 94, no.49.

101   A.3.1. Incomplete. Front plate: one end developed into a hook, attachment end splayed with

two notches; one rivet hole. Central blind-drilled hole with compass-engraved concentric circles. Remains of leather. 20x7/14mm. Church – choir; Post-Dissolution. Woodfield 1981, 94, no.50.

102 A.3.1. Incomplete. Front plate: one end developed into a hook, attachment end splayed with scalloped edge; one rivet hole. Central blind-drilled hole with compass-engraved concentric circles. 17x8/16mm. Church – choir; Post-Dissolution. Woodfield 1981, 94, no.51.

103 A.3.1. Incomplete. Front plate: one end developed into a hook with a pair of transverse lateral projections, attachment end splayed, edge broken; one rivet hole? Blind-drilled hole with compass-engraved concentric circles; series of engraved longitudinal lines. 32x6/16mm. Church – choir; Post-Dissolution. Woodfield 1981, 94, no.52.

Type A.6

104 A.6.2. Rectangular plate with pointed end and two projecting lugs holding bar; two rivets (only one *in situ*). 22x9x2mm. Church – choir; Post-Dissolution.

Woodfield 1981, 97, no.101.

105 A.6.2. Rectangular plate with pointed end and two projecting lugs holding bar; three rivet holes. 27x8mm. Church – choir; Post-Dissolution. Woodfield 1981,97, no.102.

106 A.6.2. Incomplete. Rectangular plate with pointed end, other end broken; one rivet hole (second missing?). 15x8mm. Church – choir; Post-Dissolution. Woodfield 1981, 97, no.103.

Type A.7

107 A.7.1. Two rectangular plates with central perforation, held together by four rivets; small notches in long edges; two square cut-outs, four notches and circular aperture in each short edge. Remains of leather. 44x29x2.5mm. Church – choir; Post-Dissolution. Woodfield 1981, 94, no.43. Figure 2-20.

108 A.7.1. Incomplete. Rectangular plate with central perforation. 28x17mm. Church – choir; Post-Dissolution. Woodfield 1981, 94, no.46. Figure 5-22.

Type A.11

109 A.11.1. Square plate with pin;

central notch in each edge. 18x19x1/23mm. Church – choir; Post-Dissolution. Woodfield 1981, 95, no.84. Figure 2-32.

110 A.11.1. Square plate with pin; three notches in each edge. 12x10x1/12mm. Church – choir; Post-Dissolution. Woodfield 1981, 95, no.85. Figure 2-32.

DENNY ABBEY. *Cambridgeshire, East, South. Franciscan nuns.*

Type A.3

111 A.3.1. Incomplete. Front plate: one end developed into a hook, attachment end splayed with three notches in edge; two rivet holes. Two blind-drilled holes with compass-engraved concentric circles; series of transverse engraved lines; engraved zigzag line; three engraved double diagonal lines. 53x12/21x2mm. Christie and Coad 1980, 257, no.44. Figure 2-63.

Type A.4

112 A.4.2. Two rectangular plates held together by one rivet and one riveted lug with horizontal loop near hook; front plate: one end developed into a

hook. Remains of leather. 30x15x1.5/9mm. Monastic garden. Christie and Coad 1980, 255, no.4. Figure 5-21.

Type A.5

113 A.5.1. Incomplete. Rectangular plate with one end developed into a hook (missing), attachment end with projecting lug; one rivet. 32x9x2mm. Claustral cistern. Christie and Coad 1980, 257, no.42. Figure 5-21.

Type A.6

114 A.6.2. Rectangular plate with pointed end and two projecting lugs holding bar; two rivets. 38x19x2mm. Monastic garden. Christie and Coad 1980, 257, no.43. Figure 2-16.

Type B.1

115 B.1.2. Circular domed boss with four rounded tabs each with a rivet hole. d38x2/11mm. West range; 1339-1539. Christie and Coad 1980,257, no.35. Figure 2-39.

Type B.4

116 B.4.1. Incomplete. Sub-square plate with two adjacent down-turned sides; domed boss; three

rivets (only two *in situ*). Engraved zigzag line border; punched motifs surrounding boss, motif comprising three pellets in a stirrup-shaped border. Remains of leather. 29x29mm. Monastic garden. Christie and Coad 1980, 257, no.37. Figure 2-53.

Type B.5

117   B.5.1. Rectangular plate folded lengthways one with four-six rivets. 59x8x2mm. Monastic garden; 1339-1539. Christie and Coad 1980, 257, no.39. Figure 2-56.

EYNSHAM ABBEY. *Oxfordshire, South East, South. Benedictine monks.*

Type A.1

118   A.1.1. Rectangular plate with concave edge, one rivet; sub-circular loop domed with flat back, central perforation and projecting terminal loop. Terminal loop in a stylised animal head. 28x6x3mm. South-east cloister walk; Post-Dissolution. Allen 2003, 258, no.18. Figure 6-18.

Type A.4

119   A.4.2. Medieval. Two rectangular

plates held together by one rivet and one riveted lug with horizontal loop near hook; front plate: one end developed into a hook. Engraved longitudinal linear border. 34x21x6/9mm. South-east cloister walk; Post-Dissolution. Allen 2003, 265, no.52. Figure 5-13.

120   A.4.2. Medieval. Two rectangular plates held together by one rivet and one riveted lug with horizontal loop near hook; front plate: one end developed into a hook, attachment end with circular aperture and two notches in edge. Engraved longitudinal linear border with series of punched dots superimposed. 27x23x5/11mm. South-east cloister walk; 1066-1120. Allen 2003, 265, no.53. Figure 2-12.

FOUNTAINS ABBEY. *West Yorkshire, Yorkshire and the Humber, North. Cistercian monks.*

Type A.1

121   A.1.1. Medieval. Rectangular plate with concave edge, two rivet holes; sub-circular loop domed with flat back, central perforation and projecting

terminal loop; bevelled edge. Terminal loop in a stylised animal head. 39x13x4/6mm. English Heritage, 671316.

122   A.1.1. Medieval. Rectangular plate, two rivets; sub-circular loop domed with flat back, central perforation and projecting terminal loop. Terminal loop in a stylised animal head. 34x7x3mm. Reredorter. English Heritage, 671219.

123   A.1.1. Medieval. Rectangular plate, two rivet holes; sub-circular loop domed with flat back, central perforation and terminal loop. 24x6x4mm. English Heritage, 915694.

124   A.1.2. Medieval. Incomplete. Plate missing; sub-circular loop domed with flat back, circular depression on underside and projecting terminal loop. Terminal loop in stylised animal head. 25x12x8mm. English Heritage, 671132.

125   A.1. Medieval. Incomplete. Rectangular plate with concave edge, one rivet hole; loop missing; bevelled edge. 13x6x2mm. Reredorter. English Heritage, 671201. Figure 2-5.

Type A.3

126   A.3.1. Medieval Two plates held together by three rivets; front plate: one end developed into a hook, attachment end splayed with undulating edge. Engraved longitudinal line reducing in depth, extending from attachment edge along shaft. 64x13/25x2mm. English Heritage, 671165. Figure 5-15.

127   A.3.1. Medieval. Incomplete. Two plates held together by three rivets; back plate incomplete; front plate: one end developed into a hook, attachment end splayed with three notches in edge. 28x9/16x1mm. English Heritage, 671311.3.

128   A.3.1. Medieval. Incomplete. Front plate: one end developed into a hook, attachment end splayed with straight edge; three rivets; bevelled edges. 33x10/15x1mm. English Heritage, 671311.2. Figure 2-9.

129   A.3.1. Medieval. Two plates held together by three rivets; front plate: one end developed into a hook, attachment end splayed with deep central notch and undulating edge. 41x16/30x2.5. 671310.1.

130   A.3.1. Medieval. Two plates held

together by two rivets; front plate: one end developed into a hook, attachment end splayed with two notches in edge. 26x7/20x1mm. English Heritage, 671149.

131   A.3.1. Medieval. Incomplete. Front plate: one end developed into a hook, attachment end splayed with two notches; three rivets; bevelled edges. Engraved longitudinal line extending from each notch. 64x16/31x1mm. River. English Heritage, 671098.

132   A.3.1. Medieval. Incomplete. Two plates held together by three rivets; back plate incomplete; front plate: hook missing, attachment end splayed with central notch and cusp either side; bevelled edges. Engraved longitudinal line down centre, extending from central notch. 24x7/20x2mm. English Heritage, 671310.3.

133   A.3.1. Medieval. Two plates held together by three rivets; front plate: one end developed into a hook, attachment end splayed with undulating edge; bevelled edges. Remains of leather. 36x13/32x2mm. Reredorter. English Heritage, 671218.

134   A.3.1. Medieval. Two plates held together by three rivets; front plate: one end developed into a hook, attachment end splayed with three notches. Central drilled blind hole with three compass-engraved concentric circles. Remains of leather. 33x9/18x2mm. English Heritage, 671310.2.

135   A.3.1. Medieval. Incomplete. Front plate: one end developed into a hook, attachment end splayed with deep central notch and notch either side; three rivet holes. Central drilled blind hole with two compass-engraved concentric circles. 36x10/23x1mm. English Heritage, 671311.1. Figure 2-63.

136   A.3.1. Medieval. Two plates held together by three rivets, two *in situ*; front plate: one end developed into a hook, attachment end splayed with central notch and two cusps. Remains of leather. 41x11/17x2mm. English Heritage, 671311.4.

137   A.3.1. Medieval. Two plates held together by three rivets; front plate: one end developed into a hook with transverse lateral projections, plate widens

towards attachment end which is splayed with two notches and two cusps in edge. Two transverse engraved zigzag lines; engraved lines in chevron-shaped arrangement; engraved linear herring bone decoration; three decorative holes in triangular formation. 28x8/17x2mm. English Heritage, 671313.1.

138   A.3.1. Medieval. Incomplete. Two plates held together by three rivets; back plate broken; front plate: one end developed into a hook, attachment end splayed with deep central notch and undulating edge. Faint central blind-drilled hole with two faint compass-engraved concentric circles. 34x8/13x2mm. English Heritage, 671313.2.

139   A.3.1. Medieval. Two plates held together by two rivets; front plate: one end developed into a hook, attachment end splayed with three notches in edge. 22x8/17x1.5mm. English Heritage, 671313.3.

140   A.3.1. Medieval. Incomplete. Front plate: hook missing, attachment end splayed with deep central notch and undulating edge; three rivets. Central blind-drilled hole

with two compass-engraved concentric circles. 28x8/12x1mm. English Heritage, 671313.4.

141   A.3.1. Medieval. Incomplete. Front plate: hook missing; attachment end splayed with three notches in edge; two rivet holes. Engraved herring-bone decoration. 18x8/15x0.5mm. Reredorter. English Heritage, 671207.

142   A.3.1. Medieval. Incomplete. Front plate: one end developed into a hook, attachment end splayed with three notches in edge; three rivets; bevelled edges. Central blind-drilled hole with two compass-engraved concentric circles. 35x7/18x1mm. English Heritage, 671312.1.

143   A.3.1. Medieval. Incomplete. Two plates held together by two rivets, only one *in situ*; front plate: one end developed into a hook, attachment end splayed with notches, edge broken. 27x6/11x1.5mm. English Heritage, 671312.2.

144   A.3.1. Medieval. Two plates held together by three rivets; front plate: one end developed into a hook, attachment end

splayed with deep central notch and undulating edge; bevelled edges. Central blind-drilled hole with two compass-engraved concentric circles. 24x9/16x1.5mm. English Heritage, 671312.4. Figure 3-46.

Type A.4

145   A.4.2. Medieval. Incomplete. Two rectangular plates held together by two rivets and one riveted lug with horizontal loop near hook; front plate: hook missing, attachment end with trefoil cut-out and two notches in edge. 29x15x2mm. English Heritage, 671318.

146   A.4.2. Medieval. Two rectangular plates held together by two rivets and one riveted lug with horizontal loop near hook; front plate: one end developed into a hook, attachment end with trefoil cut-out and two notches in edge. 29x15x3mm. English Heritage, 671145.

Type A.5

147   A.5.1. Medieval. Rectangular plate with one end developed into a hook, attachment end with projecting lug. Triangular indentations along edges. 41x9x1mm. English Heritage,

671312.3.

148   A.5.1. Medieval. Rectangular plate with one end developed into a hook, attachment end with projecting lug. 30x13x1mm. English Heritage, 671146.

149   A.5.1. Rectangular plate with one end developed into a hook, attachment end with projecting lug. 35x5x1mm. English Heritage, 671256.

150   A.5.1. Medieval. Rectangular plate with one end developed into a hook, attachment end with projecting lug; bevelled edges and two pair of notches in edges. 53x10x1mm. English Heritage, 671099.

151   A.5.2. Medieval. Incomplete. Rectangular plate with one end developed into a hook, attachment end with two lugs, broken. Engraved linear border defining field of engraved latticework with possible remains of niello. 32x17x1mm. English Heritage, 671320.

152   A.6.2. Rectangular plate with pointed end and two projecting lugs holding bar; two rivet holes; bevelled edges. 23x13x1mm. English Heritage, 671315.2.

153 A.6.2. Rectangular plate with pointed end and two projecting lugs; two rivet holes; bevelled edges. 29x10x1mm. English Heritage, 671315.1. Figure 2-16.

154 A.6.2. Medieval. Incomplete. Rectangular plate with pointed end and two projecting lugs, both incomplete; bevelled edges. 27x11x1mm. Reredorter. English Heritage, 671199.

155 A.6.2. Medieval. Incomplete. Rectangular plate with two projecting lugs holding broken bar, other end broken; two rivet holes; bevelled edges. 26x8x2mm. Reredorter. English Heritage, 671202.

156 A.6.2. Medieval. Incomplete. Rectangular plate with one end in decorative trefoil shape (broken), other end widens with projecting lug; three rivet holes. 70x25x1mm. English Heritage, 671166.

157 A.6.2. Medieval. Rectangular plate with pointed end and two projecting lugs; two rivets; bevelled edges. 28x11x1mm. English Heritage, 671099.

158 A.6.3. Medieval. Incomplete. Triangular plate with rectangular perforation; three rivet holes. 25x15x1mm. Reredorter. English Heritage, 671203.

Type A.7

159 A.7.1. Medieval. Two rectangular plates with central perforation, held together by four rivets; trefoil cut-out in short edges. 42x26x3.5mm. River. English Heritage, 671163. Figure 2-20.

160 A.7.1. Medieval. Two rectangular plates with central perforation, held together by four rivets. Double line of punched dots bordering plate and central perforation and also in form of saltire cross. 29x22x3mm. Reredorter. English Heritage, 671214. Figure 5-14.

161 A.7.1. Medieval. Incomplete. Rectangular plate with central perforation; four rivet holes. 31x18x1mm. Reredorter. English Heritage, 671213.

162 A.7.1. Medieval. Incomplete. Rectangular plate with central perforation; four rivet holes, one rivet *in situ*. Engraved linear border; engraved foliate decoration. 47x23x1mm. Reredorter. English Heritage,

671212. Figure 5-14.

163 A.7.1. Medieval. Two rectangular plates with central perforation, held together by two rivets. Engraved cabling along short edges. Remains of leather. 30x15x3mm. English Heritage, 671144. Figure 5-14.

164 A.7.1. Medieval. Two rectangular plates, one larger than the other, with central perforation, held together by four rivets. Remains of leather. 28x19x2mm. English Heritage, 671303.

165 A.7.1. Medieval. Incomplete. Rectangular plate with central perforation; four rivet holes. Engraved cabling on short edges defined by linear border; engraved lines forming saltire cross around central perforation. 25x14x1mm. English Heritage, 671114.2. Figure 2-65.

166 A.7.1. Medieval. Incomplete. Rectangular plate with central perforation; four rivet holes. Engraved cabling on short edges. 22x17x0.5mm. English Heritage, 671114.3. Figure 5-14.

167 A.7.1. Medieval. Incomplete. Rectangular plate with central perforation; two rivet holes. Engraved cabling on short

edges defined by linear border; engraved lines forming saltire cross around central perforation. 24x14x0.5mm. English Heritage, 671114.4. Figure 2-65.

168 A.7.1. Medieval. Incomplete. Rectangular plate with central perforation; four rivet holes. 27x20x0.5mm. English Heritage, 671114.5.

169 A.7.1. Medieval. Incomplete. Rectangular plate with central perforation; three rivet holes, unfinished? 26x23x0.5mm. English Heritage, 671114.6.

170 A.7.1. Medieval. Incomplete. Square plate with central perforation; decoratively cut edges, notches and cusps; four rivets. Engraved lines radiating from central perforation with punched dots superimposed; lines of punched dots bordering plate. 26x24x1mm. English Heritage, 671114.1. Figure 5-14.

Type A.8

171 A.8.1. Medieval. Incomplete. Rectangular plate with broken integral loop; central perforation; one rivet hole. 28x15x1mm. English Heritage, 671147.

172 A.8.1. Medieval. Rectangular

443

plate folded widthways held together by three rivets; stepped in at folded end to form integral loop; central perforation. 21x16x2mm. English Heritage, 671142.

173 A.8.2. Medieval. Rectangular plate folded widthways, held together by two rivets; attachment end with three notches in edge, tapers at folded end and fold forms projecting terminal loop; dome with central perforation through front and back. 45x17x2mm. English Heritage, 671148. Figure 2-24.

Type A.10

174 A.10.1. 12th century. Two rectangular plates held together with two rivets; front plate with slightly pointed end with perforation and terminal loop. Central panel with relief border and lozenge in middle; engraved linear decoration; terminal loop in stylised animal head. Limoges red and blue enamel. 37x17x3mm. Reredorter. English Heritage, 671210. Figures 2-30 and 3-51.

Type A.11

175 A.11.1. Medieval. Incomplete. Square plate with central

perforation; central notch in each edge; bevelled edges. 16x16x1mm. English Heritage, 671126.1 A.

176 A.11.1. Medieval. Incomplete. Square plate with central perforation; central notch in each edge; bevelled edges. 21x21x1mm. English Heritage, 671126.2 B. Figure 2-32.

Type B.1

177 B.1.1. Medieval. Circular domed solid boss with flange; three rivet holes. d30x12mm. River. English Heritage, 671093.

178 B.1.1. Medieval. Circular domed solid boss with flange; three rivet holes. d29x13mm. U/S. English Heritage, 88212905.

179 B.1.1. Medieval. Circular domed solid boss with flange; four rivet holes. Punched cross on top of boss. d30x11mm. U/S. English Heritage, 88212906. Figure 2-69.

180 B.1.1. Circular domed hollow boss with flange; three rivet holes. d28x14mm. English Heritage, 671191 A.

181 B.1.1. Circular domed hollow boss with flange; three rivet holes. d32x12mm. English Heritage,

671191 B.

182   B.1.1. Circular domed solid boss with flange; four rivet holes. Blind-drilled hole on top of boss. d29x11mm. English Heritage, 671191 C.

183   B.1.1. Circular domed hollow boss with flange; three rivet holes. NB. centre of top of boss missing, worn away? Two engraved lines on plate running around boss; moulded ridge around base of boss. d36x8mm. English Heritage, 671160.1 A. Figure 2-73.

184   B.1.1. Circular domed hollow boss with flange; three rivet holes. d40x11mm. English Heritage, 671160.2 B.

185   B.1.1. Medieval. Circular domed hollow boss with flange; four rivet holes. Two pairs of engraved lines on plate running around boss. d46x16mm. English Heritage, 671160.3 C. Figure 5-16.

186   B.1.1. Medieval. Circular domed hollow boss with flange; four rivet holes. Punched cross on top of boss. d40x9mm. English Heritage, 671160.4 D. Figure 2-69.

187   B.1.1. Medieval. Circular domed solid boss with flange; three rivet holes; bevelled edge. d50x19mm.

English Heritage, 671160.5 E.

188   B.1.1. Circular domed hollow boss with flange with central perforation in boss. d30x5mm. English Heritage, 671265.

189   B.1.2. Medieval. Incomplete. Circular domed hollow boss with four trefoil tabs each with a rivet hole, one missing. Moulded ridge around base of boss. d42x1mm. English Heritage, 671190. Figure 2-39.

190   B.1.3. Medieval. Square plate with central solid domed boss; decoratively cut edges; four rivet holes. Four pairs of decorative holes, creating openwork style? 42x42x8mm. English Heritage, 671161. Figure 2-40.

191   B.1.7. Medieval. Hexagonal domed boss with flange; protruding knop/rivet? at top of boss. d24x18mm. River. English Heritage, 671107. Figure 2-48.

Type B.3

192   B.3.1. Medieval; 13th century. Sub-rectangular plate with one end developed into a semi-circle and the other with two opposing arms; semi-circular projections half way down length; three rivet holes. Engraved linear design

bordering mount; engraved linear foliate design. Limoges blue and green enamel; gold filigree. 115x53x2mm. English Heritage, 671159. Figures 2-51 and 3-51.

Type B.4

193 B.4.3. Medieval. L-shaped plate with two adjacent down-turned sides and projecting decorative knop in corner; four rivet holes. 80x75x8mm. U/S. English Heritage, 88212907. Figure 2-53.

Type B.5

194 B.5.1. Medieval. Rectangular plate folded lengthways; two rivet holes. 77x15x6mm. English Heritage, 88212735.

195 B.5.1. Medieval. Two rectangular plates each folded lengthways one with three rivet holes. 73x8mm; 80x11mm. U/S. English Heritage, 88212898.

196 B.5.1. Medieval. Rectangular plate folded lengthways; two rivets. 134x10x9mm. English Heritage, 915685.

197 B.5.1. Medieval. Rectangular plate folded lengthways; single rivet hole. Indistinct engraved criss-cross decoration.

93x7x5mm. English Heritage, 915686. Figure 2-66.

Type B.6

198 B.6.1. Medieval. Swivel link for chain, e.g. for library book. Moulded decoration. 35x21mm. Reredorter. English Heritage, 671247. Figure 2-59.

Type B.7

199 B.7.1. Medieval. Incomplete. Rectangular plate broken before fold; front: long edges folded over perpendicular, attachment end with scalloped edge; two rivets. Series of engraved zigzag lines; two rows of punched dots. 30x16x3mm. English Heritage, 671319. Figure 2-60.

200 B.7.1. Medieval. Incomplete. Rectangular plate broken before fold; front: long edges folded over perpendicular, attachment end with deep central notch and two shallow notches; two rivet holes. Unclear engraved linear decoration. 37x24x2mm. Reredorter. English Heritage, 671206. Figure 2-60.

201 B.7.1. Medieval. Incomplete. Rectangular plate broken before fold; front: long edges folded over perpendicular, attachment

end with scalloped edge; two rivet holes. Two stamped monograms, 'ihc' inside circular border of cabling. 44x20x2mm. English Heritage, 671204. Figure 2-74.

202 B.7.1. Medieval. Incomplete. Rectangular plate broken before fold; front: long edges folded over perpendicular, attachment end with deep central notch and two cusps; two rivets. Engraved monogram, 'ihc' with series of engraved linear decoration forming background. 36x23x3mm. Reredorter. English Heritage, 671205. Figure 2-60.

203 B.7.1. Medieval. Incomplete. Rectangular plate folded widthways, held together by one rivet; front: long edges folded over perpendicular, attachment end with two notches in edge; folded edge pierced. Double engraved horizontal lines at one end; two engraved double diagonal lines in chevron-shape arrangement. Remains of leather. 41x16x1mm. English Heritage, 671138. Figure 5-17.

GLOUCESTER, GREYFRIARS. *Gloucestershire, South West, South.*

Franciscan friars.

Type A.8

204 A.8.4. Rectangular plate folded widthways, held together by three rivets; attachment end rectangular with two small cusps and larger central cusp and cut-out in edge (broken) extending into dome with projecting integral loop at fold; perforation in underside of dome. Blind-drilled holes; two? decorative drilled holes (?third broken). Remains of leather. 50x24x3/7mm. Church – presbytery; Post-Dissolution. English Heritage, 0850-00003245. Ferris 2001, 124, no.4. Figure 5-22.

GUILDFORD, BLACKFRIARS. *Surrey, South East, South. Dominican friars.*

Type A.7

205 A.7.1. Two rectangular plates with central perforation, held together by four rivets. Engraved foliate design. 38x27x4mm. Church – choir. Poulton and Woods 1984, 79, no.5. Figure 2-65.

206 A.7.1. Two rectangular plates with central perforation, held

together by four rivets; short edges with two notches and circular aperture. Engraved linear design. 38x27x3mm. Church – choir. Poulton and Woods 1984, 79, no.13. Figure 5-20.

207 A.7.1. Two rectangular plates with central perforation, held together by four rivets. Engraved transverse double lines; cabling on short edges. 29x19x2mm. Church – choir. Poulton and Woods 1984, 79, no.14. Figure 5-20.

208 A.7.1. Two rectangular plates with central perforation, held together by two rivets. 34x21x4mm. Church – choir. Poulton and Woods 1984, 79, no.15. Figure 5-20.

209 A.7.1. Two rectangular plates with central perforation, held together by four rivets; short edges with two cusps and central notch; long edges with two small notches. 29x21x4mm. Church – choir. Poulton and Woods 1984, 79, no.16. Figure 2-20.

210 A.7.1. Incomplete. Rectangular plate with central perforation; all edges with notches and cusps forming trefoil-shaped corners; four rivet holes, three rivets

in situ. Four decorative holes surrounding central perforation. 46x38x1mm. Church – choir. Poulton and Woods 1984, no.25. Figure 2-33.

Type A.8

211 A.8.2. Plate folded widthways, held together by four? rivets at attachment end, with rectangular attachment end extending into dome with projecting integral terminal loop which is folded back on itself to create back plate; circular perforation in dome. Five punched dots forming cross with smaller dots forming circle surrounding motif. 57x21x3/7mm. Church – choir. Poulton and Woods 1984, no.12. Figure 2-67.

Type A.11

212 A.11.1. Incomplete. Square plate with central perforation; cusp in each edge; small notches around corners forming trefoil-shape. 16x15x1mm. Church – choir. Poulton and Woods 1984, no.26. Figure 2-33.

213 A.11.1. Incomplete. Square plate with central perforation; central notch in each edge. 20x20x1mm. Church – choir. Poulton and Woods 1984, no.27. Figure 5-20.

214   A.11.1. Incomplete. Square plate with central perforation; two cusps and a central notch in each edge. 16x17x1mm. Church – choir. Poulton and Woods 1984, no.28. Figure 5-20.

215   A.11.2. Incomplete. Domed square plate with central perforation; cusp in each edge; small notches around corners forming trefoil-shape. 17x16x1/4mm. Church – choir. Poulton and Woods 1984, no.29. Figure 2-32.

Type B.2

216   B.2.1. Circular plate with central perforation; three rivets holes. Engraved floriate design. d14x1mm. Church – choir. Poulton and Woods 1984, no.2. Figure 5-20.

217   B.2.4. Sexfoil domed plate with central perforation; six rivet holes. Engraved? lines defining petal design. d16x1/3mm. Church – choir. Poulton and Woods 1984, no.30. Figure 2-49.

218   B.2.4. Sexfoil domed plate with central perforation; two rivets. Engraved? lines defining petal design. d14x1/4mm. Church – choir. Poulton and Woods 1984, no.31. Figure 2-49.

HAILES ABBEY. *Gloucestershire, South West, South. Cistercian monks.*

Type A.3

219   A.3.1. Incomplete. Two plates held together by one rivet; front plate: one end developed into a hook, attachment end splayed with deep central notch, edge broken. Remains of leather. 14x7/12x2.5(including leather) mm. English Heritage, 776428.

220   A.3.1. Incomplete. Front plate: one end developed into a hook, attachment end splayed with two notches in edge; one rivet. Relief design comprising small line of diamonds with foliate motif. 34x12/17x1mm. English Heritage, 776075.

221   A.3.1. Two plates held together by three rivets; front plate: one end developed into a hook, attachment end splayed with two notches and two cusps in edge; back plate: attachment end splayed with five notches in edge, with deeper central notch. Engraved linear herring bone decoration. Remains of leather. 36x10/17x3(including leather) mm. English Heritage, 776461.

Type A.6

222 A.6.2. Rectangular plate with pointed end and two projecting lugs holding bar; two iron rivets. 42x20x1mm. English Heritage, 777015. Figure 3-43.

223 A.6.4. Incomplete. Sub-triangular plate; two projecting lugs to hold bar; attachment end broken; possible rivet hole; maker's mark on back? 30x9/18x1/3mm. English Heritage, 777014.

Type A.7

224 A.7.1. Medieval. Two rectangular plates with central perforation, held together by four rivets. Engraved linear border; pair of engraved lines running across width near two rivets. 40x23x4mm (plates 1mm). English Heritage, 776444.

225 A.7.1. Incomplete. Rectangular plate with central perforation; four rivets. 20x14x1/4mm. English Heritage, 776424.

226 A.7.1. Two rectangular plates with central perforation, held together by four rivets. Remains of leather. 27x23x4mm. English Heritage, 776425.

227 A.7.1. Incomplete. Rectangular plate with central perforation; four rivets. 48x18x1mm. English Heritage, 776446.

Type A.8

228 A.8.1. Incomplete. Rectangular plate with broken integral loop; perforation near loop; one rivet hole. 32x12x0.5mm. English Heritage, 78400249.

Type A.11

229 A.11.1. Incomplete. Square plate with central perforation; central notch in each edge. 11x11x1mm. English Heritage, 776419.

230 A.11.1. Incomplete. Square plate with central perforation; central notch in each edge. 18x18x1mm. English Heritage, 776429.

231 A.11.1. Incomplete. Square plate with central perforation; central notch in each edge. 21x23x1mm. English Heritage, 776101.

Type B.2

232 B.2.2. Circular plate slightly domed with central perforation; two rivet holes. d16x1mm. English Heritage, 776458.

233 B.2.4. Sexfoil domed plate with central perforation; two rivets. Engraved lines defining

petal design. d25x1mm. English Heritage, 776452.

234   B.2.4. Sexfoil domed plate with central perforation; two rivets. Engraved lines defining petal design. d26x1mm. English Heritage, 776451.

235   B.2.4. Sexfoil domed plate with cusp in edge of each petal and central perforation; two rivets. Engraved lines defining petal design. d22x1mm. English Heritage, 776416.

HULTON ABBEY. *Staffordshire, West Midlands, Midlands. Cistercian monks.*

Type A.4

236   A.4.1. Two rectangular plates held together by four rivets; front plate: one end developed into a hook. Remains of leather. 40x25x3.5mm. Church – crossing; Dissolution. Boothroyd 2004, 162, no.41. Figure 6-13.

Type A.7

237   A.7.1. Two rectangular plates with central perforation, held together by one rivet. Remains of leather. 33x21x3mm. Chapter house. Boothroyd 2004, 162, no.34. Figure 6-6.

238   A.7.1. Two rectangular plates with central perforation, held together by two rivets; notches in long edges. Remains of leather. 30x15x4mm. West court. Boothroyd 2004, 163, no.42.

Type A.11

239   A.11.1. Incomplete. Square plate with central perforation. 11x10x1mm. Church – crossing; Dissolution and Post-medieval. Boothroyd 2004, 160, no.32. Figure 6-13.

JARROW PRIORY. *Durham, North East, North. Benedictine monks.*

Type A.5

240   A.5.1. Rectangular plate with one end developed into a hook, widens at attachment end with projecting lug. Stamped technique creating relief triangles bordering fitting; relief overlapping diamonds with quatrefoil indents; sunken background cross-hatched. 25x15x1mm. Monastic building; 20th century. Cramp *et al.* 2006, 248, no.CA129. Figure 2-67.

KIRKSTALL ABBEY. *West Yorkshire,*

Yorkshire and the Humber, North. Cistercian monks.

Type A.7

241 A.7.1. Two rectangular plates with central perforation, held together by four rivets. Punched double line of opposed triangles forming floral design and border. 30x17x3mm. Warming house courtyard. Moorhouse and Wrathmell 1987, no.173. Figure 2-68.

Type A.11

242 A.11.2. Incomplete. Domed square plate with central perforation; small notch in each edge. Engraved lines to give petal/leaf shape. 12x13x3mm. Warming house courtyard drain. Moorhouse and Wrathmell 1987, no.179. Figure 2-32.

LANERCOST PRIORY. *Cumberland, North West, North. Augustinian canons.*

Type A.3

243 A.3.1. Medieval. Incomplete. Front plate: one end developed into a hook, attachment end splayed with cusps, edge incomplete; two rivets. Central blind-drilled hole with two

compass-engraved concentric circles; two decorative holes. 23x9x1mm. Church. English Heritage, 856454.

LEICESTER, AUSTIN FRIARS.
Leicestershire, East Midlands, Midlands. Austin friars.

Type A.1

244 A.1.1. Late 13th-early 14th century. Rectangular plate, two rivet holes; sub-circular loop domed with flat back, central perforation and projecting terminal loop. Plate with incised lines along edge; terminal loop in a stylised animal head. 39x9x4mm. West range of little cloister; 14th-early 15th century. Meller and Pearce 1981, no.28. Figure 2-5.

Type A.4

245 A.4.2. Mid-14th century. Two rectangular plates held together by a rivet and one riveted lug with horizontal loop near hook; front plate: one end developed into a hook, attachment end with trefoil cut-out in edge. Engraved longitudinal double parallel lines. 30x14x3/7mm. North range of little cloister; Dissolution. Meller and Pearce 1981, no.33. Figure

5-13.

Type A.6

246   A.6.2. Rectangular plate with pointed end and two projecting lugs holding bar; two rivets. 22x9x1mm. Drain and north range of great cloister; Post-Dissolution. Meller and Pearce 1981, no.35.

LEWES, GREYFRIARS. *Sussex, South East, South. Franciscan friars.*

Type A.3

247   A.3.1. Two plates held together by four rivets; front plate: one end developed into a hook; attachment end splayed with decoratively cut edge; bevelled edges. Gilded. 73x10/21x1/3mm. Church; Post-Dissolution. Gardiner *et al.* 1996, no.63. Figure 6-13.

LONDON, CHARTERHOUSE. *Middlesex, London, South. Carthusian monks.*

Type A.9

248   A.9.1. 14th-15th century. Incomplete. One piece with rectangular attachment end extending into circular dome

with projecting terminal loop; depression in underside of dome. NB. heavily corroded. 47x21x6mm. Blackmore 2002, 103, L<1>. Figure 2-27.

LONDON, ST MARY GRACES. *Middlesex, London, South. Cistercian monks.*

Type A.1

249   A.1.1. Incomplete. Plate missing; sub-circular loop, slightly domed with flat back, central perforation and projecting terminal loop. Loop with six punched dots around perforation; terminal loop in a stylised animal head. 23x11x4mm. ?Abbot's garden; c.1400-1539. Stevenson *et al.* 2011, 154, S117 <10015>. Figure 2-67.

Type A.3

250   A.3.1. Late medieval to early post-medieval. Incomplete. Front plate: one end developed into a hook, attachment end splayed; rivets (number?). 28x8mm. Storeroom southeast of kitchen; Dissolution and Post-Dissolution. Stevenson *et al.* 2011, 150, S44 <2065a>.

251   A.3.1. Late 15th-17th century. Incomplete. Front plate: hooked

end missing, attachment end splayed with three triangular notches in edge; two iron rivet holes. Central band of engraved linear decoration. 13x17x1.3mm. U/S. Stevenson *et al.* 2011, 150, S45 <2882>.

Type A.9

252   A.9.2. Late 14th century. One piece with rectangular attachment end, edge with central notch and cusp either side, extending into lozenge with projecting terminal loop; circular depression in underside of lozenge; separate loop at apex of pointed terminal; two rivets. Attachment end: linear border around engraved 'ihc' against field of incised cross-hatch; lozenge: engraved with monogram 'MARIA'; elaborately moulded terminal loop. Remains of leather. Gilded. 59x18x7mm. 1560-c.1660. Stevenson *et al.* 2011,150, S42 <15>. Figure 2-27.

253   A.9.2. Late 14th century. One piece with rectangular attachment end, with undulating edge, extending into lozenge with projecting terminal loop; circular depression in underside of lozenge; separate loop at apex of pointed terminal; two

rivets. Attachment end with engraved fleur de lys; lozenge with engraved quatrefoil design; elaborately moulded terminal loop. Remains of tabby weave textile. Gilded. 55x18x7mm. 1560-c.1660. Stevenson *et al.* 2011, 150, S43 <1939>. Figure 2-27.

Type B.1

254   B.1.6. Polygonal (octagonal?) domed boss; shank. d30x14/27mm. Kitchen; Dissolution. Stevenson *et al.* 2011, 151, S64 <2067>. Figure 2-44.

MALDON, WHITEFRIARS. *Essex, East, South. Carmelite friars.*

Type A.3

255   A.3.1. Probably 16th century. Two plates held together by three rivets; front plate: one end developed into a hook with a pair of transverse lateral projections, attachment end splayed with three notches in convex edge. Engraved zigzag lines traversing projections; series of engraved longitudinal lines; central blind-drilled hole with compass-engraved concentric circles; three decorative holes; engraved herring-bone decoration at

attachment end. Remains of leather. 91x18/30x1/5mm. Monastic outbuilding; later 16th-early 18th century. Isserlin 1999, 119, no.23. Figure 3-49.

MERTON (ST MARY'S) PRIORY. *Surrey, South East, South. Augustinian canons.*

Type A.3

256   A.3.1. Monastic period. Two plates held together by three rivets; front plate: one end developed into a hook, attachment end splayed with notches in edges. Central blind-drilled hole with compass-engraved concentric circles; two sets of three engraved lines radiating from engraved circles. 36x14x1.3mm. South of reredorter; 16th-17th centuries. Egan 2007, 224, <S46> 43. Figure 5-11.

257   A.3.1. Monastic period. Incomplete. Front plate: hook end broken; attachment end slightly splayed with notches. Iron rivets. Engraved foliate design in four-square grid; pair of engraved lines along splayed edge. 26x19mm. Monastic precinct; 18th-19th centuries. Miller and Saxby 2007, 224, <S47>

664.

MOUNT GRACE PRIORY. *North Yorkshire, Yorkshire and the Humber, North. Carthusian monks.*

Type A.3

258   A.3.1. Incomplete. Two plates held together by one surviving rivet (originally three?); front plate: one end developed into a hook, attachment end splayed with broken edge. Blind-drilled hole with compass-engraved concentric circles. 34x9/18x2mm. Cell; 16th century. English Heritage, 854855. Coppack and Keen 2002, 92, no.144. Figure 5-18.

259   A.3.1. Iron with copper-alloy coating. Incomplete. Front plate: one end developed into a hook, attachment end splayed with deep central notch and small notch either side; three rivets originally, only one survives. 40x8/14x1mm. Coppack and Keen 2002, 92, no.145. Figure 5-18.

Type A.6

260   A.6.2. Rectangular plate with pointed end and two projecting lugs holding bar; two rivet holes.

23x6x1mm. Cell; 16th century. English Heritage, 854818. Coppack and Keen 2002, 93, no.146. Figure 5-18.

Type A.7

261   A.7.1. Incomplete. Rectangular plate with central perforation; four rivet holes. 36x23x0.5mm. Coppack and Keen 2002, 93, no.150. Figure 5-18.

262   A.7.1. Incomplete. Rectangular plate with central perforation; two rivet holes. 27x20x0.5mm. Coppack and Keen 2002, 93, no.151. Figure 5-18.

Type A.11

263   A.11.1. Incomplete. Square plate with central perforation; central notch in each edge. Engraved medial lines. 15x15x1mm. Coppack and Keen 2002, 92, no.143. Figure 5-18.

264   A.11.2. Incomplete. Domed square plate with central perforation; central notch in each edge. 15x15x2mm. Cell. English Heritage, 854822. Coppack and Keen 2002, 89, no.101. Figure 5-18.

Type B.4

265   B.4.3. Medieval. Incomplete.

L-shaped plate with two adjacent down-turned side; rivet hole at corner and one at surviving end. Two compass-engraved concentric circles around both rivet holes. 58x30x6mm. English Heritage, 88212255. Coppack and Keen 2002, 92, no.142. Figure 5-18.

NEWCASTLE-UPON-TYNE, WHITEFRIARS. *Northumberland, North East, North. Carmelite friars.*

Type A.6

266   A.6.2. Rectangular plate with pointed end and two projecting lugs holding bar; two rivets. 23x13x1mm. Church/east range. Harbottle 1968, 222, no.154.

NORTHAMPTON, GREYFRIARS. *Northamptonshire, East Midlands, Midlands. Franciscan friars.*

Type A.4

267   A.4.2. Two rectangular plates held together by three rivets (only one *in situ*) and a rivet lug with horizontal loop near hook; front plate: one end developed into a hook. Remains of leather. 26x13x2/7mm. North-south

claustral range; 16th century. Williams 1978, 149, no.CU12. Figure 5-21.

Type B.2

268 B.2.2. Circular domed plate with central perforation; two rivet holes. d16mm. Williams 1978, 150, no.CU16.

NORTON PRIORY. *Cheshire, North West, North. Augustinian canons.*

Type A.6

269 A.6.2. Rectangular plate with two projecting lugs; one rivet hole. 19x14x1mm. West cloister walk; Dissolution and Post-Dissolution. Brown and Howard-Davis 2008, 385, no.43.

Type A.7

270 A.7.1. Incomplete. Rectangular plate with central perforation; four rivets. 32x19x1mm. Reredorter; 1134-1536. Brown and Howard-Davis 2008, 382, no.26. Figure 5-9.

Type A.11

271 A.11.1. Incomplete. Square plate with central perforation; central notch in each edge. 15x15x1mm. Church - north transept; 18th-late

20th century/post-Dissolution demolition. Brown and Howard-Davis 2008, 381, no.25. Figure 5-9.

OXFORD, BLACKFRIARS. *Oxfordshire, South East, South. Dominican friars.*

Type A.11

272 A.11.1. Incomplete. Square plate with central perforation; central cusp in each edge. 11x11x1mm. Church – choir. Lambrick and Woods 1976, 216, no.10. Figure 2-32.

Type B.1

273 B.1.4. Incomplete. Square domed boss with four pointed tabs each with a rivet hole (one tab missing). Engraved linear chevron decoration on each tab. d30x6mm. Church – choir. Lambrick and Woods 1976, 216, no.9. Figure 2-43.

274 B.1.6. Hexagonal domed boss. d29x13mm. Church – choir. Lambrick and Woods 1976, 216, no.12. Figure 2-44.

OXFORD, ST FRIDESWIDE'S PRIORY. *Oxfordshire, South East, South. Augustinian canons.*

275 A.3.1. Two plates held together by three rivets; front plate: one end developed into a hook with a pair of transverse lateral projections, attachment end splayed with undulating edge. Central blind-drilled hole with compass-engraved concentric circles; series of engraved transverse zigzag lines and lines in chevron-shaped arrangement; engraved linear herring-bone decoration; three decorative holes with concentric circles. 45x14/36x3mm. Cloister garth; 16th century. Scull 1988, no.1. Figure 3-46.

276 A.3.1. Two plates held together by three rivets; front plate: one end developed into a hook with a pair of transverse lateral projections, attachment end splayed with undulating edge. Series of engraved transverse zigzag lines and lines in chevron-shaped arrangement; engraved linear herring-bone decoration; three decorative holes with concentric circles in triangular formation. Remains of leather. 31x7/20x3mm. Cloister garth; 16th century. Scull 1988, no.2. Figure 3-46.

277 A.3.1. Two plates held together by two rivets; front plate: one end developed into a hook, attachment end splayed with deep central notch and smaller notch either side. 31x9/15x2mm. Cloister garth; 19th-20th centuries. Scull 1988, no.3. Figure 5-10.

Type A.6

278 A.6.2. Rectangular plate with pointed end and two projecting lugs holding bar; two rivet holes. 28x11x1mm. Cloister garth; late 14th-early 16th centuries. Scull 1988, no.4. Figure 5-10.

279 A.6.2. Rectangular plate with pointed end and two projecting lugs holding bar; two rivet holes. 33x15x1mm. Cloister garth; 16th century. Scull 1988, no.5. Figure 5-10.

OXFORD, WHITEFRIARS. *Oxfordshire, South East, South. Carmelite friars.*

Type A.1

280 A.1.1. Rectangular plate; sub-circular loop domed with flat back, central perforation and projecting terminal loop. Terminal loop in a stylised animal head. 35x7mm. Monastic precinct; 13th-16th centuries. Allen 2001, 59, no.2.

Type A.3

281   A.3.1. Incomplete. Front plate: one end developed into a hook, attachment end splayed with two notches in edge; three rivets. Blind-drilled hole with two compass-engraved concentric circles. 27x11/20mm. 19th century. Allen 2001, 58, Fig.18, no.4.

RIEVAULX ABBEY. *North Yorkshire, Yorkshire and the Humber, North. Cistercian monks.*

Type A.1

282   A.1.1. Medieval. Incomplete. Rectangular plate, front broken, with slight concave edge, two rivet holes; sub-circular loop domed with flat back, central perforation and projecting terminal loop. Plate with engraved short lines; loop with eight punched concentric annulets; terminal loop in a stylised animal head. 39x9mm. East of chapter house. English Heritage, 85000330. Figures 2-67 and 3-48.

283   A.1.1. Medieval. Rectangular plate, one rivet hole; sub-circular loop domed with flat back, central perforation, moulded traversing line and projecting terminal loop. Plate with engraved rocker-arm decoration. 58x18x5mm. Church – nave. English Heritage, 85000336.

284   A.3.1. Medieval. Incomplete. Two plates tapering from broken end, held together by three rivets; front plate: hooked end broken, attachment end with three cusps, central one being deeper, in edge; bevelled edges. Engraved longitudinal line down centre, extending from central cusp. Remains of leather. 54x20x3/10mm. English Heritage, 85000273.

285   A.3.1. Medieval. Two plates held together by two rivets (maybe three); front plate: one end developed into a hook, attachment end splayed with deep central notch and two cusps. Central blind-drilled hole with two compass-engraved concentric circles. Remains of leather. 37x12/17x4mm. English Heritage, 85000301. Figure 5-15.

286   A.3.1. Medieval. Incomplete. Front plate: one end developed into a hook, attachment end missing (see 85000325.4 D); one rivet hole. Engraved longitudinal line down centre. 37x16x1mm.

English Heritage, 85000325.2 B.

287 A.3.1. Medieval. Incomplete. Front plate: hook missing, attachment end splayed with deep central notch and undulating edge; two rivet holes, one rivet *in situ*. Engraved longitudinal line down centre, extending from central notch. 45x18/27x1mm. English Heritage, 85000325.4 D.

288 A.3.1. Medieval. Two plates held together by three rivets; front plate: one end developed into a hook, attachment end splayed with deep central notch and undulating edge. Engraved longitudinal line down centre, extending from central notch. 53x16/35x5mm. English Heritage, 738607.

289 A.3.1. Medieval. Incomplete. Two plates held together by three rivets, only one *in situ*; front plate: one end developed into a hook, attachment end splayed with decoratively cut but broken edge. Engraved longitudinal line down centre, extending from centre of attachment edge. 36x11/16x3mm. English Heritage, 85000302.

Type A.6

290 A.6.2. Medieval. Rectangular plate with pointed end, widens at end with two projecting lugs holding bar; two rivet holes. Remains of leather. 32x9x1mm. English Heritage, 85000297.

Type A.7

291 A.7.1. Medieval. Two rectangular plates with central perforation, held together by four rivets. 30x13x4mm. English Heritage, 85000325.3 C.

292 A.7.1. Medieval. Incomplete. Two rectangular plates, one broken, with central perforation, held together by four rivets. Possible scratches or crudely engraved decoration. Remains of leather. 25x15x4mm. English Heritage, 85000324.

293 A.7.1. Medieval. Incomplete. Rectangular plate with central perforation; four rivet holes. Engraved cabling along short edges; possible scratches or crudely engraved decoration. 25x19x0.5mm. English Heritage, 85000325.6 F.

294 A.7.1. Medieval. Incomplete. Rectangular plate with central perforation; four rivets. 40x19x1mm. English Heritage, 85000325.7 G.

Type B.1

295   B.1.1. Medieval. Circular domed hollow boss with flange; three rivet holes. d40x14mm. Church – nave. English Heritage, 85000323.

296   B.1.1. Medieval. Circular domed solid boss with flange; three rivet holes. Engraved line on plate running around boss. d31x9mm. English Heritage, 85000307.

297   B.1.1. Medieval. Circular domed solid boss with flange; four rivet holes. Two engraved lines on plate running around boss. d37x12mm. English Heritage, 85000270. Figure 2-37.

298   B.1.1. Medieval. Circular domed hollow boss with flange; four rivet holes. Two indentations running around top of boss. d51x18mm. English Heritage, 85000333.

299   B.1.1. Medieval. Circular domed solid boss with flange; three rivet holes. Engraved line on plate running around boss. d37x12mm. Near dormitory/reredorter. English Heritage, 738609. Figure 5-16.

300   B.1.1. Medieval. Circular domed boss with flange; three

rivet holes. d45x4mm. Near dormitory/reredorter. English Heritage, 85000339.

301   B.1.4. Medieval. Incomplete. Square domed boss with four projecting loops for rivets, one missing. Moulded ridges and incised lines forming giving woolpack appearance. 43x43x6mm. English Heritage, 81065639. Figure 2-43.

Type B.7

302   B.7.1. 1350-1500. Rectangular plate folded widthways, held together by two iron rivets; front: long edges folded over perpendicular, attachment end with three notches in edge; folded edge pierced; separate strip looped through hole in edge. Two stamped monograms, 'ihc' inside circular border of cabling. Gilded. 49x17x3mm. English Heritage, 85000334. Figure 5-8.

303   B.7.1. Medieval. Incomplete. Rectangular plate folded widthways, held together by two rivets; front: long edges folded over perpendicular, attachment end with central notch and two cusps in edge; folded edge pierced. Engraved double lines

forming two large triangles, defined by engraved linear border on long edges; engraved trefoil leaf in each triangle. 32x14x2.5mm. English Heritage, 85000325.1 A. Figure 5-17.

ROCHE ABBEY. *West Yorkshire, Yorkshire and the Humber, North. Cistercian monks.*

Type A.1

304 A.1.1. Medieval. Rectangular plate, two rivets; sub-circular loop domed with flat back, central perforation and projecting terminal loop. Terminal loop in a stylised animal head. 31x8x2mm. Drain. English Heritage, 765352.

305 A.1.1. 12th century. Incomplete. Plate missing; sub-circular loop domed with flat back, central perforation and projecting terminal loop. Seven decorative holes; two decorative knops; moulded foliage. 37.5x23x2mm. Drain. English Heritage, 765385.

306 A.1.3. Medieval. Rectangular plate, two rivets; flat sub-circular loop with central perforation and projecting terminal loop. Loop with incised zigzag lines; terminal loop in stylised animal

head. 47x14x3mm. Drain. English Heritage, 765371.

307 A.1.3. Medieval. Rectangular plate, two rivet holes; flat sub-circular loop with central perforation and projecting terminal loop. Plate with engraved zigzag line border defined by linear border; loop with series of punched dots and engraved zigzag lines around central perforation; terminal loop with collar. Remains of leather. 66x23x4mm. Drain. English Heritage, 765382. Figure 2-67.

Type A.3

308 A.3.1. Medieval. Incomplete. Front plate: one end developed into a hook, attachment end splayed with notch in edge, edge broken; two rivets. 21x6/10x0.5mm. Drain. English Heritage, 765384.

309 A.3.1. Incomplete. Front plate: one end developed into a hook, plate widens towards attachment end with central aperture and two notches in edge; four rivet holes. Engraved cabling defined by linear border along edges; crudely engraved linear decoration. 41x20x1mm. Drain. English Heritage, 765355.

310   A.3.1. Incomplete. Front plate; one end developed into a hook, attachment end splayed with central notch and undulating edge; three rivets. Compass-engraved concentric circle around rivet. 35x9/11x1/3mm. Drain. English Heritage, 765357.

Type A.4

311   A.4.1. Medieval. Incomplete. Rectangular plate with one end developed into a hook; two rivets. 25x15x1mm. Drain. English Heritage, 765378.

Type A.6

312   A.6.2. Medieval. Incomplete. Rectangular plate with end pointed and two projecting lugs, one broken; two rivet holes. 27x11x1mm. Reredorter. English Heritage, 765377.1. Figure 2-16.

313   A.6.2. Medieval. Rectangular plate with two projecting lugs; two rivet holes and one larger central hole. Engraved cabling along edges. 24x18x1mm. Reredorter. English Heritage, 765377.2.

Type A.8

314   A.8.1. Medieval. Rectangular plate folded widthways held together by one rivet; stepped in at folded end to form integral loop; central perforation. 28x18x3mm. Drain. English Heritage, 765369.

Type B.1

315   B.1.1. Medieval. Circular domed hollow boss with flange; three rivet holes. d42x15mm. West of lay brothers' refectory. English Heritage, 765358.

316   B.1.1. Medieval. Circular domed boss with flange (hollow but filled lead); three rivet holes. d35x6mm. West of lay brothers' refectory. 765379. Figure 2-37.

317   B.1.1. Medieval. Circular domed hollow boss with flange; three rivet holes. Moulded ridge around top of boss. d49x13mm. West of lay brothers' refectory. 765364. Figure 2-73.

Type B.4

318   B.4.2. Medieval. L-shaped plate; rivet hole at corner and two holes with cut-outs to edge. 32x32x0.5mm. Drain. English Heritage, 765363.

RUSHEN ABBEY. *Isle of Man, North. Cistercian monks.*

319 A.7.1. Medieval. Incomplete. Rectangular plate with central perforation; four rivet holes. 26x15x1mm. Parlour. Butler 2002, 188, Fig.10, no.2.

SAWLEY ABBEY. *West Yorkshire, Yorkshire and the Humber, North. Cistercian monks.*

Type B.4

320 B.4.2. L-shaped plate; two rivet holes; short length of tube brazed into third hole at angle. 35x32x1/5mm. Reredorter; later medieval-Dissolution. Coppack *et al.* 2002, 87, no.123. Figure 6-11.

SOPWELL PRIORY. *Hertfordshire, East, South. Benedictine nuns.*

Type A.8

321 A.8.4. Single plate with rectangular attachment end, edge with two cusps and central aperture, extending into dome with projecting terminal loop which is folded back on itself to create back plate; punched circular depression on underside of dome; two rivets at attachment end. 40x14x1/7mm. Refectory; Dissolution. Johnson 2006, 38, no.12. Figure 2-24.

STAMFORD, ST LEONARD'S PRIORY. *Lincolnshire, East Midlands, Midlands. Benedictine monks.*

Type A.3

322 A.3.1. Incomplete. Front plate: one end developed into hook, attachment end splayed with deep central notch and cusp either side; three rivets. Blind-drilled hole with compass-engraved concentric circles. Remains of leather. 53x12/27mm. Reredorter drain; Dissolution. Mahany 1977, 22, no.CA58.

323 A.3.1. Incomplete. Front plate: one end developed into hook, attachment end splayed with deep central notch and cusp either side; three rivets. Blind-drilled hole with compass-engraved concentric circles. 34x10/15x1mm. Reredorter drain. Mahany 1977, 22, no.CA67.

Type A.6

324 A.6.2. Incomplete. Rectangular plate with two projecting lugs holding broken bar, other

end broken; one rivet hole. 30x20mm. Reredorter drain; Dissolution. Mahany 1977, 22, no.CA71.

STRATFORD LANGTHORNE ABBEY. *Essex, East, South. Cistercian monks.*

Type A.3

325   A.3.1. Two plates held together by two rivets; front plate: one end developed into a hook, attachment end splayed with notches in edges. 22x8x1.5mm. U/S. Keily 2004, 150, R<8> D<315>.

THELSFORD PRIORY. *Warwickshire, West Midlands, Midlands. Trinitarian friars.*

Type A.1

326   A.1.1. Rectangular plate, two rivets; sub-circular loop, domed with flat back, with central perforation and projecting terminal loop. Plate with incised cabling along edges; loop with series of punched dots; terminal loop in a stylised animal head. Remains of leather. 44x11x2mm. Perimeter ditch; late medieval-16th century. Gray 1993, 69, Fig.44, no.1. Figure 2-67.

THORNTON ABBEY. *Lincolnshire, Yorkshire and the Humber, North. Augustinian canons.*

Type A.4

327   A.4.2. Two rectangular plates held together by two rivets and riveted lug with horizontal loop near hook; front plate with one end developed into hook. Dissolution workshop; Dissolution. H. Willmott, *pers. comms.*

WEARMOUTH PRIORY. *Durham, North East, North. Benedictine monks.*

Type A.1

328   A.1.1. 12th-14th century. Rectangular plate with concave edge, two rivet holes; sub-circular loop domed with flat back, central perforation and projecting terminal loop. Terminal loop in a stylised animal head. 41x10x6mm. Robber trench, 12th-14th centuries. Cramp *et al.* 2006, 247-8, no.CA127. Figure 2-5.

Type A.3

329   A.3.1. 15th-16th century. Incomplete. Front plate: one end developed into a hook,

attachment end splayed with notches in edge; two rivets *in situ*. Engraved zigzag lines bordering long edges and forming criss-cross pattern down centre of fastening. 52x32x1mm. Monastic building; post-medieval. Cramp *et al.* 2006, 248, no.CA128.

WITHAM PRIORY. *Somerset, South West, South. Carthusian monks.*

Type A.8

330   A.8.5. Rectangular plate folded widthways bent near fold to form integral hook, tapers out to attachment end with undulating edge and central notch; two rivets. Remains of leather. 30x11/16x2mm. Cell. Burrow and Burrow 1990, 173, no.7. Figure 2-24.

YORK, ST ANDREW'S PRIORY. *North Yorkshire, Yorkshire and the Humber, North. Gilbertine canons.*

Type A.1

331   A.1.1. Rectangular plate; sub-circular loop domed with flat back, central perforation and terminal loop; two rivets.

37x11x4mm. Dormitory; Dissolution. Ottaway and Rogers 2002, 3147, no.15236. Figure 2-5.

Type A.3

332   A.3.1. Incomplete. Front plate: one end developed into a hook, attachment end splayed with deep central notch and undulating edge; two rivets; bevelled edges. Central blind-drilled hole with compass-engraved concentric circles. 36x16x1.3mm. Dormitory; 15th-16th centuries. Ottaway and Rogers 2002, 3147, no.15234. Figure 5-19.

Type A.5

333   A.5.1. Incomplete. Rectangular plate with one end developed into a hook, attachment end broken. 49x14x1mm. Church; Dissolution. Ottaway and Rogers 2002, 3147, no.15235. Figure 2-15.

Type A.11

334   A.11.1. Incomplete. Square plate with central perforation; multiple notches in each edge. 29x28x1mm. Church; Dissolution. Ottaway and Rogers 2002, 3147, no.15239. Figure 2-32.

Type B.1

335   B.1.1. Circular domed hollow boss with flat top with flange; three rivet holes. d37x13mm. Dissolution. Ottaway and Rogers 2002, 3147, no.15238. Figure 5-19.

Type B.4

336   B.4.2. L-shaped plate; three rivet holes, one larger, two smaller with slits to them from edge. 41x40x1.5mm. Late 16th century. Ottaway and Rogers 2002, 3148, no.15240. Figure 5-19.

BIBLIOGRAPHY

Adams, W. Y., 1988. Archaeological classification: theory versus practice. *Antiquity* 61, 40-56.

Adler, G., 2010. *Handbuch buchverschluss und buchbeschlag. Terminologie und geschichte in deutchprachigen Raum, in den Niederlanden und Italien vom frühen Mittelalter bis in die Gegenwart.* Wiesbaden: Reichert Verlag.

Alexander, J. J. G., 1992. *Medieval illuminators and their methods of work.* New Haven, CT: Yale University Press.

Allen, L., 2001. Metal objects and worked bone. In *Beaumont Palace and the White friars: excavations at the Sackler Library, Beaumont Street, Oxford*, eds. D. Poore and D. R. P. Wilkinson, pp. 57-61. Oxford: Oxford Archaeological Unit

---, 2003. The finds. In *Aelfric's abbey: excavations at Eynsham Abbey, Oxfordshire, 1989-92*, eds. A. Hardy, A. Dodd and G. D. Keevill, pp. 247-340. Oxford: Oxford Archaeological Unit Ltd.

Amsler, M., 2001. Affective literacy: gestures of reading in the later Middle Ages. *Essays in Medieval Studies* 18, 83-110.

Anon., 1901. Inventories of goods of the smaller monasteries and friaries in Sussex at the time of their dissolution. *Sussex Archaeological Collections* 44, 55-72.

Arts, N., 2009. Gothic book clasps and mounts from excavations in Eindhoven and their contexts. In *Medieval material culture: studies in honour of Jan Thijssen*, ed. H. Clevis, pp. 121-30. Zwolle: SPA Editors.

Astill, G., S. Hirst and S. M. Wright, 2008. The Bordesley Abbey project: the abbey church. http://www.reading.ac.uk/bordesley/Abbey_Gateway.htm (last accessed 9 April 2014).

Aston, M., 1973. English ruins and English history: the dissolution and the sense of the past. *Journal of the Warburg and Courtauld Institutes* 36, 231-55.

Backhouse, J., 1979. *The illuminated manuscript.* Oxford: Phaidon Press Ltd.

---, 1999. The Royal Library from Edward IV to Henry VII. In *The Cambridge history of the book in Britain, volume III: 1400-1557*, eds. L. Hellinga and J. B. Trapp, pp. 267-73. Cambridge: Cambridge University Press.

Balsamo, L., 1976. The origins of printing in Italy and England. *Journal of the Printing Historical Society* 11, 48-63.

Barber, B. and C. Thomas, 2002. *The London Charterhouse.* London: Museum of London Archaeology Service, Monograph 10.

Barber, R. W., ed. 1982. *Brief lives: a modern English version*. Woodbridge: Boydell and Brewer Ltd.

Barker-Benfield, B. C., ed. 2008. *St Augustine's Abbey, Canterbury. Corpus of British medieval library catalogues 13*. 3 volumes. London: British Library.

Barnard, J., D. McKitterick and I. R. Willison, general eds. 1999-2012. *The Cambridge history of the book in Britain*. 6 volumes. Cambridge: Cambridge University Press.

Barnard, J., D. McKitterick and I. R. Willison, 2008. Front matter. In *The Cambridge history of the book in Britain, volume II: 1100-1400*, eds. N. J. Morgan and R. M. Thomson, p. iii. Cambridge: Cambridge University Press.

Beal, P., 1998. *In praise of scribes: manuscripts and their makers in seventeenth-century England*. Oxford: Clarendon Press.

Bell, D. N., ed. 1992. *The libraries of the Cistercians, Gilbertines and Premonstratensians. Corpus of British medieval library catalogues 3*. London: British Library.

---, 1999. Monastic libraries: 1400-1557. In *The Cambridge history of the book in Britain, volume III: 1400-1557*, eds. L. Hellinga and J. B. Trapp, pp. 229-54. Cambridge: Cambridge University Press.

---, 2006. The libraries of religious houses in the late Middle Ages. In *The Cambridge history of libraries in Britain and Ireland, volume I: to 1640*, eds. E. Leedham-Green and T. Webber, pp. 126-51. Cambridge: Cambridge University Press.

Bellamy, C. V., 1965. *Pontefract Priory excavations 1957-1961*. Leeds: Thoresby Society.

Bernard, G. W., 2011. The Dissolution of the Monasteries. *History* 96, 390-409.

Bibliothèque Nationale de France, 2013-14. Archives et manuscrits: Français 24766. http://archivesetmanuscrits.bnf.fr/ead.html?id=FRBNFEAD000053335 (last accessed 23 February 2015).

Biddle, M., ed. 1990. *Object and economy in medieval Winchester. Winchester studies 7ii: artefacts from medieval Winchester*. Oxford: Clarendon Press.

Biddle, M. and D. Brown, 1990. Writing equipment. In *Object and economy in medieval Winchester, Winchester Studies 7ii: artefacts from medieval Winchester*, ed. M. Biddle, pp. 729-47. Oxford: Clarendon Press.

Biddle, M., L. Barfield and A. Millard, 1959. The excavation of the manor of The More, Rickmansworth, Hertfordshire. *Archaeological Journal* 116, 136-99.

Biddle, M., J. Hiller, I. Scott and A. Streeten, eds. 2001. *Henry VIII's coastal artillery fort at Camber castle, Rye, East Sussex*. Oxford: Oxford Archaeological Unit.

Biddle, M. and D. Hinton, 1990. Book-clasps and page-holder. In *Object and economy in medieval Winchester. Winchester studies 7ii: artefacts from medieval Winchester*, ed. M. Biddle, pp. 755-8. Oxford: Clarendon Press.

Bischoff, B., 1990. *Latin palaeography: antiquity and the Middle Ages*. Trans. D. O. Croinin and D. Ganz. Cambridge: Cambridge University Press.

Blackmore, L., 2002. Accessioned finds. In *The London Charterhouse*, eds. B. Barber and C. Thomas, pp. 102-5. London: Museum of London Archaeology Service, Monograph 10.

Blair, C. and J. Blair, 1991. Copper alloys. In *English medieval industries: craftsmen, techniques, products*, eds. J. Blair and N. Ramsay, pp. 81-106. London: Hambledon Press.

Blake, H., G. Egan, J. Hurst and E. New, 2003. From popular devotion to resistance and revival in England: the cult of the Holy Name of Jesus and the reformation. In *The archaeology of reformation, 1480-1580*, eds. D. Gaimster and R. Gilchrist, pp. 175-203. Leeds: Maney Publishing.

Blake, N. F., 2007. Manuscript to print. In *Book production and publishing in Britain, 1375-1475*, eds. J. Griffiths and D. Pearsall, pp. 403-32. Cambridge: Cambridge University Press.

Boothroyd, N., 2004. Finds: medieval finds. In *Excavations at Hulton Abbey, Staffordshire, 1987-1994*, eds. W. D. Klemperer and N. Boothroyd, pp. 152-69. Leeds: Society for Medieval Archaeology.

Bowsher, D., T. Dyson, N. Holder and I. Howell, eds. 2007. *The London Guildhall: an archaeological history of a neighbourhood from early medieval to modern times, volume I.* London: Museum of London Archaeology Service, Monograph 36.

Brennan, D., 2001. The small finds and other artefacts. In *Excavations at Carmarthen Greyfriars 1983-1990: topic report 4*, ed. T. James, pp. 1-95. Carmarthen: Dyfed Archaeological Trust.

British Library Board, 2009. Ownership inscription of Anne Felbrigge, in the Felbrigge Psalter. http://www.bl.uk/onlinegallery/onlineex/illmanus/slomanucoll/0/011slo000002400u00002v00.html (last accessed 24 September 2014).

---, 2015a. Explore archives and manuscripts. http://searcharchives.bl.uk/primo_library/libweb/action/search.do?vid=IAMS_VU2 (last accessed 10 August 2015).

---, 2015b. Database of bookbindings: Egerton 2902. http://www.bl.uk/catalogues/bookbindings/BindingsDisplay.aspx?BookId=019-000016479 (last accessed 28 February 2013).

---, 2015c. Detailed record for Egerton 3776. http://www.bl.uk/catalogues/illuminatedmanuscripts/record.asp?MSID=8638&CollID=28&NStart=3776 (last accessed 9 September 2015).

---, 2015d. Detailed record for Additional 47967. http://www.bl.uk/catalogues/illuminatedmanuscripts/record.asp?MSID=8372&CollID=27&NStart=47967 (last accessed 9 September 2015).

---, 2015e. Glossed book of Genesis. http://searcharchives.bl.uk/primo_library/libweb/action/display.do?tabs=detailsTab&ct=display&fn=search&doc=IAMS032-001963649&indx=1&recids=IAM032-001963649&recidxs=0&elementid=0&renderMode=poppedOut&displayMode=fll&frbrVersion=&dscnt=0&frbg=&scp.scps=scope%3A%28BL%29&tab=local&dstmp (last accessed 9 September 2015).

---, 2015f. Add. MS 23931. http://www.bl.uk/catalogues/bookbindings/Results.aspx?SearchType=QuickSearch (last accessed 8 March 2013).

---, 2015g. Add. MS 12023. http://www.bl.uk/catalogues/bookbindings/LargeImage. aspx?RecordId=020-000013548&ImageId=ImageId=52860&Copyright=BL (last accessed 28 February 2013).

---, 2015h. Add. MS 28626. http://www.bl.uk/catalogues/bookbindings/BindingsDisplay. aspx?BookId=019-000016180 (last accessed 28 February 2013).

---, 2015i. Detailed record for Royal 5 E XXII. http://www.bl.uk/catalogues/ illuminatedmanuscripts/record.asp?MSID=6021&CollID=16&NStart=50522 (last accessed 18 August 2015).

---, 2015j. Detailed record for Royal 14 E I. http://www.bl.uk/catalogues/ illuminatedmanuscripts/record.asp?MSID=5587&CollID=16&NStart=140501 (last accessed 10 July 2014).

---, 2015k. Detailed record for Harley 2373. http://www.bl.uk/catalogues/ illuminatedmanuscripts/record.asp?MSID=3659&CollID=8&NStart=2373 (last accessed 12 September 2014).

---, 2015l. Detailed record for Arundel 155. http://www.bl.uk/catalogues/ illuminatedmanuscripts/record.asp?MSID=86&CollID=20&NStart=155 (last accessed 8 August 2014).

---, 2015m. Detailed record for Egerton 3031. http://www.bl.uk/catalogues/ illuminatedmanuscripts/record.asp?MSID=7577&CollID=28&NStart=3031 (last accessed 8 August 2014).

---, 2015n. Detailed record for Harley 1498. http://www.bl.uk/catalogues/ illuminatedmanuscripts/record.asp?MSID=7602&CollID=8&NStart=1498 (last accessed 25 July 2014).

---, 2015o. Detailed record for Royal 10 A XIII. http://www.bl.uk/catalogues/ illuminatedmanuscripts/record.asp?MSID=8823&CollID=16&NStart=100113 (last accessed 12 September 2014).

---, 2015p. Detailed record for Royal 2 A X. http://www.bl.uk/catalogues/ illuminatedmanuscripts/record.asp?MSID=8680&CollID=16&NStart=20110 (last accessed 9 October 2015).

---, 2015q. Detailed record for Harley 1766. http://www.bl.uk/catalogues/

illuminatedmanuscripts/record.asp?MSID=8737&CollID=8&NStart=1766 (last accessed 26 June 2014).

British Museum, 2012. *Early stamped bookbindings in the British Museum; descriptions of 385 blind-stamped bindings of the XIIth-XVth centuries in the Departments of Manuscripts and Printed Books*. Miami, FL: HardPress Publishing.

Brooke, C., 1974. *The monastic world, 1000-1300*. London: Paul Elek Ltd.

Brown, F. and C. Howard-Davis, 2008. *Norton Priory: monastery to museum, excavations 1970-87*. Lancaster: Oxford Archaeology North.

Brown, M. P., 1990. *A guide to western historical scripts from antiquity to 1600*. London: British Library.

---, 1994. *Understanding illuminated manuscripts: a guide to technical terms.* Los Angeles, CA: Getty Publications.

---, 2009. The triumph of the codex: the manuscript book before 1100. In *A companion to the history of the book*, eds. S. Eliot and J. Rose, pp. 179-93. Chichester: Wiley-Blackwell.

Bull, R., 2011. *Holywell priory and the development of Shoreditch to c.1600: archaeology from the London overground East London line*. London: Museum of London Monograph 53.

Buringh, E. and J. L. van Zanden, 2009. Charting the "rise of the west": manuscripts and printed books in Europe, a long-term perspective from the sixth through eighteenth centuries. *Journal of Economic History* 69, 409-45.

Burrow, I., 1983. The northern rooms of the east cloister range – the armarium and vestiarium. In *Bordesley Abbey II: second report on excavations at Bordesley Abbey, Redditch, Hereford – Worcestershire*, eds. S. M. Hirst, D. A. Walsh and S. M. Wright, pp. 103-27. Oxford: British Archaeological Report, British Series.

Burrow, I. and C. B. Burrow, 1990. Witham Priory: the first English Carthusian monastery, excavations 1965-1969 by P. Barlow and R. Reid and their context. *Proceedings of the Somerset Archaeological and Natural History Society* 134, 141-82.

Burton, J., 2012. *Monastic and religious orders in Britain, 1000-1300*. E-book.

Cambridge: Cambridge University Press. http://ebooks.cambridge.org/ebook.jsf?bid=CBO9781139170109 (last accessed 22 January 2015).

Burton, J. and J. Kerr, 2011. *The Cistercians in the Middle Ages*. Woodbridge: Boydell Press.

Burton, J. and K. Stöber, eds., 2008. *Monasteries and society in the British Isles in the later Middle Ages*. Woodbridge: Boydell Press.

Butler, L., 1979. Introduction. In *Medieval monasteries of Great Britain*, eds. L. Butler and C. Given-Wilson, pp. 13-129. London: Michael Joseph Ltd.

Butler, L. and C. Given-Wilson, eds. 1979. *Medieval monasteries of Great Britain*. London: Michael Joseph Ltd.

Canning, R. and T. J. van Bavel, ed. and trans. 1986. *The Rule of Saint Augustine*. New York, NY: Image Books.

Campbell, M., 1987. Metalwork in England, c.1200-1400. In *Age of chivalry: art in Plantagenet England, 1200-1400*, eds. J. Alexander and P. Binski, pp. 162-8. London: Royal Academy of Arts.

---, 1991. Gold, silver and precious stones. In *English medieval industries: craftsmen, techniques, products*, eds. J. Blair and N. Ramsay, pp. 107-66. London: Hambledon Press.

Carley, J. P., 2002. Monastic collections and their dispersal. In *The Cambridge history of the book in Britain, volume IV: 1557-1695*, eds. J. Barnard and D. F. McKenzie, pp. 339-48. Cambridge: Cambridge University Press.

---, 2006. The dispersal of the monastic libraries and the salvaging of the spoils. In *The Cambridge history of libraries in Britain and Ireland, volume I: to 1640*, eds. E. Leedham-Green and T. Webber, pp. 265-91. Cambridge: Cambridge University Press.

Carter, M., 2010. The tower of Abbot Marmaduke Huby of Fountains Abbey: Hubris or piety? *Yorkshire Archaeological Journal* 82, 269-86.

Cassels, A. K., 2013. *The social significance of late medieval dress accessories*. PhD Thesis. University of Sheffield.

Chapman, F. R., ed. 1907. *Sacrist rolls of Ely, volume 2: transcripts*. Cambridge: Cambridge University Press.

Cheney, C. R., 1973. *Medieval texts and studies*. Oxford: Clarendon Press.

Christianson, C. P., 1999. The rise of London's book trade. In *The Cambridge history of the book in Britain, volume III: 1400-1557*, eds. L. Hellinga and J. B. Trapp, pp. 128-47. Cambridge: Cambridge University Press.

Christie, P. M. and J. G. Coad, 1980. Excavations at Denny Abbey. *Archaeological Journal* 137, 138-279.

Cistercians in Yorkshire, 2003a. The end of monastic life: the Dissolution of Fountains. http://cistercians.shef.ac.uk/fountains/history/end_of_monastic_life/end4.php (last accessed 10 April 2015).

---, 2003b. After the Dissolution: Byland's library in the sixteenth century. http://cistercians.shef.ac.uk/byland/buildings/library/library3.php (last accessed 5 May 2015).

---, 2003c. Fountains Abbey: the warming house (calefactory). http://cistercians.shef.ac.uk/fountains/buildings/warminghouse/ (last accessed 20 May 2015).

---, 2003d. Byland Abbey: the warming house (calefactory). http://cistercians.shef.ac.uk/byland/buildings/warming_house/ (last accessed 20 May 2015).

---, 2003e. Rievaulx Abbey: the warming house (calefactory). http://cistercians.shef.ac.uk/rievaulx/buildings/warminghouse/ (last accessed 20 May 2015).

Clanchy, M. T., 2009. Parchment and paper: manuscript culture 1100-1500. In *A companion to the history of the book*, eds. S. Eliot and J. Rose, pp. 194-206. Chichester: Wiley-Blackwell.

---, 2013. *From memory to the written record: England 1066-1307*. Third edition. Chichester: Wiley-Blackwell.

Clark, J. G., 2000. University monks in late medieval England. In *Medieval monastic education*, eds. F. Ferzoco and C. Muessig, pp. 56-71. London: Leicester University Press.

---, 2004. *A monastic renaissance at St Albans: Thomas Walsingham and his circle c.1350-*

1440. Oxford: Clarendon Press.

---, ed. 2007a. *The culture of medieval English monasticism*. Woodbridge: Boydell Press.

---, 2007b. Introduction: the culture of medieval English monasticism. In *The culture of medieval monasticism*, ed. J. G. Clark, pp. 1-18. Woodbridge: Boydell Press.

Clark, J. W., 1894. *Libraries in the medieval and Renaissance periods. The Rede lecture, delivered June 13 1894*. Cambridge: Macmillan and Bowes.

---, 2008. *The care of books: an essay on the development of libraries and their fittings, from the earliest times to the end of the eighteenth century*. E-book. London: C. J. Clay and Sons. http://www.gutenberg.org/files/26378/26378-h/26378-h.htm (last accessed 5 November 2014).

---, ed. 2011. *The observances in use at the Augustinian priory of S. Giles and S. Andrew at Barnwell, Cambridgeshire*. E-book. Cambridge: Cambridge University Press. http://ebooks.cambridge.org/ebook.jsf?bid=CBO9781139003018 (last accessed 8 August 2014).

Clarkson, C., 1993. English monastic bookbinding in the twelfth century. In *Ancient and medieval book materials and techniques*, eds. M. Maniaci, and P. F. Munafò, pp. 181-200. Città del Vaticano: Biblioteca Apostolica Vaticana.

Clay, P., 1981. The small finds – non-structural. In *The Austin Friars, Leicester*, eds. J. E. Mellor and T. Pearce, pp. 130-45. London: Council for British Archaeology, Research Report 35.

Clemens, R., and T. Graham, 2007. *Introduction to manuscript studies*. Ithaca, NY: Cornell University Press.

Clement, R. W., 1995. A survey of antique, medieval and renaissance book production. In *Art into life: collected papers from the Kresge art museum medieval symposia*, eds. C. G. Fisher and K. L. Scott, pp. 9-48. East Lansing, MI: Michigan University State Press.

Coates, A., 1999. *English medieval books: the Reading Abbey collections from foundation to dispersal*. Oxford: Clarendon Press.

Coleman, J., 1996. *Public reading and the reading public in late medieval England and France*. Cambridge: Cambridge University Press.

Cook, G. H., 1961a. *English monasteries in the Middle Ages*. London: Phoenix House Ltd.

---, 1961b. *The English mediaeval parish church*. Third edition. London: Phoenix House Ltd.

Copinger, W. A., ed. 1895. The laboryouse journey and serche of John Leylande for Englandes antiquities geuen of hym as a newe years gyfte to Kynge Henry the viii in the xxxvii yeare of his reyne, with declaracyons enlarged by Johan Bale. http://archive.org/stream/laboryousejourn00balegoog#page/n8/mode/2up (last accessed 13th September 2012).

Coppack, G., 1986. Some descriptions of Rievaulx abbey in 1538-9: the disposition of a major Cistercian precinct in the early sixteenth century. *Journal of the British Archaeological Association* 139, 100-33.

---, 2008. 'Make straight in the desert a highway for our God': Carthusians and community in late medieval England. In *Monasteries and society in the British Isles in the later Middle Ages*, eds. J. Burton and K. Stöber, pp. 168-79. Woodbridge: The Boydell Press.

---, 2009. *Fountains Abbey: the Cistercians in northern England*. Stroud: Amberley Publishing Plc.

Coppack, G., C. Hayfield and R. Williams, 2002. Sawley Abbey: the architecture and archaeology of a smaller Cistercian abbey. *Journal of the British Archaeological Association* 155, 22-114.

Coppack, G and L. Keen, 2002. *Mount Grace Priory: excavations, 1957-92*. Unpublished monograph held by English Heritage.

Cox, J. C., 1923. *English church fittings, furniture and accessories*. London: B. T. Batsford Ltd.

Cox, J. C. and A. Harvey 1908. *English church furniture*. Second edition. London: Methuen and Co.

Cramp, R., 2005. *Wearmouth and Jarrow: monastic sites, volume 1*. Swindon: English Heritage.

Cramp, R., J. Cherry and P. Clogg, 2006. Personal possessions ad domestic items:

copper alloy and silver. In *Wearmouth and Jarrow: monastic sites, volume* 2, ed. R. Cramp, pp. 230-56. Swindon: English Heritage.

Cross, C., 1989. A medieval Yorkshire library. *Northern History* 25, 281-90.

Cross, C. and N. Vickers, eds. 1995. *Monks, friars and nuns in sixteenth-century Yorkshire.* Leeds: Yorkshire Archaeological Society.

Dalton, O. M., 1924. Sarmatian ornaments from Kerch in the British Museum, compared with Anglo-Saxon and Merovingian ornaments in the same collection. *Antiquaries Journal* 4, 259-78.

Da Rold, 2011. Materials. In *The production of books in England 1350-1500*, eds. A. Gillespie and D. Wakelin, pp. 12-33. Cambridge: Cambridge University Press.

De Hamel, C., 1992. *Medieval craftsmen: scribes and illuminators.* London: British Museum Press.

---, 1997a. *A history of illuminated manuscripts.* Second edition. Oxford: Phaidon Press Ltd.

---, 1997b. The dispersal of the library of Christ Church, Canterbury, from the fourteenth to the sixteenth century. In *Books and collectors, 1200-1700: essays presented to Andrew Watson*, eds. J. P. Carley and C. G. C. Tite, pp. 263-79.

---, 2008. Books and society. In *The Cambridge history of the book in Britain, volume II: 1100-1400*, eds. N. J. Morgan and R. M. Thompson, pp. 3-21. Cambridge: Cambridge University Press.

De la Mare, A., ed. 1971. *Catalogue of the collection of medieval manuscripts bequeathed to the Bodleian Library, Oxford, by James P. R. Lyell.* Oxford: Clarendon Press.

De Lubac, H., 1998-2009. *Medieval exegesis: the four sense of scripture.* 3 volumes. Trans. M. Sebanc and E. M. Macierowski. Grand Rapids, MI: Eerdmans.

Delaissé, L. M. J., 1976. Toward a history of the medieval book. In *Codicologica 1: théories et principes*, ed. A Gruys, pp. 75-83. Leiden: E. J. Brill.

De Ricci, S., 1930. *English collectors of books and manuscripts (1530-1930) and their*

marks of ownership. Cambridge: Cambridge University Press.

Derolez, A., 2003. *The palaeography of gothic manuscript books: from the twelfth to the early sixteenth century*. Cambridge: Cambridge University Press.

Dickens, A. G., ed. 1959. *Tudor Treatises*. Leeds: Yorkshire Archaeological Society.

---, 1967. *The English reformation*. London: Collins.

Diringer, D., 1967. *The illuminated book: its history and production*. Second edition. London: Faber and Faber.

Dobson, R., B., 1973. *Durham Priory 1400-1450*. Cambridge: Cambridge University Press.

Dodd, A. and A. Hardy, 2003. The nature of the stratigraphy and a summary of the site phasing. In *Aelfric's abbey: excavations at Eynsham Abbey, Oxfordshire, 1989-92*, eds. A. Hardy, A. Dodd and G. D. Keevill, pp. 25-30. Oxford: Oxford Archaeological Unit Ltd.

Dodwell, C. R., 1993. *The pictorial arts of the west 800-1200*. New Haven, CT: Yale University Press.

Doggett, N., 2001. The demolition and conversion of former monastic buildings in post-dissolution Hertfordshire. In *Monastic archaeology: papers on the study of medieval monasteries*, eds. G. Keevill, M. Aston and T. Hall, pp. 165-74. Oxford: Oxbow Books.

Doyle, A. I., 1990. Book production by the monastic orders in England (c.1375-1530): assessing the evidence. In *Medieval book production: assessing the evidence. Proceedings of the second conference of the seminar in the history of the book to 1500, Oxford, July 1988*, ed. L. L. Brownrigg, pp. 1-20. Los Altos Hills, CA: Anderson-Lovelace.

Driver, M., 2004. *The image in print: book illustration in late medieval England and its sources*. London: British Library.

Driver, M. and M. Orr, 2011. Decorating and illustrating the page. In *The production of books in England 1350-1500*, eds. A. Gillespie and D. Wakelin, pp. 104-28. Cambridge: Cambridge University Press.

Drury, P. J., 1974. Chelmsford Dominican Priory: the excavation of the reredorter,

1973. *Essex Archaeology and History* 6, 40-81.

Duffy, E., 2005. *The stripping of the altars: traditional religion in England c.1400-1580.* Second edition. New Haven, CT: Yale University Press.

Duncan, H. B. and S. A. Moorhouse, 1987. The small finds. In *Kirkstall Abbey, volume I: the 1950-64 excavations: a reassessment,* eds. S. Moorhouse and S. Wrathmell, pp. 120-48. Wakefield: West Yorkshire Archaeology Service.

Dunning, R. W., 1964. The muniments of Syon Abbey: their administration and migration in the fifteenth and sixteenth centuries. *Bulletin of the Institute of Historical Research* 37, 103-11.

Dürrfeld, E. B., 1996. A tentative approach at reconstructing the chronology of different types of metal fastening mechanisms on German bindings of the late 15th, 16th and 17th centuries. *Gutenberg-Jahrbuch* 7, 271-8.

---, 2000. Terra incognita: toward a historiography of book fastenings and book furniture. *Book History* 3, 305-13.

Dutschke, C. W., 1989. *Guide to medieval and renaissance manuscripts in the Huntington Library.* 2 volumes. San Marino, CA: Huntington Library.

Dutton, M. L. and L. C. Braceland, ed. and trans. 2010. *Spiritual friendship.* Collegeville, MN: Liturgical Press.

Dyer, C., 2002. *Making a living in the Middle Ages: the people of Britain 850-1520.* New Haven, CT: Yale University Press.

Dyson, T., M. Samuel, A. Steele and S. M. Wright, 2011. *The Cluniac priory and abbey of St Saviour Bermondsey, Surrey: excavations 1984-95.* London: Museum of London Archaeology, Monograph 50.

Edwards, A. S. G., 2010. Books and manuscripts. In *The Oxford handbook of medieval literature in English,* eds. E. Treharne and G. Walker, 17-32. Oxford: Oxford University Press.

Egan, G., 1996. Some archaeological evidence for metalworking in London, c.1050 AD-c.1700 AD. *Journal of the Historical Metallurgy Society* 30, 83-94.

---, 1998. *The medieval household: daily living c.1150-c.1450*. London: Stationery Office.

---, 2005. *Material culture in London in an age of transition: Tudor and Stuart period finds c.1450-c.1700 from excavations at riverside sites in Southwark*. London: Museum of London Archaeological Service.

---, 2007. The non-ceramic finds. In *The Augustinian priory of St Mary Merton, Surrey: excavations 1976-90*, eds. P. Miller and D. Saxby, pp. 219-35. London: Museum of London Archaeology Service, Monograph 34.

---, 2008. Report of the Portable Antiquities Scheme 2007. *Post-Medieval Archaeology* 42, 317-31.

---, 2011. The accessioned finds. In *The Cluniac priory and abbey of St Saviour Bermondsey, Surrey: excavations 1984-95*, eds. T. Dyson, M. Samuel, A. Steele and S. M. Wright, pp. 242-60. London: Museum of London Archaeology, Monograph 50.

Egan, G. and F. Pritchard, 2002. *Dress accessories, c.1150-1450, volume 3 of medieval finds from excavations in London*. Woodbridge: Boydell Press.

Ellis, H., ed. 1827. *Original letters, illustrative of English history, series 2, volume 2*. London: Harding and Lepard.

Ellis, P., ed., 1993. *Beeston Castle, Cheshire: a report on the excavations, 1968-85*. London: English Heritage.

Elton, G. R., 1991. *England under the Tudors*. Third edition. Abingdon: Routledge.

Emden, A. B., 1968. *Donors of books to S. Augustine's Abbey, Canterbury*. Oxford: Oxford Bibliographical Society, Occasional Publication 4.

English Heritage, 2007. Pastscape: Fountains Abbey. http://www.pastscape.org.uk/hob.aspx?hob_id=51860 (last accessed 9 March 2015).

English Heritage object management database (last accessed 7 December 2011).

Erler, M. C., 2007. Private reading in the fifteenth- and sixteenth-century English nunnery. In *The culture of medieval English monasticism*, ed. J. G. Clark, pp. 134-46. Woodbridge: Boydell Press.

Evenden, E., 2010. The impact of print: the perceived worth of the printed book in

England, 1476-1575. In *The Oxford handbook of medieval literature in English*, eds. E. Treharne and G. Walker, pp. 90-108. Oxford: Oxford University Press.

Ezell, M. J. M., 1999. *Social authorship and the advent of printing*. Baltimore, MD: John Hopkins University Press.

Febvre, L. and H. J. Martin, 1984. *The coming of the book: the impact of printing, 1450-1800*. Second edition. Trans. D. Gerard, eds. G. Nowell-Smith and D. Wootton. London: Verso Editions.

Felgenhauer-Schmiedt, S., with J. Graham-Campbell, 2007. Material culture and daily life. In *The archaeology of medieval Europe, volume I: eight to twelfth centuries AD*, ed. J. Graham-Campbell with M. Valor, 237-260. Aarhus: Aarhus University Press.

Fergusson, P., 1999. *Roche Abbey, South Yorkshire*. London: English Heritage.

Ferris, I. M., 2001. Excavations at Greyfriars, Gloucester, in 1967 and 1974-5. *Transactions of the Bristol and Gloucestershire Archaeological Society* 119, 95-146.

Finkelstein, D., and A. McCleery, 2013. *An introduction to book history*. Second edition. Abingdon: Routledge.

Finlayson, R., ed. 2004. *Medieval metalworking and urban life at St Andrewgate, York. The Archaeology of York 10/7.* York: York Archaeological Trust.

Foot, M. M., 1999. Bookbinding 1400-1557. In *The Cambridge history of the book in Britain, volume III: 1400-1557*, eds. L. Hellinga and J. B. Trapp, pp. 109-27. Cambridge: Cambridge University Press.

Ford, J. A. and J. H. Steward, 1954. On the concept of types. *American Anthropologist* 56, 42-57.

Ford, M. L., 1999. Importation of printed books in England and Scotland. In *The Cambridge history of the book in Britain, volume III: 1400-1557*, eds. L. Hellinga and J. B. Trapp, pp. 179-202. Cambridge: Cambridge University Press.

Foreman, M., 1996. *Further excavations at the Dominican Priory, Beverley, 1986-89*. Sheffield: Sheffield Academic Press Ltd.

Fowler, J. T., ed. 1903. *Rites of Durham: being a description or brief declaration of all*

the ancient monuments, rites and customs belonging or being within the monastical church of Durham before the suppression, written 1593. Durham: Surtees Society, Volume 107.

Fowler, R. C., 1906. Inventories of Essex monasteries in 1536. *Transactions of the Essex Archaeological Society* 9, 380-400.

Friedman, J. B., 1995. *Northern English books, owners, and makers in the late Middle Ages*. Syracuse, NY: Syracuse University Press.

Fuller, T., 1845. *The church history of Britain: from the birth of Christ until the year MDCXLVIII. Volume III: the fifth book, containing the reign of King Henry the eighth*. Oxford: Oxford University Press.

Gairdner, J., ed. 1886. *Letters and papers, foreign and domestic, of the reign of Henry VIII, volume IX*. London: Longmans and Co.

Gameson, R., 2006. The medieval library (to c.1450). In *The Cambridge history of libraries in Britain and Ireland, volume I: to 1640*, eds. E. Leedham-Green and T. Webber, pp. 13-50. Cambridge: Cambridge University Press.

---, 2008. *The earliest books of Canterbury Cathedral: manuscripts and fragments to c.1200*. London: Bibliographical Society

---, ed. 2012. *The Cambridge history of the book in Britain, volume I: c.400-1100*. Cambridge: Cambridge University Press.

Gardiner, M., M. Russell and D. Gregory, 1996. Excavations at Lewes Friary, 1985-6 and 1988-9. *Sussex Archaeological Collections* 134, 71-123.

Gaskell, P., 1972. *A new introduction to bibliography*. Oxford: Clarendon Press.

Geddes, J., 1985. The small finds. In *Battle Abbey: the eastern range and the excavations of 1978-80*, ed. J. N Hare, pp. 147-77. London: Historic Buildings and Monuments Commission for England.

---, 1986. Cistercian metalwork in England. In *Cistercian art and architecture in the British Isles*, eds. C. Norton and D. Park, pp. 256-65. Cambridge: Cambridge University Press.

Gilchrist, R. and C. Green, eds. 2015. *Glastonbury Abbey: archaeological excavations 1904 – 1979.* London: Society of Antiquaries of London Monograph.

Gill, M., 2007. Monastic murals and lectio in the later Middle Ages. In *The culture of medieval English monasticism,* ed. J. G. Clark, pp. 55-71. Woodbridge: Boydell Press.

Gillespie, A. 2011. Bookbinding. In *The production of books in England 1350-1500,* eds. A. Gillespie and D. Wakelin, pp. 150-72. Cambridge: Cambridge University Press.

Gillespie, A. and D. Wakelin, eds. 2011. *The production of books in England 1350-1500.* Cambridge: Cambridge University Press.

Gillespie, V., ed. 2001. *Syon Abbey and the libraries of the Carthusians. Corpus of British medieval library catalogues* 9. London: British Library.

Gilyard-Beer, R., 1970. *Fountains Abbey, Yorkshire.* London: Her Majesty's Stationery Office.

Given-Wilson, C., 1979. Gazetteer. In *Medieval monasteries of Great Britain,* eds. L. Butler and C. Given-Wilson, pp. 131-400. London: Michael Joseph Ltd.

Goetz, S. K., 2003. Huntington Catalogue: guide to medieval and Renaissance manuscripts in the Huntington Library. http://sunsite3.berkeley.edu/hehweb/toc.html (last accessed 21 April 2014).

Golding, B., 1995. *Gilbert of Sempringham and the Gilbertine order, c.1130-c.1300.* Oxford: Clarendon Press.

Goodall, A. R., 1981. The medieval bronzesmith and his products. In *Medieval industry,* ed. D. W. Crossley, pp. 63-71. London: Council for British Archaeology, Research Report 40.

---, 1996. The finds: objects of copper alloy and gold. In *Further excavations at the Dominican Priory, Beverley, 1986-89,* ed. M. Foreman, pp. 155-61. Sheffield: Sheffield Academic Press Ltd.

Gorman, M., 2002. Manuscript books at Monte Amiata in the eleventh century. *Scriptorium* 56, 225-93.

Grainger, I. and C. Phillpotts, 2011. *The Cistercian abbey of St Mary Graces, East*

Smithfield, London. London: Museum of London Archaeological Service, Monograph 44.

Gray, M., 1993. *The Trinitarian order in England: excavation at Thelsford Priory.* Oxford: Tempus Reparatum.

Greatrex, J., 2000. The scope of learning within the cloisters of the English cathedral priories in the later Middle Ages. In *Medieval monastic education*, eds. G. Ferzoco and C. Muessig, pp. 41-55. London: Leicester University Press.

---, 2008. Of monks and books: the disciples of Bruno and Benedict in later medieval England. In *Studies in Carthusian monasticism in the late Middle Ages*, ed. J. M. Luxford, pp. 115-24. Turnhout: Brepols.

Greene, J. P., 1992. *Medieval monasteries.* London: Leicester University Press.

Gruys, A., 1972. Codicology or the archaeology of the book? A false dilemma. *Quaerendo* 2, 87-108.

Gullick, M., 1993. The bindings. In *Catalogue of the manuscripts of Hereford Cathedral library*, eds. R. A. B. Mynors and R. M. Thomson, pp. xxvi-xxxii. Cambridge: D. S. Brewer.

---, 2001. The bindings. In *A descriptive catalogue of the medieval manuscripts in Worcester Cathedral library*, ed. R. M. Thomson, pp. xxxviii-xlvii. Cambridge: D. S. Brewer.

---, 2006. The binding descriptions in the library catalogue from Leicester Abbey. In *Leicester Abbey: medieval history, archaeology and manuscript studies*, eds. J. Story, J. Bourne and R. Buckley, pp. 147-72. Leicester: Leicester Archaeological and Historical Society.

---, 2012. Bookbindings. In *The Cambridge history of the book in Britain, volume I: c.400-1100*, ed. R. Gameson, pp. 294-309. Cambridge: Cambridge University Press.

Gullick, M. and N. Hadgraft, 2008. Technology of production of the manuscript book: bookbindings. In *The Cambridge history of the book in Britain, volume II: 1100-1400*, eds. N. J. Morgan and R. M. Thomson, pp. 95-109. Cambridge: Cambridge University Press.

Guy, C. J., 1999. The excavation of the reredorter at Cleeve Abbey, Somerset.

Proceedings of the Somerset Archaeological and Natural History Society 142, 1-40.

Haigh, C., ed. 2010. *The English Reformation revised*. E-book. Cambridge: Cambridge University Press. http://ebooks.cambridge.org/ebook.jsf?bid=CBO9780511622113 (last accessed 8 May 2015).

Hanna, R., 2000. Reconsidering the Auchinleck manuscript. In *New directions in later medieval manuscript studies: essays from the 1988 Harvard conference*, ed. D. A. Pearsall, pp. 91-102. Woodbridge: York Medieval Press.

Hardy, A., 2003a. The transitional period. In *Aelfric's abbey: excavations at Eynsham Abbey, Oxfordshire, 1989-92*, eds. A. Hardy, A. Dodd and G. D. Keevill, pp. 81-92. Oxford: Oxford Archaeological Unit Ltd.

---, 2003b. Post-Dissolution and later activity. In *Aelfric's abbey: excavations at Eynsham Abbey, Oxfordshire, 1989-92*, eds. A. Hardy, A. Dodd and G. D. Keevill, pp. 147-55. Oxford: Oxford Archaeological Unit Ltd.

Hardy, A., A. Dodd and G. D. Keevill, eds. 2003. *Aelfric's abbey: excavations at Eynsham Abbey, Oxfordshire, 1989-92*. Oxford: Oxford Archaeological Unit Ltd.

Hare, J. N., 1985. *Battle Abbey: the eastern range and the excavations of 1978-80*. London: Historic Buildings and Monuments Commission for England.

Harper-Bill, C., 1980. Cistercian visitation in the late Middle Ages: the case of Hailes Abbey. *Historical Research* 53, 103-14.

Harris, M. H., 1995. *History of libraries in the western world*. Fourth edition. Metuchen, NJ: The Scarecrow Press Inc.

Hawthorne, J. G. and C. S. Smith, eds. and trans. 1979. *On divers arts*. Second edition. New York, NY: Dover Publications Inc.

Heale, M., 2004. *The dependent priories of medieval English Monasteries*. Woodbridge: Boydell Press.

Hellinga, L., 1999. Printing. In *The Cambridge history of the book in Britain, volume III: 1400-1557*, eds. L. Hellinga and J. B. Trapp, pp. 65-108. Cambridge: Cambridge University Press.

---, 2009. The Gutenberg revolutions. In *A companion to the history of the book*, eds. S. Eliot and J. Rose, pp. 207-19. Chichester: Wiley-Blackwell.

Hellinga, L. and J. B. Trapp, eds. 1999. *The Cambridge history of the book in Britain, volume III: 1400-1557*. Cambridge: Cambridge University Press.

Helliwell, L., 1958. Prittlewell Priory and the church site. *Journal of the British Archaeological Society* 20-1, 84-94.

Henig, M., 1988. Small finds: from 1960-65. In *St Augustine's Abbey: report on excavations, 1960-78*, eds. D. Sherlock and H. Woods, pp. 177-87. Maidstone: Kent Archaeological Society, Monograph IV.

Henig, M. and D. Sherlock, 1988. Small finds: from 1972-75. In *St Augustine's Abbey: report on excavations, 1960-78*, eds. D. Sherlock and H. Woods, pp. 187-200. Maidstone: Kent Archaeological Society, Monograph IV.

Henig, M. and H. Woods, 1988. Small finds: from 1976-78. In *St Augustine's Abbey: report on excavations, 1960-78*, eds. D. Sherlock and H. Woods, pp. 201-31. Maidstone: Kent Archaeological Society, Monograph IV.

Hicks, M. A., 1990. John Nettleton, Henry Saville of Banke, and the post-medieval vicissitudes of Byland Abbey library. *Northern History* 26, 212-7.

Hicks, M. and A. Hicks, 2001. *St Gregory's Priory, Northgate, Canterbury: excavations 1988-1991*. Canterbury: Canterbury Archaeological Trust Ltd.

Hirst, S. M., D. A. Walsh and S. M. Wright, eds. 1983. *Bordesley Abbey II: second report on excavations at Bordesley Abbey, Redditch, Hereford – Worcestershire*. Oxford: British Archaeological Report, British Series.

Hirst, S. M. and S. M. Wright, 1983. The excavation of the presbytery, crossing and eastern choir. In *Bordesley Abbey II: second report on excavations at Bordesley Abbey, Redditch, Hereford – Worcestershire*, eds. S. M. Hirst, D. A. Walsh and S. M. Wright, pp. 7-101. Oxford: British Archaeological Report, British Series.

Historic England, 2015. Pastscape: Egglestone Abbey. http://www.pastscape.org.uk/hob.aspx?hob_id=19827 (last accessed 13 April 2015).

Hobley, B., 1971. Excavations at the cathedral and Benedictine priory of St Mary,

Coventry. *Transactions of the Birmingham and Warwickshire Archaeological Society* 84, 45-139.

Hope, W. H. St J., 1900. Fountains Abbey. *Yorkshire Archaeological Journal* 15, 269-402.

---, 1905. Architectural history of Mount Grace charterhouse. *Yorkshire Archaeological Journal* 18, 270-309.

---, 1907. Kirkstall Abbey. In *Architectural description of Kirkstall Abbey*, eds. W. H. St J. Hope and J. Bilson, pp. 1-72. Leeds: Publications of the Thoresby Society, Volume XVI.

Horobin, S., 2010. The professionalisation of writing. In *The Oxford handbook of medieval literature in English*, eds. E Treharne and G. Walker, pp. 57-67. Oxford: Oxford University Press.

Howard, M., 2003. Recycling the monastic fabric: beyond the act of dissolution. In *The archaeology of reformation, 1480-1580*, eds. D. Gaimster and R. Gilchrist, pp. 221-34. Leeds: Maney Publishing.

Howsam, C. L., 2011. *Medieval book fittings: an archaeology of medieval literacy*. MA Dissertation. University of Sheffield.

Hoyle, R. W., 1995. The origins of the Dissolution of the Monasteries. *Historical Journal* 38, 275-305.

Hume, T. A. and D. E. Owen, 1955. *Kirkstall Abbey excavations: 2nd report 1951. In Kirkstall Abbey excavations 1950-1954*, eds. D. E. Owen, pp. 13-20. Leeds: Thoresby Society.

Humphreys, K. W., 1986. The loss of books in sixteenth century England. *Libri* 36, 249-258.

---, ed. 1990. *The friars' libraries. Corpus of British medieval library catalogues 1.* London: The British Library.

Irwin, R., 1966. *The English library: sources and history*. London: George Allen and Unwin Ltd.

Isserlin, R. M. J., 1999. The Carmelite friary at Maldon: excavations 1990-1. *Essex Archaeology and History* 30, 44-143.

Ivy, G. S., 1958. The bibliography of the manuscript-book. In *The English library before 1700: studies in its history*, eds. F. Wormald and C. E. Wright, pp. 32-65. London: Athlone Press.

Jackson, R., 2006. *Excavations at St James' Priory, Bristol.* Oxford: Oxbow Books.

Jackson, S. L., 1974. *Libraries and librarianship in the west: a brief history.* New York, NY: McGraw-Hill Book Company.

James, M. R., 2012. *The ancient libraries of Canterbury and Dover: the catalogues of the libraries of Christ Church Priory and St Augustine's Abbey at Canterbury and of St Martin's Priory at Dover.* E-book. Cambridge: Cambridge University Press. http://ebooks.cambridge.org/ebook.jsf?bid=CBO9780511920097 (last accessed 15 September 2014).

Jennings, B., 1999. *Yorkshire monasteries; cloister, land and people.* Otley: Smith Settle Ltd.

Johnson, E. A., 2006. *Sopwell Priory excavations, 1962-66. Supplement to Hertfordshire Archaeology and History 14.* Hertford: Hertfordshire Archaeology.

Jones, D. M., ed. 2001. *Centre for archaeology guidelines: archaeometallurgy.* Swindon: English Heritage.

Kauffmann, C. M., 1975. *Romanesque manuscripts 1066-1190: A survey of manuscripts illuminated in the British Isles, volume 3.* London: Harvey Miller.

Keevill, G., M. Aston and T. Hall, 2001. *Monastic archaeology: papers on the study of medieval monasteries.* Oxford: Oxbow Books.

Keily, J., 2004. Non-ceramic finds. In *The Cistercian abbey of St Mary Stratford Langthorne, Essex: archaeological excavations for the London Underground Limited Jubilee Line Extension Project*, eds. B. Barber, S. Chen, T. Dyson and B. White, pp. 149-56. London: Museum of London Archaeology Service, Monograph 18.

Kemp, R. L. and C. P. Graves, 1996. *The church and Gilbertine priory of St Andrew, Fishergate. The archaeology of York 11/2.* York: Council for British Archaeology.

Ker, N. R., 1954. *Fragments of medieval manuscripts used as pastedowns in Oxford bindings: with a survey of Oxford binding c.1515-1620.* Oxford: Oxford Bibliographical

Society.

---, 1960. *English manuscripts in the century after the Norman Conquest.* Oxford: Clarendon Press.

---, 1964. *Medieval libraries of Great Britain: a list of surviving books.* Second edition. London: Offices of the Royal Historical Society.

---, 1969-2002. *Medieval manuscripts in British libraries.* 5 volumes. Oxford: Oxford University Press.

---, 1985a. The migration of manuscripts from the English medieval libraries. In *Books, collectors and libraries: studies in the medieval heritage,* ed. A. G. Watson, pp. 459-70. London: Hambledon Press.

---, 1985b. Sir John Prise. In *Books, collectors and libraries: studies in the medieval heritage,* ed. A. G. Watson, pp. 471-95. London: Hambledon Press.

---, 1986. The provision of books. In *The history of the University of Oxford, volume 3: the collegiate university,* ed. J. McConica, pp. 441-519.

Kerr, J., 2009. *Life in the medieval cloister.* London: Continuum UK.

Klemperer, W. D., 2004. The excavations, 1987-94. In *Excavations at Hulton Abbey, Staffordshire, 1987-1994,* eds. W. D. Klemperer and N. Boothroyd, pp. 13-68. Leeds: Society for Medieval Archaeology.

Klemperer, W. D. and N. Boothroyd, eds. 2004. *Excavations at Hulton Abbey, Staffordshire, 1987-1994.* Leeds: Society for Medieval Archaeology.

Knowles, D. D., 1961a. *The religious orders in England, volume II: the end of the Middle Ages.* Cambridge: Cambridge University Press.

---, 1961b. *The religious orders in England, volume III: the Tudor age.* Cambridge: Cambridge University Press.

---, 1962. *The religious orders in England, volume I: the old orders 1216-1340, the friars 1216-1340, the monasteries and their world.* Cambridge: Cambridge University Press.

---, 2010. *The monastic order in England: a history of its development from the times of St Dunstan to the Fourth Lateran Council 940–1216.* Second edition. E-book.

Cambridge: Cambridge University Press. http://ebooks.cambridge.org/ebook.
jsf?bid=CBO9780511583742 (last accessed 21 January 2015).

Knowles, D. and C. Brooke, ed. and trans. 2002. *The monastic constitutions of Lanfranc*. Oxford: Clarendon Press.

Knowles, D. D. and R. N. Hadcock, 1971. *Medieval religious houses, England and Wales*. London: Longmans, Green and Co.

Kwakkel, E., 2011. Commercial organization and economic innovation. In *The production of books in England 1350-1500*, eds. A. Gillespie and D. Wakelin, pp. 173-91. Cambridge: Cambridge University Press.

Lambrick, G. and H. Woods, 1976. Excavations on the second site of the Dominican priory, Oxford. *Oxoniensia* 41, 168-233.

Lawrence, A., 1982. Manuscripts of early Anglo-Norman Canterbury. In *Medieval art and architecture at Canterbury before 1220*, eds. N. Coldstream and P. Draper, pp. 101-11. London: British Archaeological Association, Conference Transaction 5.

---, 1986. English Cistercian manuscripts of the twelfth century. In *Cistercian art and architecture in the British Isles*, eds. C. Norton and D. Park, pp. 284-98. Cambridge: Cambridge University Press.

Lawrence, C. H., 2001. *Medieval monasticism: forms of religious life in Western Europe in the Middle Ages*. Third edition. Harlow: Pearson Education Ltd.

Lawrence-Mathers, A., 2003. *Manuscripts in Northumbria in the eleventh and twelfth centuries*. Woodbridge: Boydell Press.

Lehmann-Brockhaus, O., 1956. *Lateinische schriftquellen zur kunst in England, Wales und Schottland vom jahre 901 bis zum jahre 1307, 2 band: quellen in topographischer ordnung L-Z (nr. 2249-5072).* München: Prestel Verlag.

Light, L., 2012.The thirteenth century and the Paris Bible. In *The new Cambridge history of the Bible: from 600-1450*, eds. R. Marsden and E. A. Matter, pp. 380-91. Cambridge: Cambridge University Press.

Lloyd-Morgan, G., 1990. Copper alloy. In *Excavations at Chester: the lesser medieval religious houses, sites investigated 1964-1983*, ed. S. W. Ward, pp. 166-71. Chester:

Chester City Council.

London Museum, 1954. *London Museum catalogue 7: medieval catalogue.* London: Her Majesty's Stationery Office.

Love, H., 1993. *Scribal publication in seventeenth-century England.* Oxford: Clarendon Press.

Lucas, P. J., 2006. Borrowing and reference: access to libraries in the late Middle Ages. In *The Cambridge history of libraries in Britain and Ireland, volume I: to 1640*, eds. E. Leedham-Green and T. Webber, pp. 242-62. Cambridge: Cambridge University Press.

Luxford, J. M., 2005. *The art and architecture of English Benedictine monasteries, 1300-1540*: a patronage history. Woodbridge: Boydell Press.

Lyall, R. J., 2007. Materials: the paper revolution. In *Book production and publishing in Britain, 1375-1475*, eds. J. Griffiths and D. Pearsall, pp. 11-29. Cambridge: Cambridge University Press.

MacGregor, A., 1985. *Bone, antler, ivory and horn: the technology of skeletal materials since the Roman period.* London: Croom Helm.

MacGregor, A., A. J. Mainman and N. S. H. Rogers, 1999. *Craft, industry and everyday life: bone, antler, ivory and horn from Anglo-Scandinavian and medieval York. The archaeology of York: the small finds 17/12.* York: Council for British Archaeology.

McKendrick, S., J. Lowden and K. Doyle, 2011. *Royal manuscripts: the genius of illumination.* London: British Library.

McKitterick, D., 2003. *Print, manuscript and the search for order, 1450-1830.* Cambridge: Cambridge University Press.

Magdalen College Oxford, 2015. The Worcester Psalter. http://www.magd.ox.ac.uk/libraries-and-archives/treasure-of-the-month/news/the-worcester-psalter/ (last accessed 19 August 2015).

Mahany, C. M., 1977. St Leonard's Priory. *South Lincolnshire Archaeology* 1, 17-22.

Margeson, S., 1993. *Norwich households: medieval and post-medieval finds from*

Norwich survey excavations 1971-1978. East Anglian Archaeology 58. Norwich: The Norwich Survey/Norfolk Museums Service.

Maryon, H., 1971. *Metalwork and enamelling: a practical treatise on gold and silversmiths' work and their allied crafts*. New York, NY: Dover Publications Inc.

Maxted, I., 1987. *Exeter Cathedral Library: a concordance of medieval catalogues and surviving manuscripts*. Exeter: J. Maxted.

Mellor, J. E. and T. Pearce, 1981. *The Austin Friars, Leicester*. London: Council for British Archaeology, Research Report 35.

Michael, M. A., 2008. Urban production of manuscript books and the role of the universities. In *The Cambridge history of the book in Britain, volume II: 1100-1400*, eds. N. J. Morgan and R. M. Thomson, pp. 168-94. Cambridge: Cambridge University Press.

Middleton, B. C., 1963. *A history of English craft bookbinding technique*. London: Hafner Publishing Co. Ltd.

Midmer, R., 1979. *English medieval monasteries (1066-1540): a summary*. Athens, GA: University of Georgia Press.

Miller, P. and D. Saxby, eds. 2007. *The Augustinian priory of St Mary Merton, Surrey: excavations 1976-90*. London: Museum of London Archaeology Service, Monograph 34.

Miner, D., ed. 1957. *The history of bookbinding 525-1950 AD: an exhibition held at the Baltimore Museum of Art November 12, 1957 to January 12, 1958*. Baltimore, MD: Trustees of the Walters Art Gallery.

Mooney, L. R., 2011. Vernacular literary manuscripts and their scribes. In *The production of books in England 1350-1500*, eds. A. Gillespie and D. Wakelin, pp. 192-211. Cambridge: Cambridge University Press.

Moorhouse, S., 1972. Finds from excavations in the refectory at the Dominican friary, Boston. *Lincolnshire History and Archaeology* 7, 21-53.

---, 1979. Tudor Green: some further thoughts. *Medieval Ceramics* 3, 53-61.

Morgan, N. J., 2008a. Technology of production of the manuscript book: illumination

– pigments, drawing and gilding. In *The Cambridge history of the book in Britain, volume II: 1100-1400*, eds. N. J. Morgan and R. M. Thomson, pp. 84-95. Cambridge: Cambridge University Press.

---, 2008b. Books for the liturgy and private prayer. In *The Cambridge history of the book in Britain, volume II: 1100-1400*, eds. N. J. Morgan and R. M. Thomson, pp. 291-316. Cambridge: Cambridge University Press.

Morgan, N. J. and L. Freeman Sandler, 1987. Manuscript illumination of the thirteenth and fourteenth centuries. In *Age of chivalry: art in Plantagenet England, 1200-1400*, eds. J. Alexander and P. Binski, pp. 148-56. London: Royal Academy of Arts.

Morgan, N. J. and R. M. Thomson, eds. 2008. *The Cambridge history of the book in Britain, volume II: 1100-1400*. Cambridge: Cambridge University Press.

Morgan, P. E., 1988. An unrecorded seventeenth-century Hereford bookbinder. *The Library Sixth Series* 10, 145-50.

Morris, R. K., 2003. Monastic architecture: destruction and reconstruction. In *The archaeology of reformation, 1480-1580*, eds. D. Gaimster and R. Gilchrist, pp. 235-51. Leeds: Maney Publishing.

Mowrey, J. F., 1991. Clasps, schliessen, clausuren: a guide to the manufacture and the literature of fastenings. *Guild of Book Workers Journal* 29, 1-58.

Museum of London, 2005. Paint palettes. http://www.museumoflondon.org.uk/London-Wall/Whats-on/Galleries/medieval/objects/record.htm?type=object&id=743412 (last accessed 22 August 2012).

Mynors, R. A. B. and R. M. Thomson, 1993. *Catalogue of the manuscripts of Hereford Cathedral Library*. Cambridge: D. S. Brewer.

New, E. A., 1999. *The Cult of the Holy Name of Jesus in late medieval England, with special reference to the Fraternity in St Paul's Cathedral, London, c.1450-1558*. PhD Thesis. Royal Holloway and Bedford New College, University of London.

Nixon, H. M., 1976. William Caxton and bookbinding. *Journal of the Printing Historical Society* 11, 92-113.

Norton, C., 1986. Table of Cistercian legislation on art and architecture. In *Cistercian*

art and architecture in the British Isles, eds. C. Norton and D. Park, pp. 315-93. Cambridge: Cambridge University Press.

Orme, N., 2008. Monasteries in medieval Cornwall: mediocrity or merit? In *Monasteries and society in the British Isles in the later Middle Ages*, eds. J. Burton and K. Stöber, pp. 213-28. Woodbridge: Boydell Press.

O'Sullivan, D., 2006. The 'Little Dissolution' of the 1520s. *Post-Medieval Archaeology* 40, 227-58.

Ottaway, P. and N. Rogers, 2002. *Craft, industry and everyday life: finds from medieval York. The archaeology of York 17/15.* York: Council for British Archaeology.

Owen, D. E., 1955. *Kirkstall Abbey: a history.* Leeds: E. J. Arnold and Sons Ltd.

Page, W., ed. 1907. *The Victoria history of the county of Oxford, volume two.* London: Archibald Constable and Co. Ltd.

---, ed. 1909. Cistercian monks: Eastminster, New Abbey. http://www.british-history.ac.uk/vch/london/vol1/pp461-464 (accessed 1 September 2015).

---, ed. 1913. *The Victoria history of the county of York, volume three.* London: Archibald Constable and Co. Ltd.

---, ed. 1926. *The Victoria history of the county of Kent, volume two.* London: St Catherine Press.

Page, W. and J. Horace, eds. 1907. *The Victoria history of the county of Essex, volume two.* London: Archibald Constable and Co. Ltd.

Pantin, W. A., ed. 1931. *Documents illustrating the activities of the general and provincial chapters of the English black monks 1215-1540. Royal Historical Society Camden Third Series Volume 45.* London: Royal Historical Society.

Parkes, M. B., 1976. The influence of the concepts of ordinatio and compilatio on the development of the book. In *Medieval learning and literature: essays presented to Richard William Hunt*, eds. J. J. G. Alexander and M. T. Gibson, pp. 115-41. Oxford: Clarendon press.

---, 1997. Archaizing hands in English manuscripts. In *Books and collectors, 1200-1700:*

essays presented to Andrew Watson, eds. J. P. Carley and C. G. C. Tite, pp. 101-41. London: British Library.

---, 2008a. Layout and presentation of the text. In *The Cambridge history of the book in Britain, volume II: 1100-1400*, eds. N. J. Morgan and R. M. Thomson, pp. 55-74. Cambridge: Cambridge University Press.

---, 2008b. Handwriting in English books. In *The Cambridge history of the book in Britain, volume II: 1100-1400*, eds. N. J. Morgan and R. M. Thomson, pp. 110-35. Cambridge: Cambridge University Press.

Partridge, S., 2011. Designing the page. In *The production of books in England 1350-1500*, eds. A. Gillespie and D. Wakelin, pp. 79-103. Cambridge: Cambridge University Press.

Pearce, J., 2007a. Late 11th- and 12th-century metalworking. In *The London Guildhall: an archaeological history of a neighbourhood from early medieval to modern times*, eds. D. Bowsher, T. Dyson, N. Holder and I. Howell, pp. 346-7. London: Museum of London Archaeology Service, Monograph 36.

---, 2007b. 14th-century metalworking. In *The London Guildhall: an archaeological history of a neighbourhood from early medieval to modern times*, eds. D. Bowsher, T. Dyson, N. Holder and I. Howell, pp. 347-51. London: Museum of London Archaeology Service, Monograph 36.

Pestell, T., 2004. *Landscapes of monastic foundation: the establishment of religious houses in East Anglia c.650-1200*. Woodbridge: Boydell Press.

Petroski, H., 1999. *The book on the bookshelf*. New York, NY: Vintage Books.

Piper, A. J., 1978. The libraries of the monks of Durham. In *Medieval scribes, manuscripts and libraries: essays presented to N. R. Ker*, eds. M. B. Parkes and A. G. Watson, pp. 213-49. London: Scolar Press.

---, 2007. The monks of Durham and the study of scripture. In *The culture of medieval English monasticism*, ed. J. G. Clark, pp. 86-103. Woodbridge: Boydell Press.

Platt, C., 1984. *The abbeys and priories of medieval England*. London: Secker and Warburg.

Platt, C. and R. Coleman-Smith, 1975. *Excavations in medieval Southampton, 1953-1969, volume 2: the finds*. Leicester: Leicester University Press.

Pollard, G., 1962. The construction of English twelfth-century bindings. *The Library Fifth Series* 17, 1-22.

---, 1976. Describing medieval bookbindings. In *Medieval learning and literature: essays presented to Richard William Hunt*, eds. J. J. G. Alexander and M. T. Gibson, pp. 50-65. Oxford: Clarendon Press.

---, 1978. The pecia system in the medieval universities. In *Medieval scribes, manuscripts and libraries: essays presented to N. R. Ker*, eds. M. B. Parkes and A. G. Watson, pp. 145-61. London: Scolar Press.

Portable Antiquities Scheme (PAS)/Trustees of the British Museum, 2003-2015a. Book fitting: SUR-322ED5. https://finds.org.uk/database/artefacts/record/id/88544 (last accessed 15 April 2014).

---, 2003-2015b. About the scheme. https://finds.org.uk/about (last accessed 12 June 2015).

---, 2003-2015c. Book fitting: SWYOR-D9A074. https://finds.org.uk/database/artefacts/record/id/424080 (last accessed 17 September 2015).

---, 2003-2015d. Book fitting: SUR-6DA691. https://finds.org.uk/database/artefacts/record/id/62391 (last accessed 21 September 2015).

---, 2003-2015e. Book fitting: ESS-859818. https://finds.org.uk/database/artefacts/record/id/98338 (last accessed 21 September 2015).

---, 2003-2015f. Book fitting: SUSS-A64B56. https://finds.org.uk/database/artefacts/record/id/71625 (last accessed 21 September 2015).

---, 2003-2015g. Book fitting: ESS-6AF458. https://finds.org.uk/database/artefacts/record/id/142329 (last accessed 21 September 2015).

---, 2003-2015h. Book fitting: NLM-B1CAE5. https://finds.org.uk/database/artefacts/record/id/407450 (last accessed 21 September 2015).

---, 2003-2015i. Book fitting: SUR-ECCA57. https://finds.org.uk/database/artefacts/

record/id/201677 (last accessed 21 September 2015).

---, 2003-2015j. Book fitting: WMID-DFA4E1. https://finds.org.uk/database/artefacts/record/id/188269 (last accessed 23 September 2015).

---, 2003-2015k. Book fitting: SUSS-0E6821. https://finds.org.uk/database/artefacts/record/id/263535 (last accessed 23 September 2015).

---, 2003-2015l. Book fitting: DOR-173638. https://finds.org.uk/database/artefacts/record/id/180545 (last accessed 3 November 2015).

Poulton, R. and H. Woods, 1984. *Excavations on the site of the Dominican Friary at Guildford in 1974 and 1978*. Guildford: Surrey Archaeological Society, Research Volume 9.

Pouzet, J.-P., 2001. Book production outside commercial contexts. In *The production of books in England 1350-1500*, eds. A. Gillespie and D. Wakelin, pp. 212-38. Cambridge: Cambridge University Press.

Rahtz, P. A., 1983. The finds: copper alloy. In *Bordesley Abbey II: second report on excavations at Bordesley Abbey, Redditch, Hereford – Worcestershire*, eds. S. M. Hirst, D. A. Walsh and S. M. Wright, pp. 175-82. Oxford: British Archaeological Report, British Series.

Ramsay, N., 2004. 'The manuscripts flew about like butterflies': the break-up of English libraries in the sixteenth century. In *Lost libraries: the destruction of great book collections since antiquity*, ed. J. Raven, pp. 125-44. Basingstoke: Palgrave Macmillan.

---, 2008. Archive books. In *The Cambridge history of the book in Britain, volume II: 1100-1400*, eds. N. Morgan and R. M. Thomson, pp. 416-45. Cambridge: Cambridge University Press.

Rees, H., N. Crummy, P. J. Ottaway and G. Dunn, 2008. *Artefacts and society in Roman and medieval Winchester: small finds form the suburbs and defences, 1971-1986*. Winchester: Winchester Museums Service.

Reeve, M. D., 1983. Manuscripts copied from printed books. In *Manuscripts in the fifty years after the invention of printing*, ed. J. B. Trapp, pp. 12-20. London: Warburg Institute.

Riché, P., 1976. *Education and culture in the barbarian west, sixth through eighth centuries.* Trans. J. J. Contreni. Columbia, SC: University of South Carolina Press.

Richardson, W. C., 1961. *History of the Court of Augmentations 1536-1554.* Baton Rouge, LA: Louisiana State University Press.

Roberts, D., 2010. The expurgation of traditional prayer books (*c.*1535-1600). *Reformation* 15, 23-49.

Robertson, D., 1996. *Lectio divina: the medieval experience of reading.* Collegeville, MN: Liturgical Press.

Robinson, P. R. 1980. The 'booklet': a self-contained unit in composite manuscripts. In *Codicologica 3: essais typologiques*, ed. A. Gruys, pp. 46-69. Leiden: E. J. Brill.

---, 1988. *Catalogue of dated and datable manuscripts c.737-1600 in Cambridge libraries, volume 1: the text.* Cambridge: D. S. Brewer.

---, 2008. The format of books: books, booklets and rolls. In *The Cambridge history of the book in Britain, volume II: 1100-1400*, eds. N. J. Morgan and R. M. Thomson, pp. 41-54. Cambridge: Cambridge University Press.

Robson, M., 2006. *The Franciscans in the Middle Ages.* Woodbridge: Boydell Press.

Roe, F., 1902. *Ancient coffers and cupboards: their history and description from the earliest times to the middle of the sixteenth century.* London: Methuen and Co.

Roskell, J. S., L. Clark and C. Rawcliffe, 1992. *The history of Parliament: the House of Commons 1386-1421, volume 4: members P-Z.* Stroud: Alan Sutton Publishing.

Rouse, I., 1960. The classification of artifacts in archaeology. *American Antiquity* 25, 313-23.

Rouse, R. H. and M. A. Rouse, eds. 1991. *Registrum anglie de libris doctorum et auctorum veterum. Corpus of British medieval library catalogues 2.* London: British Library.

Rundle, D., 2004. Habits of manuscript-collecting: the dispersals of the library of Humphrey, Duke of Gloucester. In *Lost libraries: the destruction of great book collections since Antiquity*, ed. R. Raven, pp. 106-24. Basingstoke: Palgrave MacMillan.

Rylatt, M. and P. Mason, eds., 2003. *The archaeology of the medieval cathedral and priory of St Mary, Coventry*. Coventry: Coventry County Council.

Rylatt, M., P. Mason and I. Soden, 2003. The metal objects. In *The archaeology of the medieval cathedral and priory of St Mary, Coventry*, eds. M. Rylatt and P. Mason, p. 126. Coventry: Coventry County Council.

Saenger, P., 1982. Silent reading: its impact on late medieval script and society. *Viator* 13, 367-414

---, 1989. *A catalogue of the pre-1500 western manuscript books at the Newberry Library*. Chicago, IL: University of Chicago Press.

---, 1997. *Space between words: the origins of silent reading*. Stanford, CA: Stanford University Press.

Salzman, L. F., 1970. *English industries of the Middle Ages*. London: H. Pordes.

San Marino, The Huntington Library, 2003a. HM 25777. http://bancroft.berkeley.edu/ digitalscriptorium/huntington/HM25777.html (last accessed 10 September 2015).

---, 2003b. HM 25778. http://bancroft.berkeley.edu/digitalscriptorium/huntington/ HM25778.html (last accessed 11 September 2015).

---, 2003c. HM 35300. http://vm136.lib.berkeley.edu/BANC/digitalscriptorium/ huntington/HM35300.html (last accessed 16 September 2015).

---, 2003d. HM 31151. http://vm136.lib.berkeley.edu/BANC/digitalscriptorium/ huntington/HM31151.html (last accessed 17 September 2015).

---, 2003e. HM 906. http://vm136.lib.berkeley.edu/BANC/digitalscriptorium/huntington/ HM906.html (last accessed 17 September 2015).

---, 2003f. HM 28561. http://vm136.lib.berkeley.edu/BANC/digitalscriptorium/ huntington/HM28561.html (last accessed 18 September 2015).

---, 2003g. HM 19915. http://vm136.lib.berkeley.edu/BANC/digitalscriptorium/ huntington/HM19915.html (last accessed 21 January 2014).

Sargent, M. G., 1976. The transmission by the English Carthusians of some late medieval spiritual writings. *Journal of Ecclesiastical History* 27, 225-40.

Saunders, A. D., 2006. *Excavations at Launceston Castle, Cornwall*. Leeds: The Society for Medieval Archaeology Monograph 24.

Savage, E. A., 2006. *Old English libraries: the making, collection and use of books during the Middle Ages*. Teddington: Echo Library.

Scase, W., 2010. Reading communities. In *The Oxford handbook of medieval literature in English*, eds. E. Treharne and G. Walker, pp. 557-73. Oxford: Oxford University Press.

Schofield, J., 2003. Some aspects of the reformation of religious space in London, 1540-1660. In *The archaeology of reformation, 1480-1580*, eds. D. Gaimster and R. Gilchrist, pp. 310-24. Leeds: Maney Publishing.

Schofield, J. and R. Lea, 2005. *Holy Trinity Priory, Aldgate, City of London: an archaeological reconstruction and history*. London: Museum of London Archaeology Service Monograph 24.

Scott, K. L., 2007. Design, decoration and illustration. In *Book production and publishing in Britain, 1375-1475*, eds. J. Griffiths and D. Pearsall, pp. 31-64. Cambridge: Cambridge University Press.

Scull, C., 1988. Excavations in the cloister of St Frideswide's Priory, 1985. *Oxoniensia* 53, 21-73.

Selwyn, D. G., 1997. Thomas Cranmer and the dispersal of medieval libraries: the provenance of some of his medieval manuscripts and printed books. In *Books and collectors, 1200-1700: essays presented to Andrew Watson*, eds. J. P. Carley and C. G. C. Tite, pp. 281-94. London: British Library.

Şenocak, N., 2003. Book acquisition in the medieval Franciscan order. *Journal of Religious History* 27, 14-28.

Shailor, B., 1994. *The medieval book.* Toronto: University of Toronto Press.

Sharpe, R., general ed. 1990-2008. *Corpus of British medieval library catalogues*. 13 volumes. London: British Library.

---, 2005. Monastic reading at Thorney Abbey, 1323-1347. *Traditio* 60, 243-78.

---, 2008. Library catalogues and indexes. In *The Cambridge history of the book*

in Britain, volume II: 1100-1400, eds. N. Morgan and R. M. Thomson, pp. 197-218. Cambridge: Cambridge University Press.

Sharpe, R., J. P. Carley, R. M. Thomson and A. G. Watson, eds. 1996. *English Benedictine libraries: the shorter catalogues. Corpus of British medieval library catalogues 4*. London: British Library.

Shaw, D. J., 2009. The book trade comes of age: the sixteenth century. In *A companion to the history of the book*, eds. S. Eliot and J. Rose, pp. 220-31. Chichester: Wiley-Blackwell.

Smalley, B., 1952. *The study of the Bible in the Middle Ages*. Oxford: Basil Blackwell.

Soden, I., 2003. The conversion of former monastic buildings to secular use: the case of Coventry. In *The archaeology of reformation, 1480-1580*, eds. D. Gaimster and R. Gilchrist, pp. 280-9. Leeds: Maney Publishing.

Spaulding, A. C., 1953. Statistical techniques for the discovery of artifact types. *American Antiquity* 18, 305-13.

Spencer Collection, New York Public Library 2014. Binding, New York Public Library Digital Collections. http://digitalcollections.nypl.org/items/510d47da-ec1c-a3d9-e040-e00a18064a99 (last accessed 25 February 2014).

Steer, F. W., 1968. *Scriveners' company common paper 1357-1628: with a continuation to 1678*. London: London Record Society.

Steinberg, S. H. and J. Trevitt, 1996. *Five hundred years of printing*. Fourth edition. London: British Library.

Stevenson, J., R. Goffin and A, Nailer, 2011. Accessioned finds. In *The Cistercian abbey of St Mary Graces, East Smithfield, London*, eds. I. Grainger and C. Phillpotts, pp. 149-58. London: Museum of London Archaeological Service, Monograph 44.

Stone, E., 1962. Profit-and-loss accountancy at Norwich Cathedral Priory. *Transactions of the Royal Historical Society*, Fifth Series 12, 25-48.

Stoneman, W. T., ed. 1999. *Dover Priory. Corpus of British medieval library catalogues 5*. London: British Library.

Stratford, N., M. Archibald, G. Elphick and G. Zarnecki, 1984. Metalwork. In *English Romanesque art 1066-1200: Hayward Gallery, London 5 April – 8 July 1984*, eds. G. Zarnecki, J. Holt and T. Holland, pp. 232-95. London: Weidenfeld and Nicolson.

Streeter, B. H., 2011. *The chained library*. Cambridge: Cambridge University Press.

Sweetinburgh, S. 2008. The Austin friars in late medieval Canterbury; negotiating spaces. In *Monasteries and society in the British Isles in the later Middle Ages*, eds. J. Burton and K. Stöber, pp. 197-210. Woodbridge: Boydell Press.

Szirmai, J. A., 1996. The archaeology of bookbinding and book restoration. *Quaerendo* 26, 144-64.

---, 1999. *The archaeology of medieval bookbinding*. Aldershot: Ashgate Publishing Ltd.

Talbot, C. H., 1958. The universities and the mediaeval library. In *The English library before 1700: studies in its history*, eds. F. Wormald and C. E. Wright, pp. 66-84. London: Athlone Press.

Taylor, J., ed. and trans. 1961. *Didascalicon*. New York, NY: Columbia University Press.

Thompson, B. T., 1994. Monasteries and their patrons at foundation and dissolution. *Transactions of the Royal Historical Society* 4, 103-25.

Thompson, E. M., ed. 1902. *Customary of the Benedictine monasteries of Saint Augustine, Canterbury, and Saint Peter, Westminster, volume I.* London: Henry Bradshaw Society.

Thomson, R. M., 1982. *Manuscripts from St Albans Abbey 1066-1235*. Woodbridge: Boydell and Brewer Ltd.

---, 1997. Books and learning at Gloucester Abbey in the twelfth and thirteenth centuries. In *Books and collectors, 1200-1700: essays presented to Andrew Watson*, eds. J. P. Carley and C. G. C. Tite, pp. 3-26. London: British Library.

---, 2001. *A descriptive catalogue of the medieval manuscripts in Worcester Cathedral library*. Cambridge: D. S. Brewer.

---, 2008a. Technology of production of the manuscript book: parchment and paper, ruling and ink. In *The Cambridge history of the book in Britain, volume II: 1100-1400*, eds.

N. J. Morgan and R. M. Thomson, pp. 75-84. Cambridge: Cambridge University Press.

---, 2008b. Monastic and cathedral book production. In *The Cambridge history of the book in Britain, volume II: 1100-1400*, eds. N. J. Morgan and R. M. Thomson, pp. 136-67. Cambridge: Cambridge University Press.

Thomson. R. M. and N. J. Morgan, 2008. Preface. In *The Cambridge history of the book in Britain, volume II: 1100-1400*, eds. N. J. Morgan and R. M. Thomson, pp. xvii-xxiv. Cambridge: Cambridge University Press.

Trapp, J. B., ed. 1983. *Manuscripts in the fifty years after the invention of printing*. London: Warburg Institute.

Vezin, J., 1978. La réalisation matérielle des manuscrits latins pendant le haut Moyen Âge. In *Codicologica 2: éléments pour une codicologie comparée*, ed. A. Gruys, pp. 15-51. Leiden: E. J. Brill.

Wakelin, D., 2011. Writing the words. In *The production of books in England 1350-1500*, eds. A. Gillespie and D. Wakelin, pp. 34-58. Cambridge: Cambridge University Press.

Walbran, J. R., 1875. *A guide to Ripon, Fountains Abbey, Harrogate, Bolton Priory, and several places of interest in their vicinity*. Twelfth edition. Ripon: A. Johnson and Co.

Walker, J. and M. Graham, eds. 2013. *St Mary's Abbey, Holme Cultram, Abbeytown, Cumbria: archaeological and historical investigations*. Carlisle: Cumberland and Westmorland Antiquarian and Archaeological Society.

Ward, S. W., 1990a. The demolition of the church. In *Excavations at Chester: the lesser medieval religious houses, sites investigated 1964-1983*, ed. S. W. Ward, pp. 59-60. Chester: Chester City Council.

---, 1990b. Surviving manuscript books from the Dominican library. In *Excavations at Chester: the lesser medieval religious houses, sites investigated 1964-1983*, ed. S. W. Ward, pp. 171-3. Chester: Chester City Council.

---, 2003. Dissolution or reformation? A case study from Chester's urban landscape. In *The archaeology of reformation, 1480-1580*, eds. D. Gaimster and R. Gilchrist, pp. 267-79. Leeds: Maney Publishing.

Warton, T., 1871. *The history of English poetry: from the close of the eleventh to the*

commencement of the eighteenth century, volume I. London: Reeves and Turner.

Watson, A. G., 1979. *Catalogue of dated and datable manuscripts, c.700-1600, in the Department of Manuscripts, The British Library, volume I: the text.* London: British Museum Publications Ltd.

---, 1984. *Catalogue of dated and datable manuscripts, c. 435-1600 in Oxford libraries, volume I: the text.* Oxford: Clarendon Press.

Watts, L., 1983. Books, fittings and writing. In *Bordesley Abbey II: second report on excavations at Bordesley Abbey, Redditch, Hereford – Worcestershire*, eds. S. M. Hirst, D. A. Walsh and S. M. Wright, pp. 200-6. Oxford: British Archaeological Report, British Series.

Weale, W. H. J., 1894-8. *Bookbindings and rubbings of bindings in the National Art Library, South Kensington Museum.* 2 volumes. London: Her Majesty's Stationery Office.

Weaver, O. J., 2006. History. In *Sopwell Priory excavations, 1962-66. Supplement to Hertfordshire Archaeology and History 14*, ed. E. A. Johnson, pp. 1-7. Hertford: Hertfordshire Archaeology.

Webber, T., 1997. Latin devotional texts and the books of the Augustinian canons of Thurgarton Priory and Leicester Abbey in the late Middle Ages. In *Books and collectors, 1200-1700: essays presented to Andrew Watson*, ed. J. P. Carley and C. G. C. Tite, pp. 27-41. London: British Library.

---, 2006a. Monastic and cathedral book collections in the eleventh and twelfth centuries. In *The Cambridge history of libraries in Britain and Ireland, volume I: to 1640*, eds. E. Leedham-Green and T. Webber, pp. 109-25. Cambridge: Cambridge University Press.

---, 2006b. The books of Leicester Abbey. In *Leicester Abbey: medieval history, archaeology and manuscript studies*, eds. J. Story, J. Bourne and R. Buckley, pp. 127-46. Leicester: Leicester Archaeological and Historical Society.

---, 2012. Latin script in England c.900-1100: the Norman Conquest and handwriting in England to 1100. In *The Cambridge history of the book in Britain, volume I: c.400-1100*, ed. R. Gameson, pp. 211-24. Cambridge: Cambridge University Press.

Webber, T. and A. G. Watson, eds. 1998. *The libraries of the Augustinian canons. Corpus of British medieval library catalogues 6*. London: British Library.

White, C., ed. and trans. 2008. *The Rule of Benedict*. London: Penguin Books Ltd.

Wiggins, A., 2003. The Auchinleck manuscript: importance. http://auchinleck.nls.uk/editorial/importance.html (last accessed 6 March 2014).

Williams, J. 2000. The library. In *Hereford Cathedral: a history*, eds. G. Aylmer and J. Tiller, pp. 511-35. London: Hambledon Press.

Williams, J. H., 1978. Excavations at Greyfriars, Northampton 1972. *Northamptonshire Archaeology* 13, 96-160.

Willmott, H. and P. Townend, 2012. *Thornton Abbey project 2nd interim report 2012*. Unpublished report. University of Sheffield.

Wilson, R. M., 1958. The contents of the mediaeval library. In *The English library before 1700: studies in its history*, eds. F. Wormald and C. E. Wright, pp. 85-111. London: Athlone Press.

Woodfield, C., 1981. Finds from the free grammar school at the Whitefriars, Coventry, c.1545-c.1557/58. *Post-Medieval Archaeology* 15, 81-159.

Woodward, G. W. O., 1966. *The Dissolution of the Monasteries*. London: Blandford Press Ltd.

Wormald, F., 1958. The monastic library. In *The English library before 1700: studies in its history*, eds. F. Wormald and C. E. Wright, pp. 15-31. London: Athlone Press.

Woudhuysen, H. R., 1996. *Sir Philip Sidney and the circulation of manuscripts, 1558-1640*. Oxford: Oxford University Press.

Wright, C. E, 1951. The dispersal of the monastic libraries and the beginnings of Anglo-Saxon studies: Matthew Parker and his circle: a preliminary study. *Transactions of the Cambridge Bibliographical Society* 1, 208-37.

---, 1958. The dispersal of the libraries in the sixteenth century. In *The English library before 1700: studies in its history*, eds. F. Wormald and C. E. Wright, pp. 148-75. London: Athlone Press.

Wright, S. M., 1976. The finds. In *Bordesley Abbey, Redditch, Hereford-Worcestershire: first report on excavations 1969-1973*, eds. P Rahtz and S. Hirst, pp. 138-221. Oxford: British Archaeological Reports.

---, 1982. Much Park Street, Coventry: the development of a medieval street, excavations 1970-74. *Transactions of the Birmingham and Warwickshire Archaeological Society* 92, 1-132.

Yale University, Beinecke Rare Book and Manuscript Library, 2013a. Honorius of Autun, Gemma animae, etc. http://brbl-dl.library.yale.edu/vufind/Record/3555148 (last accessed 20 February 2014).

---, 2013b. Missal en Francais The Fouquet Missal. http://brbl-dl.library.yale.edu/vufind/Record/3436678 (last accessed 6 October 2015).

---, 2013c. Thomas, à Kempis. Scholar's Notebook. http://brbl-dl.library.yale.edu/vufind/Record/3592255 (last accessed 12 September 2014).

Youings, J., 1971. *The Dissolution of the Monasteries*. London: George Allen and Unwin Ltd.