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PART 3. YORKSHIRE TEXTILE EMIGRATION.

2(c) HAND-WOOLCOMBERS, 1840-60.

The Great Exhibition at the Crystal Palace in 1851 displayed one pair of hand-combs and the latest types of English and French machine-combs.^{1.} Although the depressed hand-comber continued to linger on a few years more, his displacement by the machine and his personal distress were similar in many respects to the fate which befell the hand-loom weaver. Distress was much the same for comber and weaver, especially when overlaid by industrial recession. There were, however, important differences. Whereas the hand-weaver's position and status were undermined over a protracted period - and in the woollen over an even longer period than in the worsted sector - the hand-comber's, by contrast, became untenable almost overnight. Again, whilst weavers were to be found in all the textile industries of cotton, linen, silk, woollen and worsted, hand-combers were present only in the worsted branch of one industry.

1. J.R.S. Reper, "Wool combing" BT.S.J. (1955-56), 74; G.A. Feather, "Woolcombing by Hand", The Balgman (Oct. 1970), 594.

highly localised in West Yorkshire, indeed principally in the Bradford, Halifax and Keighley areas. The human problems associated with the introduction of the combing machine were therefore local rather than national, even though many thousands of workers were involved, and the 'solution' of subsequent transference to other occupations, often entailing migration and emigration, contained a high degree of voluntary or self-help. This was inevitable, for, whereas the weavers were the subject of exhaustive enquiry by Government (with admittedly little relief forthcoming), little or no attention was paid to the plight of displaced combers.^{1*}

The combing process, preparatory to spinning, was the first major stage in the worsted industry, and the last to be transformed from a domestic handicraft into a fully-fledged factory operation with the introduction of a practicable combing machine.^{2*} The hand-comber straightened the long wool fibres making them lie parallel to each other as far as possible, and removed the short fibres (or 'noils') from the lock of wool.

1. E.M. Sigsworth, "The End of Hand-loom weaving", B.T.S.J. (1957-58), 69.
2. E.M. Sigsworth, "An Episode in Wool combing", B.T.S.J. (1956-57), 113.

The tools of his trade, performed entirely by hand, were two steel-toothed combs, with three, five or eight rows (or 'itches') of teeth dependent upon the fineness of wool being processed; an iron or earthenware stove (or 'pot') by which the combs were heated over charcoal or coal; and a spiked 'pad' screwed into a convenient upright post.^{1.}

"Just as the croppers were the artisan élite of the woollen industry", observes one writer, "so the woolcombers were the élite workers in worsted. Controlling a bottleneck in the manufacturing process, they were in a position to uphold their status so long as they could limit entry to their trade". Backed by a trade union organisation since the early eighteenth century, the combers possessed an effective national organisation, despite the Combination Acts, in the early nineteenth century.^{2.}

1. The process of combing wool into slivers and the production of 'tops' is described, with sketches, in G.A. Feather, "Woolcombing by Hand", 591-92; and T.W. Hanson, The Story of Old Halifax (Halifax, 1920) p.203.
2. E.P. Thompson, The Making of the English Working Class, pp.281-82.

In June 1825, the year after the repeal of the Combination Acts, some 20,000 combers and stuff-weavers of Bradford and district began a prolonged strike under the leadership of woolcomber John Tester. The combers initially demanded an advance on already, by contemporary standards, high wages, but later struggled for recognition of the Bradford union. Operatives throughout the country supported the combers, and about £20,000 was contributed to strike funds. By November, money began to fail, Tester reportedly absconded with part of the funds and the union was dissolved;¹ and with the end of the turn-out, some 1,200 of the woolcombers and weavers, and 1,000 of the children were unable for many months to find employment even at the old prices. From being a privileged artisan before the strike, the comber became a defenceless outworker.²

1. The Radical John Tester remains a shadowy figure: see J.T. Ward, "Old' and 'New' Bradfordians in the nineteenth century", B.T.S.J. (1974-65), 27.
2. E.P. Thompson, p.282; J. Mayhall, Annals of Yorkshire...I, pp.318-19.

Prior to 1825, with apprenticeship restrictions already outmoded, many thousands were attracted into the trade by high wages. Some combers operated in large workshops, whilst others in threes and fours shared an independent shop. One wool-combing shop at Stanbury, near Haworth, was described about 1830 as "a keeing hoil with about 30 com pots". There, each of the thirty comb pots was a 'pot-o-four', used by four men, each heating four pairs of combs simultaneously. The Stanbury shop therefore employed up to 120 men, as well as women and boys for lighter jobs.¹ The working atmosphere was unpleasant and unhealthy, the fumes of the charcoal or coal combining with those of the combing-oil and lamp-oil.

Although many families also continued to comb wool in single-storey, one-room cottages over a wide area, often combining seasonal agricultural

1. Cited by G.A. Feather, "Woolcombing by Hand", 591. T.W. Hanson, p.203, notes that an unsociable or independent man was nicknamed, for obvious reasons, a 'pot o' one'.

with textile pursuits, workers were gradually drawn into growing textile centres to concentrate their efforts. At the time of the 1825 Strike it was estimated by the union that 7,000 or 8,000 hand-combers were employed in the Bradford trade, and indeed, during the 1820s large numbers migrated to the area from agricultural districts. One Bradford writer later described how "they came from Kendal, North Yorkshire, Leicester, Devonshire and even from the Emerald Isle; so that to spend an hour in a public-house (the comber's calling was a thirsty one), one might have heard a perfect Babel of different dialects..."¹

The Bradford textile industry attracted in particular many immigrants from Ireland.

1. W. Scruton, Bradford Fifty Years Ago (Bradford, 1897), pp.95-96, cited by E.P. Thompson, p.283. G.A. Feather, 591, observes that some of these districts had an earlier woollen and worsted industry, and had spun wool principally for the masters or piece-makers of Bradford and Halifax.

The migration which began in the late 'twenties and increased steadily from 1835 onwards is noteworthy because much of it preceded the Great Famine, though this was indeed the culminating tragedy. By 1841, more than 5 per cent of the population of Bradford township, 1868 out of 34,560, had been born in Ireland. By 1851, Bradford had attracted more Irish immigrants (9,581) than any other West Yorkshire town.¹ All areas of Ireland contributed to this influx, but a preponderance were natives of Queen's, Mayo and Sligo counties. In Bradford itself, the essentially Irish quarters in 1851 were Black Abbey and White Abbey, Goat Side, Mill Bank, the Nelson Court, Adelaide Street and Bedford Street areas, New Leeds and Wepping - all areas of high population density and all areas of appalling living conditions and overcrowding. Moreover, by 1851, two-fifths of the Bradford Irish were engaged in textiles, and by far the largest number (1,295) were hand-woolcombers (1,149 males; 146 females);

1. By comparison: Leeds and Hunslet, 8,533; Sheffield, 3,051; Halifax, 2,686; York, 2,248; Huddersfield, 1,957; Dewsbury, 1,407; Wakefield, 1,237; Keighley 1,060.

that is, one in every seven of the total Irish population was involved in hand-combing. By this date, woolcombing had become an extremely depressed industry, though there were certain attractions for the poor: the process could be carried on in the home and required little equipment or capital outlay. There were, however, certain grave disadvantages in that the resultant unhealthy working and living conditions aggravated the health problems caused by overcrowding and lack of proper sanitation. Of the 70 paupers noted in the Bradford Borough census of 1851, 29 were Irish, but in any case by then, many of the woolcombers were reduced to a state of pauperism.^{1.}

It is clear that a proportion, perhaps substantial, of the Irish immigrants had been engaged in textiles in their native area. In Queen's County at Mount Mellick, cotton weaving occurred about 1840 "very extensively and affords employment to about 2,000 persons, in the town and neighbourhood; the manufacturing of woollens and stuff and coarse woollen cloth is conducted on a very extensive scale". Cloth was also made in the town of Mount Rath. Linen cloth was manufactured in

1. C. Richardson, "Irish Settlement in Mid-Nineteenth Century Bradford", Yorkshire Bulletin of Economic and Social Research, XX, 1 (May 1968), 40-42, 46-48, 52-53.

both Sligo and County Mayo.¹ A further proportion would be not unaware of the skills of hand-combing, particularly if 'stuff' is taken to infer worsted rather than woollen cloth. Most hand-combers of Irish origin, however, noted in the 1851 Census of Bradford, were probably hand-weavers in Ireland who had turned to hand-combing on reaching West Yorkshire. It is noteworthy that there were only 49 hand-weavers, but 770 power-loom weavers, mainly female, of Irish origin in that year. Indicative of the distress found among Irish hand-combers is the fact that there were 1149 males and only 146 females in the occupation; and even more important, there were only 34 machine-combers, all female.²

The Irish hand-weaver who changed his occupation to that of hand-combing after immigrating to Bradford was following the pattern already established by many weavers native to Bradford and district. The drastic fall in hand-loom weavers' wages has already been noted, as has the even greater distress caused by frequent recession.

1. Yorkshire Bulletin of Economic and Social Research, XX, 1 (May 1968), 43.

2. Ibid., 53.

Additionally, the gradual introduction of factory power-loom weaving, employing largely women and girls, virtually closed the obvious alternative to male employment. Some hand-loom weavers, overwhelmingly adult males, emigrated, whilst others, 'stout young men', sought work in the local quarries. Many others, however, were obliged to join the already overmanned army of hand-combers.¹ The original band of Bradford combers was therefore with the passage of years, augmented by recruits from the outlying areas, from northern and other English counties, and especially from Ireland. Many of these immigrants or migrants consisted of weavers, weavers-turned-combers, and combers in their own right. The hand-combers' position on the economic scale which suffered a severe set-back after the 1825 Strike and the collapse of the Union was increasingly depressed by the arrival of newcomers to Bradford. The depressed years of the 1840s aggravated the position still further. But the most important factor in the ultimate extinction of the hand-comber was the introduction of an efficient combing machine.

1. Bradford Observer, 4 Oct. 1838.

It lies beyond the scope of this study to investigate the technical development of the machine-comb. Suffice to state that in 1790, the Rev. Edmund Cartwright was granted the first patent for combing wool by mechanical means, and this with additional patents resulted in 'Big Ben', the first wool-combing machine. Though a practical failure, others in the 1790s, and Noble, Gilpin, Collier, Pratt and Anderton in the first two decades of the nineteenth century, continued to work on the problem, patenting their efforts. Mixed evidence exists of the use of the machine-comb during the 'twenties and 'thirties, though, despite the warnings of the Leeds Mercury at the time of the 1825 Strike in Bradford,¹ it seems clear that introduction was spasmodic mainly because of mechanical inefficiency. The 1840s and 1850s were a different matter when "the evolution of the combing machine proceeded by a cross-fertilisation of ideas", single or joint patents, purchases of patents and legal battles. The names of George E. Donisthorpe, Isaac Holden, Heilmann, Noble and, not least, Samuel Cunliffe-Lister, predominate among many.² The outcome was the peremptory removal of the hand-comber from the textile scene within little more than a

1. Leeds Mercury, 30 Jul., 29 Oct. 1825.

2. E.W. Sigsworth, Black Dyke Mills..., pp.38-41, and "An Episode in woolcombing", B.T.S.J. (1956-57), 113; J.R.S. Reper, "Wool combing", B.T.S.J. (1955-56), 73-75; J.F. Ward, "'Old' and 'New' Bradfordians in the nineteenth century", B.T.S.J. (1964-65), 19, 26.

decade.

By 1845, wool-combing was already an overcrowded and low-paid occupation, despite a strike two years earlier for an advance in wages. The condition of the Bradford combber was not unknown: "his earnings...scanty, and insufficient to support himself and family with nourishing food. Besides, he was confined to noisome abodes, and enervated by charcoal fires, so that his life was one of privation and misery".¹ As a result of a "large and numerous meeting of the workmen", held in Peckover Walk on 5th May 1845, a committee was appointed to report on the combbers' sanitary condition. The subsequent report confirmed that: "In the town and neighbourhood of Bradford there are upwards of 10,000 hand combbers...the major part of whom were compelled to make workshops of their sleeping apartments. Unable to pay the rent for a comfortable dwelling, a large number huddle together in one apartment, thus rendering their situation still worse. That their physical well-being was neglected, the emaciated appearance of most plainly betoken". One local writer later

1. John James, The History of Bradford and Continuation (London, 1866), II, pp.104-05.

declared: "The report is a heart-sickening statement of the sufferings of these men".^{1.} Immediately prior to the introduction of the machine-comb, overmanning, especially at a time of industrial depression, was the problem of the Bradford combing industry.

Of nearby Allerton, another local writer later described how the township in 1845 possessed "about 120 hand-loom weavers" and "about 110 hand-combers, who would work up about twenty-five pecks of wool weekly."^{2.} If the writer's statement is exact and the combers were fully occupied, it must be assumed that the men so employed balanced their production finely against the requirements of local Allerton spinning and weaving. The combers there had no doubt suffered a gradual decline in wages as had the Bradford combers, and they were equally subject to recession; but their degradation in the village does not appear to have been quite so severe as that in Bradford in 1845, where inadequate housing and overcrowding in some

1. John James, History of the Worsted Manufacture (London, 1857), p.548.
2. W. Cudworth, Manningham, Heaton and Allerton (Townships of Bradford), (Bradford, 1896), pp.300-01.

central quarters added to the misery. Similarly, John Foster & Son, Ltd., at Queensbury, according to the same writer, employed 1,500 hand-combers as outworkers before the introduction of machine-combing there in 1852, a figure closely substantiated by Sigworth's findings of 1411 pairs of combs listed in the Foster stock book - assuming each pair of combs belonged to one comber. By the same assumption, 389 hand-combers were employed by the firm in 1845, and 435 in 1846.¹

The distress in Bradford in 1846 has already been noted: how in the early part of the year large numbers of combers, spinners and weavers were only partially employed, and how as a result of "the temporary suspension of the extensive works of the Messrs. Rouse", many had become dependent upon the poor rates or upon the charity of those more fortunate.

1. E.M. Sigworth, Black Dyke Mills..., pp.197-98. It would seem that Foster & Co. were able to offer reasonably full employment to hand-woolcombers, for the number of pairs of combs increased steadily until 1852, the year the machine-comb made its appearance at the firm (1843: 276; 1844: 357; 1845 & 1846 (noted above); 1847: 707; 1848: 732; 1849 (prob.c.900); 1850: 975; 1851: 1316; 1852: 1411; 1853-57 (no record); 1858 & 1859, "about 170").

Distress was alleviated to some small extent by public subscription, a soup kitchen and by employment under the auspices of the Bradford Relief Committee. In early March, it was reported that "the representative of a certain spinning establishment at Boston [Mass., had] visited this country, in order to engage wool-combers and mill-hands". It seems that about twenty families were engaged in the Bradford area and were preparing to sail from Liverpool. In June, however, about 300 families (or about 1,000 individuals) were still in a state of near destitution.¹

Although all Bradford's textile operatives were victims of industrial depression, woolcombers were in a particularly difficult situation, then and henceforth, for their traditional means of production was being overtaken rapidly by technological advance. It is significant that from about 1846-47 onwards, discussions about relief measures for Bradford's poor centred almost entirely on the plight of hand-woolcombers. James,

1. Bradford Observer, 26 Feb., 5, 12, 19, 26 Mar., 9, 16 Apr., 14 May, 18 Jun. 1846; Halifax Guardian, 17 Jan., 7 Mar. 1846; Sheffield Mercury, 21 Mar. 1846.

writing some twenty years later, after recording the combers' plight correctly, goes on to report somewhat glibly: "The wealthy inhabitants subscribed liberally to relieve the distress [of the combers], but happily, soon after this date [1845], combing machines began to be used, and the combers were gradually drafted into the weaving sheds,¹ and merchants' warehouses, where there had grown an increasing demand for labour whilst a large number of them were assisted to emigrate".² From other sources, it is clear that the solution to the problem of Bradford's 10,000 hand-combers was neither as simple nor as satisfactory as the writer would have the reader believe.

The Woolcombers' condition was never far from public record. A further "meeting of the distressed and unemployed, chiefly woolcombers, was held in Peckover's Walk" in May 1847 "to receive the report of the committee, appointed...to confer with some of the influential gentlemen of [Bradford], as to the best mode of obtaining immediate

1. Surely not principally as power-loom weavers!
2. J. James, The History of Bradford (1866), II, p.105.

relief for the sufferers". A large assembly also gathered at Bradford Moor.¹ Peckover('s) Walk witnessed another meeting of about 80 to 100 unemployed combers in June 1847.²

Towards the end of the year, with the condition of unemployed combers deteriorating, one woolcomber, undoubtedly more literate than many of his class, proposed a "perfect remedy and removal of such existing evils". His plan, contained in a letter to the Editor of the Bradford Observer, was for "emigration, as the best for the present, the best for the future, the best on a small or large scale, the best for the rich to adopt, and the poor to receive". The money collected by subscription should be used to assist emigration to Vancouver('s) Island, where, in a suitable climate, emigrants would become self-sufficient. Just as the American government was encouraging westward movement, so the British government should do the same by granting land to all emigrants, thereby

1. Bradford Observer, 27 May 1847.

2. Ibid., 24 Jun. 1847.

achieving a removal of surplus workers and a lessening of the poor rates. The vacuum so caused by emigration from Bradford would not be filled by Irish immigration, it was claimed, if Bradford masters only employed their own townspeople.¹

From the beginning of the combers' displacement by the machine and during their subsequent misery, it is clear that this class possessed the friendship and sympathy of William Byles,² a Liberal, and first printer and manager of the Bradford Observer.³

Throughout the late 'forties and 'fifties, the prominence given in the columns of the paper to the combers' condition indicates Byles's quest for a solution and his support for any promising avenue of investigation. Additionally, "many a poor woolcomber's family had to thank Mr. Byles for unostentatious acts of kindness", an obituary recorded over forty years later;

1. Bradford Observer, 4 Nov. 1847.
2. William Byles: born 19 Jul. 1807; died 17 Jun. 1891.
3. The Bradford Observer was first issued 6 Feb. 1834.

"and some were thus assisted to emigrate to countries where they have since greatly prospered..."^{1.}

By November 1847, Byles stated his conviction that "emigration is the only radical cure for the physical evils of our Society... Emigration is the natural and largest outlet for these superfluous numbers [of woolcombers]". Writing at a time when there were 4,078 recipients of out-door relief, costing £215.11s.3d. weekly in Bradford township alone, he suspected that "the machinery of the POOR LAW [was] too complicated and too unwieldy to be made available to any great extent" for emigration. He expected the numbers of distressed to increase steadily, and the great majority of out-door poor were woolcombers, far too numerous as a class.

1. William Byles: a Memoir (Bradford Observer, priv.circ., Jun. 1891), p.20. F.G. Byles, William Byles, by His Youngest Son (Weymouth, Dorset, priv. ptg. & circ., 1932), p.53, describes how "My brother Arthur, as a boy at Ann Place, would listen to the clang of their [the hand-combers'] wooden clogs as they wended their way up Horton Lane, with their pads on their backs, and later would see them come to the kitchen door for such broken victuals as my mother could afford..."

Even when the worsted trade was booming, combers were not fully employed; and the slightest trade recession augmented their numbers. Emigration was the only solution, and though combers were physically perhaps not the fittest of men to take on an emigrant's life, nevertheless, with effort, many would succeed overseas. Perhaps combers could be encouraged to emigrate to the wool-producing colonies of South Australia and the Cape so as to provide the raw material of Bradford's trade.^{1*}

Also in November, a meeting of the Bradford Board of Guardians (Chairman: Samuel Cowling) considered the combers' situation. Joshua Pollard,^{2*} an ex-officio guardian, reported the proceedings of the committee

1. Bradford Observer, 25 Nov. 1847.
2. Joshua Pollard: born 1 Jan. 1794; died Nov. 1887; J.P.; Deputy-Lieutenant of the West Riding; first a solicitor in Bradford, then quarry-owner; became partner and manager of the Bowling Ironworks in 1850, then one of the directors when the firm became a limited company (1870): Wm. Cudworth, History of Belton and Bowling (1891), pp.212, 217, 219.

appointed by public meeting and presided over by the Mayor. Three basic proposals had been made: to transfer young woolcombers to weaving; to allocate land to the combers which had been purchased by a society to be formed for the purpose; and to obtain assistance from the Government or Emigration Commissioners for emigration. Cowling opined that the Board already had the authority to raise funds for emigration, but that the Board could only send emigrants to the British Colonies (not to the United States), where employment was obtainable and population needed. In the case of free emigration to South Australia, officialdom required emigrants to be mainly agricultural labourers, shepherds, miners, female domestic servants and, to a lesser extent, a few rural mechanics, such as blacksmiths, wheelwrights and carpenters. Not eligible for free passage were reduced tradesmen, workhouse residents and those regularly receiving parish relief. Wool-

combers, therefore, were likely to fail the requirements on two counts: they were not of the occupations listed; and they would be chargeable to the parish before their applications came before the Board. The case of the hand-combers was surely exceptional, it was argued, and something must be done to alleviate their misery. The rates were currently 4s. or 6s. in the pound, and would soon be 20s. Though the combers were not, strictly speaking, 'agricultural labourers', they could soon take on such work in Australia. Those wanting to emigrate should be noted, and a letter sent to the Emigration Commissioners: J.T.Horsfall was soon to open a government emigration office in Bradford.¹ The Board also referred to the Poor Law Amendment Act of 1834² which allowed 'rate-payers in vestry assembled' to raise or borrow a sum not exceeding one-half the average amount of the rates for the previous three years for purposes of emigration.³

1. The emigration office was opened in Berkerend, near the Workhouse, before the end of November (Bradford Observer, 2 Dec. 1847; Halifax Guardian, 4 Dec. 1847).

2. 4 & 5 Will. IV, c.76, sec. lxi.

3. Bradford Observer, 25 Nov. 1847.

Local contemplation of a labyrinthine situation not surprisingly provoked correspondence to the Bradford Observer, which William Byles was doubtless pleased to print. 'Ex-Guardian' observed that the Board of Guardians could do nothing to help the poor to emigrate, except as laid down by the 1834 Act; and this required many previous formalities and the express consent of the Poor Law Commissioners. If any project were promoted to assist emigration, this must ^{be} by the public, not the Guardians. The following week, another correspondent, 'Junius', refuted these contentions. If the Bradford rate-payers at a Vestry Meeting agreed to borrow money for emigration purposes, he argued, and the Board of Guardians seconded their intentions, no other formality was necessary apart from obtaining an order from the Poor Law Commissioners, prescribing the correct regulations for spending the money and fixing the period for repayment

(by instalments over five years). 'Ex-Guardian', however, stuck to his original premise that it was extremely difficult for the Guerdians to assist. The most practical assistance, he emphasised, was for a committee of businessmen to collect and receive subscriptions. The committee could arrange with Emigration Agent Horsfall the cost and means of forwarding the emigrants to their destination. Although a subscription could be avoided by some of the rich, it had the advantage of not creating extra pressure on the many operatives who were already near destitution. Additional rates might well mean that some of those contributing to relief would be turned into recipients of relief.¹

In general terms, the opposing views of the two correspondents were mirrored by subsequent attempts to improve the condition of the hand-comber by removal - and to relieve Bradford of the burden of several thousand unemployed or partially employed workers. At one public meeting in December 1847, it was resolved to make a subscription for immediate

1. Bradford Observer, 25 Nov., 2, 9 Dec. 1847.

relief. But this was only scratching the surface of the problem. Machinery was slowly but surely killing the occupation of hand-combing in which, it was estimated, some 12,000 to 15,000 were engaged. The 'colonisation' of land at home, though possible, was far more difficult than in the colonies. Emigration was the only real answer; and among the working class, it was claimed, there was general feeling in favour of it. The working class must take the initiative to obtain the assistance of the Distress Committee or more fortunate fellows; and those wishing to emigrate should consult the emigration agent in Bradford. At the meeting convened by the Mayor, Robert Milligan, W.E. Forster outlined two of the ways in which emigration could take place: by means of a rate and through the agency of the Emigration Commissioners. Forster, however, was not very optimistic that a great deal of assistance could be forthcoming from the emigration agent because government regulations

were framed, not so much for the advantage of the English poor, but for the colonists by whom the funds were provided. Again, agricultural labourers, miners and mechanics were the types most required, and hand-combers did not fit into these categories.¹ Forster believed that the best plan was for the woolcombers to appoint a committee to consider measures to help themselves and to gain assistance from their fellow townsmen.²

By early 1848, the sub-committee of the Relief Committee appointed to investigate cases of those poor persons wishing to emigrate had received far more applications than it was able to assist. The question had to be considered seriously whether assistance could be given by means of a rate. Similarly, the Bradford Observer revealed that a great many persons, generally with large families and, with one or two exceptions,

1. Nevertheless, it is clear that a few woolcombers, no doubt claiming agricultural skills, had been forwarded by J.T. Horsfall within two weeks of his opening the Bradford government emigration office towards the end of November 1847.
2. Bradford Observer, 16 Dec. 1847.

woolcombers, had applied to the paper for advice on how to obtain assistance to emigrate to the United States or the colonies. All realised that, whilst the emigrant's life was difficult, it could certainly be no worse than remaining in Bradford. Equally, the lot of the Bradford ratepayer was becoming increasingly difficult: in 1847, two rates (the second in October) had been raised in Bradford township amounting to 3s.6d. in the pound, and already by early January, the first rate for 1848 at 3s.0d. in the pound had been imposed, with the prospect of more to follow.¹ The number of unoccupied houses was also rising steadily in Bradford, from about 1,500 in November 1847 to around 2,000 by June 1848.²

A meeting of the Board of Guardians in mid-January 1848 received not only a deputation of test-labourers, representative of several hundreds waiting outside, but also a request from the Relief Committee to advance one month's

1. Bradford Observer, 13 Jan. 1848; Doncaster Gazette, 21 Jan. 1848.
2. Halifax Guardian, 13 Nov. 1847; Doncaster Gazette, 23 Jun. 1848.

allowance which would later be a relief to the Board. All the persons emigrating, it was noted, had been passed by the government agent, J.P. Horsfall, and £2.10s. or £3 was required for a man and two children to go to Australia. The Board's chairman agreed to allow a weekly allowance henceforth to enable the Relief Committee to dispose of those families most likely to prove a permanent burden. One example was cited. Joseph Crowley, a native of Cork, but fifteen years resident in Bradford, was willing to go to the United States or Canada. At the time, he was aged 32, had six children under the age of 12, had had parish relief in the past, and was expected to be a recipient again. The cost of sending Crowley and his family out would be £28, though the Relief Committee was not requesting the full sum, only some assistance. This might be in the form of giving those parties, chargeable to parish funds and desirous of emigrating, one

or two months' advance on relief. The Board agreed to write to the Poor Law Board, Somerset House, explaining the peculiar circumstances of Bradford and especially of its woolcombers, of whom more and more were becoming chargeable because of the steady introduction of the combing machine.^{1.}

The reply of the Poor Law Board to the Bradford Board of Guardians was lofty and less than helpful. The Board did not consider it necessary to levy a specific rate for the payment of expenses incurred in the emigration of paupers. The cost could be defrayed out of the current rate, or the amount might be borrowed and the repayment of the loan charged on the rates over five years. Ratepayers and property-owners in Bradford township must of course consent to this as required by the provisions of the 1834 Act. Nevertheless, the Poor Law Board in London, far removed from the scene of Bradford's distress, "did not think that it was by any means clear that the indiscriminate emigration of woolcombers

1. Bradford Observer, 20 Jan. 1848.

was a measure which it might be advisable to sanction". The Poor Law Board's letter was accompanied by the method of procedure to be followed and the conditions to be observed in the expenditure of money: the six clauses listed were all applicable to the colonies, not to the United States.¹

The state of trade in Bradford continued at a low ebb. In the last week of January, Poor Law expenditure in Bradford township alone was £355. Some combers had left and others were preparing to leave for a "foreign land". Several families, or about 30 individuals, departed for London and Australia.²

In view of the reply received from the Poor Law Board, a public meeting of the ratepayers of Bradford township was held on 11th February to consider the propriety of empowering the Guardians to help parties to emigrate. It was not proposed to levy an express emigration rate, but to use part of the general rate to assist emigrants. Consequently, the ratepayers agreed to empower the Guardians to expend £2,000 of the poor rate for this purpose.

1. Bradford Observer, 27 Jan. 1848.

2. Ibid., 3 Feb. 1848.

There were, however, three basic conditions to be met. The rate would only be used where the intending emigrant was fully settled in the township, and this did not include any with merely an industrial residence of five years.¹ The Poor Law Board's sanction was required in every case of relief by emigration. Lastly, the intending emigrant had to be suitable in the eyes of the Emigration Commissioners.²

The agreement by Bradford ratepayers to allow the Guardians to expend £2,000 of the poor rate for emigration, not unexpectedly, soon ran into difficulties and a meeting held on 18th February at the Albion Hotel, Ivegate, opposed the appropriation of such a sum.³ Moreover, the Guardians had not used any of the £2,000 by the end of the month as there had been no applications for help (probably because many would-be applicants could not claim "full settlement" in the township). Again, the Poor Law Board wrote from Somerset House asking why so large a sum - in the Board's eyes - should be allocated in this way.⁴

1. Many recent arrivals from Ireland were therefore unable to fulfil this requirement.

2. Bradford Observer, 1^o, 17 Feb. 1848.

3. Ibid., 24 Feb. 1848.

4. Ibid., 2 Mar. 1848.

Within Bradford itself, opposition grew against the use of £2,000 for emigration purposes, and at a Vestry meeting of Bradford ratepayers held on 10th March, the opponents of the measure carried the day, such to the chagrin of the Editor of the Bradford Observer.^{1.} Finally, the Poor Law Board refused to sanction the use of the £2,000: when the actual number of intending emigrants was known, it advised, another meeting of the township's Guardians should be held and a resolution passed for raising or borrowing the actual sum required.^{2.}

In the case of those distressed Bradfordians fortunate enough to meet all official requirements for emigration, their passage out to Australia was defrayed by the Government. There was, however, a demand for woolcombers in the United States - or so it was claimed by the Bradford Observer, adding that the Relief Committee had received several applications to go there. The Commissioners had no power beyond the colonies, and of these, Australia was the most preferable.

1. Bradford Observer, 9, 16 Mar. 1848.

2. Ibid., 23 Mar. 1848.

The Board of Guardians, equally, had no power to send emigrants to the United States, though Canada was possible. Even distressed woolcombers with large families wanting to go to America under the promise of work could not be furnished with the wherewithal to go.^{1.}

Many Bradford operatives, including woolcombers, left for America, of course, without official assistance. Some auctioned whatever furniture they still possessed, investing the proceeds in an Atlantic passage. One "rash and thoughtless son" emigrated to America in late 1847 leaving a wife aged 18 and two small children at home in Bradford.^{2.} One wife, Jane Perkinson, aged 29, who lived with her two children and mother in Neb Street, committed suicide after her husband William, a woolcomber, finally left for North America after a period of separation and marital discord.^{3.} Again, many emigrant woolcombers were clearly young and single.

1. Bradford Observer, 17 Feb. 1848.

2. Halifax Guardian, 13, 20 Nov. 1847.

3. Bradford Observer, 5 Mar. 1847.

Even when hand-woolcombers were able to cross the Atlantic without bureaucratic support, their chances of obtaining identical work were uncertain. Their problem on reaching the United States was not so much that combing machines were widely used there but that worsted manufacturing - as opposed to woollen - was still in its relative infancy. Indeed, it was the introduction of modern combing processes that made the American worsted yarn manufacture commercially feasible, and "worsted...did not get a genuine start until about 1850". The Dedham Worsted Company was the first worsted manufacturer on a factory basis, though its development was slow because of an insufficient supply of long combing wool and skilled labour, and because the worsted processes had not yet adopted power. Again, although Samuel Couillard, of Boston, had patented an automatic combing machine in 1835 and 1836, and the comb was later manufactured by the New England Worsted

Company, first at Lowell, then at Saxonville, the machine was not used to comb carpet wools until after 1865. Like its earlier counterparts in England, the machine was unsatisfactory for combing fine wools. Consequently the hand-woolcomber from Bradford might find his skills of some use in New England and elsewhere until almost 1860.^{1.}

Writing from Albany County, New York State, in early 1848, H.B. Waterhouse summarized the situation in the American textile-manufacturing trade which awaited any Bradford comber who hoped to obtain work there in his own skills. Waterhouse had been a woolcomber himself for a considerable period in Bradford before emigrating to the United States some three years earlier. As he claimed to have visited every worsted factory but one in North America, he was in a good position to report on the number of combers already employed, their wages and prospects. The outlook was not rosy. About 40 combers were employed at Ballard Vale, Mass.; and

1. Von Bergen & Mauersberger, American Wool Handbook, pp.16-18; Bradford Observer, 2 Aug. 1838.

whilst Waterhouse thought that this was the best place for them in the United States, he had no knowledge of further openings there - all the places were filled and many were awaiting vacancies. At Chelmsford, near Lowell, upwards of 20 combers were once employed, but now there were none and the factory was likely to close. No more combers were required at Providence, R.I., where six combers were at work. In Philadelphia and its suburbs, about 30 combers had found work, but this was now only spasmodic.

At Cohoes, N.Y., the location of Waterhouse, combers had been employed for the first time about twelve months earlier. Combers had been advertised for and encouraging letters sent to Bradford. One gentleman in Manchester Road, Bradford, had encouraged about 40 combers to go, but their would-be employer denied sending for them. Unemployment faced the large number who had arrived at Cohoes in December 1847 and January 1848: they had no prospects for some time and no money either to keep themselves or move elsewhere. The factory there was

also likely to close, in which case the 60 or so woolcombers would be in a difficult situation if unable to obtain work in other trades. When fully occupied, combers in America were earning on average about \$1 a week. Waterhouse was also much concerned about these combers coming from Bradford. At home they had been living in terrible circumstances. Some had sold furniture and clothing in order to emigrate. Others had left their families in distress, but in the hope of good employment had expected an early reunion in America. They had then experienced the trials of a winter passage; and many had contracted ship-fever. Indeed, one young man named Whittam from the Manchester Road area had died within eight days of arriving in Cohoes, and the same fate had befallen John Coal. Two or three others were critically ill in the Albany (N.Y.) fever hospital.

Waterhouse concluded: "Cotton factories and woollen factories are everywhere in operation, and very many are in the course of erection.

The worsted business does not make the progress I would like, and what is the cause I cannot tell. I doubt not, but if some enterprising manufacturers were to come to this place, and make some fancy worsted goods, but immense money might be made". In short, "I would encourage no operatives to come unless they come willing to work at anything they can get, be strictly sober and industrious, they may then get along better than in Bradford."^{1.}

Similar sentiments were expressed by the Rev. John Winterbotham, who, as already noted, had emigrated to Canada in mid-1842.^{2.} Resuming his correspondence, he repeated his contention that 40 or 50 Bradford families could settle in the Brantford and Woodstock areas, but that sobriety and hard work were essentials, as was adaptability in work. Additionally: "Those who have been somewhat accustomed to outdoor labour, would do the best, and they would never need to fear being in want".^{3.} Unfortunately, "out-door labour" was hardly the characteristic of the Bradford woolcomber's life, when employed! The hardships

1. H.B. Waterhouse, Cohoes, Albany Co., N.Y., to Joshua Pollard, Bradford, 4 Feb. 1848 (in Bradford Observer, 2 Mar. 1848).
2. Bradford Observer, 21, 28 Jul., 24 Nov. 1842, 26 Jan., 29 Jun. 1843; Leeds Mercury, 23, 30 Jul. 1842.
3. Rev. J. Winterbotham, Brantford, U.C., to Bradford Observer, 19 Jan. 1848 (extract in Bradford Observer, 2 Mar. 1848).

to be endured by the emigrant were also noted by Dr. Scoresby, formerly Vicar of Bradford, who, on his American visit, recorded the existence of the British Protective Emigrant Society in New York, for "protecting poor and friendless emigrants from fraud and imposition, and for finding destitute persons employment".^{1.}

Well intentioned as these correspondents were - and the Rev. Winterbotham wrote a sequel to his letter² - they did little to reveal a clear-cut solution to the plight of the Bradford woolcombers. Some were undoubtedly able to make their way to America and Australis during the spring of 1848, as witness the America-bound Bradford passengers aboard the ill-fated Omega, including the fortunate George Flinn,^{3.} and the "ex-distressed woolcomber", Allen Marson,

1. Rev. Dr. Scoresby, Washington, D.C., to Bradford Observer, 9 Feb. 1848 (extract in Bradford Observer, 2 Mar. 1848).
2. Rev. J. Winterbotham, Brentford, U.C., to Bradford Observer, 22 Jan. 1848 (extract in Bradford Observer, 23 Mar. 1848).
3. Bradford Observer, 13 Apr. 1848.

about to sail with his family for Australia.^{1.}

For the overwhelming majority remaining in Bradford, however, the situation worsened appreciably during the first half of 1848. By March, the Relief Committee had expended a large proportion of the public subscription of nearly £2,000, at the same time as the relieving officers in Bradford township alone were distributing relief at the rate of £300 a week.^{2.} The position was much the same in May.^{3.} At the end of March, the Poor Law Guardians for the township were relieving 4,636 able-bodied men and women at a cost of £235.6s.11d. per week, and at the beginning of June, 5,457 at £273.10s.6d. About one in ten of the population in the Union was in receipt of parish relief. This was only part of the story, for, including those not having a 'legal settlement' in the township, and those too proud and independent to seek public charity, nearly one in five was in

1. Allan Marson, "Emigrant Ship, the Duke of Roxburgh, Plymouth Sound", to Wm. Byles, Bradford Observer, 10 Apr. 1848 (in Bradford Observer, 20 Apr. 1848).

2. Bradford Observer, 16 Mar. 1848.

3. Ibid., 11 May 1848.

a state of pauperism.¹ In the borough of Bradford, in June, 13,722 persons were receiving parochial relief and 6,800 receiving sustenance from bread and soup kitchens. Not surprisingly, the poor rates had risen considerably: in 1845-46, £5,018 had been collected, in 1846-47, £16,100, and in 1847 - late May (only) 1848, £31,629.²

The depths to which many woolcombers had sunk is illustrated by the inquest on Michael Mortimer, aged 31, one of their number, held at the Fox and Hounds Inn, North Wing, in May 1848. Before his death from "premature decrepitude ... induced, apparently, by the want of proper sustenance", Mortimer had lived with his wife and four children in a two-roomed cottage in Wapping, an area known for its high density of Irish immigrants.³ One of the two rooms was

1. Bradford Observer, 22 Jun. 1848.

2. Doncaster Gazette, 23 Jun. 1848.

3. C. Richardson, "Irish Settlement in Mid-Nineteenth Century Bradford", 47. By 1851, large numbers of Irish families lived in Lily Row, Northbrook Street, Wapping Road, Wapping Street and Wild Bear Street - all in Wapping.

used as a combing workshop; the other provided accommodation for living, eating and sleeping for six people. As a result of ill-health, he received parochial relief of 5s.0d a week, latterly augmented to 7s.0d., and this would probably be paid henceforth to his dependants. The inquest jury's report is revealing:

"A few minutes' walk [from the Fox and Hounds] brought us to the residence of the deceased, a cottage, reached by half-a-dozen steps, and situated in one of the streets called Wapping. Though high upon a steep incline, the dirt and bad drainage in those parts were strikingly apparent. The 'compound of villainous smells' was almost intolerable; and the dilapidated and dirty dwellings sufficiently betokened the poverty of the dwellings in that region. Groups of poverty-stricken men and women, apparently woolcombers, presented themselves at the chamber-windows, at street corners, and at doorways, as the jury proceeded through the streets, and, as they passed one of these groups, a female inquired - 'What, then, you are come to see pination'".^{1.}

1. Bradford Observer, 18 May 1848.

Some woolcombers and operatives managed to escape these appalling conditions before hope was totally lost, often at the expense of leaving behind distressed families. David Smith, for example, wrote from America (letter unpaid) requesting the Board of Guardians to expend £25 for his wife and family to join him, his shopmates having subscribed £10. The Board declared that it had no authority to do so.¹ Ann, the wife of Thomas Wood, woolcomber, who had recently emigrated to America, died in the Bradford poor-house in November 1848.²

In order to provide some occupation for a proportion of unemployed combers in Bradford, land was requisitioned as an experiment for model-farming. By this, it was claimed that moral stamina and self-reliance would be encouraged and some knowledge

1. Bradford Observer, 13 Jul. 1848.

2. Ibid., 7 Dec. 1848.

of husbandry gained before possible emigration. Moreover, because of this apprenticeship, the combers would be eligible for a free passage to Australia and other colonies when otherwise they would be rejected by the Emigration Commissioners. By August, some 50 men were engaged in preparing land for sowing and planting at Bradford Moor.^{1.}

During the summer of 1848, the question of rate-assisted emigration again arose. When £2,000^{2.} was voted by the pro-emigration group of Bradford township ratepayers in February to enable distressed combers and others to leave,^{3.} the vote was of no value because it applied only to those with settlement in the township. Only two persons in this category applied for such assistance, and, also because of other ratepayers' opposition, the matter was not pressed. An anomaly was to be found in giving those with five years' residence

1. Bradford Observer, 6 Jul., 10 Aug. 1848.

2. Not to be confused with the £2,000 raised by the Bradford Relief Committee.

3. Bradford Observer, 17 Feb. 1848.

a claim for relief and in yet denying them a share of that part of the rates devoted to emigration purposes. A change in the law now gave those persons with five years' residence the same privilege as the settled poor of the parish when they wished to emigrate. Perhaps Bradford township, the Bradford Observer suggested, might think it proper to renew its grant for emigration, for many persons earlier denied rate-assisted emigration now appeared to be eligible.^{1*}

The case-history of the Trigg family of Bradford illustrates the difficulties facing woolcombers and other operatives who sought rate-assisted emigration. Mr. Trigg, a woolcomber, his wife and eight children - seven sons and one daughter - lived in Bunker's Hill, North Wing (Wapping). The eldest son was learning his father's skills, two of the boys were in the mill and the others were too young to work, except the girl who suffered from poor health. The family had received

1. Bradford Observer, 10 Aug. 1843.

no parish relief for 19 years, when, because of the father's illness, the family had become chargeable for a period of three weeks.

A few years earlier, Mr. Trigg's brother-in-law had left the employ of Messrs. Garnett in Bradford to emigrate to the United States and he now owned a farm in Wisconsin. When the brother-in-law heard of the distress being experienced by woolcombers, he sent £20 to the Triggs and an offer of work for father and sons. Both Mr. and Mrs. Trigg were keen to leave for America, but £20 was less than one-half of the sum needed to convey ten persons to Wisconsin. Two choices were therefore open to the Triggs - apart from the third of staying in Bradford. Part of the family, say, the father and two eldest sons, could go, leaving Mrs. Trigg and the younger children to fend for themselves until money was forthcoming from America. Alternatively, the required amount, probably about another £30, would have to be borrowed so that the whole family could emigrate at the same time. If the first alternative were chosen, the mother and six children would become chargeable at once to the poor rates and would receive 6s.0d. or 7s.0d a week. Under the most favourable circumstances,

at least six months would elapse before Mr. Trigg could make any remittance, and even this would be insufficient to convey the rest of the family, who would be obliged to apply for assistance from the relieving officer. He, "following the precedent already established in similar cases", would perhaps advance 6s.0d. or 7s.0d. to eke out their passage money. Bradford township would, therefore, expend at least £15 before March 1849.

After twenty years of marriage, however, the Triggs declined to accept any period of separation. They applied to the Bradford Relief Committee who were unable to help because their funds were exhausted, though the Committee's secretary, William Byles (Editor of the Bradford Observer) suggested that, if sufficient sureties were forthcoming, the Guardians might lend £15 or £20. The sureties were found and Byles wrote to the Board requesting consideration of the case. The letter was read to the Board, a great argument ensued, but the case was never considered. Byles claimed that similar cases had been helped in the past and

that the Board had refused to help on this occasion because of "personal pique" against him. If the case had been submitted to the central Board in the correct way, Byles further claimed, they would have authorised the Guardians to assist. Help was forthcoming, however, from a number of non-official sources. The publication of the family's dilemma produced help for Mrs. Trigg, "who waited upon many of the more opulent inhabitants". Joshua Pollard sent £1 from Blackpool.¹ In all, the Trigg family received £15 in contributions, together with gifts of clothing, books and food.

Consequently, the Trigg family were able to leave Bradford on 31st August 1848 and take passage at Liverpool the following day for New Orleans, arriving there on 18th October after an uneventful voyage. The whole family had reached that point for £31, including provisions,

1. Joshua Pollard, Dickson's Hotel, Blackpool, to Wm. Byles, Bradford, 25 Aug. 1848.

and although there then remained only £5, there is no evidence to suggest that the family did not cover the last 1,400 miles to their destination in Wisconsin.^{1.}

Self-help, or at least non-official assistance, had permitted the Triggs to sail for America. Another local attempt to establish Bradford emigrants on American soil was contained in the plans of the Bradford Cooperative Emigration Society, whose formation was announced by Jonathan Rogers of No. 30, Park Lane, Little Horton, in a letter dated 25th April 1849 and published in The People.^{2.} Also in April, a number of readers of The People met to form an association for emigration to America and agreed to outline their plans to Joseph Barker. The Bradford Society hoped to enrol some 50 members by the Whitsuntide, each contributing 'one dollar'. Barker was then to receive the total amount as a deposit on land he was to select on behalf of the Society when he visited America during the summer. Contributions, unspecified, would then be paid weekly or monthly; and when a sufficient amount had been collected, cultivation would be started

1. Bradford Observer, 24, 31 Aug., 16 Nov. 1848.

2. The People, I, No. 51 (cited by M. Brook, "Joseph Barker and The People...", 363).

by several members of the Society. Other members would be enabled to emigrate by continuing contributions and by the proceeds from improved land in America. When the land was completely paid for, acreage would be distributed fairly by lots. In response, Barker merely stated that he did not wish to undertake sole responsibility for selecting the land in America and requested that he be accompanied by some nominee of the Society.

Some weeks later, the Society received further publicity in The People.¹ The preamble of the article was that it was obvious that great distress was prevalent in Bradford, and that the cause of this was of less importance than the remedy. The Potters' Emigration Society, apparently in decline, was not recommended, as it was founded on a "terry lottery-like plan".²

1. The People, II, No. 55 (cited by H. Brook, 364).
2. Several roughly contemporary references to the Potters' Emigration Society occur in the Bradford Observer (23 Nov. 1848, 22 Feb., 23 Aug. 1849, for example) and in many other Yorkshire newspapers.

By contrast, Mann's Emigrant's Complete Guide suggested a far better scheme for emigration: 200 members from the same town, each paying 6d. a week, could be settled on the land in six years. By doubling the contribution, the Bradford Society hoped to achieve the same object in three years. Included in the Society's rules were the following: members were to be admitted by ballot; members and families would be located on a jointly-run American farm; no drunkards or profligates were to be members; the contribution was to be 1s0d. per week, and branches might be formed outside Bradford; officials of the Society would receive no pay; monthly meetings of the whole Society would consider and resolve important matters; the Society would select the first emigration party as soon as sufficient subscriptions had been raised, and thereafter, parties would be chosen by lot. The Bradford Savings Bank would hold the Society's deposits in the name of Joseph Barker; and communications were to be sent to "Mr. Greenwood, Bookseller", School Street, Manchester Road, Bradford.^{1.}

1. N. Brook, 364-65.

Joseph Barker agreed to become the Society's agent in America. Writing to the Secretary of the "Bradford or Little Horton Emigration Society", 6th June 1849, Barker indicated that he would buy a small estate near his intended place of settlement, or an estate combining his and the Society's land. £8 had been received by Barker as a deposit, and he sailed from Liverpool, 23rd June.¹

The Bradford Cooperative Emigration Society,² noting its establishment in June 1849, then announced some modification to its former communitarian aims.³ The first part of the settlement's work would be cooperative, but then the property was to be distributed after five years, when hopefully, some members would establish a permanent community. The Bradford Observer, not

1. The People, 11, Nos. 60, 62 (cited by W. Brook, 365).
2. Secretary, Jonathan Rogers; Treasurer, Joseph Barker; Bankers, East Morley and Bradford Savings Bank.
3. The People, 11, No. 62 (cited by W. Brook, 365).

surprisingly, was "much pleased" with the aims of the Society to purchase a farm in Wisconsin (it was revealed) and "to send out a first batch of settlers in April [1850]".¹

The latter months of the Society, however, are vague and uncertain. Barker promised to report to the Society when he had been able to see the country, but his observations never seem to have been forthcoming, though there is reference to a Joseph Bromley, a member of the Emigration Society, having been deceived into buying worthless land in Virginia.²

Later, The People announced that two members had gone to look at land in America, that one person had decided upon land in Indiana, that 960 acres had been pre-empted by "Mr. Greenwood", and that seven families were working the land.³ The last report in The People suggests that although W. Greenwood

1. Bredford Observer, 6 Sep. 1849.

2. The People, 11, Nos. 68, 77, 89 (cited by M. Brook, 366).

3. Ibid., 11, No. 93; 111, Nos. 107, 133-34.

and his party pre-empted 1,120 acres, had it surveyed and partly laid out for a settlement called Bradford, the plan may or may not have come to fruition.^{1.} A statement of account to 9th February 1850 reveals that although Bradford was the birthplace of the Society, its membership was drawn from at least twenty other named places ranging from Newcastle upon Tyne and Sunderland in the north to London in the south.^{2.}

Even if the Bradford Cooperative Emigration Society had been successful in sending out its full complement of, say, 200 members, it is most unlikely that the distressed class of hand-woolcombers would have benefited more than minimally by the Society's operations. Even if all 200 had been woolcombers, and all had sailed for America, their removal would have counted only slightly against the thousands of that class partially employed or totally out of work in 1849-50. In any case, a regular contribution of 1s.0d. a week was almost certainly beyond the ability of most hand-combers to pay.

During 1849, a relative improvement occurred in the Bradford trade. Indeed, the Bradford

1. The People, 111, Nos. 151-52.

2. Ibid., 11, Nos. 77, 85, 94.

Observer recommended workers to take advantage of "the present high tide of trade" to provide themselves with the wherewithal to emigrate before the almost inevitable return of "bad times".^{1.} It should be remembered, however, that woolcombers as a group did not share fully in the improvement in trade. Woolcombers' weekly wages had declined from about 16s. for men and 7s. for boys in 1833 to around 7s. in the years 1848-51. When fully occupied, a woolcomber and his wife received about 7s. for combing 40lb. of botany^{2.} in 1848, though the general price was about 7s. a person for 20lb. of wool, perhaps one week's work. By comparison, the hand-weaver's wage in 1850

1. Bradford Observer, 6 Sep. 1849.
2. Botany: fine merino wool imported from Australia (Botany Bay). Australian wool was introduced to England in 1808 by Samuel Marsden, who was raised in the West Riding textile villages of Farsley, Horsforth and Rawdon. Except in the West Country, the wool was used only slowly in England. John Wood (1793-1871) was one of the first Bradfordians to mix British and Australian wool in 1824, but the imported wool was "so short and required so much skill in the hand comb to prepare it as to prevent its extensive use". In 1828, however, Wood, one of the largest worsted combers and spinners in Bradford (and industrial reformer), obtained larger quantities in London; and improved techniques allowed him to use the Australian wool in fine yarns (J.T. Ward, "Two Pioneers in Industrial Reform", B.T.S.J. (1963-64), 33-34, 37, citing Wade Hustwick, "Two Pioneers of Australian Wool", B.T.S.J. (1959-60), and Bradford Observer Budget, 21 Apr. 1906).

was about 4s.6d., a women millworker's about 6s., an excavator's about 10s., and a mechanic's 18s. - 22s. a week.¹ For those without work, however - and the woolcomber, increasingly subject to the incursion of the machine-comb, was one of the most likely to be unemployed - the position of pauper was the least enviable. In 1848, poor relief was about 2d. per head per day, and in 1851, about 3d.²

In October 1849, the Bradford Board of Guardians met to consider a circular letter from the Poor Law Board relating mainly to the duty of overseers and others in the levying, collecting and recovery of rates. The question was asked as to whether money could be expended in assisting parties to emigrate, and the answer was obviously in the affirmative. In the case of this applying to parties wanting to emigrate to the United States, the answer was less certain, though it was

1. C. Richardson, "Irish Settlement in Mid-Nineteenth Century Bradford", 54.
2. Bradford Observer, 11 May 1848, 15 May 1851.

thought that it applied to any part of the world, but with emphasis still on the British colonies. In any event, the consent of the Poor Law Board must be gained first - and the Board might object to the United States. Two applications to the Board of Guardians were cited: both families were chargesble to the town, both wanted to go to the United States, and a very small sum would allow them to do so. If they stayed in Bradford, they were likely to be permanent burdens upon the parish. In each case, the father of the family was already in America, but needed assistance to get his family out. The Guardians concluded, however, that as the father was absent, the Poor Law Board would object to money being spent in this way, for it would probably encourage husbands to desert their families in the hope that their dependants would be later conveyed abroad at the town's expense. On the one hand, families would remain a

permanent burden, and on the other, the Board's permission would lead to abuse. Even after money had been granted by the town's meeting, the Board had refused its consent on earlier occasions.^{1.}

The first years of the 1850s appear to have provided generally steady employment for many Bradford textile operatives. The handcomber, though he shared in this time of relative prosperity and was often fully employed, found that, in the face of increasingly relentless pressure from the power-comb, his greater efforts achieved less rather than more recompense. This transitional period between hand and power meant that whilst the latter was able to absorb a small proportion of hand-combers, the outlook was indeed gloomy for the rest. Ironically, the power-comb which removed an industrial bottle-neck, increased the output and reduced the cost of worsted yarn, and provided more employment in other branches of the trade,

1. Bradford Observer, 1 Nov. 1849.

produced only destructive effects for the hand-comber. In the finer qualities of wool, power was able to obtain results unequalled by hand, and (by about 1848-49) reduced indirectly "even the price of combing these wools for which the machines are not[yet]adepted".^{1.}

In early 1854, yet another public meeting was held to consider the woolcombers' impoverished state, aggravated by the inclemency of the weather and the high price of provisions. Optimistically, it was hoped to obviate once and for all recurring appeals for assistance from that class. Yet again, emigration was suggested as a means of providing permanent relief. Though it was not fully desirable that woolcombers, if able-bodied and employable in Britain, should emigrate, it would be far better for individuals to leave by a well

1. Bradford Observer, 1 Feb. 1849, 26 Jan. 1854.

organised system of emigration than to languish at home. It was suggested that older woolcombers would be better employed at home, the younger elsewhere. Surely where parties were eligible for emigration, some assistance could be given by Bradfordians, aided and guided by the Government.^{1.}

One operative woolcomber, George White,^{2.} painted a gloomy picture: when fully in work, a comber's wages might be 10s. a week, but many men were unemployed and hundreds were actually starving. Emigration was far preferable to starvation. White, accepting that handcombing was an obsolescent trade, proposed a six-point plan encompassing the suggestions of the Woolcombers' Committee. Emigration for the able-bodied should be planned on a comprehensive basis. A committee should be appointed at a public meeting empowered to ascertain the amount of home employment available for those able and

1. Bradford Observer, 26 Jan. 1854.

2. This may have been the George White, born in Bradford in 1817, 'physical-force' hertist, lieutenant to Feargus O'Connor, and reporter for the Northern Star. According to R. Boston, British Chartist in America, pp.25, 96, however, White left for America in 1850, possibly as a Government 'remittance man', was later reported in Kansas City and California, and returned to Leeds in the 1860s. This may have been his second return to Yorkshire.

willing to accept. A publicly authorised deputation, accompanied by the M.P.s for the borough, Milligan and Wickham, should meet the Government Emigration Commissioners. A rate should be levied to assist any grant or aid rendered by the Government. A public subscription should be solicited from the benevolent to effect the above objects and to relieve extreme cases. Lastly, the whole management should be placed in the hands of a publicly appointed committee, with the Mayor, magistrates and clergymen of all denominations as ex-officio members.^{1.}

The Rev. W.F. Black reiterated that, although some doubt had been expressed about whether a rate was leviable for emigration, this was easy to achieve. A meeting of ratepayers was first to be summoned for the purpose; and this meeting would have the right to levy a rate not greater than one-half the average rate levied during each of the previous three years. If the rate had averaged 1s.8d. in the pound - as in Bradford's case - a rate for emigration could be levied at 10d. in the pound (equal to a sum of £10,000). Ratepayers would probably agree to this sum being raised and assistance could then be sought from H.M.

1. Bradford Observer, 26 Jan. 1854.

Commissioners. Young families would be given preference, and Australia and the Cape of Good Hope would be the most likely destinations for woolcombers. A sum of £10,000 would allow for the emigration of about 300 families, each family consisting of a man, his wife and one or two children.^{1*}

A meeting of the Woolcombers' Committee at the end of January (1854), attended by W.E. Forster, represented "appalling distress" amongst many combers; and it was agreed that a sub-committee be appointed to register those who had appeared before them in order to effect action by relief or aid in emigration. Upon request, the Board of Guardians agreed to relax the law as far as possible where partially employed combers were concerned. One protagonist of the combers' cause, the Rev. Jonathan Glyde, was elected at the 1854 election of Guardians.^{2*} The

1. Bradford Observer, 26 Jan. 1854.
2. Rev. Jonathan Glyde: born Devon, 1 Jan. 1808; died Bradford, 9 Dec. 1854; Pastor of Horton Lane Chapel, Bradford, 1835-54; Rev. G.W. Conder, Memoir and Remains of the late Rev. Jonathan Glyde (London, 1858) pp.126, 167-68, 171.

sub-committee registered 1304 combers in Bradford, Bowling and Menningham by early February: 476 were unemployed, 539 had some work and 289 were in full work. The figures, however, did not include an analysis for Horton. Although the Vicar of Bradford considered that, as the registration was incomplete, the question of emigration was premature, the Rev. Black emphasised that ratepayers should levy a rate for emigration, albeit at the modified rate of 6d. in the pound. The motion was carried with the rider urging young men to enter other types of textile employment.¹

Six weeks elapsed and the relief committee for distressed woolcombers met again under the chairmanship of Titus (later Sir Titus) Salt. Little if any progress was reported, for the reasons all too evident in 1848. Little cooperation had been forthcoming from employers in the neighbourhood. Enquiries had been made about the practicability of a rate being levied to assist emigration, but such a rate could only be applied to aid the emigration of those having legal settlement as natives of the township, and not for those having merely a settlement of

1. Bradford Observer, 2, 9 Feb. 1854.

irremovability. The Bradford Observer, however, believed that though this was once true, settlement by industrial residence was now a qualification. By early March, the register of combers in North, South, East and West Wards, Manningham, Bowling, Great and Little Horton, revealed a total of 2,577: 860 were unemployed, 1017 were partially employed and 700 were in full work. Of these totals, however, 942 received less than 2s. per head per week in the family.¹

One Bradford comber was bitter in his condemnation of "the wealthier classes". "The poverty of the mass of us", he wrote to the Bradford Observer, has been urged upon the benevolent for a long time with very little success; the wealthier classes of Bradford have not done their duty, neither do we expect they ever will. They can do without us (and we know it) and they will not provide us with the means of bettering our condition in another land, where labour is in demand. We are therefore starving in the midst of plenty. We live in putrid and unwholesome cellars, in a town that is second to none

1. Bradford Observer, 9, 16 Mar. 1854.

in the splendour of its warehouses. We have to stay in our dens on a Sunday because we have not decent clothing to walk in to breathe the pure air of heaven". This comber's expenditure for himself, wife and four children over a period of two weeks in the summer of 1854 is illuminating: 1 $\frac{1}{2}$ lb. flour (2s.9 $\frac{1}{2}$ d.), 62 lb. potatoes (2s.1 $\frac{1}{2}$ d.), 1 $\frac{1}{2}$ lb. butter (1s.5 $\frac{1}{2}$ d.), 1 $\frac{1}{2}$ lb. sugar (8 $\frac{1}{2}$ d.), 1 $\frac{1}{2}$ lb. meat (10d.), 1 lb. bacon (7d.), 1 oz. coffee (1d.), $\frac{1}{2}$ oz. tea (1 $\frac{1}{2}$ d.), herrings (2d.), cheese (1d.), plums (1d.), milk (1 $\frac{1}{2}$ d.), water cress (1d.), yeast (1d.), turnips ($\frac{1}{2}$ d.), salt ($\frac{1}{2}$ d.) "spice for children" (1d.), water (3d.),² ginger, blacking, sand, pottery (2d.), matches ($\frac{1}{2}$ d.), soap (2 $\frac{1}{2}$ d.), 2 cwt. coal (9d.), charcoal (1s.0 $\frac{1}{2}$ d.) and two pairs of clogs (1s.4d.). The comber's weekly rent of 1s.9d. made up the overall two weeks' expenditure to 16s.9 $\frac{1}{2}$ d.³

Despite difficulties, discouragements and reproaches, and only moderate cooperation from many large employers and financial aid from the wealthy, the Woolcombers' Aid Committee (later, Society or Association) combined "the functions of a charitable body with those of an employment agency".⁴ Their efforts were not

1. 'spice' = sweets.
2. Water was presumably bought from the water-carrier.
3. Bradford Observer, 31 Aug. 1854.
4. E.M. Sigsworth, "An episode in wool combing", 114.

without success, and by April 1854, the Committee had been instrumental in transferring over a hundred combers from their previous work to more profitable employment.¹ Some were employed locally in Peel Park; and by July, 25 men were found work in Middlesbrough.² Apart from Middlesbrough Iron Works, letters were sent to railway companies, the Liverpool and Manchester Police, and others, requesting vacancies to be notified. Advertisements were placed in the press. When openings occurred, combers and perhaps their families were given a few shillings to take them to their new place of work.³

In response to representations made by Robert Milligan, the Bradford M.P., for a number of woolcombers to go to Australia, the

1. Bradford Observer, 27 Apr. 1854.

2. Ibid., 6 Jul. 1854.

3. E.M. Sigsworth, "An episode in wool combing", 115.

Emigration Commissioners indicated in May 1856 that they would not object to granting passages to Moreton Bay, a pastoral district of New South Wales, for about 200 or 300 of the most eligible of the woolcombers, including wives and children. Within a few days, over 500 combers applied to go.¹ The "generous cooperation" of wealthy Bradfordians was now requested, and Thomas J. Emsell, Secretary of the Woolcombers' Aid Society, was "deputed to wait upon the principal inhabitants to solicit donations". Each emigrant comber was required to pay a fee of £1 (adult) or 10s. (for children under the age of 14); and each was required to possess a certain outfit costing an average of 30s. per head. Of all the woolcombers who applied, some 113 (90 of them living in Bradford and suburbs) were selected for approval. £140 was needed for their outfitting, and private subscription, it was hoped, would cover all but £40 of the sum required.¹ The local Board of Guardians was

1. Bradford Observer, 8, 22 May 1856; Halifax Courier, 10 May 1856; Halifax Guardian, 10 May 1856.
2. Bradford Observer, 12 Jun. 1856.

approached, but as on earlier occasions, it was claimed that their hands were tied except to provide relief in individual cases. Thereupon, Emsell presented to the Board four specific cases requesting the assistance of 30s. each, but the Board declined to help as the applicants were all ineligible, having no settlement in Bradford.¹ Nevertheless, thanks to the efforts of Milligen and Emsell, some 73 persons finally left the Midland Station, Bradford, on 22nd July 1856, on the first stage of their journey to Australia.² In time, most of the emigrants seem to have prospered.³

Truly desperate conditions for the combers during the winter of 1857-58 brought renewed appeals for assisted passages to Australia, but with little success. In May 1858, the agent of the South Australia government wrote to T.J. Emsell indicating that his administration was keen to help combers and that he would be visiting Bradford shortly to make a selection.

1. Bradford Observer, 19, 26 Jun., 3 Jul. 1856.

2. Ibid., 17, 24 Jul. 1856.

3. See letter, David and M.A. Fox, West Haitland, 4 Nov. 1857 (in Bradford Observer, 28 Jan. 1858).

In the event, his terms of reference seem to have been inappropriate because female domestic servants were the most required, though it was argued, somewhat desperately, that combbers with unmarried daughters would be suitable. The agent (Mr. Moorhouse) met 60 or 70 of the most likely combbers, but found only one to be eligible: unskilled labourers were not required as the Irish, who had paid their own expenses or had had them paid by friends, were already performing that work. During the summer, T.J. Empsell advertised the facilities offered by the Emigration Commissioners for the free emigration of "respectable young women" as domestic servants. For the combbers themselves, however, little assistance was forthcoming from Australia. Combbers claimed that with the recent revival in trade there had been a "fair amount" of hand-combing, but that the price paid was "never so miserably low as at present". In August 1859, 492 Bradford combbers signed a petition, later presented to the South Australian Legislative Council and House of Assembly, praying that immigration regulations be relaxed to allow them to enter, but no action was taken.^{1.}

1. Bradford Observer, 3, 24 Dec. 1857, 13, 27 May, 15 Jul., 19 Aug. 1858, 11 Aug. 1859.

Although much publicity was given to possible openings in Australia, the Woolcombers' Aid Society, in particular Thomas Epsall, did sterling work in obtaining employment for destitute combers, especially in Middlesbrough,¹ and in supporting requests for emigration to America. The testimonial given to one such comber, enabling him to solicit subscriptions for emigration, is illustrative:

"The Bearer of this, Thomas Cavenagh, belongs to that unfortunate Class of Operatives - the Woolcombers. He has worked for Messrs. Wood and Walkers, Messrs. Waud, Messrs. W. Rouse & Co., & most recently for Messrs. J. & W. Gernett. In all these places, he conducted himself with credit & can obtain from the 'Takers-in' a character for industry, sobriety & skill. He has been out of work since the 11th of March last, & has in vain sought employment since that date. He has tried to acquire the trade of a Painter, but has failed through the slackness which pervades that branch of business. His only resource is Emigration. His brother was assisted by the

1. See letters, e.g. from John Butt, George Hopton, Middlesbrough: in Epsall Collection, Bradford Central Library (35/16/1).

Relief Committee in 1847, & went out to the United States, taking 6 children. There he has done well; & he invites his brother to join him. The difficulty is one of money. If he can collect Six Pounds, or Eight Pounds, it would with what he can get from the Sale of his Furniture enable him to get to New York.

A small donation from 20 or 30 persons would thus in all human probability, rescue a young man from the jaws of Peuperism, & enable him to maintain his family in credit and independence.

The following sums are given for the object specified in the foregoing paragraph & the money received will be paid into the hands of

Thomas J. Emsell [signature]".

Then followed a list of 27 donators and the sums donated in varying handwriting. The largest subscription came from Henry Forbes and G. Addison (£1 each), and William Garnett, Titus Salt and Christopher Waud & Co. (10s. each). The Woolcombers' Aid Committee itself gave £2.10s.¹.

1. With the Mayor of Bradford, Henry Brown, acting as treasurer in 1857, the Woolcombers' Emigration Society accepted donations or weekly subscriptions solely for emigration purposes (Halifax Courier, 18 Apr. 1857).

and the sale of Thomas Cavenagh's furniture raised a further £4.7s.2d. In all, the testimonial indicates a provision of £13.2s.8d. for this comber's emigration.^{1.}

No doubt Thomas Empsell in his capacity as secretary also received a number of begging-letters for assistance to emigrate from combers and non-combers alike. The following from John Chartres in July 1857 is one instance:

"...Through the kind assistance of a few friends I intend leaving this country next Thursday for Canada to be near my only Son who went out at Easter & his now earning his living on the largest farm in Manitoba.

I have made no money since I was put out of business & my wife cruelly turned me out after getting a comfortable home together. I never thought the wife of 20 years could have done what she did. I never treated her badly in no respect but my unfortunate position turned her affections.

My son has writing me he wants money and Clothing to fit him for the Winter & as I stated it is entirely with the kind help of a

1. Empsell Collection (35/16/1).

few friends that I am enabled to go out to find a situation of some kind & I am not quite prepared to risk any loss of time in seeking employment out there with what has been subscribed for me and I hope you will not be offended at my writing you for any assistance you can help me in till I succeed in getting with the letters of references & introduction to different houses where I intend making an application for a situation without delay.

Knowing you have much to do for your family that are still young & require help, I do not plead for more...than you can help me with untill I get settled & then all you see fit to help me with I will faithfully return to you. I can assure you it has been a struggle up to present time & since my wife and I parted to get even my own living. Waiting your kind answer....¹

1. John Chertres, Shore Cottage, Shore Head, Huddersfield, to T.J. Emsall (Manchester Rd., Bradford), 8 Jul. 1857 (Emsall Collection: 35/16/1).

During July 1857, a series of advertisements and comments in the Bradford Observer drew attention to the plight of one comber's family in the town, a situation somewhat different from that of the Triggs, of Bunker's Hill, North Wing, Wapping, in 1848.¹ Some time in mid-1856, the father of the family, unable any longer to support his wife and eight children, emigrated to the United States. For a time, the family struggled to maintain themselves, but upon the arrival of the ninth child, were obliged to apply for parish relief. The father, now "doing well", made a few small remittances and in (probably) May 1857, he was written to with the suggestion that if he could send a fair proportion of the family's passage money, the rest might be subscribed "by some friends who had become interested in their behalf". As a measure of good faith, the father sent £9, the limit of what he could afford. A further £30 or so, however, would be required.

1. Bradford Observer, 24, 31 Aug., 16 Nov. 1848.

There was a further complication: though the family had lived for nearly twenty years in Bradford, their settlement there had been disputed and indeed proven on Sowerby. Accompanied by Mr. Beirstow, the Bradford relieving officer, the mother and nine children all appeared at the end of June before the Guardians of Halifax Union where their circumstance and prospects of emigration were explained. The Board expressed its sympathy and were probably inclined to allow a contribution for emigration in preference to keeping the family as paupers, but this was disallowed at a subsequent meeting of local ratepayers. "The poor family", it was recorded, "travelled back on foot to Bradford, the helpless mother with her child in arms, disappointed and deprived of the small but prized pittance of weekly pay, and of the fond hope of being enabled soon to meet in another land, a dutiful husband and father". The Bradford public was therefore exhorted to assist the woolcomber's family to emigrate.

At first, the donators were nearly all ladies, one of whom was the wife of William Byles. At least £3.11s. in subscriptions, some from as far afield as Cheltenham, passed through the hands of William Byles. "A few of the Woolsorters in the employ of Mr. W. Walker, Bersondsey [Bradford]" contributed 8s., and woolcombers themselves managed to find 11s.3d. for the fund. A few pounds were collected at the newly opened St. George's Hall restaurant. By the end of the month, over £33 had been collected, mainly in half-a-crown contributions.^{1.}

Their financial problem resolved, the comber's family left Bradford at the beginning of August "under the experienced guidance and superintendence of Mr. Beirstow, the relieving officer", and sailed from Liverpool about the 4th of the month. "We trust that the kindness shown them in their time of need will lead them to manifest kindness to others, as they have opportunity", the Bradford Observer commented, "and especially, if in the New World a career of prosperity should open before them...that they will remember the poor they leave behind them, and contribute of 'the first fruits of their increase' for the relief of the sick and indigent who cannot leave Bradford in search of a better fortune".^{2.}

1. Bradford Observer, 2, 9, 16, 23, 30 Jul. 1857.

2. Ibid., 30 Jul. 1857.

The family were finally reunited with the father in Lawrence, Massachusetts - the niece of so many later Bradford textile emigrants - after a voyage lasting six weeks. Letters of gratitude were written to Bradford. Criticism, however, was expressed about apparent negligence in the enforcement of Government regulations for emigrant ships: besides the rations of the vessel, the family had acquired extra provisions costing \$3. Even so, before the end of their passage, the family had spent all their money (about \$4) in buying food on board.¹

The introduction of the combing machine in the Halifax area, though temporarily causing serious difficulties and inconveniences for the hand-comber, never produced the same degree of social distress as it did in the Bradford worsted industry. In the first place, by the early part of the nineteenth century, Halifax had lost its position as the centre of the West Riding worsted trade to Bradford, partly because the factory system was found less attractive

1. Bradford Observer, 15 Oct. 1857.

by Helifax manufacturers and partly because the town's proximity to Lancashire encouraged the growth of cotton rather than worsted mills. Additionally, the physical nature of Helifax hindered not only the erection of factories but also communication with the outside world.¹ Augmented by far higher immigration, Bradford's population soon outstripped that of Helifax. Also, by 1830, Bradford possessed twice as many worsted merchants as Helifax (24 : 12), and by 1842 more worsted merchants than Leeds (54 : 51 : Helifax 21).² Bradford also attracted far more Irish immigrants than Helifax: in 1851, 9,581 Irish-born (of whom 1,295 were hand-woolcombers) were resident in the former, only 2,686 in the latter.³ In short, the more extensive and important the worsted industry, the greater the number of combers to be displaced ultimately by the machine.

1. T.W. Hanson, The Story of Old Helifax, p.258.
2. E.M. Sigsworth, "Bradford and its Worsted Industry under Victoria (1837-1901)", B.T.S.J., (1952-53), 63-64.
3. C.Richardson, "Irish Settlement in Mid-Nineteenth Century Bradford", 41, 53.

Despite Bradford's steadily increasing dominance in the worsted trade, Halifax's development gained new impetus from the two great concerns of Akroyds and Crossleys from about 1840 onwards. After domestic manufacturing origins at Brookhouse and Lanehead near Ogden, the Ackroyds built the water-powered Brookhouse Mill, and later, with the era of steam, large mills at Old Lane,¹ Bowling Dyke² and Haley Hill, lower down the valley in Halifax. The Ackroyds developed into one of the largest worsted manufacturing firms in the country, specialising in damasks and other fancy fabrics.³ Similarly, the Crossleys built up their Dean Clough Mills from small beginnings. John Crossley, a carpet weaver at Luddenden Foot,

1. Erected by James Ackroyd, 1828.
2. Bowling Dyke Mill, near North Bridge, Halifax, the property of James Akroyd & Son and used as a spinning mill, was gutted by fire, 1 Jul. 1847. It was reported that 500 spinners were thrown out of work by the fire, and a further 500-1000 woolcombers and power-loom weavers "whose labour was contingent upon the running of this spinning mill...." (Halifax Guardian, 3 Jul. 1847).
3. T.W. Hanson, pp.240, 258.

became manager of a carpet works about 1800, later entering into partnerships. Crossley took a small mill at Dean Clough, and after some twenty years' trading bought out his co-partners, substituting his growing sons, John, jr., Joseph and Francis, in their place. John Crossley, sr., died in 1837, and his sons gradually adapted power-looms to the weaving of carpets. Thereafter, Dean Clough Mills increased rapidly until the firm became one of the largest and most renowned for carpet making in the country.^{1.}

Just how many woolcombers were actually employed by Halifax firms prior to the introduction of the machine-comb is uncertain. In early 1854, it was reported that James Akroyd & Son had dismissed nearly 1000 combers, but not all were heads of families. Though perhaps the largest Halifax employer of this type of worker, "Mr. Akroyd was not the only

1. T.W. Hanson, pp.258-59.

manufacturer who had found it necessary to turn off the woolcombers, the same course having been adopted by most other masters, in consequence of their being unable longer to find employment for those of their hands employed in this department".^{1.}

During the latter half of 1847 and the early part of 1848, hand-combers normally employed by Messrs. Heigh and Mr. John Bold at Ovenden Mills had little or no work.^{2.} Combers were employed at Bradshaw in 1854.^{3.} John Foster probably employed 1411 hand-combers at nearby Black Dyke Mills, Queensbury, in 1852, the year the firm introduced the combing machine.^{4.} Whilst the total number of woolcombers employed by Halifax firms remains uncertain, it is clear that the number was far surpassed by those displaced by the machine-comb in Bradford. Many Halifax combers, as revealed by the investigations

1. Halifax Guardian, 14 Jan. 1854.
2. Ibid., 30 Oct., 4, 11, 18 Dec. 1847, 8 Jan. 1848.
3. Bradford Observer, 16 Feb. 1854.
4. E.M. Sigsworth, Black Dyke Mills..., p.198.

of the Halifax Board of Guardians, also followed part-time agricultural pursuits. Even taking into account the pro-emigration William Byles, the more desperate plight of the Bradford combers gained far greater publicity over a longer period in the columns of the Bradford Observer than that of the Halifax combers ever gained in the Halifax Guardian. The following Bradford estimate made in 1861 could hardly have referred to the Halifax combers: "...21,900 hand combers were displaced, employment in machine combing being provided for about 10,000, leaving 11,900 hand combers with their families to either find employment in Bradford or migrate elsewhere"¹.

Nevertheless, by the end of 1853, the position of Halifax combers was giving cause for concern. In early 1854, Mr. Midgley, one of the head bookkeepers of James Akroyd & Son came before the Halifax Board of Guardians to discuss the desirability of assisting local

1. Bradford Observer, 16 May 1861.

woolcombers to emigrate to Australia. Midgley made the salient points that if some of the combers were not sent away soon, there would be a considerable increase in the rates, and that currently there were more unemployed combers than would ever find work again at their own occupation, however good the trade prospects were. The hand-combers' calling had almost entirely disappeared since the general introduction of machinery. It was most desirable, therefore, that many of those thrown out of work should go to Australia where they could engage in honest work. The Emigration Commissioners, he stated, had funds for assisting emigration: one-third of the proceeds of Australian land sales were sent to Britain to help emigrants. Midgley himself had made several applications to the Commissioners on behalf of combers, but without success, except in the case of two families who had emigrated about mid-1852. He believed that an application from the Guardians would carry more weight than any personal application. Midgley had received many applications

from combers wanting to emigrate, though he only had about six or seven at present. His own firm (Akroyds) had had to turn off nearly 1000 combers, and these were to be added to those dismissed by other Halifax firms. Some of the redundant workers had been able to find other temporary employment, a large number were in 'out-door' work, and Akroyds had set up three weaving work-shops for retraining combers. Akroyds had kept some woolcombers from the workhouse by distributing money to them, but pauperism was increasing. The same questions were then raised by the Board as had been raised earlier in Bradford: that the Emigration Commissioners would hardly prefer woolcombers to agricultural labourers, and that poor and homeless combers were unlikely to suit the colonies. Midgley countered these arguments by reminding the Board that most of the combers (contrary to those in Bradford) possessed agricultural knowledge, having partly worked on local farms; and that he had received many letters from operatives who had already emigrated to Australia and who were all in better circumstances.

The clerk to the Guardians promised to write to the Emigration Commissioners.¹

In the light of information already gained in Bradford, the reply of 2nd February 1854 from the Colonial Land and Emigration Office to the Halifax Board of Guardians could not have been entirely unexpected: woolcombers could not be sent, nor could inmates of unions and those in habitual receipt of parish relief. The Commissioners could only send certain classes of labourers to Australia at the expense of colonial funds. Although in the past the Commissioners had, exceptionally, sent out small bodies of artisans, the colonial authorities had raised strong objections and the experiment could not be repeated.

The Board's ensuing discussions reveal much about the Halifax comber's working situation before the introduction of the machine-comb. The Commissioners' objections, it was claimed, could not apply because at least 80 per cent of the combers had been brought up in

1. Halifax Guardian, 14 Jan. 1854.

agricultural pursuits; and the others were probably those actually living in the town of Halifax. The majority of Akroyds' combers came "out of the country". This fact was supported by one of the Guardians who revealed that a relation of his, living in the country, had combed wool for Akroyds until recently, independently of running the small farm on which he lived. This was true of many combers who either owned their own farm or worked on others'. Those who were both combers and agriculturists were the first to be discharged by Akroyds, and most had already been absorbed in other work. Those who were combers only (and probably lived within Halifax) were the last to be discharged. The Board were indignant that the Emigration Commissioners should think of these workers, skilled in combing or agriculture, or usually both, as paupers. Only the town combers had applied for relief, whereas those living in localities such as Bradshaw had found alternative employment.

It is significant, however, that those combbers without employment, when thinking of emigration, preferred the United States to Australia. Under no circumstances were the Emigration Commissioners able to assist with emigration to America, though it was there that opportunities for hand-combing in the worsted trade, albeit limited, still existed. Mr. Midgley revealed that some woolcombers, already assisted by Akroyds to emigrate to the United States, were earning £2 a week in their own trade. Even if handcombing were soon overtaken there by the machine, countless opportunities would arise for alternative employment in textiles. This was not true of Australia.^{1.}

1. Halifax Guardian, 11 Feb. 1854; Bredford Observer, 16 Feb. 1854. During 1855, Frank Croasley, M.P., made a tour of Canada and the United States. At a lecture given in Halifax in January 1856, he made the almost inevitable observation of the English traveller about the convenience and accommodation of the mills, and the neat appearance of the workers, in Lowell, Mass. Additionally, he reported that in some of the Massachusetts mills, "Messrs. Lister's combing machines are in extensive operation". (Huddersfield Examiner, 26 Jan. 1856).

In addition to those already assisted to emigrate by Akroyds, at least a second party of eighteen Halifax woolcombers left for the United States on Tuesday, 18th February 1854. The previous Sunday, intending emigrants and friends met together in the Town Mission School-room, Halsey Hill, where a "suitable discourse was delivered by Mr. Selter, town mission", and at the end of the meeting, a bible was presented to each emigrant. Moreover, each emigrant was presented by Edward Akroyd, their last employer, with their passages to the United States, "where woolcombing is still done by hand and well paid for", their outfits and 6s.0d. each.^{1.}

1. The great Akroyd concern was built up by the enterprise and perseverance of the brothers Jonathon and James Akroyd. When Jonathon died intestate in 1847, aged 64, his eldest son (Col.) Edward Akroyd inherited £1,750,000. Among Edward's many benefactions, and through his imagination and zeal, Akroydon Estate was built after 1855 for Halifax workers (Mabel Cockcroft, "A Quest for the Akroyd Story", The Dalesman, May 1966, 138-40).

All the emigrants seem to have been heads of families or single men, for wives, children and friends remained on the platform as the 'parliamentary train' left for Liverpool, where the party embarked on the Arctic two days later. No doubt many of the wives and families were sent for later.^{1.}

In summation, temporarily severe as the problem of redundant hand-combers was in Halifax, it proved by no means as intransigent as that of the Bradford combers. Far fewer workers were engaged in combing in Halifax than in Bradford, and in any case, many of the former had agricultural connections. "In the town and

1. Halifax Guardian, 18 Feb. 1854. H. Cockcroft (138), though recording the support given by the Akroyds to emigration and the fact that "...in 1836, the Akroyds erected a large power-loom weaving shed, the largest in the worsted industry", seems more than a little premature in continuing: "As a result many workpeople were thrown out of work, including more than 1000 hand woolcombers".

neighbourhood of Bradford", however, there were "upwards of 12,000 hand-combers...the major part of whom were compelled to make workshops of their sleeping apartments. Unable to pay the rent for a comfortable dwelling, a large number huddle together in one apartment, thus rendering their situation still worse...their physical well-being was neglected..."¹ The problem of redundant Halifax combers was largely solved by re-training in industry, by re-settlement in agriculture, and for a minority, by assistance from a major employer to emigrate to America. There is no press evidence, contrary to the case of Bradford, of consideration being given to rate-assisted emigration or of a stream of pleas to the Emigration Commissioners. Equally, Halifax's problem did not seem to warrant widespread public subscriptions and the invaluable efforts of the Woolcombers' Aid Association to assist migration and emigration.

1. J. James, History of the Worsted Manufacture, p.548.

2 (d) DOMESTIC ABSCONDERS FROM THE WEST YORKSHIRE
TEXTILE AREA, 1830s - 1850s.

Against a background of cyclical depression and of declining demand in many hand-skills - but also motivated by countless other personal reasons - large numbers of Yorkshire textile workers crossed the Atlantic in anticipation of greater opportunities in North America. Many were single men when they left to seek their fortunes. Some, the Abel Stephensons and Titus Crewshaws, appear to have suffered pangs of conscience about depriving the family of a bread-winner, and these, with varying degrees of success, made remittances home. In the case of married men, every permutation of the following elements may be found: those who emigrated with their families as a single group; those who went alone, but who, after a period of time, were joined by their families; and those who had no intention of sending for their families and saw America as a means of escape from the domestic hearth. A number of married Yorkshiremen returned because of an inability to gain regular employment, disillusionment,

home-sickness or wanderlust, whilst others returned with the sole purpose of re-joining with their wives and families.

The following section is devoted to a number of cases, all of which were reported in the West Yorkshire press between 1838 and 1856. The fourteen cases quoted are probably neither unique (except perhaps in one or two cases) nor likely to be exhaustive. They are significant, however, in that they not only relate to one fairly small geographical area, but they also illustrate a cross-section of emigrants, actual or intending, whose marital separation or paternity problems brought them within the scope of legal action. About three-quarters of the cases, perhaps not unexpectedly, fall into two major categories: married men who returned to Yorkshire after a period spent in North America only to find that because,

in their absence, their families had become dependent upon parish relief, & less than welcome reception awaited them from the Poor Law Guardians; and married men who tried to leave their families chargeable, but who were detained before embarkation.

In 1838, James Ferguson returned to Bradford after a four years' absence in Canada. He was subsequently brought before the local magistrates charged by the overseers with having left his family chargeable to Bradford township during the time he was away. The defendant did not deny leaving his children, but pleaded that he was unaware they would become chargeable in any way. Moreover, he claimed that he had intended to return to Bradford at the end of the third year to sell some property, & legacy, but had been prevented from doing so by the outbreak of the 1837 Rebellion. He had now come to Bradford for this very purpose and was going to return to Canada with his children. On promising "to satisfy the town", the bench allowed Ferguson to

"make arrangements with the overseers".^{1.}

Ten years later, in 1848, John Boothroyd, of Almondbury, appeared before the Huddersfield magistrates for having left his family chargeable to the parish. He had now returned home to take his wife back to the United States, but compensatory payment was demanded first by the Guardians. Boothroyd was committed for one month, unless payment were made.^{2.}

Similarly, the following year, Joseph Singleton was charged in the Halifax Magistrates' Court, Ward End, with having run away and left his wife and family chargeable to Rastrick. Singleton had been in America, and had left his family a burden, first to Skircost, then, by removal, to Rastrick. The total relief given amounted to £3.15s. Initially, Singleton had received a subscription to take himself and family to America, but in the event he had gone alone. There, he had suffered from ill-health, he claimed, and had consequently returned. The warrant was adjourned for one month to allow the defendant to make arrangements for the repayment of the debt.^{3.}

1. Bradford Observer, 21 Jun. 1838.

2. Wakefield & W.R. Herald, 4 Aug. 1848.

3. Halifax Guardian, 16 Jun. 1849.

In November 1849, Joseph Newsome was charged by Huddersfield magistrates with absconding and leaving his wife and five children chargeable to Lepton township. The facts were that, in late October 1848, the defendant, being unemployed, had applied to the overseers for relief, which was not forthcoming. Thereupon, he sailed for America, from where, he claimed, he sent money to his family on several occasions. Once, he sent \$25 to assist his family's transatlantic conveyance, the town promising £5 towards their expenses. When his family failed to leave Lepton, he returned to England to fetch them, but was arrested at the overseers' instigation and imprisoned. As Newsome was willing to make "reasonable arrangements", he was allowed to do so.¹

In the same month, John Wroe, a Bradford woolcomber, was not so fortunate. Wroe returned from America about September or October 1849, and was accused of allowing his wife and family to be a charge upon Horton township since April 1848 to the extent of £10.9s.6d. The Board of Guardians requested the magistrates to make an example of the defendant as the Board had encountered a great number of cases where husbands had left their families to go to America; and when they had been

1. Halifax Guardian, 17 Nov. 1849.

there a few months, the absconders had applied to the Guardians for a request to be made to the Poor Law Board to allow townships to raise a fund for the purpose of assisting their families to emigrate. The Guardians claimed that this had become common practice for fathers to leave their families chargeable in the hope that the town, in order to remove the burden, would send their families out. Wroe, in fact, underlined the argument by stating in his defence that he was "not the only one that has left his wife and family chargeable", and he was committed to the house of correction for one month "as a rogue and a vagabond". The Bradford Observer, however, was not in sympathy with the verdict, and considered the punishment vindictive. There may have been circumstances warranting the punishment: Wroe may have been work-shy at home before finding employment in the United States; he may have been insolent to the authorities on his return; or there may have been reason to believe that he would not now support his family. None of these factors had been revealed in the proceedings. The Bradford Observer believed that the punishment meted out to Wroe would

not dissuade similar husbands from emigrating, but it would deter them from returning. It would have been far better if the magistrates had allowed Wroe to resume work on the understanding that the Board would receive some recompense for providing relief to his family in the past.^{1.}

Sydney Smith, of Golcar, received an even heavier punishment from Huddersfield magistrates in August 1851.^{2.} Smith was charged by the relieving officer with absconding to America in September 1849,^{3.} and returning to England at the end of July 1851. During his absence, his wife and six children had remained chargeable to Golcar at the cost in relief of £24.14s. Smith admitted leaving his family, but stated that, because of unemployment, he had become a hired worker in America on 1st October 1849, though after three months his master had failed. He had never received any payment for his work, except 60¢. to help him find other work. In his next employment,

1. Bradford Observer, 8 Nov. 1849.
2. Wm. White, Directory... (1847), p.515, notes a Sydney Smith as a "flock and waste dealer" at Golcar (Leymoor).
3. There is also an oblique reference to Smith's possible involvement in railway robberies.

Smith claimed that he had received 11s.6d. a week together with "meat, lodging and washing", but that he had stayed only a short time there. At his next place of work, he received £3 a month plus similar benefits, and in May 1850, six weeks after obtaining this position, he sent his wife a cheque for £4 (there was evidence of this in a letter from his wife). Smith had written that it was impossible for him to send for all his family at once, but that his wife was to send out the two eldest children, and when these were settled, he would send for the rest. In October 1850, Smith claimed to have sent his wife a further £5 which she received on 4th November. Smith requested the magistrates to adjourn the case and give him time to go home, whereupon he would produce the letters confirming his wife's receipt of the money. The relieving officer, however, said he did not believe a word of Smith's testimony and insisted

that, in order to placate Colcer ratepayers, the Bench was honour bound to make an example of this absconder. Smith was committed to hard labour for three months.^{1.}

Two fraternal Warley absconders appeared before Halifax magistrates in the summer of 1856. John Teal, a weaver, pleaded not guilty to leaving his wife and child chargeable to Warley township when he left for America in June 1854. Since that date, Teal's family had received £13.1s. in relief from Warley township. Teal had written to his wife, the relieving officer claimed, telling her to apply for parish relief, but Teal denied this. The defendant told Col. Pollard, Chairman of the Bench, that he had left England with his brother Jonathon to try his luck in America, as fortune was against them at home. The brothers had saved a little when in England, but their resources had gradually diminished because of hard times and scarcity of work, and they had decided to sail for America. There, they had gained

1. Halifax Guardian, 23 Aug. 1851.

employment in weaving, earning #3 to #4 a week, and sometimes more, but after paying all their demands, they had no surplus to send home. After living in America for a while, they had decided their best plan was to return to England where they arrived in early July 1856. Jonathon had received promise of work, but not John. The relieving officer for the township recorded that he had been told that the real reason for the Teals' departure "was to escape the oppression of employers and rulers in England". The laughter subsiding, Col. Pollard observed that they were a couple of blockguards. In Jonathon Teal's case, he was fully employed at Messrs. Crossleys, Dean Clough, before leaving for America and his only motive for sailing was his opinions about oppression in England - or so the relieving officer claimed. Jonathon had left a wife and six children chargeable, the eldest aged not more than 14, and Warley township had expended \$22.9s. in relief. When he heard that the Teals were going to return to England, the relieving officer had

asked the two wives to write to their husbands pointing out that unless they returned with money, or made arrangements to refund the amount expended in relief, they were likely to be brought before the magistrates. It had been impossible to reach any agreement with the Teals since their return, and according to the defendants' neighbours, they had spent money extravagantly. The Teals denied this and claimed in their defence that, although they had saved some money in America, the cost of the passage both ways had exhausted their savings; and that a relative who had advanced the expenses of the outward passage had been repaid. The relieving officer then alleged that money had been paid into the relative's hands to avoid their liability for debts. The magistrates found both John and Jonathan Teal guilty, and the brothers were committed to the house of correction for three months.¹

It must be assumed that the cases noted above represent only a small proportion of

1. Halifax Courier, 2 Aug. 1856.

those domestic absconders who, during their stay in America, left their families chargeable to the parish, and who, on their return to Yorkshire, were brought before the local magistrates. It is also likely that many others, even though their families had become a burden to the parish during their absence, were able to pay off the amount incurred or were able to come to some arrangement with the local relieving officer to pay the arrears by instalments, thereby avoiding a court appearance.

Some absconders, however, were detained even before they left the country for America. One example was that of John Hartley, a butcher of Charlestown, near Halifax, who left for Liverpool, intending to sail for America, in early January 1842. As Hartley had left his wife and family chargeable to the parish, "Mr. Feather, the deputy constable, had a warrant put into his hands, and started for Liverpool...." With heavy humour, the local press reported: "[Feather] made way to the docks, and entered a public house for some refreshment, when who should walk in but the identical John Hartley he was wanting? He, of course, entered into conversation with the constable, little suspecting what he was about; and the

latter after treating him to a glass of what he liked treated him with a night in the lock-ups, which he did not like, but which the constable was undoubtedly warranted in awarding to him". Surprisingly enough, the prisoner, on being brought back to Halifax, was offered £10 by the Board of Guardians when he promised to leave England with his wife and family.^{1.}

John Lee, of Linthwaite, was treated less considerately by the Huddersfield magistrates in February 1848. Lee was brought up by the local overseer for leaving his wife and three children, aged 12, 9 and 6, chargeable to the township. Only three weeks before the case was heard, Lee, presumably a widower, had married a young woman, aged 20, and after a few days of marriage had left her and the children for Manchester, en route for America. The girl's father complained to the overseer that the children had been left with him, and on application to the Board of Guardians, the

1. Halifax Guardian, 15 Jan. 1842.

children were relieved with 3s. The magistrates obviously took the line that Lee had remarried simply to provide a 'home' for his children before he sailed overseas, and "the vagabond" was committed to hard labour for two months.¹

A similar fate befell Benjamin Gerside, of Golcar, at the hands of Huddersfield magistrates in November 1856. A slubber by trade, Gerside, a widower, was accused of leaving his three children, aged 6, 4 and 1, chargeable to Golcar township for one month when he absconded from there with the intention of sailing for America. The relieving officer claimed that the defendant was a "strong able-bodied man, but idly-inclined"; he had left a good situation and could earn a steady living if he were willing to work. Gerside was ordered to pay £1.3s., the amount of relief advanced to his children, but unable or unwilling to do so, he was sentenced to three months' hard labour at Wakefield.²

1. Halifax Guardian, 26 Feb. 1848; Wakefield & W.R. Herald, 25 Feb. 1848.
2. Halifax Guardian, 8 Nov. 1856; Huddersfield Examiner, 8 Nov. 1856.

In cases where the husband left for America leaving wife and family in perhaps precarious circumstances, dependence upon the parish might well be avoided by the wife accepting a 'lodger' (and his income). This may or may not have been so in the following example, though it was certainly true in many other cases. Up to the beginning of 1849, "a loving couple named Banbury" lived with their three children at Wooldale, near Holmfirth. At this point, Mr. Banbury sailed for America to seek his fortune. "To cheer her loneliness", the local press later reported jocularly, Mrs. Banbury "accepted as a lodger one Mr. Sykes, a bow-legged weaver from Burn Lee". All continued "very harmoniously together" until the summer of 1850 when Mr. Banbury returned totally unannounced to the domestic hearth. Mrs. Banbury, however, "indignantly spurned her lawful husband, clinging with great tenacity to her 'second thought'". Mr. Banbury remained creditably cool, recounted a few of his adventures in the United States, and left the house "perhaps meditating a speedy return to 'the land of liberty'".¹

1. Huddersfield Chronicle, 22 Jun. 1850.

In a similar situation, a Bradfordian who returned from the United States in early July 1842 failed to show the same degree of equanimity. Although he had earlier left his wife and child at home, he had regularly sent sums of money for their upkeep. Arriving home unexpectedly he discovered an unfaithful wife, whereupon he "turned her out of doors, and immediately disposed of all his furniture, preparatory it is supposed to his return to America".¹

America was also a means of escape for Yorkshire fathers of illegitimate children. In late 1846, George Wade, an engine tender of Helifax, though he did not appear in court, was charged with being the father of Hannah Spencer's child. Wade, "who had been in America in order to get out of the way", had returned, but a difficulty had arisen in that Wade had

1. Leeds Mercury, 16 Jul. 1842.

returned sooner than expected and the case had been postponed until May 1847. After his return, Wade made some contributions towards the upkeep of the child, and on Hannah Spencer making fresh application, Wade was obliged to pay £2.5s.6d. and 2s.6d. a week thereafter.^{1.}

In October 1847, William Crossley, a dyer, late of Skircoat and now "in America", was charged by the Halifax magistrates with being the father of Grace Thompson's illegitimate child. As there was insufficient proof that Crossley was the father of the child, the first summons was dismissed. The following month, however, Crossley, still overseas, was again charged, the summons being served at his father's address, the young man's "last known place of abode". Despite objections to this, a witness proved that Crossley had lived at his father's house in Selterhebble, and nowhere else, until he had

1. Halifax Guardian, 2, 9 Jan. 1847.

left for America in May or June 1847.

Grace Thompson's child was born in July 1847. An order was made for 2s.6d. a week to be paid, with expenses of £1.7s.6d.¹

A curious case was heard by the Halifax magistrates in October 1847. John Harwood, a Wadsworth farmer, was charged by Nancy Horsfall with being the father of her child. The case had been twice postponed to ascertain the relevant law as the applicant was a married woman, but she had not seen or heard from her husband for seven years. The Horsfalls were married in May 1837, but the husband went to America in early 1840. In the June of that year, she received a letter (dated 1st June) from him in America, but this was the last she had heard of him. After some dispute about the legality and propriety of asking the question, Mrs. Horsfall stated that from her knowledge she could not tell that her husband was living at any time within the previous seven years. John Harwood had courted her and had promised to marry her when he was "at liberty" - he himself was a married man,

1. Halifax Guardian, 30 Oct. , 27 Nov. 1847.

but had been separated from his wife some sixteen or seventeen years. Nancy Horsfell's baby was born on 11th July 1847, and Harwood made a weekly contribution of 2s.6d. up to the time of her taking out the summons. Under cross-examination, Mrs. Horsfell produced the letter dated 1st June 1840, but swore that she had never received any other letter from anyone in America, had never shown any letter to anybody in 1843 and had never heard that her husband had been in England since he left. Three witnesses proved the courtship of Nancy Horsfell and John Harwood and a promise to pay for the child made as late as the night previous to the case being heard; and another witness proved the husband's absence of more than seven years. The defence quoted the law that "an absence of seven years was deemed presumptive evidence of death", but contended that the seven years' absence must date from the beginning of the period of gestation and not from the birth of the child. Legally, it was claimed, the husband was still the father of the child! Whatever the niceties of legal argument, however, the magistrates applied the commonsense view and granted an order for 2s.6d.

a week, with expenses of £3.12s. If the magistrates' order were wrong, it could be appealed against; and a notice of appeal was immediately served on Mrs. Horsfall.¹

The Halifax magistrates heard an even more involved case in January 1850. Mary Horsfall, aliss Heywood,² then in custody in the Halifax lock-up, brought a charge of brutal assault against her husband, Matthew Horsfall. The case was earlier adjourned for one week because her husband was unwell, and in the intervening period, he had obtained a warrant against her for bigamy, the reason for her removal by the magistrates. Matthew, a falling-miller at the time, and Mary Horsfall were married at Halifax Parish Church in 1827. The couple's twenty years of marriage up to 1847 seem to have been highly eventful. Mary Horsfall had borne "as good as 12 children", of whom three or four survived. Matthew Horsfall had been committed three times - for assault, neglecting his family and obtaining goods under false pretences.

1. Halifax Guardian, 16 Oct. 1847.

2. Despite the similarity of names, there appears to be no connection between Nancy Horsfall and John Heywood in the previous case, and Mary Horsfall and John Grenville Heywood in these proceedings.

After three months' unemployment, Matthew decided to go to America, and, accompanied by his wife as far as Liverpool, sailed in May 1847, supported by the proceeds (£7) from furniture he had sold, which he promised to return within six months. Back in Halifax, Mary and her family were soon destitute. After about three months' residence in the United States, Matthew wrote from Mansyunk, near Philadelphia, to say that he had gained well paid employment, and that if his wife and family went out, the children would "earn as much as would keep them without working". Bad news, however, soon arrived in a letter, signed "John Freeman" and postmarked October 1847: Matthew had died in Mansyunk, 25th September. This letter, Mary Horsfall claimed, she carried in her pocket until her 're-marriage', and then as Matthew's friends declared that she had never received the letter, she returned it (naively?) to America to make further enquiries. On 18th or 19th December 1847, Mary Horsfall was 're-married' at Halifax Parish

Church - to John Grenville Heywood. The couple lived together until Matthew Horsfall arrived at their house, No. 5 Gardener's Square, from America, drunk and without prior announcement, on 4th or 14th September 1849. John Heywood left the house at this point. Horsfall agreed that the letter which informed his wife of his 'death' was written at his request so as to "get his wife into a scrape". After his return, he abused his wife regularly unless he received money for drink. Matthew Horsfall was fined £5 for assault, or two months' imprisonment: the fine was not paid and he was sent to Wakefield. Mary Horsfall who for some reason had described herself as a 'spinster' at the time of her 're-marriage', was released on bail pending her appearance at the next York Assizes.¹

In addition to the examples cited above, Poor Law Guardians in the West Riding commonly received requests from husbands already in America for their families to receive parish assistance to emigrate. Frequently, wives and families left behind were already in receipt of parish relief.

1. Halifax Guardian, 12 Jan. 1850.

Rarely, it seems, were the Guardians able or willing to assist emigration in an official or unofficial capacity, no matter whether the suppliant had earlier 'absconded' to America or he was still at home. David Smith's letter, sent unpaid from America to the Bradford Board of Guardians in 1848, requesting that his wife and family be sent out to him at the expense of £25, his shopmates having subscribed £10, received the terse comment that the Board had no authority to pay for emigration to America.¹

Equally, those who had neither the means nor the inclination to 'abscond' to America usually received similar replies to their requests for such assistance. In mid-1841, William Briggs, of Warley, a pensioner of the 84th Regiment, requested the Halifax Board of Guardians to help him to emigrate to Canada. Briggs was experiencing hard times with his large family and, having already been reduced from housekeeping to lodgings,

1. Halifax Guardian, 8 Jul. 1848; Bradford Observer, 13 Jul. 1848.

hoped to avoid the poor-house by emigration. He even offered to transfer his 6d. a day pension to the Board for three years - more than £27 - in return for this assistance, but it was decided that the Board possessed no power to entertain the proposition.¹ In 1847, the local Board of Guardians received "a petition from a handloom weaver, named Orrod, of Horton, praying the board to assist him, in his distressed circumstances, and with a dark prospect before him, to the means of emigrating, with his family, to one of the British colonies. The petition was couched in touching terms, and showed how distressed and hopeless was the condition of the petitioner." Whether the Guardians were able to offer much comfort is uncertain.² Joshua Hellewell was refused assistance to emigrate to the United States in 1848 by the Halifax Board of Guardians.³ Similarly, later that year,

1. Halifax Guardian, 19 Jun. 1841.

2. Bradford Observer, 9 Dec. 1847.

3. Halifax Guardian, 25 Mar. 1848.

the clerk to the same Board read a letter from the Commissioners relating to an application made by Bastrick township for £12 to enable Sarah Mellinson to emigrate to America. The Commissioners indicated that £12 was too small a sum for the purpose and emphasized that the necessary assistance could only be considered if Mrs. Mellinson and her family wished to emigrate to a British colony. The matter was closed when it was revealed that the applicant wanted to go to New York.¹

The case of woolcomber Trigg and family, of North Wing, Bradford, in 1848, has already been quoted in detail: their ultimate success in reaching Wisconsin was thanks largely to private contributions, not to public assistance from the Bradford Guardians.²

Nevertheless, there were occasions when the local Board of Guardians assisted families

1. Halifax Guardian, 17 Jun. 1848.

2. Bradford Observer, 24, 31 Aug., 16 Nov. 1848.

to emigrate for reasons that seem no more valid than in those cases warranting a refusal to assist. In May 1843, Jones Jennings, the relieving officer for the Horton district, which included Horton and Clayton townships, wrote to the Bradford Observer to correct impressions given by an earlier printed report. First, Abraham Ackroyd, who formerly lived near the Old Dolphin, Clayton, "left his native country for fear of being apprehended on a charge of having committed a burglary at Great Horton, and not...because of the high price of provisions, etc." Secondly, the wife and family of this "Fortunate Emigrant" did not emigrate at their own expense, "whereas the guardians of the poor have considered that it would be a great saving in the township of Clayton to ship them off at the expense of the township..." Jennings had therefore been authorised by the Board to pay out some £30 for the family's passage.¹

1. Bradford Observer, 27 Apr., 11 May 1843.

Some four years later, in 1847, Jones Jennings, as relieving officer for Horton, was the central figure in a controversy arising out of a family's assisted passage to America. Some time earlier, Jennings, on the orders of the ratepayers of Horton township and the local Board of Guardians, had expended £21.6s.5d. in removing a family named Clough to America. In doing so, the Board had relieved themselves of the burden of expending 9s. or 10s. a week in maintaining the family in the father's absence overseas. The validity of the Board's assistance in this case was now questioned, however, by the auditor, and reimbursement of the sum was disallowed. The Poor Law Commissioners for their part stated that "they could merely decide on the lawfulness of the reasons which influenced the auditor in the disallowance", and could not go beyond the law by sanctioning the repayment of any sum illegally laid out. The Guardians, highly indignant, passed a resolution that Jennings should have the money repaid from some

source.^{1.}

An almost identical situation had arisen a few months earlier in Halifax. John Hey, the relieving officer for Halifax, had expended 20s. as casual relief by order of the Board of Guardians to a sick pauper named Wilkinson, a native of the town, to allow him to leave for New York. This sum was disallowed by the District Auditor; and the Poor Law Commissioners, on appeal, declared that they had no power to allow the payment made by Hey, nor to reverse the auditor's decision.^{2.}

How, if at all, Jones Jennings and John Hey were able to retrieve the sums laid out for the emigration of the Clough

1. Halifax Guardian, 30 Jan., 20 Feb. 1847; Bradford Observer, 25 Feb. 1847; Wakefield & W.R. Herald, 25 Feb. 1847; Leeds Mercury, 27 Feb. 1847. Jones Jennings was again linked with emigration when, in mid-1850, he reported to the Board of Guardians the result of a case brought before the Bradford magistrates. Mary Haley had been to America, leaving her children chargeable to the parish; but the magistrates dismissed the case, much to the dissatisfaction of the Guardians (Halifax Guardian, 13 Jul. 1850).
2. Halifax Guardian, 19 Sep. 1846.

family and pauper Wilkinson is uncertain. From the number of refusals to assist thereafter, it is clear, however, that the respective Boards of Guardians exercised the utmost care not to exceed their authorised powers, especially when the United States was the desired destination of the suppliant or his family. When the Trigg family wished to leave Bradford for Wisconsin in 1848, the Bradford Board of Guardians refused to assist their emigration by lending £15 or £20, even though sufficient sureties were forthcoming for the repayment of the loan. After their experience the previous year when the sum of £21.6s.5d. expended on behalf of the Clough family had been disallowed, the Guardians claimed quite correctly that their hands were tied by law and the case of the Trigg family could not be entertained. William Byles of the Bradford Observer was also quite correct in his rejoinder that similar cases had been helped before - but these, it must be assumed,

if identical in nature, occurred almost certainly before the scrimony of the Clough case in 1847. "Personal pique" there may have been between the Guardians and Byles in August 1848, but this was irrelevant to the Guardians' powers in the issue.¹

1. Bradford Observer, 24, 31 Aug. 1848.

PART 3. YORKSHIRE TEXTILE EMIGRATION.

3. AMERICAN CENTRES OF YORKSHIRE TEXTILE
IMMIGRATION.

(a) NEW ENGLAND.

One writer has remarked that "there were Englishmen...wherever woollen was woven in the United States during the 1820s and 1830s".¹ It may be stated, more specifically, that Yorkshiremen were to be found wherever woollen cloth was woven; and, more generally, that throughout the nineteenth and into the twentieth centuries, Yorkshiremen were to be found wherever American wool - encompassing 'woollen' - textiles were manufactured. Nowhere was this truer than in the New England States.

It is not within the confines of this study to delve deeply into the comparative stages of automotive development of the

1. Rowland T. Berthoff, British Immigrants in Industrial America, 1790-1950, p.37.

textile industries of the United States and Britain during the nineteenth century. Nevertheless, it should be stated that, just as in Britain, power-driven machinery and factory organisation were generally introduced sooner and more readily into the American cotton than the woollen, and particularly the worsted, industries.¹ This in itself meant that widespread opportunities existed in New England wool textiles, though limited in times of economic slump, for the Yorkshire emigrant to employ his traditional skills, to introduce recently acquired technical expertise, or to adapt himself in a new environment, perhaps with some misgivings, to changes in industrial techniques. The relatively late development of the American worsted industry after about 1845, and especially after the end of the Civil War, attracted large

1. Rowland T. Berthoff, British Immigrants in Industrial America, 1790-1950, pp.36-37; H.J. Habakkuk, American and British Technology in the Nineteenth Century: The Search for Labour-Saving Inventions (Cambridge U.P., 1962), p.103.

numbers of Yorkshiremen, particularly skilled workers from the Bradford area to Lawrence, Massachusetts, where they operated British equipment,¹ or "a complete equipment of well-developed, quasi-automatic machinery [which] was originally borrowed from abroad".²

English experience largely established the foundations of the American woollen industry at the end of the eighteenth and the beginning of the nineteenth centuries. The enterprise of John and Arthur Scholfield, who emigrated from the Saddleworth area of Yorkshire to Boston in 1793, has already been widely and justifiably recorded. Building a hand-loom and spinning-jenny from memory, the brothers began the manufacture of broadcloth within a few weeks of their arrival in the United States. In 1794, backed by Massachusetts capitalists, they started a mill at Hyfield, near Newburyport, and superintended its operations for nearly five years during which time

1. Berthoff, p.38; A.H. Cole, The American Wool Manufacture, I, pp.277-78; II, pp.81-83.

2. Habakkuk, p.104.

the brothers also built or supervised the building of the first successful New England carding machines. In 1798, the Scholfields moved to Montville, Connecticut, where they set up the first woollen machinery ever run by water-power in that State (with the one exception of carding machinery set up earlier by the Hartford Woollen Manufactory). The brothers' partnership at Montville was dissolved in 1801, and Arthur Scholfield moved to Pittsfield, the factory there becoming the first mill in western Massachusetts where the process of woollen manufacture was carried on by the improved machinery. Arthur Scholfield remained in Pittsfield carding wool and building carding machines for sale with varying commercial success until the suspension of his business, 1815-16.¹ John Scholfield continued at Montville with the business of carding wool and the manufacture of cloth under his own management until 1806, when he established a similar business at Stonington, Connecticut; and his sons, James and Thomas, remained in charge of the

1. Arthur Scholfield died in Pittsfield, Mass., 27 Mar. 1827, aged 70 (W.R. Bagnell, The Textile Industries of the United States, 1639-1810, p.267).

Montville business until 1812 when the lease there expired. John Scholfield also established a second business near Montville and a third at Waterford, near New London, Connecticut. Son Joseph managed the Stonington business successfully until 1831 when the mill and land were sold. John, the eldest son of John Scholfield, earlier occupied in the business of wool-carding in Colchester, Conn., established the same industry in Jewett City, Conn., in 1807; he returned to Colchester in 1817, before removing to Montville on the death of his father to take charge of the Scholfield mills there.¹

Though a lesser figure than either John or Arthur Scholfield, a third brother, James, was associated with them in the Byfield Mill of the Newburyport Woolen Manufactory. James who had probably left Saddleworth slightly later than the others, quitted Byfield about the same time. He did not, however, accompany his brothers to

1. A.H. Cole, The American Wool Manufacture, I, pp.83, 88-89, 91-99, 107-10, 113-14, 122-23, 220-21, 234; W.R. Bagnall, pp.202-04, 207-09, 247-49, 259-60, 262-63, 423-24, 457-59.

Montville but removed to Haverhill, Mass., where he stayed two or three years. In 1802, James moved to North Andover, Mass., where he purchased a small area of land, with a mill-privilege, on which there was a dam and fulling-mill, near the mouth of the Cochicwick River. Arthur Scholfield was associated with James in this purchase. James's enterprise consisted of erecting a small building for his carding machine; and spinning jacks and looms were operated by hand-and foot-power. Spinning and weaving work was done mostly, perhaps wholly, by members of the family, his daughter Nancy, in particular, being an expert weaver. He carded wool for his own manufacture of broadcloth and for manufacture by others. The enterprise was perhaps not very successful commercially, and the interests of both James and Arthur were sold in 1812. The following year, however, James became superintendent of a factory, recently erected on the Cochicwick River by Capt. Nathaniel Stevens (1786-1865). Stevens was the first to introduce American-made

flannels into the market, amassing a
'handsome fortune'.^{1.}

James Besumont was another Yorkshireman to make his mark on the early New England textile industries - both cotton and wool - in the first years of the nineteenth century. Besumont, born in Denby parish^{2.} on 4th June, 1778, was the eldest son of John Besumont, a mill-wright, and grandson of an extensive manufacturer of woollen fabrics. On the death of his uncle James, also a mill-wright, he became heir in 1792 to the 'Pudding Mills' estate consisting of about thirty acres of land, including excellent water-power, fulling mill and dwelling houses, also eleven houses in Holmfirth. After three years' apprenticeship with a Sheffield silversmith, Besumont returned to Denby in 1796 to enter the employ of Joseph Wood, the owner of a large sheep-bearing moorland farm and manufacturer of woollen cloth, in order to learn the intricacies of woollen

1. W.R. Bagnell, pp.306-09; D. Hamilton Hurd, History of Essex County, Massachusetts, 2 vols. (Philadelphia, Pa., 1888), II, pp.1684-85; Von Bergen & Mauersberger, American Wool Handbook, pp.9, 11.
2. Denby Parish: situated c.7-8 mls. S.E. of Huddersfield, and c.3 mls. N. of Penistone, Yorkshire.

manufacture, especially kerseys. He reached his majority in 1799, came into possession of the above estate and began the production on his own account of plain half-width broadcloths, marketable at Huddersfield Cloth Hall.

Within a very short time, however, James Beaumont's thoughts turned to the United States. Two friends who had already left Yorkshire wrote to inform him that they had set up a mill in Lebanon, N.H., probably the first attempt made in that State to establish a cloth manufactory with machinery based on the improved English models. Beaumont sent a sketch of the spinning machine in Joseph Wood's mill; and after reading of the expatriates' hopes for the future and of excellent manufacturing prospects in America, he "got a hankering to go there and see what they were about", especially as trade was depressed at home.¹

1. W.R. Bagnall, pp.269-70.

In order to circumvent the laws forbidding the emigration of skilled artisans, Besumont packed his goods on hand, and bought a considerable quantity of similar goods from neighbours and several casks of hardware, especially cutlery in Sheffield. The vendor in Sheffield gave him a letter of introduction to a Liverpool broker, who in turn vouched for Besumont at the custom house that he was a farmer's son going to America on a trading trip.

James Besumont sailed for America in the spring of 1800, landing at Salem, Mass., 56 days later. He sold his goods mainly at the port of entry, at Beverly (where he visited the cotton factory, of which he thought little) and at Newburyport (where he visited the Byfield mill, described by him as "the first woollen manufactory, worthy of the name, established in the United States").¹ For the winter of 1800-01, Besumont stayed in Boston, where he made the acquaintance of a young Englishman, known now only by the nickname of 'Slimsey'. Besumont was informed by the latter

1. W.R. Bagnall, p. 271.

that a fine mill-privilege existed at Canton, Mass., south of Boston on the Neponset River, and that the two owners wished to establish a cotton factory on the site; they were willing to erect a dam and mill if someone would invest \$400 to buy machinery. Besumont visited Canton, liked what he saw and agreed to furnish the machines, presumably with part of the proceeds from the sale of the woollens and cutlery brought from Yorkshire.¹

'Slimsey' now proposed to Besumont that they should go to Paterson, N.J. A machinist there, John Clark, was making cotton machinery at a factory erected by the Society for the Establishment of Useful Manufactures, and Besumont could have his machinery built there. Besumont (now aged 22) and his companion left Boston in the early spring of 1801. He recorded:

1. W.R. Bagnall, pp.271-72.

" 'Slim' and I started off from Long Wharf in Boston in a smallsloop bound for New Haven [Conn.] . From that place we went to Humphreysville,¹ where he said there was a cotton factory; and there we found it; but there was nothing doing at that time and I thought from the appearance of the machinery that it was not capable of doing much. From New Haven we voyaged in a small packet to New York. From New York we went to the city of Paterson in New Jersey. At that time there were hardly a dozen houses within a mile of the Falls of the Passaic. 'Slim' had been there before, working at a paper mill and had made the acquaintance of John Clark, a machinist. We made an agreement with Mr. Clark to build three cards, a drawing and roving frame, and a mule of one hundred and forty-four spindles. I found the machines would cost double what 'Slim' had represented; but I agreed to pay for them, as I would not put my hand to the plough and look back. I stopped four or five weeks at a worthy Dutchman's house near by the factory".²

1. Now Seymour, Connecticut.

2. Cited by W.R. Bagnell, p.272.

James Beaumont returned to Boston alone, for 'Slim' got work at mule-spinning in a small cotton factory at Bellville", a few miles from Peterson. The dam and factory at Canton, Mass., were built during 1801 and were ready for the setting up of Clark's machines, received in early 1802. Beaumont, drawing upon the knowledge gained during his silversmith's apprenticeship in Sheffield, completed the necessary drawing and roving cans and other tin work in a Boston coppersmith's shop. Beaumont then entered into partnership with Lemuel Bailey and Abel Fisher: they owned the mill and real estate, he, the machinery; and profits were to be divided equally.

The Canton factory first made wick-yarn for the candle-makers, the prominent firm of Aaron Davis & Company, of Roxbury, Mass., placing a large order for the product at 75¢ a pound. Beaumont had purchased the original Sea Island cotton, the price reduced because of staining, for about 24c. a pound, but upland cotton from Georgia, costing 16¢. - 18¢. a pound, later formed the raw material. The factory also began to make warp and weft yarns for domestic fabrics, and the first piece of cloth was made for sheeting at 50¢. a yard. "This, in 1802", claimed

Beaumont, perhaps with some exaggeration, "was the first piece of cotton cloth ever made in America from mule-yarn, either all or in part produced".¹

Within two years of the factory's establishment, ownership of the property was modified. In April 1804, Bailey sold his interest in the mill-privilege to Fisher, who thereby became sole proprietor of the real estate; and in February 1806, Fisher sold to James Beaumont $4\frac{1}{2}$ acres with the cotton factory, buildings and mill-privilege.

Associating at the time with Richard Wheatley, a Boston merchant, Beaumont manufactured cotton yarns, bed-ticking, sheeting and shirting, checks, plaids, ginghams and cotton pelisse wadding.

Beaumont acquired a monopoly in the production of pelisse wadding, and his original process of running the carded batts between rollers wet with size, was patented in December 1814.

In July 1808, Beaumont sold the property to Wheatley except for one-quarter of the mill-privilege and mill-stream; and Wheatley in turn

1. Cited by W.R. Bagnell, pp.272-74.

operated the property until 1821.¹

James Besumont, however, had by no means ended his operations. Soon after selling his mill property to Wheatley, he erected a new factory on the north side of the Neponset River on land purchased from Abel Fisher in February 1807: the land also adjoined the mill-privilege of which he had retained one-quarter. Besumont continued to manufacture the same types of fabrics produced earlier, especially pelisse wedding, but he also added woollen fabrics to the range. Besumont reported the following about these activities:

"I then began to manufacture all wool cloth, cercys² and satinets. For the last article I got great credit, making my own cotton warps of Sea Island cotton, and employed English workmen, who beat them up well in the hand loom, so that when afterwards finished you could scarcely tell the back side from the face. I sold the finest of them for \$3.50 a yard, both before and during the war of 1812".³

1. W.R. Bognall, p.274.

2. Presumably 'kerseys'.

3. Cited by W.R. Bognall, p.274.

By his production of setinets in 1808 or soon after, Besumont, if his evidence is correct, was one of the three pioneers - together with Abraham Warland, formerly of Ashton, Lancs., Shrewsbury, Leeds and Holbeck, then of Andover, Mass., and Delano Abbott, in Vernon, Conn. - to develop this important branch of American woollen manufacture.¹ Besumont continued in remunerative business until he sold his factory in February 1823 for \$3,500. Retiring from manufacturing pursuits at the age of 44, he turned to farming.²

One of the many problems faced by the proprietors and initiators of the factory system in the American textile industry in New England and elsewhere was the shortage of labour, skilled in the processes and in the use of equipment already employed or being developed in England. John Shew, a Saddleworth spinner and weaver, accompanied John and Arthur Scholfield when they emigrated in 1793; he was very soon taken into partnership when the brothers began woollen-cloth

1. Cited by W.R. Bagnall, pp.274-75, 306, 335-43; D.Hamilton Hurd, History of Essex County Massachusetts, II, pp.1645-46. Abraham Warland: born Ashton, Lancs., 22 Feb. 1772; died Andover, Mass., 20 Feb. 1849.

2. W.R. Bagnall, p.275.

manufacture in a hired house in Charlestown, Boston.¹ James Besumont employed English workers from about 1808 onwards in his new factory at Canton, Mass., for the manufacture of satinetts.² When Besumont and 'Slimsey' made their trip from Boston to Paterson, N.J., in early 1801 to order machinery for the Canton factory, it will be remembered that they made a short visit to Humphreysville (later Seymour), Conn., to see the cotton factory there. Besumont's comments were disparaging: "...there was nothing doing at that time and I thought from the appearance of the machinery that it was not capable of doing much...."³ But those were early days. General (or Colonel) Humphreys, former U.S. minister to Spain, had bought a factory site - including dam, sawmill, two fulling mills, clothier's shops and other buildings - on the Naugatuck River in New Haven County. Humphreys was joined by John Winterbotham, a Lancashire

1. W.R. Bagnall, p.203; A.H. Cole, I.p.88.

2. W.R. Bagnall, p.274.

3. Ibid., p.272.

manufacturer from near Manchester, and then by Thomas Vose, of Derby, Conn. Forming a company under the name of Thomas Vose & Company, the partners built a woollen mill in 1806, and later a paper and cotton mill. In order to work the woollen mill, English artisans were imported. One of these artisans, probably not the only one from Yorkshire, was Thomas F. Gilyard, born in Leeds in the 1780s, where he was employed as an expert finisher of broadcloth. Arriving in Humphreysville (or Seymour) in 1806, he built a house at No. 126, Skokerst Street, wherein his son, grandson and great-grandson were later born.¹ By 1811, one year after the re-organization of Thomas Vose & Company into the Humphreysville Manufacturing Company, it was declared that the "best broadcloth produced here is considered as inferior to none that is imported". The weaving of woollen cloth, however, was still not done by power-loom in the factory,

1. Raymond E. Gilyard, born Mar. 1891, the great-grandson of Thomas F. Gilyard, was mayor of Seymour in 1930.

but by hand-loom in private families.^{1.}

The Hollingworths, like so many others from the West Riding, reached New England from the Honley area "when the factory was already a common feature of the American scene".^{2.} The probable reasons for their emigration, and their life in central New England, have been well covered,^{3.} but their locations must be reiterated. John and Jabez Hollingworth settled first in Leicester, Massachusetts, in 1826, and became employees of the Leicester Manufacturing Company which made woollen cloth. The brothers were joined there in December 1827 by their father, George, and three other brothers, Joseph, James and Edwin. The family's skills covered almost the whole range of processes required in woollen-cloth production: slubbing, spinning, warp-winding, weaving, finishing; and Jabez was

1. Mery H. Mitchell, History of New Haven County, Connecticut, 3 vols. (Chicago & Boston, 1930), II, pp.491-92. Humphreys never took an active part in the business, viewing the mills as a patriotic and philanthropic undertaking. He promoted Connecticut state legislation for the provision of education for factory apprentices and the humane treatment of workmen.
2. T.W. Leavitt (ed.), The Hollingworth Letters..... p. xvii.

in the machine shop as a carpenter. By the spring of 1830, the father and Joseph, James and Edwin, were employed by the Hamilton Woolen Company in Southbridge, Mass., a large firm producing broadcloth and employing more than 100 workers. Meanwhile, John and Jabez moved to Woodstock, Conn., to work in the leased Muddy Brook Pond Factory. The other members of the family joined them within a year; and the factory was maintained on lease for three years, but not apparently purchased. Jabez moved to Sturbridge during 1832. James returned to Southbridge. Edwin later appeared in Waterford, Conn., before moving to McDonough, N.Y.; E. Hollingworth & Son were manufacturing cassimeres and flannels there as late as 1874. John Hollingworth stayed in Woodstock, buying a farm in 1835. Joseph also remained in Woodstock, dying there in 1861.¹

It is clear from the Hollingworth correspondence that many more Yorkshire expatriates were contemporarily resident in New England. George Brown was at the South Leicester woollen factory in 1827,² as was James Keddock in 1827-28.³ George Meller from the same area of Henley - Netherthong was in

1. T.W. Leavitt (ed.), The Hollingworth Letters..... pp. xxiii-xxv.

2. Ibid., p.17.

3. Ibid., pp.13, 22.

South Leicester from late-1827 until late-1829 and boarded with the Hollingworths.¹ James Shaw, a native of Saddleworth, father of "a large Industrious Family" and "an excellent Corder", possessing "a knowledge or acquaintance with some of the Merchants and Woolstaplers of New York and Albany", was working in South Leicester in 1830, though he may well have been there in 1828 or earlier.² James Hollingworth married James Shaw's daughter, Mary, at Wilkinsonville, Worcester Co., Mass., in April 1830; and the marriage produced at least five sons and one daughter by 1842.³ Joseph Kenyon sailed for America about the same time as Jabez and John Hollingworth, in late-1826 or early 1827. Locating initially at South Leicester, he spun wool, and by mid-1828 was boarding with the Hollingworth family. In early 1830, he moved with the family to Southbridge, Mass., where he was 'roping' (or 'roving'). Sometime after October 1832, he leased a mill in Southbridge. Later still, he moved to Woodstock, Conn., purchasing a mill with ten acres of land and substantial machinery

1. T.W. Leavitt (ed.), The Hollingworth Letters..... pp.23, 26-28, 31, 48.

2. Ibid., pp. 39, 56-58, 60-61.

3. Ibid., pp.39, 71-72, 94.

for the manufacture of cassimeres. The village around the factory became known as Kenyonville, and on his death, his sons ran the Kenyon Brothers Mill.¹ Mary Kenyon, Joseph's sister, sailed from Liverpool with a party from the Honley area about 8th July 1829, reaching New York, 17th August. After experiencing some difficulty in finding work in South Leicester, Mary is noted as being a weaver in Southbridge by early 1830, where she lost part of one finger weaving on a power-loom.² Joshua Smith, probably a native of the Huddersfield area, is noted as working at Winsted, Conn., in 1828, together with John and James Hollingworth during their short stay there. All were probably working for Alfred French who made broadcloths at Winsted, the village also including a dye goods dealer and a shop where "Machinery for Woolen Factories" was made.³ Joseph Haigh, George Hollingworth's

1. T.W. Leevitt (ed.), The Hollingworth Letters..... pp. 5-6, 10, 13, 16-17, 26, 39, 42-43, 45, 48, 76-77, 91, 107, 111.

2. Ibid., pp.45, 48, 52, 77, 88, 111.

3. Ibid., p.37.

cousin, seems to have been a restless spirit. Haigh, located with his family in Pittsburgh up to 1830, had moved to Woodstock, Conn., by the September of that year, where he was weaving. With his son, John, Haigh moved temporarily to Milbury, Worcester Co., Mass., in the spring of 1831: the two soon returned to Woodstock, "not liking the Confinment, Slavery and oppression of the Yanke Factorys". Jabez Hollingworth, despite opposition from his father-in-law, married Joseph Haigh's daughter, Martha.¹ J. Brocks from Hoxley was located in Middletown, Conn., by the late summer of 1829.²

In a period somewhat later than that covered by the Hollingworth correspondence, J. Moorhouse, a woollen-cloth dyer from Holmfirth, but now of Southbridge, Mass., was married in November 1852 at Woodstock, Conn., to Ennice Green, the daughter of Amos Green, of Woodstock.³

1. T.W. Lovitt (ed.), The Hollingworth Letters, pp.74, 81-86, 99.

2. Ibid., p.45.

3. Halifax Guardian, 1 Jan. 1853: marriage, 25 Nov.1852

In July 1859, a John Hinchcliffe Moorhouse, perhaps the same or a kinsman of the last, the second son of the late Joseph Moorhouse, 'yeoman' of Hades, Holmfirth, died at Greenfield in north-western Massachusetts.¹ Richard Wilkinson, a cloth-dresser from Leeds, aged 74 and perhaps going to America to join younger members of his family already there, had also died at Greenfield in October 1848, three days after landing at New York.²

The year 1840 found Abel Stephenson, a native of Thurstonland, temporarily resident in Northampton, Mass. A hand-weaver of woollen cloth at home, Stephenson reached the United States during depressed times, and, as a firm opponent of power-driven machinery, was dismayed to find that in Northampton, "They weav all by power here". In all, he presented a gloomy picture:

1. Halifax Guardian, 20 Aug. 1859: obit., 24 Jul. 1859.
2. Leeds Mercury, 28 Oct. 1848; E.C.H., 2 Nov. 1848: obit., 2 Oct. 1848.

"The times is and as been so bad
this last 6 months in the manufacturing
business that I cannot give you any
encouragement to come at presnt...I
am spinning at the place I am at now...
Wages is very low here. I shall not
stop here any longer then till times
begins to revive again...Sickness
and been out of work it is nearly
taken all my earnings....Fancy goods
is imported from England cheeper then
they can make them here..."

William Swift, a shoemaker from Lower Wortley,
near Leeds, was also in Northampton in 1840:
he was evidently more cheerful about his
prospects for "He is going to send for
his family".¹

The later 1840s seem to have found
Yorkshire textile emigrants in a generally more
optimistic frame of mind. In October 1846,
Benjamin Stead, a stuff manufacturer, formerly
of Bradford, married Marynette, the eldest

1. Abel Stephenson, Northampton Factory Village,
Mass., to Relatives, Thurstonland, Yorks.,
18 Apr. 1840 (C. Erickson, Invisible Immigrants,
pp. 305-06).

daughter of Eleazer Ayrs, at Franklin,
New London County, Connecticut.^{1.}

R. Sugden, a young card-cutter, later
wire-drawer, from Idle, near Bradford,
felt "pretty comfortable" in Leicester,
Mass., in 1845, where "An Englishman owns
two out of three factories. He is from
Saddleworth, and came here about 20 years
ago, a cloth weaver". With the optimism
of youth, Sugden was full of praise for his
new situation:

"The cards are all made by machinery,
and in a different way to what they
are in England. Indeed, nearly every thing
is done with less labour here; it is
all 'go ahead'. I got work the same
day that I arrived, at my own
trade...The wages generally are
rather higher, and food cheaper, here
than with you; consequently the working
class is in far superior circumstance,
so far as I have had the opportunity
of seeing..."

1. Bradford Observer, 19 Nov. 1846;
Halifax Guardian, 21 Nov. 1846;
marriage, 25 Oct. 1846.

At the three woollen mills,

"they have first-rate machinery; they dispense with slubbers, spinners and hand-loom weavers...they employ young ladies (so called here), to tend the power looms...The working men appear to me to be superior to the same class in England, both in their intelligence, habits, morals and general character. They are nearly all teetotalers; but comparisons are odious. The young men are great fops, and spend most of their wages in fine clothing and gewgaws. In most of the workshops there are large mirrors, and the young men have soap, towels, combs, and hair brushes, and they wash and dress everytime they leave the shop; I have used a pound of soap already...."¹

1. R. Sugden, Leicester, Mass., 3 May 1845
(extract in Bradford Observer, 12 Jun. 1845).

In 1848, according to H.B. Waterhouse, now resident in the United States "near three years", the picture was less bright in New England for would-be emigrant hand-woolcombers from Bradford hoping to continue their trade. "In Ballard Vale, Massachusetts", he wrote,

"there are forty [handcombers] employed, and in my opinion it is decidedly the best place for them in the States, and I do not hear that they contemplate employing more; all their pieces are filled up, and many are waiting for situations when vacancies occur. In Chelmsford, near Lowell, where they used to employ upwards of 20, they now have none, and it is reported the factory is about closing. In Providence, Rhode Island, I hear six are at work, and

they are as many as are wanted..."¹

Others, however, writing to Joseph Barker's The People, seem to have generally found a comfortable niche in New England textile towns by the late 1840s. Benjamin Ross, formerly of Pudsey, and by 1849 of the Amesbury and Salisbury Mills, Mass., considered that he had a great chance to prosper: he had "a good house, with 7 rooms, 3 of these papered".² Joseph Fox, a shoemaker from King Cross, Halifax, wrote from Lowell, Mass., in 1848 that he obtained work at the first attempt, and reported that he would do better than in England and yet rarely work later than 7.0 p.m. on five days and 5.0 p.m. on the sixth, earning "a dollar a day very easy". On his first night in Lowell, he was introduced to "near a score" of people

1. H.B. Waterhouse, Cohoes, Albany Co., N.Y., to Joshua Pollard, 4 Feb. 1848 (in Bradford Observer, 2 Mar. 1848).
2. The People, II, No. 85. Letter of 28 Oct. 1849 (cited by M. Brook, "Joseph Barker and The People, The True Emigrant's Guide", 343).

from Halifax and Sewerby Bridge.¹ By 1849-50, Thomas P. Kellet who had emigrated from Armley, Leeds, probably in the early years of the decade, was a fore^eman and shareholder in the Middlesex Factory at Lowell, though he was hoping that in time he would make himself independent of the factory system by buying land.² From South Andover, Mass., William Beaumont reported home to the Huddersfield district in 1849 that life in a New England textile mill was certainly not one of ease. Work continued from daylight to 7.30 p.m. in winter and from sunrise to 7.0 p.m. in summer: "It is all factory and bed, so that no room is left for improvement". Even so, the recipient of Beaumont's letter was encouraged to emigrate to America for his weaving and designing skills would stand him in good stead; but, initially at least, he should leave his family at home for "in this country five or six starve a deal sooner than one".³

1. The People, I, No. 36. Letter of 7 Dec. 1848 (cited by M. Brook, 343-44).
2. The People, II, No. 70. (M. Brook, 370).
3. William Beaumont, South Andover, to Joseph Greenwood, Gawthorpe, nr. Huddersfield, 4 Feb. 1849; in The People, I, No. 48 (cited by M. Brook, 347).

From numerous press announcements alone, it is clear that Yorkshire textile emigrants were scattered throughout the manufacturing towns of New England in the 1840s to 1860s. It is rarely evident from the notices, however, whether the subjects were long established overseas or recent emigrants. William Littlewood, a former Leeds flax dresser, died at Andover, Mass., in June 1848.¹ In early 1849, Joseph Oldfield was resident in North Lee, Mass., when his wife Mary died at Armley, Leeds, aged 33.² Later that year, both Elizabeth Mellor and her infant son died at Woonsocket, R.I.: Elizabeth was the wife of Joseph Mellor and third daughter of John Clough, formerly of Fulneck, near Leeds.³ In September 1850, Thomas Trees married Hannah Popplewell at Nashua, N.H., September 1850. Thomas was the third son of (the late) James Trees, a manufacturer of Baildon, near Shipley, and Hannah, the second daughter of George

1. Leeds Mercury, 15 Jul. 1848: obit., 18 Jun. 1848.
2. E.C.H., 25 Jan. 1849: obit., 17 Jan. 1849.
3. Leeds Mercury, 18 Aug. 1849: obits., 17, 25 Jul. 1849.

Popplewell, of Ardsley.¹ Sarah Ann, the wife of John Beckwith and sister of Richard Meller, of Leeds and Huddersfield, died in Rhode Island the same year.² John Boothman, a cloth dresser from Leeds, was in Providence, R.I., at the time of his death in early 1853.³ John A. Edmondson was working as an overlooker at Mystic, Conn., when his young wife Elizabeth, the youngest daughter of Joseph Armitage, formerly of Honley, died there in 1856.⁴ Josh. Dickenson, from Bingley, died in Lowell, Mass., and Daniel Dodson, from Knaresborough, in West Andover, Mass., in 1857.⁵ Phoebe, the wife of James Homer, formerly of Halifax, died at Fall River, Mass., in early 1858.⁶ William Henry Haigh, married Miss E. Wood at Roxbury, Mass., later in 1858, and both were natives of Halifax.⁷

1. Leeds Mercury, 26 Oct. 1850: marriage, 30 Sep. 1850.
2. Ibid., 2 Nov. 1850.
3. Ibid., 26 Feb. 1853: obit., 16 Jan. 1853.
4. Ibid., 19 Apr. 1856: obit., 15 Mar. 1853.
5. Bradford Observer, 14 May 1857: obit. 6 Apr. 1857; Leeds Mercury, 5 Dec. 1857.
6. Halifax Guardian, 13 Mar. 1858: obit. 16 Feb. 1858.
7. Ibid., 29 Jan. 1859: marriage, 28 Dec. 1858.

Mary, the wife of Henry Medley, and eldest daughter of John Stenson, of Holbeck, died at Pittsfield, Mass., in February 1862.^{1.} The following month, James Speck, formerly of the Galsis Mills, Stansfield, Todmorden, died in Lowell, Mass., aged 46.^{2.} The aged William Booth, "formerly at Mr. Stansfield's Mill, Kirkstall Road, Leeds", died in February 1864 at Woonsocket, R.I.^{3.} At the time of his death in October 1864 from typhoid fever, Ezra Booth was staying with his brother Henry in Pascedale, R.I.; and although the former had been in the employ of Charles Lees, a Bradford solicitor, it is likely that the latter was engaged in textiles.^{4.} George Nicholl, formerly of Halifax, was a woolsorter in Amesbury, Mass., when his infant daughter died there in 1864.^{5.} Mrs. Bessey Hargrove, the daughter of (the late) Samuel Murgetroyd, of Bradford, died in Nashus, N.H., in August 1865.^{6.} William Gill, formerly

1. Leeds Mercury, 22 Mar. 1862; Bradford Observer, 27 Mar. 1862: obit., 9 Feb. 1862.
2. Halifax Guardian, 12 Apr. 1862: obit., 22 Mar. 1862.
3. Leeds Mercury, 23 Mar. 1864; Bradford Observer, 24 Mar. 1864: obit., 19 Feb. 1864.
4. Bradford Observer, 17 Nov. 1864: obit., 11 Oct. 1864.
5. Halifax Guardian, 3 Dec. 1864.
6. Bradford Observer, 14 Sep. 1865: obit., 10 Aug. 1865.

of East Merton, near Bingley, died in Rhode Island early the following year at the age of 31.¹ Later in 1866, Pearson, the young grandson of John and Hannah Hainsworth, of Bents, Wilsden, near Bradford, died in Sebattisville, Maine.² William Whitworth, who died at his home in Guy's Cliffe, Otley Road, Bradford, in August 1868, had earlier been superintendent of the Hartford Carpet Company at Tariffville, Conn.³ John Coxon, a Bradford woolsorter, died at North Vasselboro, Maine, in 1869.⁴

1. Gravestone, Parish Church of St. Luke, Merton: obit., 10 Feb. 1866.
2. Gravestone, Wilsden Cemetery, Cullingworth Road: obit., 7 Jun. 1866.
3. Bradford Observer, 13 Aug. 1868: obit., 3 Aug. 1868. Orrin Thompson organised the Tariff Manufacturing Co. in 1840, purchased a factory at Tariffville, installed Bigelow carpet power-looms, and continued the operation of the Thompsonville mills. The Hartford Company was reorganised in 1854 and bought the factory at Tariffville in 1859 (Von Bergen & Meurersberger, p.25). It seems likely, therefore, that William Whitworth's superintendence dated from about 1859 or later.
4. Bradford Observer, 14 Dec. 1869: obit., 24 Nov. 1869.

Issac, the youngest son of (the late) Daniel and Sally Ingham, of Under Hill, near Illingworth, died at Rockville, north-east of Hartford, Conn., in 1870, aged 28.¹

Thomas Goodell who died in Sanford, Maine, 11th May 1910, aged 86, was perhaps the epitome of the successful Yorkshire textile emigrant to the United States in the nineteenth century. Born in Dewsbury, 1st September 1823, the son of George and Tebithe Goodell, he was orphaned at an early age and apprenticed in a woollen mill. There he remained for eleven years and by 1840 he was in charge of the buying of materials and the selling of the finished products. On attaining his majority in 1844, he began working for himself and "met with a fair degree of success",

Goodell's immediate motives for emigrating to the United States in 1846 remain unknown, and it can only be surmised that the

1. Halifax Guardian, 22 Oct. 1870; Gravestone, Mount Zion Methodist Church, Ogdon: obit., 18 Sep. 1870.

restlessness of ambitious youth confined by depressed industrial times encouraged him to take this step. In New England, restlessness and a degree of altruism combined to make his early days there somewhat itinerant. He lived for a brief time in Connecticut, then moved to South Hadley, Mass., where he resigned a good position to allow a needy countryman with heavy family responsibilities to take work. After two years' work in Rhode Island, Goodall returned to South Hadley where he married Ruth, the second daughter of Jerry Waterhouse, a leading manufacturer there, in April 1849.

In 1849, he moved to West Winchester, N.H., and in 1852 to Troy, N.H. At Troy, he manufactured satinetts and beavers, as well as shaped horse-blankets; and of the last, it is claimed, he was the pioneer in the United States, presenting many bales of blankets for Union troops in the Civil War. At the end of interstate hostilities, he sold his Troy plant to a Keene, N.H., manufacturing syndicate, which in turn continued its activities until at least 1911.

Thomas Goodell then paid a long visit to England - indeed, during his long business life, he made several transatlantic trips - and while there on the first occasion concerned himself with exporting lap-robbs to the United States and Canada. Goodell decided to produce the goods he had been exporting from England, and in 1867 purchased, at Sanford, Me., a flannel factory, grist and saw mill, and a substantial water-privilege on the Mousam River. By 1868, he was operating two sets of cards and ten looms, with 50 operatives producing carriage robes and kersey blankets. About 1885, the large manufacturing enterprise of Sanford Mills was formed, the result of a business alliance between L.C. Chase & Co., Boston, Mass., and Thomas Goodell, Sanford., Me., manufacturers of sochir plush robes and blankets. Sanford Mills, by 1911, employed about 1,500 operatives, and the earlier village of Sanford was converted into an important commercial centre.

In 1884, Thomas Goodall resigned from the presidency of the Sanford Mills Corporation, and in 1895 retired from business life. His interests, however, were perpetuated by his twin sons, Louis and George, and a third son, Ernest.¹

Not all Yorkshire textile emigrants in the mid-nineteenth century were concerned directly with the manufacture of cloth. Some, indeed, were textile technologists. Richard Kitson, born in Cleckheaton in 1814, the son of John Kitson, card-clothing manufacturer, fell into the latter category.² Richard Kitson, after receiving a "fair education" in Cleckheaton, joined his father in the manufacture of cards for combing. The two Kitsons made and patented a machine for the manufacture of needlepointed card teeth which revolutionised the making of card clothing, but when the patent expired in 1849, father and son were left in business straits.

1. J.H. Brown, E.M. Norris (eds.), Lamb's Textile Industries of the United States (Boston, Mass., 1911), I, pp. 341-42, 359.
2. E. Beines, History, Directory and Gazetteer of the County of York (Leeds, 1822), I, p. 483, lists John Kitson and Thomas Kitson under the heading of Cleckheaton card-makers.

Prospects brightened when Francis Calvert, of Lowell, Mass., visited Cleckheston to examine the Kitson cards. Calvert proposed that Richard Kitson should return with him to Lowell, and the latter emigrated with his wife Sarah, and family, in 1849. The Yorkshireman opened a shop on Broadway, Lowell, and consequently was the first manufacturer of needle-pointed card clothing in the United States. Soon Kitson remodelled the picker then in use; also, in 1852, he invented a single cotton-opening machine which later gained total acceptance in New England cotton mills.^{1.}

Up to the time that Kitson had introduced his needle-pointed revolving cylinder shortly after 1853, John C. Whitin and other inventors and makers of lappers had used besters.^{2.} It should be noted in passing

1. Brown, Norris (eds.), Loeb's Textile Industries..., I, p.328; George Sweet Gibb, The Saco-Lowell Shops: Textile Machinery Building in New England, 1813-1949, Harvard Studies in Business History, XVI (Cambridge, Mass., 1950), p.313.
2. Thomas R. Nevin, The Whitin Machine Works Since 1831: A Textile Machinery Company in an Industrial Village, Harvard Studies in Business History, XV (Cambridge, Mass., 1950), espec. pp.28-33, 130.

that Yorkshire machine makers had found their way to Whitinsville, Mass., a few miles south-east of Worcester, by about the mid-century. George Pollard, a 'machine maker' from Leeds, died there in October 1850, aged 35.¹ Robert Swithenbank, also from Leeds, married Mary, the eldest daughter of Thomas Claybourn, a Scarborough seiner, in Whitinsville in May 1851.² David Crowfoot, a 'machinist', formerly of Leeds, married Elizabeth Fussel in Lowell, Mass., in October 1846, and died at Worcester, Mass., in February 1865, aged 44.³ A 'machinist late of Halifax', William F. Baldwin, married Mary Donahue, an Irish girl from Cork, at Mansfield, Mass., in January 1854.⁴ David Hinchley, an 'engineer', and Jennett Townsend, both from

1. Leeds Mercury, 16 Nov. 1850: obit., 12 Oct. 1850.
2. Scarborough Gazette, 29 May 1851: marriage, 8 May 1851.
3. Leeds Mercury, 7 Nov. 1846, 25 Mar. 1865; marriage, 8 Oct. 1846; obit., 22 Feb. 1865.
4. Halifax Guardian, 25 Feb. 1854: marriage, 12 Jan. 1854.

Leeds, married in Lowell, Mass., in January 1857.¹ In Whitinsville, whilst English immigrants were never numerous - compared with the Irish, and later, the French-Canadians - they constituted the foreman group, holding key positions in the community's economy. The English were invaluable for their skills as machine makers and for their ability to teach the Whitin workers superior methods of manufacture.²

In the years leading up to the Civil War, Richard Kitson became the most important American producer of picking machinery. All of his machines were made by outside manufacturers until 1860, but in that year he erected a shop to manufacture these machines himself. This shop, the nucleus of later plant growth, was a brick building, 80ft. by 80ft.

1. Leeds Mercury, 28 Feb. 1857: marriage, 18 Jan. 1857. 'Engineer' is presumably used in the English sense, not the American.
2. T.R.Nevin, The Whitin Machine Works..., p.160.

four stories high, and was constructed on Dutton Street, Lowell, across the canal from the Lowell Machine Shop. Kitson's technological and business success reached a climax during the Civil War years when his machines were able to process - in the absence of Southern cotton - Surat and other short-staple imported cotton.

The Kitson shop in Lowell prospered from the beginning, sweeping away competitors. The Whitin Machine Works, producing a wide range of products, was unable to compete with the technological progress of Kitson's shop. The Lowell Machine Shop and the Saco Water Power Company attempted to compete in the building of pickers, but failed. Not until about 1870 did Kitson have any serious competition, and by then his position and reputation were secure. He also minimized overseas

competition by incorporating English improvements: he entered into agreement in 1879 with William T. Emmott, of Manchester (Lancs.), by which any English inventors wishing to license picker improvements for manufacture and sale in the United States were to be directed to Kitson. Reciprocally, Emmott concerned himself with the promotion of Kitson's machines in Britain.¹

Technological improvements poured from the minds of Kitson and his skilled assistants. The business, highly prosperous, was incorporated in 1874 under the name of the Kitson Machine Company and Richard Kitson became president, holding office until his death, 14th July 1885, aged 70 or 71. Kitson, born in Cleckheaton, was a Yorkshire emigrant of great mechanical genius: much was owed to him for the advancements made in the manufacture of machines for manipulating cotton.²

1. G.S. Gibb, The Saco-Lowell Shops..... pp.314-15.

2. G.S. Gibb, The Saco-Lowell Shops..... pp.313-15; Brown, Norris (eds.), Lamb's Textile Industries..... I, p.329.

Of all New England textile locations, Lawrence, Massachusetts, "sometimes called the Bradford of America, for it is there that Bradford Americans come out the strongest", apart from the fact that it was the "chief seat of the worsted manufacture in America", deserves particular treatment.^{1.}

Unlike many other New England textile centres, Lawrence on the Merrimack River possessed no colonial background, and its growth from foundation was dependent upon immigrant invasions. Lawrence was established in 1845 by the Essex Company, comprising Patrick Jackson, Nathan Appleton, Charles Storow and Abbott Lawrence: the last was the principal owner and president, and the new town on being chartered in 1847 took his name. Construction work was rapidly completed. Irish labour built the longest dam on the Merrimack by 1848. In the following year, the Bay State Mills were producing shawls, and the Atlantic Mills, sheets and shirts; and by 1853 or 1854 the Pacific Mills were manufacturing cashmeres. In 1855,

1. James Burnley, Two Sides of the Atlantic (London & Bradford, 1880), p.62.

Lawrence possessed five wool mills and six cotton mills, 15 per cent of Massachusetts' sets of wool textile machinery and 10 per cent of its cotton spindles. The Arlington Mill was built in 1865, and about the same time, a felt mill was founded by Enoch Waite, an Englishman.^{1.}

Except in its very earliest years as a model town, Lawrence was an immigrant city. Even by 1855, when its population had risen to 16,000, some 40 per cent had been born abroad, mainly in Ireland. By 1910, 74,000 out of the total of 86,000 living in Lawrence were either first - or second-generation Americans, with immigrants representing 51 countries.^{2.} The first workers in Lawrence migrated from other parts of New England and immigrated from Ireland; and by 1848, there were 3,750 native Americans and 2,100 Irish in the town. The arrival of large numbers of "menial" Irish "labourers", who were "intemperate" to boot, was viewed with

1. Donald B. Cole, Immigrant City: Lawrence, Massachusetts, 1845-1921 (Chapel Hill, N.C., 1963) pp.17-19, 30, 41; Von Bergen & Mauerberger, p.903.

2. D.B. Cole, pp.10-11, 26; Maurice B. Dorgan, History of Lawrence, Mass., with War Records (Cambridge, Mass., 1924), pp.11-14, 44, 174.

disfavour by native Americans. Although several hundred indigenes existed at first with the Irish in shanty dwellings near the dam, segregation was soon practised. As the Irish influx increased, so the native-born moved to the outskirts of Lawrence, to Prospect and Tower Hills and South Lawrence.¹

In the ante-bellum years, it is clear that although overseas workers in Lawrence were predominantly Irish-born, a trickle of Yorkshire emigrants began to flow there either directly from England, or, perhaps indirectly and occasionally, by way of employment in other New England towns. It is possible that as early as 1846, some of the twenty or so families who were reportedly engaged by the representative of a Boston spinning establishment on his visit to England looking for woolcombers and millhands found their way to Lawrence.² John and Hannah Trees

1. D.B. Cole, pp.24, 26. Cole cites The Lawrence Courier, 8 May 1847, for sneering references to the Irish immigrants.
2. Sheffield Mercury, 21 Mar. 1846 (from Halifax Guardian).

emigrated from Bieldon, near Shipley, in the 1840s and settled in Lawrence. In 1849, John Trees was credited with establishing the first commercial dye-house in that locality, while, about the same time, his wife Hannah successfully operated a millinery business. Later, a laundry and carpet-cleaning business was added to the dye-house.¹ Robert Hinchcliffe, weaver and Chertist, born in Bradford in 1817, left for Boston and Lawrence in 1847. In Lawrence, he edited a working men's journal on behalf of other Bradford weaver-emigrants and became an associate of Robert Bower, another weaver and 'physical force' Chertist, born in Lancashire in 1807,

1. Henry J. Trees, 448-9th Avenue N., St. Petersburg, Florida, to J.T. Dixon, 31 Jan., 18 Feb., 20 May 1969.

who reached Lawrence in 1848 and became "the most important labour leader" there up to and just after the Civil War.¹ Joseph Blackburn, a Bradford woolsorter, died in Lawrence in 1854, after only a short period of residence in the United States.² Samuel Rushworth, also from Bradford, died in Lawrence in 1857,³ as did Matthew Seggerson, formerly of Sweet Street, Holbeck, in 1860.⁴ As noted earlier,

1. Ray Boston, British Chartist in America, 1839-1900, pp.86, 89, 91-92. John Hinchcliffe, Robert's brother, a tailor and active Chartist, also left home in 1847 for New York and, later, Philadelphia and St. Louis, Missouri. In St. Louis he became a miner's lawyer. He settled in Belleville, Ill., in 1860 and edited the Weekly Miner. John Hinchcliffe died at St. Louis in 1878, aged 56.
2. Bradford Observer, 28 Sep. 1854: obit., 30 Aug. 1854, aged 52.
3. Ibid., 5 Dec. 1857: obit., 13 Nov. 1857, aged 39.
4. Leeds Mercury, 25 Aug. 1860: obit., 2 Aug. 1860, aged 32.

the family of a Bradford woolcomber was enabled to join the father in Lawrence in 1857 by means of a subscription such publicised and supported by the Bradford Observer.¹ Michael Naylor and his wife Ann lived in Heckmondwike where they kept the Upper Globe Inn, and Michael wove on his own loom. In 1863, they emigrated by way of Liverpool to New York with their sons, James and John, and daughter, Mary Ellen, and settled in Lawrence.² Though James Holmes, late of Bradford, died in Philadelphia in 1863, he was "for many years the manager and wool buyer for the Pacific Mills, Lawrence, Massachusetts, U.S."³ Charles Fletcher also left Yorkshire before the

1. Bradford Observer, 2, 9, 16, 23, 30 Jul., 15 Oct. 1857.
2. Ethel M. Ashton, 59, Tower Street, Methuen, Mass., to J.T. Dixon, 14 Jan. 1969.
3. Bradford Observer, 14 Jan. 1864; Leeds Mercury, 15 Jan. 1864: obit., 22 Dec. 1863, aged 57.

end of the Civil War. Born in Thornton, near Bradford, 25th November 1839, he attended school for a short time, then worked in a local mill. At the end of his apprenticeship, he moved the short distance to Bradford and followed mill-work there until the age of 21. Hard times in 1864 prompted him to sail for America in the clipper Adelaide and he found employment at the Pacific Mills, Lawrence. He returned to Bradford after a year, probably to marry, but sailed again in 1867, settling in Providence, R.I., and entering the employ of the Valley Worsted Mills, at Olneyville. Fletcher's wife, Harriet, and two young children sailed shortly afterwards in the City of Boston steamer. The careers of Charles Fletcher and his sons have been justly celebrated.^{1.}

1. E. Everton Foster (ed.), Lamb's Textile Industries of the United States (Boston, Mass., 1916), II, pp.89-91; Miss Fletcher Little, 305, Warren Street, Brookline, Mass., to J.T. Dixon, 5, 15 Mar. 1969; Telegraph & Argus (Bradford), 24 Jan. 1968. The Fletchers' subsequent careers are noted in detail, pp.1225-29.

The purpose of the Pacific Mills' organisation in Lawrence was to produce "ladies' dress goods from wool wholly, from cotton wholly, and from wool and cotton combined"; and the establishment ultimately included an aggregation of wool mills, cotton mills and print works. As time passed, production included the following: (worsted) poplins, alpacas, cashmeres, henriettes, serges, brocades and diagonals; and (cotton) mousselines, chambrays, lawns, organdies, challies, draperies, satines and crepes.¹ By the late 1850s, many workers in Bradford were doubtless well aware of the alternative employment offered in Lawrence, specifically by the Pacific Mills. As noted above, James Holmes was a manager and wool buyer at the Pacific Mills "for many years", and Charles Fletcher was employed, albeit temporarily, by the same organisation about 1864-65. Other Bradfordians were also there.

1. Brown, Norris (eds.), Lamb's Textile Industries I, pp. 36-47.

'John Carneck', from Bradford, and 'Hannah Cole' (and probably other members of the 'Cole' family), from Farnsworth, near Belton, Lancs., emigrated under contract to the Pacific Mills.¹ The contract of 'John Carneck' in 1858 was as follows:

"I, 'John Carneck', do hereby engage to go to the United States as soon as possible to make arrangements therefor and immediately enter the service of Pacific Mills, Lawrence, Mass., William C. Chapin, Agent,² as bleacher, for which position there, I declare myself to be fully competent, and agree to devote myself with faithfulness and sobriety to the best interests of my employers. For this service I am to be paid by the Pacific Mills three pounds sterling per week, or \$14.64 federal money. It is also agreed that eight pounds sterling shall be paid to me for my passage money.

1. 'John Carneck' and 'Hannah Cole' are pseudonyms as 'John Carneck's' great-grandson was employed by the Pacific Mills as late as 1950.
2. William C. ('Big Bill') Chapin was Mill Agent, 1853-71 (Lamb's Textile Industries..., I, p. 438).

Should Mr. John Fallon, Superintendent of the print works of Pacific Mills,^{1.} arrange to employ me as an overlooker for the scouring and preparing of delaines,^{2.} I am to receive two hundred pounds sterling per annum, or its equivalent, \$18.70 in federal money, per week.

Signed, Bradford, England, this 13th day
of November, A.D. 1858.

'John Carbeck'.

Witness: G.W. Beyley^{3.}

From No. 3 Derley Street, Farnsworth,

'Hannah Cole' wrote on 10th June 1860:

1. John Fallon was the first Superintendent of Printing; and acting Mill Agent, 1871-88. Joseph Walworth, from Bradford, was Superintendent of the Lower Mill, and later, Pacific Mill woolbuyer (Lamb's Textile Industries, I, p.438; D.B. Cole, Immigrant City, p.115).
2. In the early years, the Pacific Mills produced delaines and calicoes in strong competition with imports from England (Lamb's Textile Industries, I, p.437).
3. Josef Berger (ed.), Memoirs of a Corporation, Pacific Mills (Boston, Mass., 1950), Booklet, 3, p.6.

"Mr. Bayley [G.W. Bayley] -

Sir I beg to inform you that my mother and sisters and I has considered and come to the Conclusion to embark to America being unprepared when I received your Letter I wish to state that we have all things now in readiness and wishes to go the first opportunity offers in the next month. I do intend seeing you personally in Manchester to settle all affairs and if you condescend to let me know the day it would be convenient for you I shall not fail...."

In the letter's margin, Bayley penned:

"Mr. Chapin: Mr. Lomas left with me a list of 36 souls, telling me I must ship them including this family, but will wait until I hear from you".¹

1. J. Berger (ed.), Memoirs of a Corporation...p.7.

'Hannah Cole' wrote again from Farnsworth on
4th September 1860:

"Mr. Baley -

Sir we received a Letter from Mr. Lomas
on the 3d. stating that you agreed for
our Family to go to America. We want you
to let us know a positive Answer. We
have decided not to take our Mother
who is too old and afraid. We want
you to let us know how soon we are to
get ready again what Date of the
Month...."¹

"Hannah' and her sisters evidently emigrated
to Lawrence very soon after for on 3rd February
1861, she requested of the Mills' cashier:

"Pacific Mills

Please pay to my mother 'Bridget Cole',
Farnsworth, England, four pounds £4
and stop it from my wages past earned, also
one pound £1 per month hereafter until
further notice and stop it from my
monthly wages...."²

1. J. Berger (ed.), Memoirs of a Corporation.....
p.8.
2. Ibid.

Within a short time, a romance blossomed between 'Hannah Cole' and 'John Carneck'. By early 1861, the latter was well established in his employment, and, as an overlocker earning £200 a year, was presumably proving satisfactory to John Fallon. A memorandum, dated 26th April 1861, reads:

" 'John Carneck', overlocker, scouring, wants to build a house on the west side of Margin Street.
Land 40 x 159 - 6360 ft. - House one story.
Mr. Barton has examined the property and reports it will be worth, when erected, £1,500.
Mr. 'Carneck' wishes to borrow £1,000 and will pay monthly £15 and interest semi-annually".

W.C. Chapin agreed to this.^{1.}

1. J. Berger (ed.), Memoirs of a Corporation, pp. 8-9.

'John' and 'Hannah' married and moved into the new house in Margin Street.

In June 1861, it was

"Requested by 'John Carmack', overlocker, scouring, that £1 per month be stopped from his wages and paid from this date forward to 'Bridget Cole', Farnsworth, England, instead of payments made to date by 'Hannah Carmack', nee 'Hannah Cole', resigned.

June 18, 1861..." (G.M. Boyley was notified June 19th).

The reason for 'Hannah's' resignation was obvious for, nine months and two weeks later, a memorandum of 3rd April 1862 reads:

"Pacific Mills

Mr. Chapin: 'John Carmack', overlocker, scouring, wishes to build a two-bedroom second story addition to his house on the west side of Margin Street, on which we advanced him \$1000 last Year. Requests additional loan of \$400. Has paid \$193.92, owes \$820 principal. Please advise.

Ebenezer T. Colby, Cashier".

To this, W.C. Chapin again agreed.^{1.}

'John' and 'Hannah Gernock's' son(s), grandson and great-grandson worked for the Pacific Mills, a pattern commonly repeated by other immigrant families.^{2.}

With the end of the Civil War and the opening of the Arlington Mill in 1865, further contingents of immigrants arrived in Lawrence. French-Canadians from the St. Lawrence valley took up employment at the Arlington and followed a social pattern similar to that established by the poor Irish in 1846 when the latter were building the dam and early mills. More Irish arrived. Also from overseas, English and German immigrants were attracted in large numbers. Both national groups had left textile districts, the

1. J. Berger (ed.), Memoirs of a Corporation.....
p.9.

2. Ibid., p.10.

English from Yorkshire (especially the Bradford area), Lancashire and Cheshire, and the Germans from Saxony, Bavaria and Silesia. Apart from their textile experience, both groups had the advantage of encountering a number of their fellow-countrymen who had settled in Lawrence prior to the Civil War.¹

The number of English immigrants rose steadily. In 1855, English-born in Lawrence totalled 1,132, increasing to 1,892 in 1865, to 3,353 in 1875 and to 3,928 in 1885.² The English, though living near the Irish and French - Canadians, soon took up residence in better areas. By the 1870s - 1880s,

1. D.B. Cole, Immigrant City, pp.42-44.

2. Ibid., p.44, citing Census of Mass., 1865, p.63; Census of Mass., 1875, I, p.288; Census of Mass., 1885, I, Pt. 1, p.507.

about half the English lived on the Old Essex Turnpike, renamed Broadway, south of the Merrisack in South Lawrence, where they were near to their place of employment, the Arlington Mill. A substantial proportion of the remainder by 1875 (and in 1910) lived in Ward Five, specifically Tower Hill, north of the Merrisack.¹ Others, or their descendants, later moved north-westwards from Ward Five of Lawrence into the contiguous Methuen, Massachusetts.²

As earlier,³ there is ample evidence of the presence of Yorkshiremen, especially Bradfordians, in Lawrence in the 1870s. John T. Taylor, accompanied by his wife and six children, left the Horton Bank Top area of

1. D.B. Cole, p.44n. (citing Census of Mass., 1875, I, p.288; Thirteenth Census... Supplement for Mass., p.609); and pp.25,50,110 (Maps II, III, IV).
2. Indicated by the addresses of many of the elderly correspondents writing to J.T.Dixon.
3. The death of John Beaumont, a cloth manufacturer, formerly of Pudsey, in 1859, should be added to those already noted as occurring in Lawrence before the Civil War (Leeds Mercury, 10 Sep.1859: obit., 18 Aug. 1859).

Bradford for Lawrence about 1870. Though he went back to Bradford with his wife for a period, he returned to Lawrence upon her death. On his second voyage to America, he sailed with a married son George, his wife and child, who also settled in Lawrence. Another son, Matthias, occupied in the wool business in Boston for many years, though frequently visiting Lawrence and Methuen, died in 1944, aged 82.¹ Richard Robinson, late of Bradford, was employed at the Arlington Mill before his death in Lawrence in August 1871.² Mark and Emma Carter, from Halifax, were resident in Lawrence in 1872 when their infant son died.³ Sarah Jane, the wife of Jonathan Creven, formerly of Bradford, died in Lawrence in 1873.⁴ The following

1. Ida M. Hart, 24 Mystic Street, Methuen, Mass., to J.T. Dixon, 11 Jan. 1969.
2. Bradford Observer, 15 Sep. 1871: obit., 30 Aug. 1871.
3. Halifax Guardian, 28 Sep. 1872: obit., 3 Sep. 1872.
4. Bradford Observer, 3 Jul. 1873: obit., 19 Jun. 1873.

year, John R., the son of James Fyfe, of Sunny Bank, Shipley, married Core Ellis, the only daughter of Charles R. Merrill, at the bride's home in Broadway, Lawrence.¹ Ann Elizabeth, the young daughter of John Fletcher and Isabella Whitehead, formerly of the Bradford area, died in Lawrence in June 1875.² Later that same year, Isaac Middlebrook married Selina Cockshott at Grace Church, Lawrence.³ Richard Rothery, from Halifax, died in Boston in March 1877 and was interred in Lawrence.⁴ Arthur Firth, born in Munningham, Bradford, in 1860, emigrated to Lawrence about 1879, where he worked at the Arlington Mills as a cloth finisher.⁵ His marriage after 1882

1. Bradford Observer, 10 Sep. 1874: marriage, 10 Aug. 1874. The second son of James Fyfe, William, "of Iowa, U.S.", returned to marry a Shipley girl in 1873 (Ibid., 6 Feb. 1873).
2. Grovestone, Scholemore Cemetery, Bradford.
3. Bradford Observer, 13 Jan. 1876: marriage, 23 Dec. 1875.
4. Halifax Guardian, 28 Apr. 1877: obit., 22 Mar. 1877.
5. Arthur Firth died in Lawrence in 1915.

to Hannah, the daughter of Joseph Lee, produced at least one son, Arthur R. Firth. He in turn married a Yorkshire girl who, after weaving at Mason's Mill, Shipley, and Saltsire Mill, emigrated to Lawrence in 1916 where she worked at the Arlington Mills until 1952.¹

In late 1879-1880, two Bradfordians, James Burnley and his friend 'Bernacles' made an extensive journey in the United States as far west as Colorado and the Rockies. The outward leg was by way of New York, New England, Albany, Niagara, Detroit, Chicago, St. Louis and Kansas City, and the inward by Louisville, Cincinnati, Washington, Baltimore, Philadelphia and New York. Throughout their travels, they met expatriate Yorkshiremen: the "valued friend" now living in comfortable circumstances on Staten Island;²

1. Mrs. Arthur R. Firth, 50, Hampshire Street, Methuen, Mass., to J.T. Dixon, 11, 17 Jan. 1969.
2. James Burnley, Two Sides of the Atlantic (London & Bradford, 1880), pp. 38-39.

Robert Collyer, "once a working blacksmith at Ilkley, now one of the foremost preachers of America", living at No. 500, North La Salle Street, Chicago;¹ Alfred Ackroyd, a Bradfordian and member of the very extensive hog packing-house of John Morrell & Co., sometime provision merchants of Tyrrel Street and Aldersbury, Bradford, later of Liverpool, and now of Chicago and Ottumwa, Iowa;² the chief clerk at Willard's Hotel, Pennsylvania Avenue, Washington, and a federal official and his wife, formerly of Bradford, now of that city.³

Burnley's highly entertaining description, however, is particularly apposite to the residence of Bradford workers

1. James Burnley, Two Sides of the Atlantic (London & Bradford, 1889), pp.117-22.
2. Ibid., pp.122-25.
3. Ibid., pp.200-01.

in New England. Walking through Lawrence, "a clean, well-planned city of some 35,000 inhabitants" and "sometimes called the Bradford of America", the travellers observed that "in the day-time, one sees few evidences of factory life. There

are no weavers dodging about in 'smocks' as in Bradford, no wool-sorters walking up and down in pinsfores,¹ no girls lounging about with shawls on their heads. The American factory-workers wisely object to take the factory with them into the streets and to their homes. They plunge into their work enthusiastically enough when they are at it, but, like the French, they divest themselves of it entirely as soon as they get clear of the factory gates....."²

1. In Bradford, colloquially, 'brets'.
2. J. Burnley, p.62.

With perhaps only slight exaggeration, the writer recorded that as Lawrence was

"the chief seat of the worsted manufacture in America...naturally, it is the place to which the Bradford emigrant-weavers mostly flock. Bradford faces meet you in the streets, Bradford saloon keepers supply you with your glass of lager, Bradford people stand behind the counters of the shops, Bradford names stare out from numerous sign-boards in the principal street, and, once get inside a factory, it is Bradford, Bradford, everywhere. If it had not been for Bradford, indeed, Lawrence would hardly have made the success it has, for not only has Bradford supplied a large proportion of the operatives, but it has supplied such of the technical skill and managerial capacity which have enabled Lawrence to attain its present high standing in the manufacturing world.

What could Lawrence have done, too, without Bradford machinery? As you walk through the long rooms of the mills, the familiar names of Bradford and Keighley makers can be read on the combing, carding and other machines; indeed, Bradford's sign manual is written so palpably upon everything in and around these factories, that you can almost imagine that you are still at home..."

Not surprisingly, 'Bernacles' commented:

"It does seem a little hard...that after English ingenuity, English perseverance, and English industry should have accomplished so much, we should be robbed of it in this way. This is the sort of thing that prevents me selling my wool'...."¹

During their stay in Lawrence, the two travellers visited and were fascinated by the operations of the Pacific and Arlington Mills. The

1. J. Burnley, pp.62-63.

Pacific Mills, though of great dimensions, "employ 5,300 hands, and their collective production is something incredible", did "not compare with some of our large establishments in and around Bradford - such as Saltsire and Lister's - as 'show' establishments, for there is not so much solidity, or architectural character about them...." Another basic contrast noted between the Lawrence and Bradford mills was in the nature of business organisation. In the Lawrence mills, textile manufacturing was 'vertical', that is, "the entire business connected with the manufacture - from the wool and yarn buying to the dyeing and finishing - is accomplished in one establishment". By contrast, "in Bradford we have, as separate traders, woolstaplers, combbers, spinners, manufacturers, dyers, merchants..."¹ The writer was much impressed with the excellent wool and cotton goods produced by the Pacific Mills and "with the knowledge that in the manufacture of worsted goods the Americans have made marvellous strides

1. J. Burnley, pp.63-64.

during the last half-dozen years, [so] that they are still progressing rapidly towards the point of perfection reached by English manufacturers".^{1.}

Burnley goes into great detail about the condition and living standards of the work-force, especially those employees residing either within the factory boarding-house system or in their own homes, usually built in blocks of four or six tenements.^{2.} Whilst many aspects of life were to be admired, the writer found in 1879-80 that Lawrence

"factory workers generally - the hands who do the real labour - [are] little, if any, better off than the same class of workpeople in England...when we come to strike a balance between the income and outgo of these factory workers, we find that the surplus in hand is little, if any, over that which the Bradford factory workers find themselves in possession of at the end of each week....The English factory worker

1. J. Burnley, p.64.

2. Ibid., pp.64-68, 70-78.

who goes over to America with the intention of continuing to toil in the mill will therefore find that he does not materially improve his position - i.e., as things are at present. He will have to work harder, to put up with fewer home-comforts, and will to some extent experience the loneliness and the disadvantage of being a foreigner. On the other hand, he will breathe a purer atmosphere, he will have a greater variety of estates, and, perhaps he will feel somewhat more independent".¹

Nevertheless, during the 1880s, with trade prosperous in America but dull in Yorkshire, steady emigration occurred. For a period, Bradford operatives left home at the rate of fifty a week, nearly all for American destinations, and one organised group of 750 sailed together.² The American consul in

1. J. Furnley, pp.64-66; also cited by R.T. Berthoff, pp.38-39, and D.B. Cole, p.44n.

2. American Manufacturer, 3 Oct. 1849, 3 Jun. 1881 (cited by R.T. Berthoff, p.38).

Bradford observed that the emigrants were "almost wholly of the high artisan class...expert wool-sorters...mechanists, foremen, managers, and supervisors...whom the mills here are as loth to lose as we are pleased to gain".¹ George and Phoebe Aspinall and their two small children emigrated from Bradford in 1881 or 1882, and settled in Lawrence, where another five children were born of the marriage. George worked as watchman at the Arcadia Mills.² Joseph Lee, born in Saltaire or Shipley, and a butcher by trade, left the area for Lawrence in 1882 with his son Frank, aged 2, and daughter Hannah. Frank grew up to work at the Arlington Mills until his retirement in 1945.³ William Giles Jackson and his son, of Bradford, settled in Lawrence about 1884-85; the father worked at the

1. "Diplomatic and Consular Reports on Emigration", p.33 (cited by R.T. Berthoff, p.38).
2. Beatrice L. Longworth, 20 Central Street, Methuen, Mass., to J.T. Dixon, 10, 19 Jan., 6 Feb. 1969. In 1969, Mrs. Longworth had several second-cousins whose grandparents emigrated from Bradford to Lawrence in the 1880s.
3. Mrs. Arthur R. Firth, 50 Hampshire Street, Methuen, Mass., to J.T. Dixon, 10, 17 Jan. 1969.

Arlington Mills for nearly fifty years in an overseeing capacity, and his son worked at the Pacific Mills as a spinning overseer.^{1.} About the same time, John Welsh and his third son Anthony left Keighley for Lawrence and were employed in mill-work there. John Luke, the second son, served his apprenticeship in a Keighley print works before emigrating with his mother Mary and the remainder of the family in 1886. In Lawrence, John Luke Welsh continued to work as a cotton printer at the Pacific Mills until his retirement.^{2.} John Duggan and his wife Bridget were born and married in Northern Ireland. About 1869-70, the couple moved to Bradford with their baby daughter Alice (born Newry, 19th November 1868), and lived in Manningham Lane. There, four other children were born, and the mother and daughters worked as weavers in Bradford mills. After the

1. Florence Seranko, P.O. Box 22, Methuen, Mass., to J.T. Dixon, 2 Mar., 15 May, 10, 24 Jul. 1974.

2. Margaret Welsh Rooney, 64 Georgia Avenue, Lowell, Mass., to J.T. Dixon, 21 Jan. 1969.

death of the father, Alice Duggan emigrated to Lawrence about 1885-86 to work in the mills there, to be followed eventually by the rest of the family.¹ Walter E. Rushworth, born in Bradford about 1865, married Sarah Elizabeth Robinson in 1884 or 1885 and lived at No. 22, Chaucer Place, Undercliffe Street. With their young son, the couple moved to Lawrence about three years later, and Walter took out U.S. naturalisation papers in 1892. In at least the mid-'nineties, he was a newspaper correspondent for the Lawrence Critic and Lawrence Journal, and became a close friend of William Wood, of the Lawrence Woolen Co. Rushworth made several return trips to Bradford, including one in 1910, possibly to recruit workers for Wood.²

There is also substantial evidence of others, also mainly from Bradford and neighbourhood, living in Lawrence in the 1880s:

1. Elizabeth A. Bailey, 2 Cyr Drive, Lawrence, Mass., to J.T. Dixon, 10 Jan. 1969.
2. Mrs. A.J. Hinshaw, 1225 Oakcrest Circle, Beaumont, Texas, to J.T. Dixon, 23 Apr. 1969.

from their ages or marriages it may be assumed that a proportion emigrated during the decade. Joseph, the son of Joseph and Lister Beslands, of Morton, near Bingley, was but a young man of 22 when he died in Methuen, Mass., in July 1881.¹ Walter Smith Lee returned temporarily from Lawrence to marry Hannah, the daughter of Richard Smith, of West Bowling, Bradford, in March 1884: sadly, the marriage was short-lived for Walter died in Lawrence in February 1887.² A son was born to Edward Braithwaite, formerly of Bradford, but now living in Winthrop Avenue, Lawrence, in October 1884; and a daughter followed in April 1889.³ Martha Alice Sharp, late of Stone Chair, Shelf, died in Lawrence, aged only 20, in February 1885.⁴ The marriage

1. Gravestone, Parish Church of St. Luke, Morton: obit., 3 Jul. 1881.
2. Bradford Observer, 26 Mar. 1884, 1 Mar. 1887: marriage, 25 Mar. 1884; obit., 14 Feb. 1887.
3. Ibid., 28 Oct. 1884, 3 May 1889: births, 14 Oct. 1884, 21 Apr. 1889.
4. Halifax Guardian, 7 Mar. 1885: obit., 11 Feb. 1885.

took place in New York in March 1887 of William A. Smith, formerly of Bradford but now of Lawrence, and Florence, only surviving daughter of Daniel Reteman, formerly of Wibsey, Bradford, but now of Philadelphia.¹ In May of the same year, Ann Jackson, formerly of Upper Winter Edge, Hipperholme, married Orlando Tordeoff in Lawrence.² In 1889, Leech, son of (the late) Richard Haggas, of Thornton, near Bradford, and husband of Martha Haggas, died at the age of 32 in Lawrence.³ From outside the Bradford-Halifax area, Emily, the wife of Cockcroft Redman, formerly of Todmorden, died in Lawrence in early 1890.⁴

1. Bradford Observer, 10 Mar. 1887: marriage, 8 Mar. 1887.
2. Halifax Guardian, 7 May 1887: marriage, 3 May 1887.
3. Gravestone, Parish Church of St. James, Thornton: obit., 8 Mar. 1889.
4. Halifax Guardian, 1 Feb. 1890: obit., 15 Jan. 1890, aged 36.

From the mid-'sixties to the mid-'eighties, therefore, it is evident that Bradford workers flocked to Lawrence either to apply their textile skills, or, as shopkeepers and saloon-keepers, to minister to the needs of fellow-Yorkshiresmen. The majority of these emigrants left home secure in the knowledge that their skills as loom-fixers, woolsorters, worsted weavers and in kindred activities would gain ready employment, and that in Lawrence, "among the spindles and shuttles, they [would be] surrounded by old neighbours speaking familiar dialects".¹ The majority also appear to have been drawn to Lawrence - and to other Massachusetts mill towns like New Bedford and Fall River - on the recommendation of relations gone before, and, in some cases, family recommendations prompted by American employers.

Moreover, a number of skilled textile workers also emigrated to Lawrence

1. Haldwyn A. Jones, Destination America, p.107.

and elsewhere under contract, though the extent of this is uncertain. For sixty years, it was perfectly legal to recruit workers in this way; in 1825, Parliament removed the ban on departing artisans, and in 1885, Congress forbade labour contracts, though the practice in one form or another occurred illegally outside these dates. The agent of one Lowell mill persuaded a group of about thirty Westcountry woollen workers to leave Uley in Gloucestershire for Massachusetts in 1837, and these were followed by others in subsequent years.^{1.} In 1846, the representative of a Boston spinning establishment visited Yorkshire in order to engage woolcombers and millhands; and some twenty families reportedly received contracts.^{2.} The Amoskeag Woollen Co.,

1. Charles Cowley, "The Foreign Colonies of Lowell", Contributions of the Old Residents' Historical Association, II (1883), 172-74, cited by R.T. Berthoff, British Immigrants, p.37.

2. Sheffield Mercury, 21 Mar. 1846 (from Halifax Guardian).

of Manchester, N.H., imported fifty or so Scottish girls in June 1868 to weave ginghams; and a second group of 41 arrived in 1870.^{1.}

In general, however, American manufacturers often found contract labour too unreliable and restricted the practice to obtaining only individual expert workers needed for particular jobs or new processes.^{2.} It will be remembered that in November 1858, 'John Carnack' signed a contract in Bradford to work for the Pacific Mills in Lawrence as a bleacher, with possible promotion to "an overlooker, for the scouring and preparing of delaines" in the print works. Yet again in 1869, 'Hannah Cole' -

1. M.A. Jones, Destination America, p.106; D.Creamer, "Recruiting Contract Laborers for the Amoskeag Mills", The Journal of Economic History, I, 1 (May 1941), 47-56.
2. M.A. Jones, pp.106-07.

shortly to become 'John Carmack's' wife - and some or all of her sisters, also left Farnsworth, with the promise of work at the Pacific Mills, as did probably 36 others from Lancashire.^{1.}

An exhaustive search through the issues of the Bradford Observer between 1877 and 1884, the year prior to that in which Congress disallowed the importation of contract labour, reveals fifteen obvious advertisements for positions necessitating emigration to the United States.^{2.} Of these, only three advertisements relate to non-textile occupations: masons and bricklayers, whose pay would be 12.0d. a day upwards, were required in Topeka, Kansas, in 1883;^{3.}

1. Josef Berger (ed.), Memoirs of a Corporation, pp.6-8.
2. Other Yorkshire newspapers, particularly the Helifax Guardian and Leeds Mercury, may well reveal further advertisements both during the same period and prior to 1877. In the Bradford Observer, advertisements for posts 'overseas', but not specifying the United States, and in Europe, have been omitted.
3. Bradford Observer, 24 Aug. 1883: applications to "W. Fyfe, Shipley Shipping Office".

and in the following year, "Twenty good Stone Pavor Dressers" were required at monthly wages of up to £10 by the Albion-Medina Stone Quarries at Albion, N.Y.,¹ and a "Young gentlemen to learn practical farming" was needed in Texas.²

Perhaps not surprisingly in the light of other evidence, four-fifths of the advertisements refer to specific textile posts, all requiring a high degree of relevant competency. In only two of these twelve advertisements were applicants requested to write direct to the United States: to "T.D. & Co., Drawer, D.D., P.O., Philadelphia, Pa.", in 1881 in answer to "Competent manufacturer, thoroughly understanding the manufacture of Umbrella Alpaca and Bradford Goods, to superintend Mill";³ and, in 1883, to "W.J.

1. Bradford Observer, 17 May 1884: applications to Iro Garth, East View, Thornton, near Bradford.
2. Ibid., 30 Sep. 1884: applications to No. 23, Kuchton Road, Leisterdyke, Bradford.
3. Ibid., 17 Aug. 1881.

Whittell, Worcester, Mass., " for
"Practical man to manage Coarse Worsted
Yarn Mill".¹ Even though until 1885
it was legal for the American manufacturer
to advertise vacant positions abroad,
he seems to have displayed a marked
reluctance to divulge his identity.
In only one case, additional to those
noted above, was even the region
of the United States revealed - New England.
This advertisement was addressed to
"English manufacturers, thoroughly skilled
in the manufacture of any class of
goods largely consumed in American markets,
to transfer whole or part of their
business to the U.S. Advertisers are
prepared to furnish factory with power,
also experience and capital if required".²

1. Bradford Observer, 3 Oct. 1883.

2. Ibid., 19 Jan. 1880: applications to
care of Geo. Blair, 16 Royal Exchange,
London, E.C.

Whether the American manufacturer or investor, by remaining anonymous, wished to conceal his intentions from fellow-American competitors, or, by employing a box number and well-informed agent in England, it was more practicable to check an applicant's credentials before sailing, is not clear. Perhaps both possibilities, and indeed others, are valid.¹ It is certainly true that agents, especially in Liverpool, and box numbers in Bradford or Leeds are nearly always elements in the advertisements for skilled textile workers or managers to go to America. In 1880, a "First-class Gigger of Broadcloths and Fancy Cassimeres" was required "to furnish particulars of age, wages wanted, possible starting date" to care of Lee & Nightingale, Advertising Agents, Liverpool.² Similarly,

1. Also, an American textile manufacturer in New England or Philadelphia probably had no desire to disclose his plans to Bradford or West Riding manufacturers who were marketing a similar product in the United States.
2. Bradford Observer, 12 Jan. 1880.

in 1884, Hughes & Isherwood, 38-41, The Albany, Liverpool, wanted to hear from "a Good experienced Fancy Silk Plush Dyer";¹ and John Tennent, 12 Montrose Street, Glasgow, wished to gain the services for America of a "First class practical Manager for Dyeing Piece Goods for ladies' wear: salary, £400-£500 p.a."² Sandy O'Hare, of the Friendly Inn, Boothtown, Halifax, also advertised in 1884 for "Experienced girls in Worsted or Silk Spinning or Drawing Departments; also Silk Spreading and Cassers; steady work, good wages; special inducements to widows with experienced daughters".³ J.E. Stone & Co., Kidderminster, required for America in 1882 a "Piece Dyer and Finisher of Imitation Sealskin and Lap Rugs: liberal salary".⁴

1. Bradford Observer, 25 Apr. 1884.

2. Ibid., 3 Sep. 1884.

3. Ibid., 9 Jul. 1884. The references to silk manufacture may infer recruitment for New Jersey Mills.

4. Ibid., 24 May 1882.

Moreover, it is conceivable that one or more of the four advertisements requesting replies to Bradford or Leeds box numbers may have related, by their very nature, to positions in Lawrence, Massachusetts. In 1877, a "Man to take charge of Combing and Drawing of Short Wools (Noble's Combs) in a spinning concern; to be thoroughly master of both branches, with preference for person also understanding spinning", was requested to reply to a Bradford Observer box number.¹ So, too, was a "Mechanic, with family of Spinners, employed at worsted mill", required for America in 1882.² An "Overlooker to take charge of Carding and Combing Machinery for Medium and Fine Wools; preference for middle-aged men", in 1878, and a "Thoroughly good practical Carder of first-class ability, accustomed to English and Australian wool",

1. Bradford Observer, 25 Jul. 1877.

2. Ibid., 4 Jan. 1882.

the following year, were requested to apply to Post Office box numbers in Leeds and Bradford.^{1.}

Just as skilled artisans took their surreptitious departure of England before 1825, so too the American measure of 1885 forbidding the importation of contract labour seems to have been readily circumvented when the need arose. At one federal investigation in the late 'eighties, two Lawrence workers, James Denby and George Foster, told how they had joined groups promised jobs in America by agents in England. Back in Yorkshire, Denby had been attracted by the following advertisement: "Wanted for America - five hands for drawing, six spinning...Families preferred having four or more girls. Wages from three shillings, two pence..." The agent had also paid for the passage of Denby and his family. George Foster's testimony was such the same. It was claimed, somewhat

1. Bradford Observer, 26 Sep. 1878, 5 Aug. 1879.

ingenuously, that the 1885 laws had not been violated because arrangements had been made between the agent and the worker, not the employer and the worker. The Yorkshiresmen's agreed place of work was the Andover Mills, though the witnesses had shortly moved to Lawrence. There seems little doubt that New England mills did advertise overseas for workers after 1885, though probably even less directly than suggested by the evidence contained in the Bradford Observer, 1877-84. Consequently, allegations that Lawrence companies advertised in England, France, Germany and Italy foundered on half-truths and second-hand information.¹ Moreover,

1. Lawrence Journal, 25 Aug. 1888; Testimony Taken by the Select Committee of the House of Representatives to Inquire into the Alleged Violation of the Laws Prohibiting the Importation of Contract Laborers 90 Congress, 1 Session, House Doc. 572 (Washington, 1888), pp. 578-91. Both sources cited by D. B. Cole, Immigrant City, pp. 92-93.

'contracts' entered into after 1885 with emigrating Yorkshire operatives were unenforceable and often unhonoured. Manufacturers complained that new mills could not be opened, nor new processes developed, without the assistance of skilled Yorkshire textile workers who, in turn, required evidence of wages and security before pulling up roots in England.^{1.}

There is less evidence of West Yorkshire emigration to Lawrence in the 1890s.^{2.}

1. R.F. Barthoff, British Immigrants, p. 39.
2. Priscilla, the wife of Joseph Bancroft, formerly of Denholme, near Bradford, died in Lawrence in January 1898, aged 54, but the couple's emigration probably pre-dates the 1890s. After his wife's death, Joseph returned to Denholme, dying there in 1915 (Gravestone, Parish Church of St. Paul, Denholme Gate: obits., 29 Jan. 1898; 4 Jan. 1915). A search of the Bradford Observer and Halifax Guardian in the 1890s may reveal further relevant marriages and obituaries.

Indeed, in times of industrial unrest, workers in Lawrence went out of their way to dissuade emigration. Striking Arlington Mills' woollsorters in 1891 cabled Bradford urging their fellows not to come and Pacific Mills' engravers even sent a representative there to forestall potential strike-breakers, some of whom were themselves doubtless involved in the great dispute which began at Lister's Henningson Mills in December 1890.¹

In the early years of the present century, however, many instances occurred of textile emigration from the Bradford area and, more specifically, from the Aire valley textile towns, to Lawrence and other New England locations. Before leaving for America in June 1902 with his two sons, George Cecil

1. The Evening Tribune (Lawrence), 29 May 1891, 12; 15 Apr., 4 May 1892 (cited by D.B. Cole, pp.93, 116); J.T. Ward, "'Old' and 'New' Bradfordians in the nineteenth century", 19-20.

and Foster, Samuel Best was manager of the carding department at Isaac & Sons Ltd., Grangefield Mills, Stanningley; and in America, he was in charge of combing at the Hudson Worsted Co., Hudson, Mass., until the time of his death. George Cecil Best was also employed by Isaac & Sons in his early days - in the carding room - and his first work in America was in a small factory in New Jersey. Moving to Pennsylvania, he was in charge of combing at James Lees & Sons, Bridgeport, until 1921, when he moved yet again to Lawrence, Mass. There he worked for the American Woolen Co. as superintendent of scouring, carding and combing in the Wood Worsted Mill, became inspector of tops for the company and later assistant mill manager until his death in 1945. Foster Best, Samuel's other son, worked at first, like his father, in the carding and combing department of the Hudson Worsted Co. Later he became a top maker at

Horton Mills, Norton, Mass., and eventually, the superintendent of top-making for the Nichols Co.¹ Two Airedale emigrants who died in Lawrence may or may not have been recent arrivals. David, son of Martha and (the late) Henry Bowker, of Lothersdale, died in Lawrence in September 1907, aged 33;² and James, son of (the late) William and Eden Rhodes, of Keighley, died there in October 1910, aged 54.³ Edward Horner was born in Bradford in 1891 and emigrated in 1909 from Windhill, Shipley, to Lawrence, where he worked in the spinning department of the Washington Mill.⁴ Lily Spencer was also born in Bradford about 1878 and was employed as a weaver at Mason's Mill, Shipley, until 1911. In that year, she joined some 8,900 other workers at the Arlington Mills, and married the following year. As Lily Kilcoyne, she returned to England in December 1914 to have a baby (son).

1. George E. Best, 4 Argyle Street, Andover, Mass., to J.T. Dixon, 14 Jan. 1969.
2. Gravestones, Christ Church, Lothersdale, and Silsden U.D.C. Cemetery: obit., 4 Sep. 1907.
3. Gravestone, Public Cemetery, Shipton Road, Keighley.
4. Mrs. Arthur R. Firth, 50, Hampshire Street, Methuen, Mass., to J.T. Dixon, 11, 17 Jan. 1969.

but unable to go back to the United States because of wartime difficulties, she re-started weaving at Mason's and Seltaire Mills. By 1916, she was able to return to Lawrence.^{1*} Letitia Hower and her mother, and Lily Wood, all left Keighley for Lawrence - like Lily Spencer from Shipley - in 1911. Letitia's father was the first member of the immediate family to sail for the "Bradford of America" in 1907 and her brother followed in 1912. All worked in Lawrence textile mills.^{2*}

The formation of Lawrence as an immigrant city was complete by 1912 when for some years it had had the highest proportion of immigrants in its population of any city in Massachusetts. In 1910, 86 per cent of its population of 86,000 had either been born abroad or were first-generation Americans. The Irish, despised in

1. Mrs. Arthur R. Firth, 50 Hampshire Street, Methuen, Mass., to J. T. Dixon, 11, 17 Jan. 1969; Brown, Morris (eds.), Leah's Textile Industries... I, p. 447.
2. Interviews in "Made in Britain", Thames T.V. Colour Production (presented by Tyne-Tees Television, 14 Feb. 1978).

1850, were now totally established, especially politically, in the city. So, too, were the British and Germans. The French-Canadians, though still insecure, since 1890 had found south-eastern European immigrants below them socially and economically.¹

Though immigrants rarely found their transitional period easy, those from Yorkshire seem to have settled in and 'assimilated' far more easily than most newcomers to Lawrence. Strange as the Yankee twang sounded to the Yorkshire tyke - and the Yorkshire intonation to the native American - they were both forms of English which could be fairly readily understood; not so the Irish Gaelic, the Canadian-French, or later, the Slovenic and Mediterranean tongues.

1. R.T. Berthoff, pp. 45-46, 93, 125.

Above all, Yorkshire textile skills were needed, indeed frequently contracted for in one form or another, and a majority of newcomers from the West Riding, men at all levels and women at the operative level, possessed these skills. In the early 1880s, some 55 per cent of the English males in Lawrence and 91 per cent of the females had been engaged in textile manufacturing before leaving home.¹ Many male Yorkshire textile workers transferred from, or soon moved into positions of responsibility as overseers, managers, even proprietors. Some became saloon - and store-keepers.² The employees at the Arlington Mills ran a cooperative store with an English-trained manager.³ Even those who arrived in Lawrence and Fall River mills in the 1870s to take up jobs involving long hours and only moderate pay soon found themselves displaced upwards by

1. D.B. Cole, p.114.

2. J. Burnley, Two Sides of the Atlantic, p.62.

3. R.T. Berthoff, p.102.

other incoming nationalities. By the mid-'eighties, English operatives became known as "house-proud" people who "like to live in a good house and have nice furniture and will pay high rents".¹

It comes as no surprise to discover that racial prejudice, even tension, was to be found in Lawrence. On his visit there in 1880, Burnley observed that "while trade has been so bad in the States, much ill-feeling has been engendered between the various nationalities engaged in factory and other labour, the classes which were satisfied to accept the lowest pay being strongly despised by those who demanded a higher price...." The French-Canadian or 'Cannock', he reported, was at the bottom of the scale in Lawrence: he worked for the lowest wage and lived most cheaply - "I was told of instances where as many as fourteen or fifteen of these people lived together in one wooden tenement of three rooms". The German, though

1. Cited by R.T. Berthoff, p.125; D.B. Cole, p.109.

living with great frugality, was sociable, with his leger-drinking and companionship at the 'verein'. "The German and the Englishmen get on together in America better than any other two nationalities. The Irishman is quite as swinish as the 'Cannock', but he cannot live so cheaply": the former drank whiskey, the latter the lowest-priced gin.¹

An indication of the ready 'assimilation' of the English worker in Lawrence is that, because there were no linguistic or religious conflicts with the native American, national societies were not readily established. The Albion Club was founded as late as 1886 to gain better representation in local government, and the English Social Club was established in 1902; a state convention of British-Americans met there in 1891, also the Daughters of St. George in 1902.²

1. J. Burnley, p.66.

2. D.B. Cole, pp.43-44.

Nevertheless, despite relatively easy 'Americanisation', Yorkshire immigrants in Lawrence seem to have followed the general pattern in marriage set by other English and German immigrants. Yorkshiresmen mostly married women from Yorkshire or Lancashire. Just as when William F. Baldwin, from Halifax, married Mary Donahue, an Irish girl from Cork, in Mansfield, Mass., in 1854,¹ there were also exceptions to the general rule in Lawrence. But on the evidence of Yorkshire press announcements and other information, most Yorkshire emigrants were married before sailing, or returned home temporarily to marry, or married a Yorkshire girl in Lawrence.

Yorkshire immigrants also maintained their strong links with England by visits home. By 1912, 27 per cent of the English in Lawrence had made at least one trip home - a percentage only exceeded by the French-Canadians - compared with 16 per cent each of the Irish and Germans.²

1. Halifax Guardian, 25 Feb. 1854.

2. D.B. Cole, p.100.

Some Yorkshire-Americans from Lawrence fought in World War One.^{1.}

About ninety miles to the south-west of Lawrence, Holyoke, in the Connecticut River valley, also had important associations with Yorkshire from the 1870s onwards. When Burnley and his companion visited there in 1880, they found a town of some 17,000 inhabitants engaged in widely diversified industry: cotton fabrics, woollen goods (including beavers, doeskins and cashmeres), worsted cloths (including alpaca and poplins) and fine writing paper.^{2.}

Some thirty years earlier, before the establishment of a water-power company and the construction of a dam, Holyoke had been little more than an "insignificant farming hamlet".^{3.}

1. H.B. Dorgan, History of Lawrence, Mass., pp.233-36, lists the names of Lawrence citizens who were killed in the 1914-18 War. Naturally, most of these served in the U.S. Army, but nine lost their lives while serving in the British Army: Thomas Berwick, John Booth, Edward Cullen, John Kellett, Joseph McKnight, Leonard Potter, Thomas Rogers, Benjamin Townsend and William J. Young. A number of these names carry a distinctive Yorkshire ring.
2. J. Burnley, pp.80-81.
3. Ibid., p.80.

Indeed, Holyoke's population in 1855 was only 4,639, of whom 2,015 were foreign-born; and mill-operatives were largely drawn from the foreign-born females. Of the 2,015 foreigners in 1855, over 82 per cent were Irish-born. Few Irish women were employed as weavers, however, being mainly carders and spinners. In 1853, 82 Scottish women were imported as weavers, and two years later, an additional supply was obtained, also under contract, from England and Scotland. Moreover, a few English-Canadians, Germans and Swiss were to be found there. Towards the end of the 1850s, needing experienced power-loom weavers - and the Scottish girls proving insufficiently docile - the Lyman Mills' agent imported a few Belgians from Ghent. In the winter of 1858-59, an importation of French-Canadians occurred. In 1865, agents in Scotland sent about 200 skilled spinners and weavers to Holyoke.¹

1. Constance McLaughlin Green, Holyoke, Massachusetts: A Case History of the Industrial Revolution in America (Yale U.P., New Haven, Conn., 1939), pp. 48-49, 68-69, 76.

In 1860, Holyoke's population numbered 4,632, and in 1865, 5,648. The next few years saw a rapid rise, to 10,722 in 1870, and about 14,000 in 1873. In 1865, over 43 per cent were foreign-born - a greater proportion than in any other town or city of Massachusetts¹ - and by 1870, over 50 per cent. The Irish were the most numerous, followed after 1867 by the French-Canadians, with the Germans in third place. English and Scottish families arrived in the late 'sixties. The three largest national groups all formed colonies within Holyoke. The Germans, "skilled workmen, devout Lutherans", were concentrated in South Holyoke, near the Germania Mills, developed after 1865 by the Stursberg brothers, Rhineland manufacturers, and manned by skilled Rhenish spinners and weavers producing high-grade woollens (beavers and doeskins). The 'Tigertown' section of South Holyoke accommodated the Irish

1. Lawrence, Mass., ranked second in this respect in 1865.

and, later, French-Canadian immigrants, both of whom also lived northwards within the loop of the Connecticut River - in the 'Flats' and upon the 'Hill' (Irish mill tenements) or in the 'Patch'.

French-Canadians herded together in the 'Frenchville' tenements. The major groups, separated by national, cultural or religious differences, failed to mingle.^{1.}

The English and, more specifically, the Yorkshire influence in Holyoke began in the 1870s with the popularity of lustre dress goods made from alpaca and mohair, and with the founding there of the Farr Alpaca Company in 1874. In England, (Sir) Titus Salt, of Saltaire, developed the manufacture of alpaca from 1836 onwards; lustre cloths gained in popularity during the 1850s and 1860s, and the Bradford area enjoyed a lucrative monopoly in their manufacture. Worsted cloths in general began to predominate in the English

1. C. McL. Green, pp.74-75, 111-13.

fashion trade because they were more varied and stylish, and frequently lighter in weight, than woollens. Again, a lowering of price in the 1830s and 1840s, effected by the use of cotton wools and the introduction of the machine-comb, encouraged greater consumption. Most of the dress goods exported to the United States from the Bradford area in the immediate ante-bellum years were of cotton warp or 'mixed stuffs' type. The Civil War occasioned a sudden decline in this trade. Peace, however, brought about a revival, despite high tariffs, because of fast-growing American demand and the inability of the tardy New England worsted manufactures to satisfy this demand. In 1859, only three American establishments produced worsteds, certain factors militating against rapid development: the tariff on long-staple wool and lack of suitable American-grown wool; and the need for skilled and

relatively expensive hand-labour in woolcombing. American worsted production was stimulated, however, by the 1854 reciprocity treaty with Canada which allowed combing wool into the United States duty free for ten years, and by protective Civil War tariffs. The war years also increased Army demands for uniform cloth, and private demand for worsted cloth for women's wear to replace expensive and scarce cotton fabrics. The invention and development of the machine-comb in England, and its subsequent importation into the United States, enabled short-staple American wools to be used. By 1869, the number of worsted mills in the United States had risen to 102; but not one was a producer of the popular mohair and black alpaca lustre dress goods.¹

1. Frances Cornwell Hutner, The Farr Alpaca Company: A Case Study in Business History, Smith College Studies in History, XXXVII (Northampton, Mass., 1951), pp. 1-3.

From England, the manufacture of alpaca lustrés was introduced into Canada in the late 1860's. In 1862, Herbert N. Farr, and his two uncles Bendall, from Chesterfield, N.H., converted a saw mill at Hespeler, Ontario,¹ for the production of knitted goods and, later, of alpaca worsteds. As their main market for alpacas was in the United States, protected by high tariff, the manufacturers decided to establish themselves within the tariff wall and to transfer their activities to New England.² Attempts to

1. Titus Crewshew, it will be remembered, worked temporarily in 1863 at Hespeler where he had followed his friend, John Wilson, from Philadelphia (Titus Crewshew, Hespeler, to Father, Taylor Hill, nr. Huddersfield, 31 Jul. 1863; C. Erickson, Invisible Immigrants, . . . pp. 331, 355-56).
2. Joseph Bonn & Co., Bradford manufacturers, also established themselves at Greystone, N. Providence, R.I., in 1904, to circumvent the Dingley tariff of 1897 (see pages 1218-19).

move their Canadian production to Bellows Falls, Vermont, proving fruitless. Ferr and Kendall were successful in locating at Holyoke, the corporation there being organized in October 1873 for "the manufacture of Alpaca Lustras and other dress goods". Manufacturing operations began in the spring of 1874.^{1.}

Initially, the two largest stockholders in the Ferr Alpaca Co. were Herbert N. Ferr and his brother-in-law, Joseph Metcalf. Metcalf supplied \$40,000, and Ferr, \$95,000 (of which \$75,000 was paid for by transferring the equivalent value of machinery from the Kendall Ferr Co. in Canada); and Holyoke businessmen supplied about \$100,000. The building of the mill was financed by the Holyoke Water Power Company.^{2.}

1. The Ferr Company at Holyoke was the second American worsted mill to manufacture alpacas. The Arlington Mill, of Lawrence, began this activity in 1872, almost wholly dependent upon workers from Bradford.
2. F.C. Hutner, p.9; C. McL. Green, Holyoke, Massachusetts, pp.140-41.

Joseph Metcalf was born in Yorkshire in 1841, but emigrated to Canada as a young boy. He began work at 15 in the office of the Great Western Railway of Canada, and by the age of 26 had been appointed Treasurer of this English-held company. In 1874, he resigned his post to organise, with Ferr, the Ferr Alpaca Co., and to succeed Ferr as Treasurer of the Company. Later in 1874, Metcalf sold \$33,000 worth of his subscription, but in the 1880s and 1890s bought himself back into the company, becoming its largest single stockholder. The responsibility in the Ferr financial practices lay not with the directors, but with Joseph Metcalf until his death in 1916, when his son Frank succeeded him in the role. After Herbert Ferr's death in 1900, Joseph Metcalf became both Treasurer and Agent; and in 1914, his salary was set at \$50,000 per year.^{1.}

1. F.C. Hutner, pp.9, 50, 52, 55.

Although it is clear that by about 1870, the Irish, French-Canadians and Germans formed the largest national group in the Holyoke workforce, a number of English immigrants were also established there, manufacturing cottons, woollens or paper. James Mallalieu Shepherd, late of Rishworth, near Halifax, died there in October 1873, a few months before the Farr Albee Co. began its operations.¹ One of the problems faced by the company in starting its Holyoke activities in the spring of 1874 was the scarcity of labour skilled in the production of lustre goods. The mill was therefore forced to import a number of trained hands from Canada and England; and of the original labour force of 200-250, all the overseers and skilled workers came from either Hespeler, Ontario, or the Bradford area of Yorkshire. Local

1. Halifax Guardian, 7 Mar. 1874: obit., 28 Oct. 1873, aged 41. There is possibly a family connection between J.M. Shepherd and: (a) Ellen Susannah Shepherd, the young daughter of "James Shepherd, late of Rishworth", who died at Anson, N.Y., in October 1862, aged 4 (Ibid., 23 Nov. 1862: obit., 22 Oct. 1862); and (b) Sarah Shepherd, wife of "John Shepherd, jun., paper maker, formerly of Rishworth", who died at West Toghkenic, Columbia Co., N.Y., in July 1864, aged 20 (Ibid., 13 Aug. 1864; obit., 11 Jul. 1864).

unskilled labour was trained by the imported overseers, who tended to employ workers of their own nationality. In the early years, therefore, English, Scottish and English-Canadians formed the bulk of the firm's employees. With the expansion of the Farr Company, these groups manned the most skilled and responsible occupations, so much so that they were considered the elite of the concern. Even when the English no longer dominated numerically, the Farr Company was still referred to as "an English mill". Irish, French-Canadians and, after 1900, Poles also found employment at the company.^{1.}

The production of the Farr Alpaca Co. was soon held in high esteem, and by June 1874, Joseph Metcalf was able to announce that the output of alpaca cloths had already reached about 11,000 yards, with a finish surpassing that of the earlier Canadian product. New machinery was

1. F.C. Hutner, pp.5-6, 12, 57-58;
C. McL. Green, pp.140-41.

ordered from Yorkshire, and Herbert Ferr made a transatlantic crossing to study finishing methods. Soon a machine was imported, which gave the goods a permanent, perspiration-proof finish. The quality of the firm's products improved so rapidly that at the Centennial Exposition held in Philadelphia in 1876, the highest award was presented "For an Excellent Exhibit of Black Alpaca, Mohairs, Cashmeres, and Serges, all of superior manufacture, very regular in quality, evenly spun and woven, and of permanent color and finish". The English judge who was also a Bradford manufacturer, Henry Mitchell, reported on the Ferr's "specially good" product to the British government.^{1.}

1. F.C. Hutner, p.17; C. McL. Green, pp.141-42; J. Burnley, Two Sides of the Atlantic, p.81.

James Burnley and his companion obviously knew of the Ferr Company's success at the 1876 Exposition, but this was not the only reason for the Yorkshiresmen's visit to Holyoke in 1880:

" There was a colony of factory-workers living there" - many from Yorkshire, Burnley might have parenthesized - "of whom we knew something, and we desired to mix among them and enter into their feelings, habits, and sympathies. We wanted to see what the home life of these classes was really like; how they bore their exile; and what domestic comfort they were able to command...The one particular person we wanted to meet with was a workman engaged at the Ferr Alps Hill...."¹

1. J. Burnley, pp.80-82.

'John Smith' (the workmen's pseudonym) was not, however, at work that day, but was in the process of moving his family's accommodation in South Hadley Falls, across the Connecticut River from Holyoke. Other "English fellows" lived "over at the Falls". On this evidence alone, it would seem that some at least of the English and English-Canadian immigrants imported to work at the Farr Alpacas Co., by finding a residential niche across the river, had avoided the already closely-knit Irish, French-Canadian and German communities in Holyoke proper. 'John Smith' and others lived in small tenements, containing less furniture than normally the case in England, but with the ubiquitous heavy iron fire stove.

Buraley's description of 'John Smith' is probably typical of many Yorkshire textile workers living in New England mill towns at the time:

"John Smith was a working-man of a restless turn of mind. He was not proud, he was intelligent, and had come over from Yorkshire with the idea of bettering his fortune. That idea has yet to be realised, and he has found out that it is quite as easy to realise it in England as in America. He is discontented but does not growl. Like the philosopher that he is, he takes things as they are and endeavours to make the best of them. If he could see that he had a better chance anywhere else than at the picturesque little city in the Connecticut Valley, he would probably, did his means allow, remove there. At the same time, he is not sufficiently Americanised to make him risk such. If you tell him of the great success that many have achieved

by going out West, and by otherwise launching into speculation, he will remind you that many have also been ruined by attempting such changes, and he evidently believes he would be more likely to fall within the latter than the former category were he to try the experiment. He has a wholesome contempt of everything that is unfair, and would as soon think of trusting off-hand to the honesty of an American as to the sincerity of a Frenchman....¹

More generally, Burnley observes:

"...America has often afforded a chance of retrieving a shattered fortune to men who have gone from Yorkshire with honest aim and earnest endeavour to work and persevere. Indeed, I came across several manufacturers and managers who were perhaps unfortunate (in the strictest sense of the term) in trade in Bradford years ago, who are now in splendid positions in America. But it is little use going out to America thinking

1. J. Burnley, pp.85-86.

of obtaining a high position in the industrial world by mere scheming and idling, and waiting. It cannot be done with any greater, if as great, a chance of success there as in England. I came across some instances of men who were really clever who had gone out from Bradford to America, but, who, from want of energy or moral ballast, have failed to make headway, and may be looked upon now as 'gone to the bad' utterly. In America, as in England, it is the men of the most sterling parts who succeed the best....¹

Just as the Farr Alpaca Co. was established in Holyoke to produce fabrics within the American tariff barrier, so too Joseph Benn & Sons Inc. set up at Greystone, North Providence, Rhode Island, in 1904, to produce alpaca and mohair linings in avoidance of the tariff effected by the Dingley Act of 1897.²

1. J. Burnley, p.88.
2. F.C. Hutner, pp.4, 38. A similar action by Forstman & Huffman, a German branch firm established in Passaic, N.J., in 1903, is also cited, inter alia.

For many years prior to 1897, the high-grade sipse products of Joseph Benn & Sons, of Bradford, had been sold licretively through a New York branch; but the teriff on the imported goods made the price leas attractive to American customers, and Benns decided to erect a large mill in the United States.

Frank P. Sheldon, a mill engineer, was engaged to recommend a suitable site and Greystone on the Woonasquatucket River was chosen, near the end of the Centerdale trolley line and in close proximity to the Pescoog branch of the New York, New Haven and Hartford Railroad. The site included land on both sides of the river, the abandoned Greystone Mill, and water-pover. The Benn project was no mean undertaking: a new concrete dam was built and south of the old mill, a substantial brick mill, 62 feet by 436, five stories high, together with a weaving shed, 308 feet by 136 feet, and subsidiary buildings, were erected. The structures were circumsented by a chimney, 160 feet high; and a tower, 24 feet square, rose to a height of

111 feet. The thickness of the concrete foundations (from 7 feet to 10 feet) and heavy load-bearing walls and beams, followed the English pattern rather than the lighter American construction.^{1.}

On a visit to North Providence in 1904 to inspect the new mill, Harrison Benn, head of Joseph Benn & Sons, was interviewed by the Providence Daily Journal. The interviewer's summarized report is highly relevant as far as the possible work-force was concerned:

"There may be some difficulty...in obtaining on the spot men familiar with the details of manufacturing in Bradford. The line of goods made in the Benn Mills being entirely new to [the United States] ,^{2.}

1. Yorkshire Daily Observer (Bradford), 4 Nov. 1904. The article is headed "A Bradford Firm's Enterprise in the United States: Employment for a Thousand Operatives", and includes a 5" x 3" sketch of the Greystone factory.
2. At first sight, the Farr Alpece Co. had produced the same type of goods since 1874, but Benn's speciality was small lots of high-class fabrics made to order for the custom tailor trade. Joseph Benn & Sons, Greystone, often turned a large order for a staple fabric over to the Farr Co. The two companies did not become fierce rivals until the decline of the alpece-lining trade in the 1920s (Nutner, p.38).

operatives cannot be drawn from other mills. But a number of English operatives have been in New England for several years, and it is expected that some of them will apply for positions at Greystone and that they will be able to train operatives from the local worsted mills who desire to take up a new line of work. The law prohibiting sending men to the United States under contract is being rigidly enforced and will probably cause some delay in obtaining a complete force of skilled operatives".^{1.}

Both Harrison Bann and the Providence reporter were obviously aware of American immigration regulations; and the former no doubt hoped, publicly at least, that skilled workers drawn from elsewhere in New England would form the nucleus of the operations and, privately, that others would leave the Bradford area.

1. Yorkshire Daily Observer, 4 Nov. 1904.

unofficially and without contract, to work at Greystone. James Baldwin, for example, soon discovered the official position. Born in Bradford in 1883, and later engaged in textiles, he emigrated to the United States in 1906, encouraged by friends already in Pawtucket, R.I. "As things were not going very well" for him in Bradford, and knowing that Joseph Benn & Sons had a mill at Greystone, Baldwin called on Harrison Benn in Bradford, requesting a letter of introduction to the American branch. Benn regretted that he was not allowed to do so under U.S. immigration laws. Nevertheless, Baldwin "decided to take a chance" and sailed from Liverpool to Boston, where, on passing through the Customs, he was asked if he knew that Benns also had a mill at Greystone, near to his destination at Pawtucket. A truthful, affirmative answer produced the

tongue-in-cheek comment that he must be the first Bradford person who knew of the existence of Greystone!¹

Notwithstanding official policy, it is clear that from the early days of production, Yorkshire workers were attracted to Joseph Benn & Sons in North Providence. Mrs. E.H. Marshall, born in Bradford in 1893, emigrated at the age of eleven with her parents, born and raised in Leeds and Bradford; and her future husband and father-in-law also left Farsley about the same time.² Both before and after World War One, West Riding workers served the mill. Mrs. Stell from Bradford was employed at Greystone in the reeling

1. James Baldwin, 139 Mineral Spring Avenue, Pawtucket, R.I., to J.T. Dixon, 6 Mar. 1969. In the event, James Baldwin did not work for Joseph Benn & Sons, but gained employment at J. & P. Coats for a few months, before receiving a better offer from the Lorraine Manufacturing Co., working there over 38 years until his retirement. He "never regretted the move" from Bradford, though he made two return trips in later years.
2. Mrs. E.H. Marshall, 63 Louisa Drive, Pittsfield, Mass., to J.T. Dixon, 19 Jan. 1969.

department from 1924 to 1926, only returning to Yorkshire because of short-time working; and the overlooker in that department was a Keighley man, Lot Northrop. Accommodation for the operatives at Graystone consisted of "new cottages...of much higher grade than the average mill tenement. Hot and cold water and the best of plumbing and electric lights convey to the American mind the impression that the English manufacturers are men of liberal spirit and high ideals".^{1.} When the mill closed in 1930,^{2.} and other companies made use of the buildings, many of the Yorkshire-American villagers bought the houses previously rented. The workers transferred not only their skills to the mill - always appropriately flying both Union Jack and Stars and Stripes - but also their traditions. A cricket team, "Benn's

1. Yorkshire Daily Observer, 4 Nov. 1904.
2. The Benns' competitor, the Ferr Alpece Co., Holyoke, liquidated in 1939 (F.C. Hutner, preface).

Mohsirs", competed against local Rhode Island mill elevens; and the Primitive Methodist Church boasted "an outstanding choir", with a Mr. Varley from Wilsden, near Bradford, the choirmaster in at least the mid-'twenties.¹

Joseph Benn & Sons were only one of a long line of Rhode Island textile concerns to employ the services of skilled Yorkshire workers. Charles Fletcher, born in Thornton, near Bradford, in November 1839, became an outstanding figure in New England textiles. His first visit to the United States in 1864 resulted in a short period of employment at the Pacific Mills, Lawrence. Sailing again in 1867, and soon to be joined by his wife Harriet and two young children, Charles

1. Telegraph & Argus (Bradford), 20, 28 Sep. 1962: extracts of letters from Herbert Hudson, 261 Woonasquetucket Avenue, Centerdale II, R.I.; Mrs. Stell, 1 South View, Norton, nr. Keighley; Mrs. B. Jowett, Glenholme, Clayton, Bradford.

Fletcher settled in Providence, R.I., and entered the employ of the Valley Worsted Mills at Olneyville. As a textile apprentice trained before emigration, he soon proved his ability and rapidly advanced to the position of superintendent of the Valley Mills, a post he held for nine years. During this period, he solved many of the firm's problems in the combing and spinning of wool.

While superintendent of the Valley Mills, Fletcher also ventured personally into the manufacturing business. In 1875, he obtained the lease of a small stone mill in Valley Street and equipped it with worsted machinery imported from England. For nearly two years, he divided his time between his employers and his own venture. Fletcher purchased the mill in 1878, and devoted himself to manufacturing totally on his own account and to mill building. The additions included five acres of land and six large mills. A second group of mills was erected nearby,

until he became the owner of nine mills, employing 3,000 operatives. Charles Fletcher was also prominent in establishing the Thornton Worsted Mill. He was associated with the originator of the British Hosiery Mill, in Thornton (named after his birthplace), in transferring the equipment and work-force from Nottingham; on their arrival, the immigrants found an entire village of cottage houses ready to occupy. Two more factories were built by Fletcher in the neighbourhood: the Victoria Mill for the treatment of wools was supervised by his Yorkshire son-in-law, Henry Hertley; and Fletcher's younger son, Frederick Charles Fletcher, managed the Pocomset Yarn Mill.

Charles Fletcher's activities were not, however, limited to Rhode Island. He purchased an old mill in Fulton, N.Y., so cheaply that he sold the machinery for the total value of the site, demolished the building, and erected a new

factory similar to that in Olneyville, R.I. Again, at Blackstone, Mass., he purchased old mill property, and with his older son, Joseph Edward Fletcher, established Saranac Mills. The father also became owner of the old Richmond Print Works. He re-capitalized the National-Providence Worsted Mills, made it a corporation and agreed to manage it for five years. At the end of this period, he entered the American Woolen Co.'s combination: his Fulton Mills, Saranac Mills at Blackstone, and National-Providence Mills were consequently placed in this trust, while the Pocasset Mills and Victoria Mill at Thornton remained as distinct corporations. J.E. Fletcher continued as manager of the Saranac Mills, and the father, Charles, became a director and executive of the American Woolen Co. until 1900. Intermarriage occurred between the Fletchers, and the Hartleys and the Benns (of Greystone, R.I.), all Yorkshire families.

Charles Fletcher died in Providence, R.I.,
13 May 1907, aged 67.^{1*}

Joseph Edward Fletcher, Charles's
elder son, was born in Bradford, 11th June,
1866, emigrating with his mother at the age
of two or three. Starting work with his
father in Providence at 16, he inherited his
flair for the wool trade. By 1916, he
owned and operated the Coronet Worsted Co.,
of Hopleville, R.I. (600 employees), the
Plainfield Woolen Co. (300 employees) and
Central Yarn Co. (75 employees), of Central
Village, Conn., and the Allentown Woolen Co.,
of Allentown, R.I. (150 employees). He was one
of the organisers and first president of the
American Association of Woolen and Worsted
Manufacturers, and he had extensive interests
in real estate and banking.^{2*}

1. E. Everton Foster (ed.), Lamb's Textile
Industries,... II, pp.89-91; Telegraph & Argus
(Bradford), 24 Jan. 1968; Miss Fletcher Little,
305 Warren Street, Brookline, Mass., to
J. S. Dixon, 5, 15 Mar. 1969.
2. E. Everton Foster (ed.), Lamb's Textile
Industries,... II, pp.92-93.

With the end of the Civil War, it is evident that although textile workers from the Bradford area were particularly attracted to Lawrence, Massachusetts, substantial numbers from the West Riding also flocked to Rhode Island Mills. As also in the case of Lawrence, the later 'sixties, the 'seventies and 'eighties seem to have witnessed far more textile immigration from Yorkshire than the 'nineties; and the official American prohibition of the importation of contract labour after 1885 was almost certainly one direct cause. As already noted, Charles Fletcher, settling in Providence, R.I., in 1867, obtained employment at the Valley Worsted Mills in Olneyville.¹ Later, his son, Joseph E. Fletcher, operated the Allentown Woolen Co., in Allentown, R.I.² At about the same time as Charles Fletcher, Joshua Hallinson, from Berry Brow, near Huddersfield, was living and working in Olneyville. In

1. E. Everton Foster (ed.), Lomb's Textile Industries, II, p.89.

2. Ibid., p.92.

August 1870, Mallinson married Jane Crossland, also of Olneyville, but formerly of Elland, at Allendale Baptist Church, near Providence.¹ Jubel W. Holroyd, from Restrick, died in Olneyville in 1873.²

Charles Emmett (or Emmott) was born in Leeds in 1845, the son of a dyer, and descendent in a direct line of dyers in Colne, Lancashire, and Warley, near Halifax. Moving from Leeds to Bradford at an early age, Emmett worked with his father and several brothers at Armitage's Mill, but decided to emigrate to the United States about the mid-1860s. There, a position awaited him at the Peace Dale Manufacturing Co., a small mill built in 1847 for the working of fine wools, but much enlarged in 1856 to manufacture shawls and worsted costings. After a short time, like Charles Fletcher, he sailed for England, but soon returned to Rhode Island, where he tried to

1. Halifax Guardian, 1 Oct. 1870: marriage, 29 Aug. 1870.
2. Ibid., 10 May 1873: obit., 5 Apr. 1873, aged 47.

start a small mill in Rocky Brook village, near Pesce Dale. This venture, however, was unsuccessful. For much of his life in the United States, where he married (1874) and became a naturalised citizen, Emmett was a 'boss dyer' (or dyeing overseer) at the Pesce Dale Mill; but he also worked for a time at a River Point mill, started in 1885 near Providence, and for a year or two in Philadelphia in company with other English families.¹ Arthur Bainton (or Baynton) was born and married in Bradford before he emigrated with his wife Martha and family to Providence in 1871: he worked in textile mills both in Bradford and Rhode Island.² Also in 1871, in Providence, James R. Hetton, formerly of Bradford, married Edith, the youngest daughter of (the late) James Grimshaw, of Rochdale, Lancs.³ William Ferrer, late of Elland, was working in Providence in 1875 when his young child was "accidentally drowned".⁴

1. Elizabeth Emmett, Emmett Lane, Pesce Dale, R.I., to J.T. Dixon, 21 Jan. 1969. Charles Emmett died in Pesce Dale in 1913.
2. Eleanor I. Bainton, 214 Sumter Street, Providence, R.I., to J.T. Dixon, 28 Jan. 1969.
3. Bradford Observer, 10 Mar. 1871: married, 10 Feb. 1871
4. Halifax Guardian, 29 Jan. 1876: obit., 4 Dec. 1875.

John Haste was born in Bradford in the late 1850s, and after his marriage there to Fanny Dunford about 1880, the couple emigrated in 1881-82 to Woonsocket, R.I., where John worked in textiles. Charles H. Haste, born to the couple in 1885, grew up to work for a textile mill, probably the Perseverance Worsted Co., in Woonsocket. After his marriage, Charles Haste moved some 35 miles northwards to Clinton, Mass., where he worked in various administrative positions, finally as superintendent, at the Boubaix Manufacturing Mills, Inc. Though the mills liquidated during the 1920s, he continued to work for other textile firms and yarn brokers until his retirement.¹ As late as 1968, the Gregson family, descendants of the original emigrants who left Battershaw, Wibsey, near Bradford, probably in the 1880s, were operating the Worcester Textile Co. at Centerdale, R.I., and "still carrying on the Bradford type of business of worsted spinners and manufacturers".²

1. Stanley H. Haste, 21 Elmgrove Avenue, Providence, R.I., to J.K. Dixon, 17, 28 Jan. 1969. Charles H. Haste died in 1963, aged 78.
2. Telegraph & Argus (Bradford), 24 Jan. 1968: letter from Edgar Gregson, Rhode Island.

Isaac Smith, late of No. 6, Green Lane, Halifax, was working in Saylesville, R.I., in 1883 when his wife Emma, the fifth daughter of James Harrison, of Claremont, Halifax, died there.¹ Also both from Halifax, Alfred Helliwell and Mercy Selway Carey married in Providence in April 1885.² Christine Denison left Bradford for the United States about 1885, settling in Pawtucket, R.I. Her son James married in Bradford in the late 'sixties; and about 1886-88, James followed his mother's example and emigrated to Pawtucket with his wife Mary and their seven children. Settling near the Lorraine Mills, they ran a boarding house for many years, mainly for textile operatives.³ Alfred Margetroyd, son of (the late) Benjamin Margetroyd, of Bowling, Bradford, died in Providence in November 1885.⁴ Charles and Ellen Bradley and their family

1. Halifax Guardian, 10 Feb. 1885: obit., 4 Feb. 1885.
2. Ibid., 16 May 1885: marriage, 22 Apr. 1885.
3. Alice Hallinghurst, 8 Kenilworth Drive, Lincoln, R.I., to J.F. Dixon, 18 Jan. 1969.
4. Bradford Observer, 2 Dec. 1885: obit., 13 Nov. 1885, aged 41.

left Bradford for Rhode Island, probably Providence, about 1885-86.¹ Thomas Illingworth, formerly of the Halifax area, was living at No. 9, Regent Street, Providence, at the time of his father's death there in July 1887.² John Keersley and his wife Mary were married in Wilsden, near Bradford: in 1873-74, the couple moved to Leeds with four children, and then about 1888, with eight children, they emigrated to Providence, where John and members of his family were engaged in textiles.³ Hannah Marie, the wife of Abram Riley and eldest daughter of (the late) Samuel Bexendale, of Halifax, died at Saylesville, R.I., in January 1890.⁴

1. Helen A. Bradley, 1890 Broad Street, Cranston, R.I., to J.T. Dixon, 24 Jan. 1969.
2. Halifax Guardian, 6 Aug. 1887: obit. of Solomon Jas. Illingworth, 31 Jul. 1887.
3. Mrs. Wm. Devolve, 235 Hartford Avenue, Providence, R.I., to J.T. Dixon, 23 Jan., 10 Mar. 1969.
4. Halifax Guardian, 8 Feb. 1890: obit., 22 Jan. 1890, aged 39.

Herbert Newell was born in Bradford, the son of Robert Newell, a dyeing overseer, and later sailed for the United States in 1899 in order to set up Bradford System spinning frames in a mill in Bloomsburg, Pennsylvania. After completing his task, he stayed on for a few months as overseer at the mill which manufactured carpets, clothing and (later) rayon. Newell returned temporarily to Bradford in 1900 to marry Louise Philpot, of Pesch Street, Hanningham, but the couple soon sailed for America, where, in Pawtucket, R.I., the husband became overseer at Goff's Mill. When the Lorraine Worsted Mills were established, also in Pawtucket, Newell went there as superintendent, staying until 1920. Meanwhile, his brother Thomas Newell, his brother-in-law Walter Philpot, and

later his sisters and mother all emigrated to Rhode Island.¹ Albert Harrison and his wife Sarah Jane both worked in Huddersfield textile mills before emigrating to Providence about 1899-1900.² Jack Cullerton, born in Bradford about 1885, settled in the Fall River area in 1912, worked in textiles and was a member of the Fall River Soccer team which won the U.S. championship in the 1918-19 season.³

1. Thomas H. Newell, 98 Old Mill Boulevard, Shawomet Beach, Warwick, R.I., to J.T. Dixon, 19 Jan. 1969.
2. Frederic R. Harrison, 88 Glen Avenue, Cranston, R.I., to J.T. Dixon, 20 Jan. 1969.
3. Telegraph & Argus (Bradford), 29 Jan. 1969.

PART 3. YORKSHIRE TEXTILE EMIGRATION.

3. AMERICAN CENTRES OF YORKSHIRE TEXTILE
IMMIGRATION.

(b) NEW YORK AND NEW JERSEY.

Skilled Yorkshire workers were involved in the textile industries of New York State, especially in the earlier days of American factory development, though by no means apparently on the same scale as in New England or the Philadelphia area, or even in New Jersey. In New York State, a factory for making superfine broadcloths was established in 1811 at Ballston, north-west of Albany, by a resident American group. Encouraged by the closure of the American market to British goods by non-importation legislation, 1808-1811, and by the recent import of merino sheep from Spain and Portugal, the group explored the West of England and obtained the services of

Richard Lowe, of Gloucestershire, to manage the Ballston plant.¹

About the same time, immigrants from Yorkshire settled on the east bank of the Hudson around Poughkeepsie and Fishkill, or to the west and north-west of Albany. In these areas, they developed large-scale woollen-cloth production, employing the new spinning machinery.² After 1815, the Poughkeepsie area of Dutchess County, N.Y., in particular attracted many others from Yorkshire. J. Wedsworth, probably a native of the Huddersfield area, seems to have emigrated to America in the early 1820s, where he became the owner of a woollen factory in Poughkeepsie. In 1826, he began the manufacture of broadcloth and cassimeres.³

1. H. Boston, "The Industrial Immigrant....", 523-24.

2. Ibid.

3. T.W. Leavitt (ed.), The Hollingworth Letters.... p.19n.

From the correspondence of Wadsworth, and various members of the Hollingworth family and their in-laws, it is clear that the Poughkeepsie factory attracted a sizable number of workers from the Huddersfield-Honley area by the late 1820s. Joseph Hirst, Wadsworth's cousin, was employed as a spinner at Poughkeepsie in at least 1828 and probably earlier, where he "is verry well in health and doing well. If to be diligent at work earning all he can and keeping what he earns is doing right then he is your man. I find no fault with him because I see none. We have no one steadyer about the place". At the time, Hirst's wife and family were still in Yorkshire: "...I think it would be better for him to get his family here too...he frequently talks of them and wishes they was here..."¹ Jonathan Hirst was at the factory from at least late-1828 to late-1829.² Joseph and Grace Brook(s) and ----- Bowers

1. F.W. Leavitt (ed.), The Hollingworth Letters... pp.19-21, 42.

2. Ibid., pp. 37, 42, 56.

were at Poughkeepsie in 1828.¹ Joseph Fletcher died there in December 1827 and was buried the same day that the Hollingworths arrived. James Hollingworth went to the funeral, and Joseph Hollingworth heard the funeral sermon preached at the Methodist Chapel the Sunday following.² William Rawcliff, George Hollingworth's brother-in-law and the most important of the secondary figures in The Hollingsworth Letters, worked at the Poughkeepsie factory from the late summer of 1829 to 1832. He then moved with his family to Rosendale, Ulster County, perhaps to enter the employ of the Rosendale (Wool) Manufacturing Company, or to Liberty, Sullivan County, N.Y. State.³ Joseph Hollingworth, at the time in South Leicester, Mass., sought work at Poughkeepsie through Rawcliff's good offices in November 1829.

1. T.W. Leavitt (ed.), The Hollingsworth Letters, p.32.

2. Ibid., p.34.

3. Ibid., esp. pp.19-20, 40, 42, 45, 106.

and Jabez Hollingworth visited the factory shortly afterwards seeking employment, but without success.¹ Lastly, William Lockwood worked at Poughkeepsie from at least 1829 until 1831.²

John Hollingworth, on his visit to up-state New York in 1827, may have worked temporarily for the Pleasant Valley Manufacturing Company during his sixteen weeks' stay in Pleasant Valley.³ Joseph Hollingworth, visiting the same area in 1828, encountered John Scholfield, a recent immigrant, and John and Michael Boothroid (or Boothroyd), all Yorkshiresmen, living at Pine Grove, one mile from Pleasant Valley. There they were probably working for the Pine Grove Woollen Manufacturing Company, "which produced broadcloth, flannel, baize, setinet, cassinets, kerseys and

1. T.V. Leavitt (ed.), The Hollingworth Letters... pp.55-56.
2. Ibid., pp. 52, 86, 99.
3. Ibid., p.11.

narrow cloth".^{1.}

Several examples occur in the Hollingsworth correspondence of the interest shown by the Yorkshire immigrants in establishing their own factory or factories: by doing so, they hoped, if not to escape the system, to be victorious over it.^{2.} Several members of the family explored the possibility of organizing a society based on Robert Owen's community at

1. T.W. Leavitt (ed.), The Hollingsworth Letters..., pp.34-35, 35a. By coincidence of place-names, Samuel Barker, the brother of Joseph Barker, emigration propagandist, editor and publisher, was located at Pleasant Valley, Ohio, about 1847. Samuel wrote home to Yorkshire that he knew of several places where spinners and weavers were wanted: he had been sent for to weave at Pleasant Valley, Ohio, where John Dod and Richard Thompson, from Brawley (near Leeds) were weaving. "Dod has bought 45 acres of land", he wrote, "and a man farms it for half the crop, and it leaves him about 100 dollars a year..." (M. Brook, "Joseph Barker and The People...", p.337, citing Reformer's Companion to the Almanac, No. 2, Feb. 1848). As in the case of the Oriskany Mills, N.Y., the factory at Steubenville, Ohio, early "had the advantage of a few skilled foreign workmen" (A.H. Cole, The American Wool Manufacture, I, p.234, citing Miles' Weekly Register, XXI, 367). Henry Haude, a woollen manufacturer, eldest son of William Haude, clothier, of Wortley, near Leeds, died in Steubenville, Jefferson Co., Ohio, in October 1855 (Leeds Mercury, 1 Dec. 1855: obit., 31 Oct. 1855, aged 35).
2. T.W. Leavitt (ed.), The Hollingsworth Letters..., p. XX¹i.

New Lenark, Scotland, and New Harmony, Indiana. The Hollingworths' venture was to be on "a parcel of land consisting of 200 Acres together with a house and other necessaries...24 Acres of it cleared", contracted for and situated in Yorkshire township, Cattaraugus County, in up-state New York. The land included a water privilege and the Hollingworths hoped to erect thereon "a small Factory at some futer period".¹ In 1828, John " & James Hollingworth was going to take up a small Manufacterien place in Herkimer County, New York", where there were several small cotton and woollen mills; "But they have not taken the place on account of the Owner wanting too much Rent. At present they are working at Winsteed [Winsted] in Connecticut".² Joseph Haigh hired,

1. T.W. Leavitt (ed.), The Hollingworth Letters..., p.XXii, pp.6, 16.

2. Ibid., p.37.

but did not take up, the lease of the Delaware Woolen Factory in Delhi, Delaware Co., N.Y., in 1832.¹ Two years earlier, Heigh had been interested in property owned by William Perks at Liberty, N.Y., where William and his son Elijah built several mills on the Little Beaverkill River.² Later, Edwin Hollingworth moved from Waterford, Conn., to McDonough, N.Y., where as late as 1874, E. Hollingworth & Son were manufacturing cassimeres and flannels.³

Benjamin Marshall's early career in the United States has already been noted; his membership of the ship-owning group which included Isaac Wright & Son, and Francis and Jeremiah Thompson, and which established

1. T.W. Leavitt (ed.), The Hollingworth Letters, p.107.
2. Ibid., p.81.
3. Ibid., p.XXV.

the first regular line of packets, the Black Ball Line, between New York and Liverpool, in January 1818; and his position by the mid-1820s of being probably the largest cotton trader in the world.¹ By 1823, Marshall, born in Huddersfield in 1782, was beginning to invest part of his large mercantile fortune in several lots of land in the Whitestown area of Oneida County, New York State, with a view to cotton manufacturing. In 1825, he formed a partnership with Benjamin S. Walcott, Jr., a Rhode Islander by birth, by which Marshall invested the capital necessary for the building of a factory and Walcott became the responsible executive manager. A stone factory, 120 feet by 50 feet, five stories high, was erected, and the New York Mill (named after Marshall's then city of residence) began operating in late 1825. Until 1839, Marshall was in full partnership with Walcott in the business of the New York Mills, but in that year

1. H. Heston, "Yorkshire Cloth Traders in the United States...", 260-64; W. J. Bognall, The Textile Industries of the United States..., pp. 510-11.

he sold to Walcott and his eldest son the middle and upper group of mills, the product of increased building; and in 1847, he conveyed his entire interest to the Walcotts. In 1838, Marshall had purchased the property of the Whitestown Cotton and Woolen Manufacturing Company from Benjamin Walcott. At the time of his retirement from the firm in 1847, Marshall was living in Troy, N.Y., where he established, in 1826, the Hudson River Print Works and the Ida Mills. Later, he purchased the Middlebury Cotton Mills in Middlebury, Vermont, and a mill at North Adams, Mass. Marshall was still actively interested in these establishments when he died in Troy in December 1858.¹

Other Yorkshiresmen were living and working not far from Troy. David Lindley, a cloth manufacturer, formerly of West Ardsley,

1. W.E. Bagnell, pp. 505, 509-13, 516.

near Wakefield, but then of Chatham, N.Y., some 25 miles south of Troy, died in 1845.¹ H.B. Waterhouse, formerly a Bradford woolcomber, was employed in Cohoes, Albany County, N.Y., on the west bank of the Hudson, three miles from Troy, in February 1848. Prospects for others in same occupation, however, were not encouraging. Waterhouse reported:

"This place in Cohoes commenced employing combers about twelve months ago; they were advertised for, and letters were sent to Bradford encouraging men to come. I understand one gentleman in Manchester Road Bradford has encouraged about forty to come, and their should-be employer now denies having sent for them. There are a great number here who have arrived within the last two months out

1. Leeds Mercury, 21 Jun. 1845; Bradford Observer, 26 Jun. 1845; Halifax Guardian, 26 Jun. 1845; Doncaster Gazette, 4 Jul. 1845; obit., 21 Apr. 1845.

of work, with no prospects of getting any for some time, without money to keep themselves with, or to take them to other places, if they had ever such a good chance of being employed elsewhere, and from present appearances this factory is very much likely to close in a short time... There are more than 60 here at present....

Were I to communicate to you the sufferings the greatest part of these poor men have experienced at sea according to their own statements, and confirmed by their looks, it would make your heart bleed... We buried a young man of the name of Whittam last Sunday, from Manchester Road, he had been here but eight days... another of the name of John Coal died on Monday last, two or three others are in the fever hospital in Albany, not expected to live..."¹

Moreover, from press references, it seems likely that some Yorkshire textile workers were

1. H. B. Waterhouse, Cohoes, N. Y., to Joshua Pollard, 4 Feb. 1848 (Bradford Observer, 2 Mar. 1848).

resident in New York State in the 1860s.

Elizabeth, the eldest daughter of William Bates, of Sowerby Bridge, married B.M. Talbot, of Fishkill, at Matteswan, N.Y., in November 1868.¹ Samuel Johnson, of Ellenville, Ulster County, N.Y., married Eden, daughter of (the late) George Reistrick, cloth manufacturer, of Pudsey, at the Morevian Chapel, Fulneck, in 1869.²

Four generations of the McLaughlin family lived at Skenesbale, Onondaga County, N.Y., a village established as early as 1738 in the Finger Lakes region, 16 miles south-west of Syracuse. Though of Northern Irish extraction, the McLaughlins forged several links with Yorkshire through industry and marriage in the nineteenth and twentieth centuries.

1. Halifax Guardian, 5 Dec. 1868: marriage, 9 Nov. 1868.
2. Bradford Observer, 12 Oct. 1869: marriage, 11 Oct. 1869.

In 1817, William Nipper, an English immigrant from Somerset, began to grow teasles (or teasels), used, attached to a revolving cylinder, in raising the nap on cloth; and his product was sold to Massachusetts woollen mills. Whereas Nipper's crop was sold to textile manufacturers for them to prepare the teasles for use, Dr. John Snook, another Somerset man, established a business in Skeneateles in 1832 whereby he bought the teasles from numerous growers and prepared the product himself for manufacturers. About 1858, Snook sold his teasle business to Forrest Weeks, also from Somerset and owner of a paper mill. Paper and teasle business grew apace, and Weeks, unable to superintend both, placed James McLoughlin, Jr., in charge of the second enterprise. For two years, McLoughlin was employed learning sales methods, but moved west on being offered a well paid post as paymaster to a building company constructing a bridge over the Missouri River from Omaha, Nebraska, to Council Bluffs, Iowa.

In 1868, after visits to California and Idaho, James McLaughlin returned to Skanastales to buy out the Weeks teszle business. McLaughlin opened a factory for the preparation, boxing and shipping of teszles purchased from local farmers, nearly all from Somerset. He also bought Weeks' existing stocks and shipped 1,700 cases to England. McLaughlin himself sailed for England in 1870 and sold large quantities of teszles to various Yorkshire woollen mills, where they were much in demand on account of their greater efficiency than West of England teszles.^{1.} In 1875, James went again to Leeds, with his brother John, and both entered a textile school to learn the manufacture of woollen broadcloth.^{2.}

In October 1880, the firm, now known as James McLaughlin & Sons, lost its

1. American teszles were first grown from West of England seed.
2. During his lifetime, James McLaughlin, Jr., made twenty trips to England and Europe.

Skanesteles factory, destroyed by fire. At once, the firm took the lease of, and later purchased, the bankrupt firm known as Skanesteles Iron Works, Skanesteles Falls (five miles down the Skanesteles Creek). In 1882, it was decided to convert the tassel shops in the iron works into a woollen mill. Another tassel factory was opened in Skanesteles, and, as the woollen mill progressed, a selling office was established in the heart of the textile district of New York City. A chance enquiry at the city office prompted an entirely new development: the firm, now with the officially adopted name of the Glenside Woollen Mills, was asked if it could manufacture cloth similar to a particular pattern of woollen fabric. James McLaughlin recognised the sample and soon sailed yet again for England to find the manufacturers of basket cloth in Morley, Yorkshire, and to make contact with various workers skilled in the making of this cloth, such as overseers in carding, spinning,

weaving, fulling and finishing. As no other woollen mills in the United States were manufacturing casket cloth, it seems that these specialists were allowed to sign contracts enabling them to enter the country without bureaucratic barrier. Among others, the brothers William and Thomas Wright, Thomas Riley and Samuel Bradshaw all left Morley in 1885 to take up positions at the Glenside Woollen Mills as boss-finisher, boss-fuller, boss-spinner and boss-carder, respectively. Another Morley man became boss-dyer.

Casket cloth was made from rags converted into shoddy and blended with fine Australian wool for the filling; and cotton purchased from various mills provided the warp. A special mill was built for the manufacture of shoddy. After the election of Grover Cleveland to a second presidential term in 1892, imports of casket cloth entered the United States duty-free, seriously affecting the Glenside Woollen Mills. Eventually, James and John McLaughlin lost control of the firm to be replaced by their selling agents in New York City.

The New York firm failed to pay dividends and a law suit commenced that ran for more than two years. Although the McLaughlin brothers were finally successful, considerable legal fees seriously affected James's health and he died before the lawsuit ended.

Additional problems had been caused when, prior to 1892, the city of Syracuse shut off the outflow of water from Skanesteles Lake into Skanesteles Creek; and the resultant loss of water power necessitated the purchase of steam engine and electric motors.

Considerable money was spent in suing the city of Syracuse. Again, great expense was incurred by the executors in breaking the will of James McLaughlin, Jr. All the shares in the name of James McLaughlin were sold to Arnstaedt & Co., the firm which had obtained control of the Glenside Woolen Mills, and the undertaking's name was now changed to the Glenside Mills Corporation. Eventually, the manufacture of casket cloth gave way to the production of other types of lining made from silk and rayon.

The woollen mill also began the manufacture of automobile broadcloth upholstery.^{1.}

In addition to the Glenside Woollen Mills established in Skaneateles in the 1880s with the assistance of overseers from Morley, James McLaughlin extended his textile business by opening a main branch in Webgate Mills, Skinner Lane, Leeds. Subsidiary branches were opened in Aachen, Copenhagen, Lodz and Avignon. Charles McLaughlin, one of James's three sons, maintained the Leeds office, and while there he met and married Sarah Ann Heegen, of Hull. Later, the business was transferred from Webgate Mills to Wesculey Street Mills, also in Skinner Lane. With the outbreak of World War One and embargoes placed on cases of textiles going into Europe from England, the continental offices closed. Similarly, with the small demand for textiles in England, the Leeds branch closed in late 1919.^{2.}

Just as Yorkshire workers from Morley played an important part in the establishment of basket-cloth making at Skaneateles in the mid-'eighties, so, about the same time, members of the Yorkshire firm of T.F.

1. The Glenside Mills Corporation continued until 1937.
2. Henry W. McLaughlin, 812 Emeralds Drive, Pine Hills, Orlando, Florida, to J.T. Dixon, 20 Jun., 24 Aug. 1966.

Firth & Sons Ltd., of Heckmondwike, founded the Firth Carpet Company in New York State. In 1886, the Broadhead Mills at West Cornwall were purchased, and Axminster, velvet, tapestry rugs and carpets were manufactured. The American Axminster Industry, making seamless chenille, was also purchased; and plant facilities already developed at Auburn, N.Y., continued operations.^{1.}

As in New York State and New England, Yorkshiremen were to be found in New Jersey, wherever textiles were manufactured, as skilled operatives, dyers, finishers and mechanics. By no means all, however, under the broader heading of Englishmen, appear to have displayed exemplary conduct in American eyes. At Paterson, New Jersey, in 1832, it was claimed by one American that English mill hands were "the most beastly people I have seen" and were usually drunken and unruly. In the 1870s, hand-jack spinners still had "the disorderly habits of English workmen. Often on a Monday morning half of them would be absent from the mill in consequence

1. Von Bergen & Muenersberger (eds.),
American Wool Handbook, p.31.

of the Sunday's dissipation".¹ Notwithstanding these observations, there is no reason to suppose that the majority of Yorkshiremen failed to supply desirable expertise to the New Jersey textile mills either before or after the Civil War.

In 1832, William Rushworth left Halifax, sailed for the United States and settled in Belleville, N.J. There, his daughter, Mary Holroyde Rushworth, born at Crewstone Hall, near Elland, 11th November 1808, married John Andrews, from Monmouthshire. It had been claimed, though with some uncertainty, that William Rushworth and John Andrews were the first to introduce the manufacture of felt cloth

1. Observations on Professions, Literature, Manners, and Emigration in the United States and Canada (New York, 1833), p.97; John L. Hayes, American Textile Machinery (Cambridge, 1879), pp.31-32: both sources cited by R.T. Berthoff, British Immigrants in Industrial America, p.146.

into the United States.¹ John, the son of Charles Wilkinson, was born in Yorkshire in 1821. A cloth dresser by trade, he emigrated to the United States in 1842, where for some years he lived and worked in Peterson, N.J., before moving west to Liberty, Grant County, Wisconsin.² E.J.C. Atterbury, from Leeds, married Mary Colt in Peterson in September 1846.³ Joseph Scott left Bingley or Shipley in the 1850s and was employed at Cost's Mill, Newark, N.J., as a mill mechanic. After some years, he returned to England, worked in Shipley and married Sarah Broadbent. The marriage produced three children before Scott went back to Newark

1. Halifax Guardian, 19 Apr. 1879: Mary Holroyde Andrews died at Newark, N.J., 28 Jan. 1879, survived by two sons and three daughters. Von Bergen & Neuerberger (eds.), American Wool Handbook, p.903, note, however, that the first mechanical process for the production of felt was invented by an American, J.R. Williams, about 1820. The actual manufacture of felt, it is recorded, was started in Winchester, Mass., by Robert Bacon about 1824-25. Rushworth and Andrews may well have been the first to introduce felt manufacture into New Jersey.
2. History of Grant County, Wisconsin (1881), Liberty, p.1031.
3. Leeds Mercury, 31 Oct. 1846: marriage, 25 Sep. 1846.

to establish a home there prior to the arrival of his wife and family. Sadly, within a few weeks of reaching Newark, all three children contracted diphtheria and died, though at least one more daughter was born in the city in 1867. During the Civil War, Joseph Scott was enlisted to fight for the North, but peace came before his call-up.^{1*} Elizabeth, the wife of John Morgan, and eldest daughter of (the late) Isaac Wilkinson, of Leeds, died in Jersey City in June 1863.^{2*}

It has already been noted that Lawrence, Massachusetts, and Rhode Island attracted great numbers of West Riding immigrants, particularly from the Bradford and Halifax areas, in the years after the Civil War. The same also seems to be true, though to a lesser extent, of the textile and manufacturing centres of New Jersey, especially after the installation of the first jacquard loom (for silk weaving) in Paterson in 1874.^{3*} James

1. Cyril Adams, Ellerkin, Beech Street, Bingley, to J.T. Dixon, 25 Sep. 1966.
2. Leeds Mercury, 16 Jul. 1863: obit., 22 Jun. 1863.
3. Herbert S. Swan, The Jacquard Industry: an Economic Survey of Fundamental Factors in the Local Industry at Paterson, New Jersey (Paterson, N.J., 1938), pp. 8-9. The number of jacquard silk looms in Paterson increased steadily to a peak of 9,046 in 1917. In 1937, Paterson possessed 3,018 (and New Jersey, in total, 4,199) jacquard looms out of a total of 9,864 in the United States.

Midwood, from Halifax, died in Trenton in 1868, aged 47.¹ Samuel Smith Kellett, formerly of Waterhouse Street, Halifax, died in Jersey City, in October 1879, aged 59.² A dyer by trade, and formerly of St. James's Square, Bradford, Henry Carr died at Englewood, N.J., in September 1881, aged 29.³ Also from the Bradford area, Mary Walls died at her son's home in Jersey City in November 1882.⁴ Two Bradfordians were married in Camden, N.J., in March 1884: John Roberts Ecob and Martha, youngest daughter of John Wright, of the West Bowling Post Office, married at St. Paul's Church.⁵ In August of the same year, William Thornton Mortimer, son of George and Emma Mortimer, of Bradford, died in Paterson, N.J., aged 31.⁶ James Farnell, a Halifax pattern-dyer, was resident in Cranford, N.J., in August 1886 when his infant daughter died there.⁷ Charles Alfred Crossley,

1. Halifax Guardian, 8 Aug. 1868.
2. Ibid., 1 Nov. 1879: obit., 14 Oct. 1879.
3. Bradford Observer, 10 Oct. 1881: obit., 26 Sep. 1881.
4. Ibid., 23 Nov. 1882: obit., 7 Nov. 1882, aged 59.
5. Ibid., 14 Mar. 1884: marriage, 12 Mar. 1884.
6. Gravestone, Undercliffe Cemetery, Bradford: obit., 15 Aug. 1884. George Mortimer, and probably his wife, also spent some years in Paterson.
7. Bradford Observer, 4 Sep. 1886: obit., 18 Aug. 1886.

second son of Sophia and (the late) Joseph Crossley, a provision dealer of Queen's Road, Halifax, died at his uncle's house in Trenton, N.J., in December 1886.¹ J. Herbert Bottomley, eldest son of William Bottomley, Nab Wood House, Shipley, was married to Miranda Croft in Camden in February 1887.² In April 1888, Charles Henry Beet, formerly of Halifax, married Lillian A. Timbrook, of Orange, at Birch Church, N.J.³ Also in April 1888, Turner Berry, late of Bradford, died in Camden.⁴ The following June, Friend Haley, from Cleckhaston, married Mary Jane, the youngest daughter of Thomas Pickles, of Elizabeth Street, Bradford, in Phillipsburgh, N.J.⁵ In February 1889, Charles Ingham, of Bradford, died in Phillipsburgh.⁶ Thomas Garritt, from Stockbridge,

1. Halifax Guardian, 8 Jan. 1887: obit., 21 Dec. 1886, aged 19.
2. Bradford Observer, 17 Feb. 1887: marriage, 1 Feb. 1887.
3. Ibid., 19 May 1888: marriage, 25 Apr. 1888.
4. Bradford Observer, 28 Apr. 1888: obit., 26 Apr. 1888.
5. Ibid., 21 Jun. 1888: marriage, 6 Jun. 1888.
6. Ibid., 19 Feb. 1889: obit., 3 Feb. 1889, aged 55.

Morton, near Bingley, died at Cedar Grove, N.J., in September 1889, and was interred at Fox's River.¹ Thomas Shipley, born in 1861, probably in Yorkshire, emigrated to the United States as late as about 1905, and settled in Newark, N.J.²

1. Gravestones, Parish Church of St. Luke, Morton: obit., 1 Sep. 1889, aged 59.

2. Telegraph & Argus (Bradford), 14 Jul. 1970.

PART 3. YORKSHIRE TEXTILE EMIGRATION.

3. AMERICAN CENTRES OF YORKSHIRE TEXTILE
IMMIGRATION

(c) PHILADELPHIA AND PENNSYLVANIA.

Philadelphia's nineteenth-century textile industries, as those of New England, owed much to the influx of immigrants from the British Isles. In 1850, the city possessed a population of 408,762, of whom 121,699 (or nearly 30 per cent) were foreign-born. Those born in the British Isles - 72,312 Irish, 17,500 English and 3,291 Scottish - accounted for 76.5 per cent of the foreign-born.¹ In 1854, the city's corporate limits became so-extensive with those of Philadelphia County, and a further eighteen villages and towns were thereby drawn into the metropolitan area.² Of these, Frankford, Germantown and Manayunk, both before and after the years

1. German (22,750) and French immigrants (1,961) made up all but 3,865 of the remainder of foreign-born.
2. Edwin T. Freedley, Philadelphia and its Manufactures: A Handbook exhibiting the Development, Variety and Statistics of the Manufacturing Industry of Philadelphia in 1857 (Philadelphia, 1859), p.57.

1850-54, have particular significance in a consideration of Yorkshire textile immigration in Philadelphia. So too has Schuylkill, or Schuylkill Falls, on the north-western limits of the city.

Moreover, by 1850, Pennsylvania contained "a larger number of factories for the making of cotton and woollen goods than any State in the Union". Massachusetts contained 213 cotton and 119 woollen factories, and New York State, 36 cotton and 249 woollen factories; but Pennsylvania possessed a total of 588 such factories, 208 cotton and 380 woollen. Philadelphia itself, it was claimed, was

"the centre of a greater number of factories for the textile fabrics than any other city in the world...not...a greater number of looms, or greater value of production; but simply... a greater number of distinct, separate establishments fairly entitled to be called factories. No other city in the world.... is the centre of two hundred and sixty Cotton and Woollen factories, and containing, besides, hand-looms in force and production equal to

seventy additional factories of average size....^{1*}

In short, Philadelphia in the 1850^s was the largest textile city in the United States, a position held since the American Revolution.^{2*} La Grange Place, near Holmesburg,^{3*} provided the location of Philadelphia's first cotton mill, whose machinery was supplied by Alfred Jenks, a pupil of the celebrated Samuel Slater, from his manufactory of cotton machinery, established in Holmesburg in 1810. Pennsylvania's first woollen mill was sited at Censhocken, a few miles to the northwest, and now an industrial suburb, of Philadelphia. Scattered references indicate a steady

1. Edwin T. Freedley, Philadelphia and its Manufactures: A Handbook exhibiting the Development, Variety and Statistics of the Manufacturing Industry of Philadelphia in 1857 (Philadelphia, 1859), pp.9⁴-95, 23⁴.
2. Sam Bess Warner, Jr., The Private City: Philadelphia in Three Periods of Its Growth (Philadelphia, 1968), p.69.
3. Then in Philadelphia County, but in 1854 incorporated into the city of Philadelphia.

development of textile manufactures. In 1824, for instance, 33 cotton and woollen factories, worked by water - or steam-power, were operating in Philadelphia and neighbourhood; and two-thirds of these operated 28,750 spindles. Later, one English writer reported that Philadelphia was "the great nest of hand-loom manufacturing and weaving".¹

By the mid-century, Philadelphia's textile production covered an immense range of fabrics, hosiery and carpetings. Cotton manufacturers included tickings, aprons, shirting and furniture checks, gingham, pantaloons, cottonades, heavy brown sheetings, mariners' shirtings, denims, negro plaids, nankeens, ducks, osenbergs, baggings, and printed cloths of all types and grades. Several mills in Philadelphia produced cotton yarns, though great quantities were also obtained from Paterson, N.J., and Southern mills, especially in Augusta, Georgia. The main

1. E.T. Freedley, Philadelphia and its Manufactures, in 1857, p.233.

varieties of woollen manufactures in Philadelphia consisted of cassimeres (all wool, or cotton and wool), satinets, Kentucky jeans (cotton, cotton and wool, or all wool weft), twills and tweeds (mainly all wool weft), shawls (chiefly all wool), flannels (especially all wool, 'Welsh' flannel, used for miners', glass-blowers' and foundry men's shirtings), and linceys, or woollen plaids, of one-half or one-third wool. A considerable variety of mixed goods was also produced: coverlets (of cotton and wool), damask, birds-eye and huckaback diapers, linen table cloths and towelling, bed-spreads, union checks (of linen and cotton), worsted braid (or 'ferreting'), and carpet bindings (of cotton and wool). Other major areas of textile manufacture by 1850 included carpetings (of all wool, worsted, and - "said to be exclusively confined to Philadelphia" - of cotton and cotton-and-wool), woollen hosiery and silks. Associated with the production of many types of cloth were the extensively developed processes of printing, dyeing, embossing and finishing.^{1.}

1. E.T. Freedley, Philadelphia and its Manufactures...in 1857, pp.235-50.

It is significant, however, that in the 1850's, Philadelphia's great textile production, resulting from the efforts of more than 10,000 workers, emanated from "a special mix of modern mill and old fashioned cottage work".¹ Besides 260 cotton and woollen mills, it was claimed that the production by skilled handweavers equalled "seventy additional factories of average size".² As in Yorkshire, woollen and cotton fabrics were produced by many kinds of manufacturing organisation. Large mechanised mills employed steam-powered machinery and an increasing number of women and children. Both skilled handweavers and power-driven looms were employed by some manufacturers. Some firms spun or bought their thread, and placed orders with and set up the hand-loom of domestic weavers.³ Despite the rapid substitution of power for textile production and the growth of large mills, Philadelphia in the 1850's was still "truly the great seat of Hand-loom Manufacturing and Weaving in America". Probably about 6000, certainly 4760, hand-loom were

1. S.B. Warner, p.69.

2. E.T. Freedloy, p.234.

3. S.B. Warner, p.70.

producing checks and other cotton goods, many linseys or woollen plaids, mixed goods, coverlets, bed spreads and carpetings. The weaving of the cloth from yarn supplied by the manufacturer took place either in the weaver's own home or, sometimes, in a wooden building attached to the manufacturer's dwelling, where journeymen weavers, perhaps given board and lodging by their employer, produced cloth on ten, twelve or more looms. Many, though by no means all, of the hand-loom weavers were to be found "in garrets, cellars, and out-houses, as well as in [their own] apartments" in Wards 17 and 19 (formerly Kensington).¹ Similarly, cotton and woollen hosiery production relied not only on wooden hand-powered knitting frames in the home, but also on power-driven rotary knitters in the factory; and about one thousand domestic knitgoods workers, mostly English immigrants from Nottingham and Leicester, lived on the northside of Philadelphia, in Germantown and Kensington. Skilled domestic workers still prospered in the 'fifties, though large factories had entered the

1. S.B. Warner, p.70, E.F. Freedley, pp.238-39,252-53.

business.¹ Yet again, carpet weaving was commonly undertaken by skilled domestic workers who wove the yarns prepared by the manufacturers. In the 1850s, about 1500 hand looms were working up the orders of some one hundred manufacturers. As in cloth production, carpet weaving was in a transitional stage in that a few large manufacturers combined hand-weaving with power-driven looms.² As new industries to Philadelphia, the manufacture of silks, narrow goods and sewing threads took place in a few large factories using the latest powered machinery.³

As already noted, in 1850, 12,699, or nearly 30 per cent, of the city of Philadelphia's population was foreign-born, and of these, over three-quarters had sailed from the British Isles. Many were skilled in the manufacture of one branch or another of textiles. Although the threat of new machines and new methods of production was continuous from the 1830s and '40s onwards, it is certain that many hand weavers had been attracted to

1. E.B. Warner, p.70; E.T. Freedley, pp.254-55.

2. Warner, pp.69-70; E.T. Freedley, p.256.

3. E.B. Warner, p.70.

Philadelphia because there still remained a niche in the city's textile industries for skilled domestic workers. Indeed, British immigrant handloom weavers "were able to forestall the complete shift to water-power and steam until the 1880s".¹ Again, although the American carpet industry had developed efficient power looms, such as Bigelow's ingrain machine in the 1840s, weaving in this branch still remained essentially a heavy hand skill until the 1880s; and in 1876 in Philadelphia, only 592 power looms were weaving carpets as opposed to 3,517 hand-looms.² Even as one textile handskill after another succumbed to industrialization, British immigrants, both long-established and newly arrived, found

1. R.T. Berthoff, British Immigrants..., p.37; S.B. Werner, pp.71, 180.
2. A.H. Cole & H.P. Williamson, The American Carpet Manufacture (Cambridge, 1941), pp.36, 57-58; Pennsylvania Bureau of Industrial Statistics, Eighth Annual Report (1879-80), pp.100-01: both sources cited by R.T. Berthoff, p.39.

opportunities as expert operatives and as overseers in the developing mills of the Philadelphia neighbourhood.

As Philadelphia grew outwards from its original urban core, and especially as the city expanded northwards along the Delaware shore, manufacturing developed behind wharves and shipyards. The leather and wool district (in 1860, Ward 11) and the machinery and textile mills' district (in 1860, Ward 18) sprang up. Across the northern limits of the city, but beyond the stretch of continuous settlement and not, until 1854, part of urban Philadelphia, lay the mill towns of Manayunk on the Schuylkill, Germantown, and, to the east, on the Delaware, Frankford.¹

By the early twentieth century, the importance of textiles to Philadelphia was overwhelming. As the major industry, the value of textile products

1. S.B. Warner, p.59; Griffith Taylor, Urban Geography (London, 1949), p.173. Similarly, the mill town of Kellyville in West Philadelphia, across the Schuylkill, became part of metropolitan Philadelphia in 1854 (S.F. Freedley, p.57).

accounted for more than one-fifth of that of all industries. Nearly one-third of all wage-earners in the city were engaged in textile manufacturing. Moreover, in 1909, the value of Philadelphia's textile products (\$153,000,000) was more than twice that of its nearest rival, Lawrence, Mass. (\$70,000,000), and nearly three times that of the third-ranking Fall River, Mass. (\$56,000,000). Worsted and woollen goods alone accounted for \$55,000,000 worth of Philadelphia's products.¹ Macferlane describes the following scene:

"From the tower of the Bromley Mill at Fourth and Lehigh Avenue, there is within the range of vision more textile mills than can be found in any other city in the world. For miles in every direction is seen the smoke of thousands of mills and factories. To the northeast one continuous line of factories extends through Frankford to Tecony, six

1. John J. Macferlane, Manufacturing in Philadelphia, 1683-1912 (Philadelphia, 1912), pp.9, 13-14.

miles away. To the northwest through the smoke rising from the Midvale works at Nicetown the mills of Germantown are seen. To the west another line of mills stretches to the Falls of Schuylkill and Mearsyunk...".^{1.}

By 1930, Philadelphia's Northeast had become a great industrial district of 479,000 inhabitants and over 2000 factories covering a multitude of industries.^{2.} In the years before and after the Civil War, large establishments, including textiles, moved into the district, and skilled English workers continued to be attracted to, and imported for, the textile trades throughout the late nineteenth century. Each new group of textile specialists brought its own unions, and the first Philadelphia textile union was part of a British international. Textile workers in the Northeast mills lived overwhelmingly within the district, in cheap housing and within walking distance of work.

1. John J. Macfarlane, Manufacturing in Philadelphia, 1687-1912 (Philadelphia, 1912), p.39.

2. S.B. Warner, pp.178-79.

Their normal year was punctuated "by a succession of short weeks, overtime weeks, seasonal lay offs and calls for extra hands". Many workers, especially the upholstery weavers, were often able to obtain fill-in jobs until their regular place of employment offered renewed work. It is interesting to note that, in 1930, the geographical distribution in Philadelphia of British - and German-born was similar, when 36,593 of the former and 38,066 of the latter were living in the city. 41.4 per cent of the British and 43.8 per cent of the Germans were living in the Northeast; 33.5 per cent and 41.3 per cent, respectively, were to be found in the Northwest; and 18.0 per cent and 9.2 per cent lived in the West. Only about 7 per cent of either nationality lived in the South and Downtown districts combined.^{1.}

1. S.B. Warner, pp.180-81, 182 (Table XV11).

For much of the nineteenth century, there is substantial evidence of Yorkshire textile immigration in Philadelphia; and the same is true of the nearby mill towns both before and after their incorporation into the city. As craftsmen, operatives, finishers, overseers, and promoters of specialist textile industries, Yorkshiremen added their numbers to Philadelphia's population and their skills to almost every branch of textile production.

John Perry, for instance, a Leeds flax dresser, died at Manayunk in December 1838.¹ Thomas Auty, born probably in the Batley Carr district of Yorkshire in 1816, was almost certainly engaged in textiles before he emigrated with his wife Frances and their children to the United States about 1840-45. At least two more children were born to the couple in Philadelphia, 1846 and 1848, before Thomas and his family returned to Yorkshire about 1849. As the family grew up, some sons emigrated in their own right. Charles, the eldest son (born 1841), emigrated to Arkansas, to be joined, probably about 1880, by his brothers Alfred (born 1854) and Edwin (born 1856).

1. Leeds Mercury, 2 Feb. 1839: obit., 13 Dec. 1838, aged 39.

The younger brothers both later settled in Philadelphia, where Alfred worked as a weaver at the Dobson Textile Mills, a large concern of Yorkshire origin which manufactured at various times grey blankets, carpets, mohair costings and velvets; and Edwin was foreman in the cloth-finishing department of Firth & Foster, another firm of Yorkshire origin.^{1.}

1. Marion Alexander, 279 Old Hall Rd., Chesterfield, Derbys., to J.T. Dixon, 2, 24 Oct. 1967, 10 Dec. 1968, 11 Jun. 1969. Alfred Auty's sons, William (b.1881), Samuel, Edward (b.1888) and Alfred (b.1891), all worked for the Dobson firm. The concern may have been "Dobson & Co., Falls Mill, Woollen carpet yarn, &c.," listed by E.T. Freedley, Philadelphia and the Manufactures...in 1857, p.258. The firm of John Dobson, woollen manufacturer, is first listed in the Philadelphia City Directory (1863); and in 1871, the name became John & James Dobson. The firm of John & James Dobson was incorporated in 1915; and in 1916, it was capitalised at \$9,200,000. The last listing was in the 1941 Philadelphia Telephone Directory. The Dobson brothers were two Yorkshire workers who possessed an intimate knowledge of the woollen manufacturing business, and who built up their activities into a firm having seven mills at the Falls of Schuylkill and Mansyunk. The firm of Firth & Foster began in 1869 as Firth Brothers, with John and Thomas Firth as partners. In 1884, the firm became Firth & Foster with Thomas Firth and Joseph R. and John H. Foster as partners. In 1917, the name became Firth & Foster Co., Inc., and a last listing occurred in the Philadelphia City Directory (1930). Firth & Foster were dyers and finishers of piece goods, with a dye works in the city of Philadelphia, and, from about 1917 to 1926, with an office in New York City (Free Library of Philadelphia, Logan Square, Phils., to J.T. Dixon, 4 Dec. 1967; H.W. McLaughlin, 812 Emeralds Dr., Pine Hills, Orlando, Fla., to J.T. Dixon, 20 Jun. 1966; J.J. Macferlone, Manufacturing in Philadelphia..., pp.20 (Drawing of John & James Dobson's Mills), 34 (Drawing of Firth & Foster Co.), 37).

The villainous Matthew Horsfall, it will be recalled, left Halifax in May 1847 to sail for America on the proceeds (£7) from furniture he had sold, leaving his wife Mary and children destitute. After about three months' residence in the United States, Matthew, a fulling-miller at the time of his marriage in 1827, wrote from Manayunk to say that he had gained well paid employment there, and that if his wife and family went out, the children would "earn as much as would keep them without working". Matthew Horsfall reportedly 'died' in Manayunk, 25th September 1847, though he arrived drunk and unannounced at their Halifax house - now the home of Mary and her new 'husband', John Grenville Heywood - in September 1849.¹ Horsfall perhaps fitted into that category of Englishmen described by 'a great manufacturer of Philadelphia' as being "employed very unwillingly on account of their being so 'dissipated and discontented'...and disliked because they were so given to drunkenness".²

1. Halifax Guardian, 12 Jan. 1850.

2. Durham Advertiser, 13 Sep. 1844.

In early 1848, one former Bradford woolcomber, now resident in Cohoes, New York State, reported that in "Philadelphia and suburbs about thirty [woolcombers] have been employed, and none of them have now but very little to do"¹ John Spencer, youngest son of (the late) John Spencer, left Bradford for America with his wife and two children in March 1847 or 1848, but died of typhus fever in Menayunk in April 1848.² Another Bradford man, David Wilson, formerly of Bolton, and normally resident in Philadelphia, was found drowned in a New York dock in April 1848.³ Isaac Goodell, from the Heath, Halifax, was living in Germantown at the time of his wife's death there in 1851.⁴ George Denison's wife, Ann, probably from the Leeds area, also died in Germantown in January 1852.⁵ Frederick Henry, the youngest son of (the late) Joseph Tyas, of Delph, Saddleworth,

1. H.B. Waterhouse, Cohoes, Albany County, N.Y., to Joshua Pollard, 4 Feb. 1848 (Bradford Observer, 2 Mar. 1848).
2. Bradford Observer, 25 May 1848: obit., 24 Apr. 1848, aged 30.
3. Ibid., obit., aged 30.
4. Halifax Guardian, 1 Mar. 1851: wife - Sarah Jane Goodell.
5. Leeds Mercury, 31 Jan. 1852: obit., 6 Jan. 1852, aged 26.

died in Manayunk in November 1854.¹ Edward Spencer, youngest son of (the late) David Spencer, of Halifax, married a Manayunk girl, Mary Benister, in Philadelphia in October 1856.² Mrs. N. Umpleby, the widow of Ignatius Brook, a former Cleckhaston machine maker, died at Frankford in August 1857.³ Jeremiah, eldest son of (the late) George Adshead, of Dobcross, Saddleworth, died in Philadelphia in January 1860.⁴

In Freedley's 1857 list of 'Manufacturers of Textile Fabrics' in Philadelphia, several entries suggest the possibility of Northcountry, if not Yorkshire, origins. In the absence of further evidence, however, the conclusion can only be the result of conjecture and frequent occurrence of

1. Leeds Mercury, 23 Jan. 1854: obit., 30 Nov. 1854, aged 23.
2. Halifax Courier, 29 Nov. 1856: marriage, 20 Oct. 1856.
3. Leeds Mercury, 15 Oct. 1857; Halifax Guardian, 17 Oct. 1857: obit. of Mrs. Umpleby, 28 Aug. 1857, aged 82.
4. Leeds Mercury, 4 Feb. 1860: obit., 4 Jan. 1860.

identical textile names in the immigrant context. The following have been extracted: "Armstrong & Shew, Satinets and other woolen goods"; "Briggs' Print & Dye Works, Frankford"; "Foster, Israel, Pilling's Mill, Satinets, &c."; "Garsed, R. & Brother, Wingohocking Mills, Denims, ducks, Osnburgs, bagging, &c."; "Garside, Joseph, Franklin Mill, Cassimeres and wool tweeds"; "Greenwood, John, Wissahicon, Carpets and carpet yarns"; "Greenwood & Co., McFadden's Mill, Mansyunk, Carpet yarn"; "Howorth, Israel, Dark Run, above Frankford, Woolen cloths"; "Kershev's Mill, Satinets and wool tweeds"; "Meadowcroft & Winterbottom, Frankford, Checks, cottonsdes"; "Schofield, Thos., Hill's Mill, Wissahicon, Woolen Carpet yarn"; "Schofield, Benjamin, opposite Mansyunk, Woolen carpet yarn"; "Schofield, John & Co., Mansyunk, Cotton carpet yarn"; "Schofield, B. & M., Woolen yarns"; "Schofield, H., McFadden's Mill, Mansyunk, Cotton Carpet yarns"; "Shew, John & Son, Schuylkill, above Mansyunk, Woolen goods"; "Sutton, Geo. & Son, Perseverance Mills, Lower Mansyunk, Cassimeres and twills"; "Thornton & Smith, Globe Mill, Kensington, Apron checks"; "Watson & Thorp, Chestnut Hill, Print and Dye Works"; and "Winterbottom & Co., Armingo Mill, Frankford, Cotton yarns".^{1.}

1. E.T. Freedley, Philadelphia and its Manufactures, in 1857, pp.256-62.

When Titus Crewshaw emigrated from Taylor Hill, Almondbury, Huddersfield, in the late summer of 1853, except for a short stay with the Brookes family at Trenton, N.J., he made direct for Philadelphia. December 1853 found him earning "one dollar a day at finishing" at the Globe Mill.¹ Nevertheless, "I went to learn to weave three days before I went to the finishing and I have been working three weeks". Like Crewshaw, a cloth finisher born in Almondbury, Allen Hey was also weaving at the Globe Mill; and both in the early days boarded at the house of William Hardy, late of Kirkheston, but now of "Marshalls St., above Poplar St., Philadelphia".² Six months later, Crewshaw was still at the Globe Mill "and finishing...[at] one dollar a day and we have been very busy since I went there, and Webster Greenwood³.

1. E.T. Freedley, Philadelphia and its Manufactures... in 1857, pp.256, 259, 262, also lists the following: "Austin, David, Globe Mill, Pantaloon stuffs"; "Holt, Richard, Globe Mills, Cotton yarns"; "Thornton & Smith, Globe Mill, Kensington, Apron checks"; and "Wett, William, Jr., Globe Mill, Kensington, Checks". Of the four manufacturers listed, Crewshaw, from his past experience, was perhaps most likely employed by the first.
2. Poplar Street ran eastwards from the Schuylkill River and formed the northern limit of Ward 15 (in 1860 and later): S.B. Warner, The Private City: Philadelphia... maps, "The Big City of 1830-60", "The Industrial Metropolis of 1920-1930", opp. pp.49, 161. E.T. Freedley, p.262, lists "Wood, Henry, Marshall street, Cotton laps", as operating in 1857.
3. Webster Greenwood was presumably a Huddersfield immigrant.

works here too". Other Yorkshire expatriates known to Crewshaw worked in the city and outskirts: Allen Haigh, a woollen cloth dresser, born in Almondbury Parish, and his family; and Francis Ellis who "got work in Philadelphia". At Crewshaw's second lodgings, he became friendly with John Wilson whose wife Sarah, the daughter of Ben Walker, of Faraley Bank, Almondbury Parish, though still in Yorkshire, was soon to join her husband.^{1.}

Despite apparently steady work at the Globe Mill in 1853 and 1854, and having "been lucky in getting work and keeping it", Crewshaw decided to go West to investigate the prospects there, and in April 1855, he was in Rock County, Wisconsin.^{2.} By the end of June, however, he was back in Philadelphia and soon working for Joseph Garside^{3.} at

"6 dollars a week when I work...and I have the highest wages of any of the finishers at the place".

1. Titus Crewshaw, Philadelphia, to Family, "Taylorhill, near Huddersfield", 18 Dec. 1853, 6 May, n.d. [1854], 30 Nov. 1854 (C. Erickson, Invisible Immigrants..... pp.332-37; and footnotes, pp.333-34, 336).
2. Titus Crewshaw, Porter, Rock County, Wis., to Family, Almondbury, 16 Apr. 1855 (Invisible Immigrants..... pp.337-38).
3. E.T. Freedley, p.258, lists "Garside, Joseph, Franklin Mill, Cessimeres and wool tweeds", as operating in 1857.

Employment, however, was not always regular:

"If I had ad good work all the time it would have been better. I have been playing 7 weeks and I am likely to play 4 more before I get work. I expect to begin for my old master then...there is very little moving at the factories in winter time...I expect trade to be a good bit better this spring in manufacturing wollen cloth...."¹

Crewshaw continued to experience difficult times. In 1856, he went to Norristown, Pennsylvania, in Montgomery County, to the north-west of Philadelphia County. But:

"I left Norristown because I could not get into the finishing room and then I played three weeks and I got work about the middle of August [1856] in Philadelphia and worked there 6 months pretty steady, part of the time at 6 dollars per week, and the remainder at 7 dollars; and then I was out of work 10 weeks and I was seeking work for about 50 miles north and south of Philadelphia...; but got work in Delaware State, about 50 miles south of Philadelphia.

1. Titus Crewshaw, Philadelphia, to Family, Almondbury, 24 Jul. 1855, Dec. [1855?] (Invisible Immigrants, pp.339-40).

But I had not steady work and so
I left when I had been five weeks.
I did not like that place at all....
Then I came to Philadelphia and
played one week. Then Mr. Samuel H.
Needles sent John Wilson for me and
I am working for him yet, but trade
is not so very busy here at present...^{1.}

Industrial depression struck Crewshaw and his fellow-workers hard: "a complete stagnation of trade" meant that a "great many families is receiveing cherrity". Crewshaw's employer had not paid any wages for fifteen weeks: a short period of work was followed by no work, followed in turn by work at reduced wages, with promises of full wages later. Crewshaw was never short of food, but he obtained this on credit. Matters were little better by the spring of 1858: the bankruptcy of Sam Needles left Crewshaw unemployed and owed £32 for past work.^{2.}

1. Titus Crewshaw, Norristown, Penn., to Family, Almondbury, 9 Mar., 30 Aug. 1857 (Invisible Immigrants..., pp.341-42). E.F. Freedley, Philadelphia and its Manufactures...in 1857, p.262, notes: "...in Montgomery County...one [factory], located in Norristown, was the largest factory, it is believed, in the United States, previous to the erection of the Pacific Mill, at Lawrence [Mass.]"
2. Titus Crewshaw, Norristown, Penn., to Family, Almondbury, 4, 7 Dec. 1857, 5 May 1858 (Invisible Immigrants..., pp.343-45).

In 1859, Crewshaw returned to Philadelphia where he lived in Crescentville Way, in the north-central part of the city, until 1861. Work was apparently available there, though Crewshaw's application to it was variable on account of intermittent sickness. "At the time", he wrote,

"I was playing for werp so you see
I am only a weaver, but I like
power looms better nor the ingrain
carpet and I can make out as well.
But you know weaving is only weaving..."

and later,

"I am weaving yet, but the pay is very
poor, but its better then nothing.
I have overridged \$4.60 per week
this last 7 months..."

William Bedford from Taylor Hill, Almondbury, was working at the same mill.^{1.}

Crewshaw spent one year in the Union Army, but was discharged on medical grounds, and he returned to Philadelphia, this time to Germantown.

1. Titus Crewshaw, Crescentville (Way), Penn., to Family, Almondbury, [1859?], 28 Sep. 1859, 18 Jan., 11 Aug. 1860 (Invisible Immigrants..... pp.345-47).

In 1863, he visited Hespeler, Ontario, but in the following year, was back in Germantown. In 1865, he was living in Blockley, a town incorporated into the Philadelphia city wards in 1854; and after his marriage in 1866 to Eliza, an Irish girl, the Crewshaws returned to old Philadelphia.^{1.}

In the years after the Civil War, Yorkshire immigrants abounded in the textile industries of Philadelphia. As earlier in the century, many were attracted to the city or Philadelphia County because the widening range of textile manufacturing required the same domestic or factory skills as those at home. It has been observed that "the movement after 1870 was in part a continuance of that long since initiated". Irrespective of the permutations of national groups - English, Irish, Scottish, French-Canadians, Germans, Belgians, French - the influx always included the English (and Yorkshire) element. Both in 1857 and 1878, it was reported that highly skilled dyers were "for the most part English, German or French". Again, many were skilled in loom-fixing, weaving, dresser-tending and other textile occupations, and many were in

1. C. Erickson, Invisible Immigrants, pp. 331, 348-59.

supervisory or overseeing positions.¹ The first weavers in Philadelphia's manufacture of upholstery and drapery fabrics in the 1870s hailed from Yorkshire and Scotland. Though later some skilled immigrants in the trade were Belgian, German and French, about one-quarter of the industry's employees in 1906 were still English and Scottish. British weavers were so occupied as late as the 1920s.² Philadelphia's new worsted mills depended upon newly arrived English- and, by implication, especially Bradford and Halifax - overseers about 1880.³ In carpet-weaving, whereas New England manufacturers, particularly at Medway, Mass., and the Thompsonville Carpet Manufacturing Company, of Enfield, Conn., in the 1820s relied on direct importations of Scottish, and later, English weavers, dyers and mechanists, Philadelphia carpet manufacturers mainly drew weavers from other textile

1. A.H. Cole, The American Wool Manufacture, II, pp.112-13; E.T. Freedley, Philadelphia and its Manufactures...in 1857, p.249.
2. Gladys L. Palmer, et al., The Philadelphia Upholstery Industry (Philadelphia, 1932), pp. 6, 15; Pennsylvania Bureau of Industrial Statistics, Thirty-Fourth Annual Report (1906), p.256; both sources cited by R.T. Berthoff, British Immigrants... p.40.
3. R.T. Berthoff, p.39.

trades, and many local workers continued in their own homes.^{1*} Even so, English carpet weavers from Kidderminster were hired to work in Philadelphia; and the Kensington section, absorbing English, Scottish and Northern Irish artisans, became the city's carpet centre.^{2*} In 1841, Pennsylvania possessed five carpet factories, all in or near Philadelphia.^{3*} In 1857, at least 26 manufacturers were producing ingrain, venetian, cotton and cotton-and-wool carpetings, or carpet yarns, in Philadelphia.^{4*} Until the 1880s, despite the gradual development of efficient power looms for carpet weaving, the trade required great skill as well as strength. In 1880, some six thousand Englishmen, no doubt including immigrants from the Halifax area, were working in large and small Philadelphia carpet works. Still more weavers, designers, superintendents, as well as machinery, were supplied by English and Scottish carpet towns during the next decade.

1. Nancy P. Norton, "Labor in the Early New England Carpet Industry", Bulletin of the Business Historical Society, 26 (Mar. 1952), 19-20.
2. R.T. Berthoff, British Immigrants..., p.39.
3. Von Bergen & Neversberger, American Wool Handbook, p.26.
4. E.T. Freedley, Philadelphia and its Manufactures... in 1857, pp. 256-62.

More than one-quarter of the immigrants in 1890, or one-tenth of all workers, in the trade were British-born.¹

In the years after the Civil War, from the very large number of West Riding press announcements and gravestones carrying details of the marriages and deaths of Yorkshiremen and women resident in Philadelphia, it is clear that the city and its neighbourhood attracted a strong concentration of such people. Nor should it be forgotten that such announcements probably referred to no more than a fraction of Yorkshire textile immigrants resident there. The following, predominantly from the Halifax press, have been extracted for the years 1865-79.

William Gomersall, late of Stanningley, near Leeds, died at Frankford in February 1865.² John Edward Scarth, son of Thomas Crawshaw and Sarah Ann Scarth, of Armitage Bridge, near Huddersfield, died in Philadelphia in July 1867.³ John Henry Foster, a Halifax pattern dyer, and presumably his wife, were living in Philadelphia at the time of the death of their baby daughter, Annie, in August 1874.⁴ In April 1875,

1. R.T. Berthoff, pp.39-40.

2. Leeds Mercury, 21 Feb. 1865: obit., 1 Feb. 1865, aged 52.

3. Gravestone, Parish Church, Armitage Bridge: obit., 27 Jul. 1867, aged 21.

4. Halifax Guardian, 5 Sep. 1874: obit., 8 Aug. 1874, aged 8 months

Charles B. Welker, the 27-year old nephew of Samuel Welker, of Old Lane, Halifax, died in Philadelphia.^{1*} Two months later, Abren Bell, formerly of Halifax, was married to Sarah Jane Bell in Philadelphia.^{2*} In March 1876, James Wilson, another former Halifax resident, of Shroggs Road, died in Philadelphia.^{3*} Hannah, the wife of John Bray, formerly of Halifax, died at Park Avenue, Philadelphia, in February 1878, to be followed two weeks later by her husband.^{4*} Alice May, the baby daughter of J.F. and M.A. Wainwright, formerly of Southwren, Halifax, died at Schuylkill Falls, Philadelphia, in July 1878.^{5*} Mary Porter

1. Halifax Guardian, 1 May 1875: obit., 6 Apr. 1875.
2. Ibid., 10 Jul. 1875: marriage, 2 Jun. 1875.
3. Ibid., 22 Apr. 1876: obit., 25 Mar. 1876, aged 38.
4. Halifax Guardian, 16 Mar., 6 Apr. 1878: obits, 26 Feb., 12 Mar. 1878, aged 62 and 65.
5. Ibid., 27 Jul. 1878: obit., 6 Jul. 1878, aged 7 months.

(née Pilling), from Huddersfield, died at Thomas Bond's house in Philadelphia in September 1879.^{1*}

References to West Yorkshire immigrants in Philadelphia are even more prolific in the 1880s and 1890s. Martha Hannah Battersby, daughter of Martha and (the late) Edward Battersby, formerly of the Haworth area, died in Philadelphia in January 1881.^{2*} The following August, Harry Beetham Jennings, son of William and Sarah Jennings, late of Bradford, died at No. 2713, North 11th Street, Philadelphia, of "inflammation of the lungs".^{3*} Henry Cawthron, late of Halifax, died in Philadelphia in 1882, aged 63 or 64.^{4*} Jonathan and Hannah Maria Horsfall, from Huddersfield, were living in Philadelphia when their baby daughter, Elsie, died in April 1882.^{5*} Similarly, Joseph and Mary Padgett, from

1. Halifax Guardian, 11 Oct. 1879: obit., 19 Sep. 1879, aged 72 or 73. There is also a familiar Yorkshire ring about E.T. Freedley's listing for 1857 (p.258) of "Foster, Israel, Pilling's Mill, Satinets, &c.," Philadelphia.
2. Gravestone, Hall Green Baptist Church, Haworth: obit. 25 Jan. 1881, aged 22.
3. Bradford Observer, 17 Sep. 1881: obit., 30 Aug. 1881, aged 25. North 11th Street, parallel to Broad and 7th Streets, ran northwards from Montgomery Avenue, and was near the southern end of Germantown Avenue (S.B. Werner, The Private City: Philadelphia, Map, "The Big City of 1830-1860", opp. p.49).
4. Halifax Guardian, 6 May 1882.
5. Ibid., 29 Apr. 1882: obit., 6 Apr. 1882, aged 7 months.

Halifax, lost their infant son, Edgar, in Philadelphia in June 1882.¹ Lydie Ann, the wife of Christopher Raper, of No. 15 Hopwood Lane, Halifax, and only daughter of (the late) Christopher Tinkler, who had earlier settled in Philadelphia, died in June 1882.² Henry Nathan, eldest son of (the late) Edwin Bentley, of Bradford, married Fannie, eldest daughter of R.B. Biley, of Halifax, in Philadelphia, in March 1883.³ The couple were living in Wissahickon, north-west Philadelphia, near Germantown, when a daughter and son were born in 1885 and 1886.⁴ William Johnson, the fourth son of (the late) Charles Johnson of Bradford, died at Hatboro', Pennsylvania, near the northern outskirts of Philadelphia, in July 1883.⁵ William Henry Whiteley, formerly of King Cross, Halifax, married Ella Ann Drewes, in Philadelphia, in July 1883.⁶

1. Halifax Guardian, 15 Jul. 1882: obit., 23 Jun. 1882, aged 14 months.
2. Ibid., 10 Jun. 1882: obit., 5 Jun. 1882.
3. Bradford Observer, 21 Mar. 1883: marriage, 5 Mar. 1883.
4. Ibid., 22 Apr. 1885, 29 Nov. 1886: Halifax Guardian, 25 Apr. 1885.
5. Bradford Observer, 2 Aug. 1883: obit., 7 Jul. 1883.
6. Halifax Guardian, 4 Aug. 1883: marriage, 14 Jul. 1883.

Henry Birkby, a Bradford dyer, died in Philadelphia in December 1883.¹ William Henry Hartley, another dyer, eldest son of (the late) Jonathan Hartley, of Bradford, also died in Philadelphia in December 1883, of typhoid fever.² In April 1884, Walter Holden, eldest son of Thomas Holden, and Mary Smith, third daughter of (the late) William Smith, all formerly of Halifax, were married at Falls of Schuylkill, Philadelphia.³ Six years later, the couple were still living there when they lost a young daughter, Beatrice.⁴ Elina, the wife of George Kitchen, and daughter of Joseph W. Tidswell, of Peel Street, Halifax, died in January 1885 at No. 733, Sanson Street, Philadelphia.⁵ Philip and Elizabeth Wright, formerly of Cullingworth, near Bradford, lost an infant son, Joseph Edwin, in Philadelphia, in May 1885.⁶ In the same month, Thomas

1. Bradford Observer, 16 Jan. 1884: obit., 29 Dec. 1883, aged 46.
2. Ibid., 18 Dec. 1883: obit., 2 Dec. 1883, aged 32.
3. Halifax Guardian, 17 May 1884: marriage, 24 Apr. 1884.
4. Ibid., 7 Jun. 1890: obit., 3 Jun. 1890, aged 4.
5. Ibid., 31 Jan. 1885: obit., 11 Jan. 1885, aged 29.
6. Grevestone, Parish Church of St. John, Cullingworth: obit., 16 May 1885, aged 10 months.

Scott, from Eccleshill, Bradford, died at Conshohocken, in Montgomery County, a few miles to the north-west of Philadelphia.¹ A son was born to D. Conrade Beteman and his wife, probably from the Bradford area, in July 1885 at Wissahickon, north-west of Philadelphia.² Three days later, Thomas Tidswell, late of Halifax, died in Philadelphia.³ Emily Jennings, second daughter of William Jennings, from Fern Bank, Girdlington, Bradford, married John Weaver, of Stourport, Worcestershire, in Philadelphia, in October 1885.⁴ Thomas H. Priestley and his daughter Susannah, from Lightcliffe, near Halifax,

1. Bradford Observer, 25 May 1885: obit., 22 May 1885, 'suddenly', aged 55.
2. Ibid., 6 Aug. 1885: birth, 12 Jul. 1885.
3. Halifax Guardian, 1 Aug. 1885: obit., 15 Jul. 1885, aged 51. Thomas Tidswell was perhaps related to Mrs. Eliza Kitchen, née Tidswell (Ibid., 31 Jan. 1885).
4. Bradford Observer, 5 Nov. 1885: marriage, 22 Oct. 1885, at residence of bride's parents. Emily may have been the sister of Harry Beetham Jennings, "son of William and Sarah Ann Jennings, late of Bradford", who died at No. 2713, North 11th Street, Philadelphia, in August 1881 (Ibid., 17 Sep. 1881).

were both in Philadelphia at the time of the latter's death in December 1885.^{1*} Fred Goulroger, also from Lightcliffe, died in Philadelphia in April 1886.^{2*} In the July following, Nellie, the infant daughter of John and Fanny Greenwood, late of Halifax, died in Philadelphia.^{3*} Charles Pearson, who before emigrating had been a foreman mechanic at Lister's Menningham Mills, Bradford, died at Schuylkill, Philadelphia, in November 1886.^{4*} The marriage of Florence Bateman, only surviving daughter of Daniel Bateman, of Philadelphia, formerly of Wibsey, Bradford, and William Anthony Smith, of Lawrence, Mass., took place in New York in March 1887.^{5*} Joseph Wood, the eldest son of Ellis Wood, dyer, of Hunslet, married Edna Wilson, of Wibsey, in Philadelphia in August 1887.^{6*} Also in 1887, A.K. Mersden, from Bradford, married Mary Alice Ridler, from Halifax, at St. David's Church, Manayunk, Philadelphia.^{7*}

1. Halifax Guardian, 2 Jan. 1886: obit., 14 Dec. 1885.
2. Ibid., 8 May 1886: obit., 16 Apr. 1886, aged 25 or 26
3. Ibid., 31 Jul. 1886: obit., 15 Jul. 1886.
4. Bradford Observer, 13 Nov. 1886: obit., 9 Nov. 1886, aged 52.
5. Ibid., 10 Mar. 1887: marriage, 8 Mar. 1887. Florence and Daniel Bateman may have been related to D. Conrade Bateman (Ibid., 6 Aug. 1885).
6. Ibid., 21 Nov. 1887: marriage, 14 Aug. 1887.
7. Ibid., 5 Dec. 1887.

Henry Briggs, from Brighthouse, died in Philadelphia in May 1888;¹ and Thomas Tasker, eldest son of William Tasker, of New Bank, Halifax, died at Schuylkill Falls, Philadelphia, in October 1888.² John and Maria Diggles, from Bradford, were living in Philadelphia in at least early 1889 when their youngest daughter, Ethel, died of diphtheria.³ In August 1889, Leonard, son of W. Marsden, of No. 98 New Cross Street, West Bowling, Bradford, died in Philadelphia.⁴ The marriage of Sarah E. ('Sallie') Parker, third daughter of (the late) G.L. Parker, of Bradford, and Lightcliffe, and Harry, second son of James Foster, formerly of Halifax, later of Brussels, Belgium, took place in Philadelphia, in September 1889.⁵ William Buckton, late of Booth Town, Halifax, died in Philadelphia in October 1889.⁶ Benjamin Smith, born in Keighley, 31st July 1828, died in November 1889, and was interred at the West Laurel Hill Cemetery, Philadelphia.⁷

1. Halifax Guardian, 16 Jun. 1888: obit., 28 May 1888, 'suddenly', aged 55 or 56.
2. Ibid., 17 Nov. 1888: obit., 31 Oct. 1888, aged 49 or 50.
3. Bradford Observer, 13 Jan. 1889: obit., 2 Jan. 1889.
4. Ibid., 28 Aug. 1889: obit., 25 Aug. 1889, aged 23.
5. Halifax Guardian, 12 Oct. 1889: marriage, 12 Sep. 1889.
6. Ibid., 9 Nov. 1889: obit., 25 Oct. 1889, aged 67.
7. Gravestone, Public Cemetery, Skipton Road, Keighley: obit., 8 Nov. 1889, aged 61.

Similar sources reveal the residence of West Yorkshire immigrants in Philadelphia in the 1890s and in the early years of the twentieth century. John Ogden, from Halifax, died at his home in North Front Street, Philadelphia, in April, 1890.¹ Ann Breerley, the wife of John Breerley, from Booth Town, Halifax, died at her son-in-law's house in Philadelphia in September 1890.² Yet another Halifax immigrant, William Hargreaves, died in Philadelphia in the following November.³ Joseph Henry Bearder, formerly of Bradford, died in Philadelphia in April 1893.⁴ James, son of (the late) Charles and Mary Radcliffe, of Warley, near Halifax, died in Philadelphia in September 1893.⁵ In March 1904, Fred, son of Spencer and (the late) Nancy Earnshaw, of Manningham, Bradford, died in Philadelphia.⁶ In February the following year,

1. Halifax Guardian, 3 May 1890: obit., 18 Apr. 1890, aged 55.
2. Ibid.: 11 Oct. 1890: obit., 22 Sep. 1890, aged 70.
3. Ibid.: 13 Dec. 1890: obit., 8 Nov. 1890, aged 55.
4. Gravestone, Undercliffe Cemetery, Bradford: obit., 13 Apr. 1893, aged 32.
5. Gravestone, Warley Cemetery, nr. Halifax: obit., 7 Sep. 1893, aged 23.
6. Gravestone, Parish Church of St. John, Ingham, Keighley: obit., 25 Mar. 1904, aged 35.

John Eastwood, son of (the late) John and Ann Eastwood,
of Woodsley House, Bradford, died in Philadelphia.¹

William Eastburn, son of Robert and (the late)

Hannah Eastburn, of Bradford, was accidentally
killed in Philadelphia in 1916.²

1. Gravestone, Undercliffe Cemetery, Bradford:
obit., 24 Feb. 1905, aged 66.
2. Gravestone, Scholemore Cemetery, Bradford:
obit., 19 Aug. 1916, aged 51.

PART 4. YORKSHIRE STEEL, HARDWARE & CUTLERY
EMIGRATION.

1. HARDWARE & CUTLERY MERCHANTS, MANUFACTURERS
& TRADERS, 1760-1880.

As in wool textiles, the American market played a dominant part in the export trade of the Yorkshire hardware and cutlery industries. As an extension of the somewhat earlier trade with Europe, Sheffield products found their best external market across the Atlantic, between about 1760 and the mid-nineteenth century.¹ Indeed, "until the middle 1830s, Sheffield had a virtual monopoly of the American market, supplying agricultural and domestic tools and implements of all kinds".² Despite occasional setbacks and a gradual increase in the American tariff (to a peak of 50 per cent in 1828), the export trade in cutlery and hardware expanded annually between 1816 and the high point of 1825-26.

1. G.I.H. Lloyd, The Cutlery Trades (London, 1913), p.392.
2. J. Potter, "Atlantic Economy, 1815-60: the U.S.A. and the Industrial Revolution in Britain", in A.W. Coats & Ross M. Robertson (eds.), Essays in American Economic History (London, 1969), p.42.

In the three five-year periods of 1816-20, 1821-25 and 1826-30, the United States' share of the total British export of these products averaged annually 45, 42 and 49 per cent. The American tariff was reduced in the 1830s, but British exporters encountered increasing competition in the United States from an expanding domestic production (in part effected by the immigration of skilled workers from Sheffield),¹ and from German exports. For these reasons, as well as the restoration of the American tariff to 33 per cent in 1842, British exporters concentrated increasingly on a number of specialised products from the 1840s onwards. In the five-year periods, 1831-35 and 1836-40, the American share of the total British export of cutlery and hardwards averaged annually 52 and 45 per cent; in the periods, 1841-45, 1846-50 and 1851-55, 30, 35 and 29 per cent; and in the years 1856-60, 21 per cent. Despite absolute and relative decline in the trade, the United States was the most important single customer in almost every year to 1860.²

1. See Part 4, Chaps. 2 and 3.

2. J. Potter, pp. 42-43, 45 (Table 12).

Starting about 1760, the American trade pursued by Sheffield merchants was already considerable by the time of increasing friction and, in 1775, the outbreak of war between Britain and her American colonies. In early 1773, it was reported that in Sheffield, "the distresses of the manufacturers in the hardware business", caused mainly by the currently uncertain American trade, had "induced several of them to accept of the offers made by a foreign power to leave this kingdom, and many more are daily expected to follow their example".¹ Again, open hostilities in 1775 "created much alarm" in Sheffield, "particularly amongst the several merchants and factors who during the last fifteen years had opened a trade to Philadelphia, Boston and other places".² The firm of John Kenyon, which, as John Kenyon & Co. Ltd., celebrated its bi-centenary in 1910, had direct trading connections with North America sometime after 1762. Jonathan Moore, a Sheffield merchant who later

1. York Chronicle, 29 Jan. 1773.

2. The Local Register (and Chronological Account of the Occurrences and Facts Connected with the Town and Neighbourhood of Sheffield), Sheffield, 1850, et ann. (6 vols. to 1908): 1775, I, pp.53-54.

sent his son to represent his interests in New York, entered into partnership with an American merchant about 1769.¹

The return of peace in 1783 offered renewed opportunities for Sheffield's American trade; and thereafter, apart from the limitations imposed by disturbed trading conditions at the beginning of the nineteenth century during the Napoleonic Wars, the city's trade connections with the United States were increasingly strengthened. Until the 1840s, Sheffield's principal overseas market lay in the United States.² The modes of trading between Sheffield manufacturers and American customers were similar in many respects to those employed by Yorkshire wool textile manufacturers. Thomas Nowill & Co., for instance, between 1817 and 1821 exported pen and pocket knives to Davis, Brown & Co., of Boston, though the English firm mainly supplied the merchant intermediaries of Sheffield, Birmingham and London - the probable practice of most

1. Peter C. Garlick, "The Sheffield Cutlery and Allied Trades and their Markets in the 18th and 19th Centuries", M.A. thesis, University of Sheffield, 1951, p.142.

2. Ibid., pp.142-43.

of the smaller manufacturers.¹ Many firms, however, combined the functions of both merchants and manufacturers: in 1821, for example, at least 54, perhaps 59, of the 72 merchants listed in the Sheffield directory were also manufacturers. Many large merchant-manufacturers, such as James Dixon & Sons, exported directly in the 1830s.²

As in the sale of wool textiles to the United States, the trade in Sheffield goods demanded transatlantic representation, such was their increasing importance to both parties. Early Sheffield travellers considered the possibilities. Robert Sutcliff, a Quaker merchant of Sheffield, silver cutler and manufacturer of table knives, visited the United States four times from the 1790s onwards, before eventually settling there.³

1. Thomas Newill & Co., Ledger, 1812-25 (LD196), Sheffield City Libraries, Dept. of Local History and Archives.
2. P.C. Gerlick, pp.151-52.
3. W.H.G. Armytage, "A Sheffield Quaker in Philadelphia", Pennsylvania History vol. 17 (1950), cited by P.C. Gerlick, p.158-59. For an earlier treatment of the Quaker connection in the eighteenth century, see: A.T. Gary, "The Political and Economic Relations of English and American Quakers", D.Phil. thesis, St. Hugh's College, University of Oxford, 1935, esp. pp.226-34.

The establishment of agencies succeeded the travelling stage when the potentialities of the market were revealed and the volume of trade made venture worthwhile. An established agency in turn promoted more trade: American interests and requirements could be viewed at closer hand, and Sheffield merchant-manufacturers possessed regular transatlantic bases through which to sell their goods. In time, many of the Sheffield merchant-manufacturers had permanent representation in America, nearly always, it seems, a man from the Sheffield area, and often a member of their own family or business partner.

By 1821, the three Sheffield brothers, Thomas, William and George Newbould, were well established as 'American merchants'; and from 1803 to 1805, George Holy Newbould had been in America. After the Napoleonic Wars, he was the New York agent for Watson & Bradbury, manufacturers of silver and silver-plated goods, though he returned to Sheffield for a period in 1820. Later he was agent for both Thomas Bradbury & Sons and other Sheffield firms.¹ In July 1837, one letter from

1. Thomas Bradbury & Sons. Business Records, 1805-46 (esp. many letters from George H. Newbould, N.Y., 1817 onwards), Sheffield City Libraries, Dept. of Local History and Archives.

Buffalo noted that:

"John A. Newbould keeps a hardware store here and is doing very well, son of George H.N. agent for Rodgers & Son and William Parker - G.H.N. is establishing his second son Alex^r at Detroit where he will doubtless do well...."¹

George H. Newbould died in New York in December 1838, aged 55 or 57.² His widow Mary died in the same city in May 1845, aged 61;³ and his only daughter, Hannah Maria, was married there in November 1849 to William Barton, of Messrs. Barton Brothers.⁴ George Newbould himself noted Sheffield observers and agents in New York in the years shortly after

1. P.C. Gerlick, p.158 (citing letter, James Willis Dixon to Sheffield, 28 July 1837).
2. Doncaster Gazette, 23 Jan. 1839: obit., 23 Dec. 1838, aged 57. P.C. Gerlick, p.158 (citing letter, James Willis Dixon to Sheffield, 2 Jan. 1839), notes Newbould's age as 55.
3. Sheffield Iris, 26 Jun. 1845: obit., 25 May 1845.
4. Sheffield Times, 15 Dec. 1849: marriage, 28 Nov. 1849.

the end of the Napoleonic Wars. A Mr. Cates was there in 1818 on behalf of Hawksley & Sons, merchants of Eyre Lane, Sheffield; and Samuel Newbould, jr., was apparently the resident New York agent for Samuel Newbould & Co., merchants and saw, fender, edge tool, wool-shear and steel manufacturers, of South Street, Sheffield.^{1.}

Moreover, from 1817 onwards, the well rooted Sheffield firm known both as James Marsh & Co., and as Marsh & Shepherd,^{2.} steel, tool and cutlery manufacturers, found it necessary to maintain agents in the United States, such was the increasing scale of its American business. James Marsh, the younger, born 3rd June 1792, was sent out to Philadelphia in 1817 to take charge of an office and warehouse there; and he lived in America thereafter.^{3.}

Some indication of Marsh(es) & Shepherd's commitment to the

1. Thomas Bradbury & Sons, Business Records, 1805-46: 171-237, 171-385 (cited by P.C. Gerlick, p.159).
2. After about 1824, known as Marshes & Shepherd, and from about 1846 onwards, as Marsh Brothers & Co.
3. Sidney Pollard, Three Centuries of Sheffield Steel: The Story of a Family Business (Sheffield, priv. printing, 1954), pp.8-10, 28, after 82 (Table 1, "Pedigree of the Marsh Family"). Dr. Pollard makes extensive use of Marsh Bros. & Co., Ltd., Ponds Steel Works: Business Records, 1819-76.

American market in that at the end of 1819, £2,600 were due from American firms;¹ in September 1822, £11,500 out of a total of £15,800 of customers' debts were from America; and by 1828 stocks and debts outstanding in America had risen to £25,000.²

The firm's successes (and difficulties) in the American market are well illustrated in letters from the agents and partners in the United States in the 1830s and 1840s. The years 1836 and 1847 were highly prosperous, but disordered monetary conditions in 1833, 1837, 1839 and 1841 incurred great problems for the firm. In 1837, for instance, Marshes & Shepherd received American sales proceeds in the form of cotton.³ These difficulties were augmented by James Marsh's extravagant business account and his lassitude, at times perhaps ineptitude, in business matters, hardly the qualities demanded of a chief American agent and partner.

1. Stock Book, 1310-34 (Marsh Bros. & Co. Ltd. Business Records).
2. S. Pollard, Three Centuries of Sheffield Steel, pp. 10-11.
3. Ibid., pp. 21-23.

"James Marsh has resided in Philadelphia since the year 1817" (it was recorded)
"He has always had a larger family to maintain than any of his partners, he has not kept any cash account of his Family Expenses, neither for any sum or sums of Money charged him as Rent or Servants and other Wages, altho' in all these instances, almost without exception, his Expenses have exceeded those of any other Partner, and he has also a good Furnished House and for which only the sum of 698. 8.9. was charged him in the year 1826.

He therefore in September 1832 agreed with Mr. Shepherd, that his family and other Exp's should be charged after the rate of Expenses etc. incurred by
Wm. Marsh.....

Any excess was to be debited to the partnership at compound interest. For past overspending, he was debited with £1,000; and his debt was raised to £2,361 by his purchases at No.290 North 6th Street, 6th Street East Side and 2nd Street East Side, all in Philadelphia. In his business affairs, James Marsh had allowed bad debts and unsaleable stock to

accumulate, involving a total loss to the partnership by 1832 of some £3,000. Moreover, in the two-year period up to August 1832 there was an imbalance of £31,000 between the value of goods sent to America and monies received in Sheffield.

In the summer of 1832, therefore, Thomas Shepherd, senior partner of the firm since the mid-1820s, sailed for America to investigate James Marsh's (mis-) management at first hand. The reports and observations were full of woe: "James' appearance gloomy, spirits down and greatly absorbed in thought"; "damaged goods loss £1,400 - J's deafness"; James' regret for his speculation but that he "does not intend to engage in it again"; "James has mortgaged his house for £300"; and, perhaps most damning,

"James N. is flattered by people, and wastes his time giving advice to others or arguing about a straw, no time for business. Does everything in his own name, even securities. Baset by harpies and acquaintances as would smaze us".

Despite James' insistence that many of the bad debts could be retrieved if he were given a free hand, by August 1832, an agreement was reached. James was debited with excess expenditure; and he agreed that he would not speculate in

foreign exchange and that he would provide an account of outstanding debts for gradual retrieval. Bookkeeping and expenditure control were delegated to a clerk. Thereupon, Thomas Shepherd, doubtless with many misgivings, returned to Sheffield.

By 1839, James Marsh's affairs in Philadelphia were again disordered, and John Marsh, jr., went out in that year to end the connection. In August 1840, the partnership with James was dissolved, and he received as his share the American stock and his outstanding debts, though in June 1843, some debts still required collection. At No. 2, Gold Street, New York, John Marsh rented a new office and warehouse for the firm, and left William Newton Woodcock, later a partner, in control there. James Marsh Shepherd, the son of the firm's senior partner, Thomas Shepherd (died September 1845), became the firm's representative in Philadelphia after James Marsh's resignation and retirement in 1840. James Marsh returned to England

in late 1842.^{1.}

Fortunately for Marshes & Shephard, despite James Marsh's indifferent performance at the head office in Philadelphia in the 1830s, the firm was otherwise served by able men in America. These continued to send details of orders and comments on competitors' prices in the 1840s, together with observations on American political and financial affairs, after the main American office had been transferred to New York. Joseph Cam was the New York traveller. A competent salesman, he was perhaps related to James Cam, nephew of the now deceased founder of James Cam & Co., edge tool manufacturers of Norfolk Street, Sheffield. The manufactory was bought by the partnership of John Marsh and Benjamin Vickers in August 1838, and James Cam, the younger, entered the partnership as manager of the firm.^{2.} Edward Mullins and Rowan were agents trading on their own account. Edward Mullins was one of the Mullins Bros., of Conisborough,

1. S. Pollard, Three Centuries of Sheffield Steel, pp.12, 18-19, 24-26, after 82 (Table 1, "Pedigree of the Marsh Family"). James Marsh died in Philadelphia in June 1878, no doubt survived by some of the "8 children going to school" in August 1832 (Ibid., p.26). James Marsh Shephard married Marie, daughter of (the late) Richard W. Bowlby, "a merchant of Philadelphia", in Philadelphia in October 1846 (Sheffield Iris, 26 Nov. 1846; Sheffield Mercury, 28 Nov. 1846; marriage, 20 Oct. 1846).
2. S. Pollard, Three Centuries of Sheffield Steel, pp.20, 23, 27.

on whose behalf Marshes & Shepherd, by 1850, undertook the sale of scythes, sickles and hooks.¹ Charles Wrecks, another Sheffield man, started many new connections in New Orleans in 1836.² In 1838, the firm's activities were extended to Boston. Two years later, a separate depot was opened in Montreal. A branch was re-established in Philadelphia in 1845. In 1848, the American accounts - stock and outstanding debts - stood at \$29,000; Philadelphia, \$11,400;

1. S. Pollard, Three Centuries of Sheffield Steel, pp. 20, 23-24, 27. Edward Mullins, described as a "hardware merchant", died in Philadelphia on Christmas Day, 1868 (Sheffield Telegraph, 13 Jan. 1869.)
2. S. Pollard, Three Centuries of Sheffield Steel, p. 27. Charles Wrecks, third son of (the late) Joseph Wrecks, of Sheffield, died in New York in March 1867, aged 62, "from ossification of the heart" (Sheffield Telegraph, 2 Apr. 1867; obit., 11 Mar 1867). Richard Wrecks, fifth son of "Mr. Wrecks, postmaster, Sheffield", died in New Orleans in March 1842 (Wakefield & W.R. Herald, 13 May 1842). Henry Wrecks, eldest son of "Mr. Wrecks, postmaster", first took up residence in New York in or about 1827. In March 1832, described as a "merchant of New York", he married in that city Miss E.M. Fitzwilliam, only daughter of (the late) G. Fitzwilliam, Esq., of Trinidad, B.W.I. Henry Wrecks died in New York in May 1843 (Yorkshire Gazette, 28 Apr. 1832; Sheffield Mercury, 28 Apr. 1832; Hull Advertiser, 4 May 1832; marriage 16 Mar. 1832; Leeds Mercury, 3 Jun. 1843). Henry Wrecks' only son, Charles F., and his youngest daughter, Elizabeth, married sister and brother of the same family. Charles F. married Mary K. Booreem, daughter of (the late) Hendrick Booreem, Esq., at Newark, N.J., in Apr. 1860 (Sheffield Independent, 19 May 1860; marriage, 30 Apr. 1860); and Elizabeth Wrecks married John Van Vorst Booreem at Jersey City, N.J., in November 1867 (Sheffield Telegraph, 20 Nov. 1867; marriage, 7 Nov. 1867).

New York, £9,300; Canada, £6,500; and New Orleans, £1,900.¹ The New York office prospered under the management of W.N. Woodcock, a native of Stockport and a partner in the firm from January 1853 to August 1866. The New York head office was moved to No. 50, Beckman Street; and in 1862, branches were operating at No. 86, Water Street, Boston; No. 40, Gravier Street, New Orleans; No. 25, North 5th Street, Philadelphia; No. 3, St. Sacramento Street, Montreal; and No. 53, King Street, Toronto. In 1863, the firm bought its own property in New York at No. 95, John Street and No. 30, Gold Street, a large stock of hardware being maintained at the latter address. One of the partners, Theophilus Marsh, resided temporarily in New York in 1864 at the time of William N. Woodcock's illness; and another partner, Walter Marsh, sailed for New York in 1866 to check the holdings of Marsh Brothers & Co. when Woodcock retired. On Walter's return, John W. Cockayne, a relation, sent out to America in 1865, remained in control.²

1. S. Pollard, Three Centuries of Sheffield Steel, p.27.

2. Ibid., p.37.

Marshes & Shepherd, merchants and manufacturers of table, butcher and shoe knives, files and saws, were only one of many Sheffield firms possessing an important American market in the nineteenth century. Equally, the firm was not unique in having Sheffield agents temporarily or permanently resident in the United States. Samuel Butcher, a Sheffield merchant, was resident in New York at the time of his marriage there in December 1825 to Ross Bliss, the second daughter of Theodore Bliss, Esq.¹ Samuel Jackson, Sheffield merchant and manufacturer, visited the United States sometime before 1833 and in 1838.²

James Willis Dixon, representing James Dixon & Sons, of Sheffield, noted in his letters, 1835-39, not only a number of Sheffield firms exporting to America, but also many Sheffield agents, representatives and visitors encountered by him in New York.³ The following firms all received mention: John Brown & Co., razor manufacturers; Broadhead & Atkin, manufacturers of Britannia metal goods and spoons; William Greaves & Sons, manufacturers of table knives, razors, files and edge tools; Ibbotson Bros., manufacturers of scythes, sickles, saws, files, hay, straw and table knives;

1. Sheffield Independent, 28 Jan. 1826: marriage, 30 Dec. 1825.
2. P.C. Garlick, p.159.
3. Ibid., pp.153, 159-60.

Sanderson Bros., merchants and steel manufacturers; William Staley, manufacturer of edge tools, joiners' tools and table knives; and William Stenton & Son, manufacturers of table and pen knives. Many others probably sold the goods of, or acted as merchants for, other Sheffield firms in America.¹

Dixon, in his letters, also named a dozen or more Sheffield merchants, agents, representatives and travellers resident in New York for at least some of the years, 1835-39. A Mr. Crookes was agent for John Brown & Co., razor manufacturers. Mr. Champion, perhaps of Champion Bros., cutlery manufacturers and merchants, was encountered. So too were Moss, of Wilson, Hawksworth & Moss, merchants and steel manufacturers, and Edward Vickers, another merchant and steel manufacturer.² A Mr. Hancock, with an office in Gold Street, New York, was agent for Charles Congreve, merchant of Gell Street.³

1. P.C. Garlick, p.153.

2. Ibid., pp.159-60.

3. P.C. Garlick, p.160. 'Mr. Hancock' was perhaps Henry Hancock, late of Sheffield, who died in New York in 1849 (Sheffield Times, 25 Aug. 1849: obit., 17 Jul. 1849). He may also have been related to John Hancock who was born at Attercliffe about 1819 and who sailed for New York in 1841. He later moved to St. Louis, Missouri, and, about 1846, moved again to St. Francisville, Clark County, Missouri. There he "engaged in business" until his death in 1858, survived by a wife and three children (Sheffield Independent, 21 Aug. 1858).

Similarly, a Mr. Maraden represented William Staley, Sheffield manufacturer, "in the tool line", and took an office in New York below James W. Dixon.^{1.}

William Parker, a Sheffield merchant, visited New York;^{2.} and Thomas Parker, eldest son of "Mr. W. Parker, merchant, South Street, Sheffield", died in New York in January 1836.^{3.}

The presence in New York of members of the Ibbotson family of Sheffield was also observed by James Willis Dixon in the later 1830s.^{4.} In 1841, Ibbotson Brothers, of Penistone Road, Sheffield, were merchants, factors and manufacturers of a very wide range of articles, many destined for the American market, including edge tools, fenders, files, ledger blades, spiral cutters, machine knives, saws, scythes, hay and

1. P.C. Garlick, p.160. 'Mr. Maraden' may have been John Maraden, who, described as a 'Sheffield agent', died at Pearl Street, New York, in 1859 (Sheffield Independent, 28 May 1859). Slater's Royal National Commercial Directory of the Northern Counties (Manchester & London, 1854-55), 1, p.469, notes that Johnson, Gemell & Co., merchants and manufacturers of files, edge tools, railway springs etc., Cyclops Steel Works, Sheffield, also had an office at No. 289, Pearl Street, New York, in the mid-1850s.
2. P.C. Garlick, p.159.
3. Doncaster Gazette, 5 Feb. 1836: obit., 4 Jan. 1836, aged 22. Another Thomas Parker, uncle of the above newsake, "absent from his family forty years", died in Memphis, Tennessee, also in 1836 (Ibid., 3 Jun. 1836). Ezra Parker, merchant, eldest son of Joseph Parker, died at Crookes, Sheffield, in 1847, having "lately returned from the United States" (Sheffield Iris, 23 Sep. 1847: obit., 17 Sep. 1847, aged 27).
4. P.C. Garlick, pp.153, 159.

strew knives and table knives.¹ Such was the extent of the firm's American trade that Henry Ibbotson was for many years partner and resident agent in New York probably up to the time of his sudden death there in August 1849.²

George Westenholm III, of George Westenholm & Sons, Sheffield merchants and manufacturers of table, pen and pocket knives, paid many visits to the United States after his first in 1836. Even earlier, in 1830, a Mr. Stenton, his father's partner, and buyer for Haylor & Sorderson's, visited America for Westenholm's.³ In at least 1833, Charles Dilworth was the firm's New York agent; and in 1848, the agency in that city was taken over by Charles Congreve.⁴

1. Piset and Co.'s Royal National and Commercial Directory (London & Manchester, 1841), pp. 329-30, 333-34, 339, 342, 344. In the mid-1850s, Ibbotson Bros. & Co., of Cross Smithfield and No. 8, Silver Street, Sheffield, were listed as merchants and manufacturers of files and penknives (Slater's Royal National Commercial Directory, 1854-55, I, p. 469).
2. F.C. Garlick, pp. 159-60; Sheffield Times, 29 Sep. 1849: obit., 27 Aug. 1849, aged 52; The Local Register, (1849), I, p. 468. In 1834, Robert Ibbotson, of New York, and of G. & S. Peace & Co., Sheffield, merchants and manufacturers, returned to Sheffield to marry Anna Marshall, daughter of Martin Marshall, Esq., Bellfield Terrace, Sheffield (Leeds Mercury, 1 Mar. 1834: marriage, 24 Feb. 1834). Samuel F. Ibbotson, Esq., married Mrs. Isabel Duff in New York in March 1854 (Sheffield Times, 1 Apr. 1854: marriage, 16 Mar. 1854).
3. F.C. Garlick, pp. 159-60.
4. George Westenholm & Son Ltd., Washington Works, Wellington Street, Sheffield: Business Records, 1833-1957 (invoice, 17 Aug. 1833; letter, 22 Feb. 1848). It will be remembered that in the later 1830s, a Mr. Hancock (perhaps Henry Hancock) was in turn New York agent for Charles Congreve, merchant of Gell Street (F.C. Garlick, p. 160; Sheffield Times, 25 Aug. 1849).

By the 1890s, George Wostenholm & Son Ltd., of Wellington Street, Sheffield, produced every type of pocket and table cutlery, razors and scissors, and was "one of two largest cutlery manufacturing concerns in the town". The firm's products were exported to Europe, the United States and Canada, Australia, India and China. Besides manufacturing cutlery, the firm carried on an extensive hardware merchants' business and ran branches in New York and Philadelphia, Montreal, Sydney and Melbourne.^{1.}

Messrs. Sanderson, probably of Sanderson Bros., merchants and steel manufacturers, were also noted by James W. Dixon in New York in the later 'thirties.^{2.} Oblique press references to Edward Fisher Sanderson, Esq., indicate that he was resident in New York probably in the 1840s, certainly in the 1850s, and that his death occurred in the early 1860s. Robert Kermit, "an eminent and well known shipowner and merchant", who had married E.F. Sanderson's sister, died in New York in March 1855.^{3.} The second and eldest daughters of E.F. Sanderson, "of New York U.S., and of Endcliffe Grange, Sheffield", were both married at

1. The Century's Progress, Yorkshire Industry and Commerce, 1893 (London, 1893; repubd., with intro. by Arthur Reistrick, Settle, Yorks, 1971), p.109.

2. P.C. Garlick, pp.153, 159.

3. Sheffield Times, 31 Mar. 1855: obit., 14 Mar. 1855, aged 60.

St. Mark's Church, New York. Mary Sanderson married Thomas Sanderson Furniss, of Lincoln's Inn, London, in September 1858;¹ and in April the following year, Sarah Elizabeth Sanderson married Robert B. Campbell, Esq.² Mrs. Julia Carow Sanderson, the widow of E.F. Sanderson, "late of Sheffield and of New York", died at Endcliffe Grange in early 1867.³ Mrs. Sanderson was the daughter of Isaac Carow, Esq., of New York, and sister of Mrs. C. Thomas, who died at Elizabethtown, New Jersey, in December 1864, aged 48.⁴

The firm of William Jessop & Sons, founded in 1792, was well established by the end of the Napoleonic Wars. "For more than 28 years" - probably dating from the late 1820s or early 1830s - William Boyd, who died in New York in 1864, "was the able and faithful representative in America of Messrs. Wm. Jessop, of Sheffield".⁵ By at least the early 1840s, perhaps earlier, a member of the firm, Henry Jessop, merchant, was resident in New York. In September 1845, he married Mary Anne Fockrell, daughter of John Fockrell, of Ogdensburgh, N.Y., in New York City.⁶

1. Sheffield Independent, 9 Oct. 1858: marriage, 15 Sep. 1858.
2. Doncaster Gazette, 27 May 1859; Leeds Mercury, 28 May 1859; Sheffield Independent, 28 May 1859: marriage, 28 Apr. 1859.
3. Sheffield Telegraph, 29 Jan. 1867: obit., 25 Jan. 1867. Post Office Directory of the West Riding of Yorkshire (Kelly & Co., London, 1861) - (Street Directory, Sheffield - p. 666, lists: "Endcliffe Vale: ... Sanderson, Edward Fisher, esq. (Endcliffe grange)").
4. Sheffield Telegraph, 5 Jan. 1865: obit., 17 Dec. 1864.
5. Ibid., 27 Jul. 1864: obit., 12 Jul. 1864, aged 65.
6. Sheffield Iris, 2 Oct. 1845; Sheffield Mercury, 4 Oct. 1845 marriage, Church of the Messiah, N.Y., 2 Sep. 1845.

The marriage, however, was short-lived, for Henry Jessop, reportedly "one of the largest and wealthiest importers of steel in the United States", died in Brooklyn in 1849, survived by his young wife and family. At the time of his death, he was a member and officer of the Society of St. George in New York, and a member of the Anglo Saxon Lodge, No.137, of Free and Accepted York Masons, Brooklyn, N.Y.¹ Jane C. Jessop, the only daughter of the marriage, married Henry J. Stevenson, third son of the deceased Joseph Stevenson, of Lowfield, in Brooklyn, in 1869.² William Jessop & Sons (later Ltd.) went from strength to strength. By the 1890s, "the growth of this gigantic concern [had] almost been unparalleled in the Sheffield industries...the works at Brightside now cover an area of no less than thirty-one acres, and contain six miles of railway lines...."³

1. Sheffield Times, 4, 25 Aug. 1849 (incl. extracts from Brooklyn Daily Advertiser).
2. Sheffield Telegraph, 30 Jan. 1869: marriage, Church of the Saviour, Brooklyn, N.Y., 12 Jan. 1869.
3. P.O. Directory, 1857 (Commercial Directory: Sheffield), p.627, includes two entries for the firm: (a) "Jessop, William & Son, steel manufacturers, Park works, Blast Lane, Park [Sheffield]"; and (b) "Jessop, William & Sons, steel manufacturers, Forge Lane [Sheffield]". P.O. Directory 1861 (Commercial Directory: Sheffield), p.746, lists: "Jessop, William & Sons, steel converters & refiners, Park Works, Blast Lane & Soho rolling mills, Forge Lane, & at Brightside".

The firm was renowned for the production of special steels for all engineering, marine and mechanical processes, and of fine steel for cutlery, edge tools, hammers, mill picks, needles, shear blades, fish hooks, cloth and watch springs, circular saws and steel pens. A British and European trade demanded depots in London, Manchester, Glasgow, Paris, Dusseldorf and St. Petersburg. The firm's American market, however, was particularly important for stores had been established at No. 91, John Street, New York,¹ and in Boston, Philadelphia, St. Louis, Cincinnati, Providence (R.I.), Chicago, Baltimore, San Francisco and Newark (N.J.). Outside the United States, stores were to be found in Montreal and Buenos Aires.²

Scattered press references throw brief light upon yet other Sheffield merchants and agents resident in North America. William Wasnidge, a hardware merchant, eldest son of the deceased H. Wasnidge, Esq., of Montreal and Sheffield, died in Toronto in 1835.³ Thomas Wright, a Quaker, eldest son of (the late) William Wright, of the firm of W. J. & R. Wright, merchants, of Cross

1. Marsh Bros. & Co., it will be remembered, bought property at No. 95, John Street, New York, in 1863 (S. Pollard, Three Centuries of Sheffield Steel, p.37).
2. The Century's Progress: Yorkshire Industry and Commerce, 1893, p.113.
3. Hull Advertiser, 15 Jan. 1836; Hull, E. R. & N. Lincs. Observer, 19 Jan. 1836; obit., 6 Dec. 1835, aged 25.

Smithfield, Sheffield, died near Hudson, New York State, on the last day of 1836.¹ Another native of Sheffield, Henry Worrell, died in New York in April 1849 after more than fifty years' residence in America; and for most of that time "he was engaged in successful business".² Henry Wright, of the Sheffield firm of Gorsen, Denton, Burdekin & Co., merchants, factors and manufacturers, of No. 105, Eyre Street, married Josefine B. McCall in Philadelphia in November 1852.³ James Alfred Moulson, "one of the unfortunate passengers who sailed for Philadelphia by the City of Glasgow", perished on 1st March 1854, aged 23. He was the youngest son of John Moulson, of the firm of Moulson Brothers, Union Works, No. 49, Division Street, Sheffield, steel converters and refiners, merchants and manufacturers of saws, edge tools, joiners' tools and augers.⁴ Edward Barnes, jun., of Edward Barnes & Sons, spring knife manufacturers, of No. 26 Wheelson Street, Sheffield, was resident in New York in 1854 at the time of his marriage to Mary Elizabeth Moser, of

1. Sheffield Iris, 18 Feb. 1847; Halifax Guardian, 20 Feb. 1847. E. Baines, History, Directory and Gazetteer of the County of York.... (Leeds, 1822), I, p.353, lists: "SHEFFIELD....Wright, W.J. & R., mfrs. of table, pen, pocket knives and razors, 11 Allen Street".
2. Sheffield Times, 19 May 1849: obit., 29 Apr. 1849, aged 77.
3. Ibid., 25 Dec. 1852: marriages, 20 Nov. 1852; Slater's Royal National Commercial Directory...., 1854-55, I, p.501.
4. Sheffield Times, 2 Sep. 1854; Slater's Royal National Commercial Directory...., 1854-55, I, pp. 72, 484.

Philadelphia.¹ By 1861, on the evidence of two separate directory listings, it would seem that Edward Barnes, jun., was acting both on his own behalf and on that of Edward Barnes & Sons.² Edward, junior, died at Fort Green Place, Brooklyn, N.Y., in January 1864, aged 36.³ John Byre, second son of the deceased John Byre, file manufacturer, of Pond Street, Sheffield, died at Williamsburgh, N.Y., in August 1854 from cholera.⁴ John Whetley, a merchant from Rotherham, died in New York in early 1835.⁵ John H. Hicks, Esq., son-in-law of (the late) John Sanderson, Esq., of Newhall, Sheffield, was perhaps a merchant in New York prior to his death there in October 1857.⁶ Hicks' son, Henry W., a Captain in the 165th Regt., New York State Volunteers, died from typhoid fever at Clifton, Staten Island, N.Y., in 1863.⁷ Albert Bredshaw, late of Sheffield, merchant, and probably partner in the firm of Bredshaw & Clatworthy,

1. Sheffield Times, 17 Jun. 1854: marriage, Philadelphia, 30 May 1854; P.O. Directory, 1857 (Commercial Directory: Sheffield), p.609.
2. P.O. Directory, 1861 (Commercial Directory: Sheffield), p.719.
3. Sheffield Telegraph, 16 Feb. 1864: obit., 30 Jan. 1864.
4. Sheffield Times, 30 Sep. 1854: obit., 22 Aug. 1854, aged 40.
5. Ibid., 17 Mar. 1855; Halifax Guardian, 24 Mar. 1855: obit., 21 Feb. 1855, aged 63.
6. Sheffield Times, 14 Nov. 1857; Sheffield Independent, 14 Nov. 1857: obit., 21 Oct. 1857.
7. Sheffield Independent, 12 Sep. 1863 (supp.): obit., 19 Aug. 1863, aged 23.

New York, was married in Brooklyn in March 1858 to Ann Sanderson, eldest daughter of George Sanderson, formerly of Steelbank, Sheffield.^{1*} Only four years later, however, Bredshaw died from dysentery at No. 66, Clermont Avenue, Brooklyn.^{2*} There is perhaps a relationship between "Mr. Benjamin Duffin, merchant, Baltimore, U.S.", whose wife died in that city in August 1859,^{3*} and Grace Duffin, only daughter of (the late) "Mr. Benjamin Duffin, cutler manufacturer of Sheffield", who died at Tickhill, Yorkshire, in February 1864.^{4*} W.G. Hall, of the firm of Smith & Hall, merchants, lost both his infant son and wife at Brooklyn, N.Y., in September and October 1867.^{5*}

Moreover, it is clear from a number of advertisements in the Sheffield press that applicants were ready and willing to undertake transatlantic representation on behalf of local cutlery and hardware manufacturers. One advertiser in 1859 wanted

1. Sheffield Independent, 17 Apr. 1858: marriage, 23 Nov. 1858.
2. Ibid., 30 Nov., 1861: obit., 2 Nov. 1861, aged 40.
3. Sheffield Independent, 29 Oct. 1859: obit., 13 Aug. 1859.
4. Sheffield Telegraph, 13 Feb. 1864: obit., 10 Feb. 1864.
5. Ibid., 16 Oct. 1867: obits., 21 Sep., 1 Oct. 1867.

"AGENCIES...FOR NEW YORK, for Files, Joiners' and Edge Tools, and Steel".¹ Another, "a young man, aged 29, who has a practical knowledge of the Outlery Trade", wanted "a situation as TRAVELLER in the United States".² Yet another, advertising with greater panache, was "A Sheffield Gentleman, who has a very large, long established, and most valuable Connexion in every part of the United States and Canada, is now open to negotiate for the AGENCY of some first-class Sheffield Hardware House".³ One "Gentleman, representing a House in the File and Steel Business... [had] a good opportunity of introducing other Branches of the Sheffield Trade" in the United States and Canada.⁴ In 1870, an "Advertiser...desirous of Representing an English Firm in any part of the United States of America for the Sale of Files, Saws, Steel Tools, Outlery, Birmingham Goods, &c.," requested

1. Sheffield Independent, 18 Jun. 1859.

2. Ibid., 2 Jul. 1859.

3. Ibid.

4. Ibid., 23 Jul. 1859.

interested "Merchants and Manufacturers" to reply direct to a Boston, Mass., P.O. Box Number. "Having served his time to the above trades in Sheffield, and possessing a good knowledge of the business, with ample facilities for conducting it", the advertiser felt "confident that a connection can be established which will be satisfactory to his employer". References were available in Sheffield and America.¹ It seems likely that this advertiser was not unique in his having acquired skills in Sheffield before emigrating, and then offering to maintain and develop further connexions with his home town through business.

1. Sheffield Telegraph, 29 Jan. 1870.

2. HARDWARE & CUTLERY MANUFACTURERS, CRAFTSMEN
& OPERATIVES, 1760-1880.

Evidence of the emigration to North America of skilled Yorkshire, especially Sheffield, cutlery workers in the second half of the eighteenth century is at best sketchy. Granted that spasmodic emigration of cutlers did in fact occur, the reasons for this general lack of evidence are not far to seek. In the colonial period and later, mercantilist doctrine discouraged, even prohibited, the emigration of skilled artisans. Even so, such workers, unrecorded except on rare occasions, quietly sailed for America under a variety of guises. Similarly, the Iron Act of 1750, whilst encouraging American exportation of pig and bar iron to Britain, forbade colonial erection of "new slitting mills, rolling mills, tilt-hammer forges and steel works". Even so, finished iron and steel products, mainly for local consumption, continued to be made with little molestation in the colonies.¹ In both cases, the general effect of the statute book was to produce discreet circumvention of the law when the need arose. Except occasionally,

1. Carl Ubbelohde, The American Colonies and the British Empire, 1607-1763 (London, 1968), p.66.

therefore, skilled metal-workers left unheralded for North America. Equally, the number who later used those skills in scattered locations across the Atlantic cannot be counted.

Nevertheless, in the pre-Revolutionary years, the emigration of Yorkshire metal-workers to America is evidenced on at least two occasions. In January 1769, "A list of the persons gone into North America within the last eighteen months or thereabouts" was presented in a letter written by Vicer Downes to Lord Rockingham. Apart from three persons, all 81 listed - including 16 women and 35 children - hailed from Sheffield and district. Some were noted specifically as being metal-workers: one blacksmith, four cutlers, five forgemmen, and one Whitesmith, his journeymen and apprentice.¹ Again, though representing only a tiny proportion of those leaving Yorkshire for North America in the immediate pre-Revolutionary years, at least six metal-workers sailed between June and December 1774. In the passenger returns for those months, two cutlers and a smith stated that they had left Sheffield; two other cutlers claimed their home town to be York; and another cutler had left "Yorkshire". In the June, Owen Shaw, a 21-year old cutler from Sheffield, looking

1. Henry Downes (Vicer of Ecclesfield) to Rockingham, 16 Jan. 1769: Fitzwilliam (Wentworth Woodhouse) Muniments, Rockingham Letters, R1/1149; P.G. Gerlick, p.168.

"for employment", sailed from London for Philadelphia aboard the Free Mason.¹ The remainder all sailed from London for Maryland or Virginia as indented servants. Cutler William Ward, from Sheffield, left for Maryland aboard the Elizbeth in early July,² and later in the month, Luke Horsfield, a Yorkshire cutler, and James Horsfield, perhaps his younger brother, a Sheffield smith, sailed together for the same colony aboard the Russa-Merchant.³ Towards the end of November or early December 1774, Joseph Mathershaw and John Weedhen, York cutlers, sailed for Virginia aboard the Active and William.⁴

Some evidence also occurs in the years following American independence. In 1791, the Sheffield press noted that "these frequent emigrations [were] of serious moment"; and again in 1793, the Government intended

1. Fothergill, "Emigrants from England", LXIV (Jan. 1910), 19, (week, 14-21 Jun. 1774).
2. Ibid., 21 (week, 3-10 Jul. 1774).
3. Ibid., 22 (week, 10-17 Jul. 1774).
4. Ibid., (Oct. 1910), 315, 317 (weeks, 21-28 Nov., 28 Nov. - 6 Dec. 1774).

"to prevent them in future".^{1.}

Soon after the end of the Napoleonic Wars, it seems certain that individual emigrants skilled in the Sheffield trades left for the United States. John Lee, for instance, a manufacturer of Britannia ware emigrated with wife Harriet (née Wright) to America in 1820. John set up business in New Jersey, where his son Henry, born in Yorkshire in 1818, learned the manufacture of Britannia ware. In 1841, Henry Lee settled at Newark, N.J., but moved West in 1856 to live in Patch Grove, Grant County, Wisconsin.^{2.}

1. Sheffield Register, 5 Aug. 1791, 23 Aug. 1793. Joseph Gales, a native of Eckington, Derbyshire, owner and editor of the Sheffield Register, and one of the leaders of local Radicalism, fled to the United States in 1794 to escape prosecution. Gales claimed he had committed no crime, but "in these persecuting Days, [it is] a sufficient Crime to have printed a newspaper which has boldly dared to doubt the infallibility of Ministers". In the United States, Gales established the Raleigh Register, North Carolina, and became "the official reporter of congressional debates"; and his son and son-in-law published the Washington National Intelligencer. Joseph Gales died in Raleigh, 24th August 1841, aged 80. Joseph Gales' second son, Thomas, died 18th November 1815, aged 26, at Attapapas, Louisiana, where he had been "several years judge advocate-general of the most southern department of the U.S.", together with duties, letterly, as Indian agent at Natchitoches: Donald Read, The English Provinces, c.1760-1960: a Study in Influence (London, 1964), pp.46,50; H.A. Jones, American Immigration, p.73; Hull Rockingham, 4 May 1816; Hull Advertiser, 11 May 1816, 24 Sep. 1841; Leeds Mercury, 18 Sep. 1841; Doncaster Gazette, 24 Sep. 1841; The Local Register.... (1794, 1841), I, pp.76, 358.
2. History of Grant County, Wisconsin (1881). Patch Grove, p.978.

Against a background of widespread emigration from Yorkshire in 1830, several grinders and file makers left Sheffield and neighbourhood for America in the March of that year.¹ About the same time, one report listed articles "manufactured in great profusion and perfection in Massachusetts". Penknives, earlier manufactured almost exclusively in England, were now being produced extensively in Worcester, Massachusetts. It is likely that some Sheffield men were included in the fifty employed at Moses L. Moore's establishment, the knives produced there being "equal in workmanship and quality to those made in England".² John Curtis, a Sheffield saw grinder, may have been one of the emigrants of 1830, for he died in New York in 1836.³ One Peterson (N.J.) saw manufacturer, starting production in 1835, offered attractively high wages to essential Sheffield men and later sent for more. Other American employers rated Sheffield workers no less highly; and "if from the factory of Rogers, it is a sufficient introduction anywhere".⁴

1. Doncaster Gazette, 12 Mar. 1830.

2. Ibid., 5 Mar. 1830.

3. Ibid., 8 Apr. 1836: obit., 3 Mar. 1836, aged 35.

4. The British Mechanic's and Labourer's Hand Book and True Guide to the United States (London, 1840), pp.233-34 (cited by R.T. Berthoff, British Immigrants, p.70).

In the later 1830s, industrial depression in Sheffield also led indirectly to the emigration of some workers. Heralded by the American financial troubles of 1836-37 and the consequent countermending of many orders from the United States,¹ the depression which set in in 1838 was one of the most severe in Sheffield's history.² Poor law expenditure in the borough increased from £12,000 (in 1837) to £55,000 (in 1843).³ The revived Anti-Corn Law movement and Chartism were both nourished by the distress after 1838.⁴ The Chartist movement grew in influence from mid-May 1839 onwards; and in late July, Chartists were informed that their meetings in Sheffield were no longer considered legal. In defiance of the ruling, meetings continued to be held, and in August, nearly 80 assembled Chartists were arrested, about half of whom were from the cutlery trades.⁵ In order to escape arrest or avoid general harassment, at least fourteen Chartist

1. Reports, e.g., in Bradford Observer, 22 Dec. 1836, 2 Feb. 1837.

2. S. Pollard, A History of Labour in Sheffield (Liverpool, 1959), p.40.

3. Ibid.

4. Ibid., p.42.

5. Ibid., pp.45-46.

cutlery, saw-smiths, grinders, file-smiths and razor-smiths left Sheffield for America in September 1839. Two of the emigrants may be identified: James (or John) Wolstenholme, a filemaker, born in Dunfields, near Sheffield, in 1804; and (George ?) Chatterton, a nailmaker, born in Sheffield in the same year. Wolstenholme was a delegate to the first Chartist Convention, and Chatterton, a physical-force Chartist, was Secretary of the Sheffield Working Men's Association. Taking all their tools with them, the two friends, "after being hunted like wild beasts for being Chartists", preferred "leaving the land of their birth to dragging on a miserable life in prison, like Lovett, Collins, Martin, Fox, and many others." Both men were reported later in Connecticut, but both are believed to have returned home in 1850 or later.¹

Towards the end of the 1840s, emigration activity reached a high point in the Sheffield area, the probable result of several inter-related factors. In the first place, the distress of 1847-49 in Sheffield was almost

1. S. Pollard, A History of Labour..., p.46; R. Boston, British Chartists in America, 1839-1900, pp.22, 90, 96; Sheffield Iris, 1 Oct. 1839; Sheffield Mercury, 5 Oct. 1839; Bradford Observer, 10 Oct. 1839; Doncaster Gazette, 11 Oct. 1839; The Local Register... (1839), I, pp.329,330.

as serious as that caused by the depression starting in 1838, with the borough's total poor law expenditure rising from £29,000 in 1847 to £47,000 two years later. In addition, relief was provided by permanent and other charities, together with large sums collected from private donors.¹ The Chartist-Radical alliance was also at a peak of fervour and endeavour in Sheffield in 1848-49.² Just as in the early years of the decade, lack of work, or employment at low wages, or poor return for effort on the part of small manufacturers, prompted the emigration of the "best Sheffield workmen", who in turn urged their fellows to join them in America - according to H.G. Ward, one of the Sheffield M.P.s, in 1841 - so too James Roberts, a former Chartist, was able to write home from Connecticut in September 1849:

1. S. Pollard, A History of Labour..., p.40.

2. Ibid., pp.48-49; John Salt, Chartism in South Yorkshire (Univ. of Sheffield, Loc. Hist. Ser., pamphlet No. 1, 1967), pp.24-26.

"We...was glad to hear you had plenty of work, but was sorry to hear you had no better prices for working, which is not the case here for we have plenty of work and a good price for it...."^{1.}

No doubt "plenty of work and a good price" motivated many other skilled workers to pull up their roots - workers such as John Watkin, a spring-knife cutler, formerly of Allen Street, Sheffield, who sailed for America in the Ocean Queen in 1848 (and not by the ill-fated Ocean Monarch, as originally feared)^{2.} and another, named Ellis, who died suddenly from cholera at Hasbrough (Rotherham) shortly before he was due to leave for America in 1849.^{3.}

1. Cited by P.C. Gerlick, pp.169-70. The Local Register.... (1841), I, p.361, contains the following entry: "Oct. 19. Shipwreck on Cape St. Antonio, Cuba, of the John Taylor emigrant ship, from Liverpool to New Orleans, with about 200 emigrants, and near 60 of them from Sheffield. All saved but one young man". Though it is likely that some of the passengers from Sheffield were metal-workers, it seems unlikely that they were seeking for the developing areas of hardware manufacture, such as New England, New Jersey and Philadelphia, by this route. Nevertheless, they had left Sheffield during a depressed period.
2. Sheffield Mercury, 2 Sep. 1848.
3. Doncaster Gazette, 2 Nov. 1849.

Moreover, emigration and its attendant societies attained great prominence in Sheffield in 1849. In January of that year, William Costes, Secretary of the Potters' Emigration Society, lectured to the Sheffield branch of the Society in the Town Hall, only one of many such publicity talks given by him in North of England towns. The Society's future seemed far from rosy. In answer to the enquiry whether any of the members now established in the Midwest had begun to repay money originally advanced, Costes admitted that only one member had started to do so, but he emphasized that repayments were only just becoming due. More serious, some had refused to repay their advance, and therefore, their lend, the lecturer promised confidently, would be taken from them and given to those willing to pay. To that date, 13¹/₂ emigrants, including 40 men, had been sent out by the Society. The meeting also revealed that a debt was still owed to Sheffield trades by the Society when support amounting to about £2,000 was given to the Potters' Strike in 1836-37.¹

Costes' lecture in January 1849 was followed within a few days by that of George Catlin in the Music Hall, Sheffield. Catlin, "the well-known North American traveller", and, it may be added, "a native of

1. Sheffield Times, 20, 27 Jan. 1849; Leeds Mercury, 27 Jan. 1849; S. Pollard, A History of Labour, p. 3.

Pennsylvania, lawyer, artist, and student of Indian culture";¹ treated the audience to "The Valley of the Mississippi, with its advantages to emigration and the gold mines of California". The advantages of the Upper Mississippi and Prairies were stressed in particular, as was the desirability of well-balanced groups of emigrants settling together in order to provide the necessary skills for a successful community.²

Shortly afterwards, a meeting at the Moseley Arms, West Bar, established the Sheffield Free Emigration Society, "in the place of the Western Land Company, on account of the many objections which were then raised against it on many grounds".³ The Sheffield Free Emigration Society

1. W.S. Shepperson, British Emigration to North America, p.88.
2. Sheffield Times, 3 Feb. 1849.
3. The activities of the Western Land and Emigration Agency, of London (by early 1850, the United States Land Company) and the British and American Colonization Emigration and Land Company (formed early 1850, soon becoming the Universal Emigration and Colonization Company, London), and the merger of the two, together with the involvement of George Catlin, Superintendent of the Texas Department of the new company, are described in W.S. Shepperson, pp.87-91. George Catlin, in his capacity as agent to the U.S. Land Company, also lectured about Texas in Doncaster in 1850 (Doncaster Gazette, 3 May, 14, 23 Jun. 1850).

proposed to purchase land, and then subdivide acreage among the shareholders, in Milam district, central Texas. In mid-April 1849, the rules of the new Society were confirmed, and in early May, an agent, Mr. Kissack, accompanied by two others, was to proceed to Texas to select the land.¹ Shares to the amount of 14,000 acres were taken up.² By the end of May, the list of members was reportedly fast increasing; and mention of the Society was made in the House of Commons by J.A. Roebuck.³ On 21st June, the Society held another publicity meeting at the

1. For comparison, Sheffield Times, 4 Aug. 1849, extracted the following from the Derby Reporter: "The gentlemen who left Derby in the spring [1849]... to inspect North Eastern Texas as a suitable location for a Colony, are, we understand, returned to this country, and that a public meeting will be held shortly to receive this report". "The gentlemen", Dr. Edward Smith, of Hensnor, Derbyshire, and John Barrow, a civil engineer, sailed from Liverpool 10 Apr. 1849, for New York, arrived at Shreveport, Louisiana, 21 May 1849, and toured as far as Grayson County, Texas, returning to Shreveport by way of Dallas County, Texas. Their subsequent report covered north-east Texas (W.S. Shepperson, pp.86-87).
2. Sheffield Times, 28 Apr. 1849.
3. Sheffield Times, 26 May, 16 Jun. 1849. J.A. Roebuck ("Tear 'Em Roebuck") became M.P. for Sheffield in May 1849 (J. Selt, Chartism in South Yorkshire, p.26). In June, the Society's committee "received most valuable information and directions" from Roebuck, who felt "an interest in the well-being of the Society and [expressed] his willingness to do anything in his power for it".

Moseley Arms: those present were "principally connected with various departments of industrial occupation". Many more members were enrolled, lacking only a few in certain trades to make up the required complement of one hundred heads of families.¹ The exploratory group sent out by the Sheffield Free Emigration Society seems to have reported favourably on prospects in Texas, for "a large party of emigrants" assembled at the Manchester railway station on 27th September 1849, prior to sailing from Liverpool two days later for New Orleans.² In the light of other ill-fated attempts to turn British artisans and tradesmen into American agriculturists, and in the absence of further firm evidence, it seems likely that the Society's members, "principally...of industrial occupation", found frontier life in Texas unacceptable. Even this assumes that land was indeed legally available when the emigrants reached their destination.

From the early 'forties, the evangelical fervour of the Church of Jesus Christ of Letter-Day Saints was also

1. Sheffield Times, 23 Jun. 1849.

2. Ibid., 29 Sep. 1849.

witnessed in south Yorkshire and in the adjoining counties of Nottinghamshire and Lincolnshire. Among many other events, lectures, public discussions and debates on the Mormon faith were held in Doncaster in 1842,¹ in Methersey and Gringley-on-the-Hill, Nottinghamshire, in 1844 and 1849,² and in Crowle and Gainsborough, Lincolnshire, in 1847 and 1850.³ As elsewhere in areas of Mormon activity, local attitudes to the new gospel, as reported by the press, generally ranged from curiosity and scepticism to scorn and sarcasm. Nevertheless, local opposition seems to have dampened neither missionary zeal nor the emigration incentive to reach the New Zion. The successful Mormon system of emigration was attractive not only to convinced converts, but also to those following the advice of family and friends already in America that this means was the cheapest, the best victualled and

1. Doncaster Gazette, 11 Mar. 1842.

2. Ibid., 6, 20 Dec. 1844, 27 Jul. 1849.

3. Ibid., 25 Jun. 1847, 18 Apr. 1850.

equipped, and the most satisfactory of all.^{1.}

The Letter-Day Saints were particularly active in the Sheffield and Rotherham areas in at least the years 1848-51.^{2.} In bentering fashion, one article described how, on 24th January 1849, a vessel, "engaged, exclusively, by at least 500 of this type of fanatic", was due to sail from Liverpool as the first stage of the emigrants' journey to "the land of promise". Of these, "several...were [formerly] filling excellent and permanent positions in Rotherham, Masbro', and Sheffield, and [they] have broken up their homes and connexions entirely for this visonary and perilous pursuit". Some had been employed as model makers by Yates, Heywood & Co., stove-grate manufacturers of Rotherham, at wages averaging 30s. to £3 a week; and they took with them "gipsy stoves"^{3.} for cooking, &c., if they can

1. For a detailed treatment of Mormon emigration from Britain, see Philip A.M. Taylor, Expectations Westward: The Mormons and the Emigration of their British Converts in the Nineteenth Century (Edinburgh and London, 1965).
2. Sheffield Times, 16 Feb. 1850; Doncaster Gazette, 22 Feb. 1850; Wakefield & W.R. Journal, 6 Sep. 1851.
3. Defined in the report as "stoves stand[ing] upon four feet, and hav[ing] four sides, each having an open grate with bars, and movable trivets to hold pots, pans, kettles, &c. above the fire".

find the provender when they reach their destination which appears to be a quay - at present". In all, about 40 individuals, men, women and children, left Rotherham and Masbrough on 23rd January, their goods having been sold by auction the previous day.¹ Again, on New Year's Day, 1851, fifteen families from Sheffield, as well as parties from Rotherham, Masbrough and Whiston, left for Liverpool to take passage by the Beadicea, bound for New Orleans, their ultimate destination being the Salt Lake Valley.²

Most of the skilled workers who emigrated from Sheffield and district, however, were attracted less by promises of agricultural self-sufficiency or Mormon salvation than by steady work at good wages in their own trades. In 1849 and 1850, James Roberts wrote home to Sheffield that in Waterville, Connecticut,

"we have plenty of work and a good prise for it....we can get with esse 7 dollars [a week] each...It would not be possible to discribe half the Sheffield people there are at these works. Ther is about 1000 people in the ville & I believe there is a majority of Sheffield people...we are.... making knives & can have any quantity out that we think proper...."³

1. Doncaster Gazette, 26 Jan. 1849. Several families were also due to leave Gringley-on-the-Hill, Notts., for Salt Lake City the following July (Ibid., 27 Jul. 1849).
2. Wakefield & W.R. Journal, 10 Jan. 1851.
3. James Roberts & family, Waterville, Conn., to Sheffield, 30 Sep. 1849, 14 Feb. 1850 (C. Erickson, Invisible Immigrants... pp.322-23).

After the first flush, however, Roberts was not quite so happy with his situation:

"We have been settled of with every 6 months &settling time in January. We have to finish our work by the last of December [1851], and on the first of January they told us we must begin to find our own files & tools of all kinds and if we refused to do it we might go about our business.... [Consequently] we are now going to form a company of our own...."¹

In 1864, one Sheffield newspaper, though advising "our artisans 'to look before they leap'", extracted from the American Hardware Reporter an article offering great inducements to skilled workmen to emigrate to the United States. Labour of all kinds was required, but there was a particular demand for all "skilled in manufacturing or working iron and steel". Puddlers in any numbers could earn 15s. to £1 a day, rollers (iron), £1.4s. to £1.10s. a day, and rollers (steel), £5 to £7 a week. Steel rollers, steel heaters (£5 to £6 a week), steel converters (£3.12. to £4.12s. a week) and steel melters (£4 to £10 a week) could be assured of employment as soon as they arrived in America. Machinists, blacksmiths, moulders (iron) and mechanics could obtain work

1. James Roberts, Waterville, to Sheffield, 6 Feb. 1852 (Invisible Immigrants, p.327).

for the asking at 7s. to 12s. a day. There was great demand for spring-knife cutlers and pen blade forgers (£8 to £10 a month), cutlery grinders (8s. to 12s. a day), and huffers and table-knife forgers (7s. to 10s. a day). File cutters and forgers could expect to receive 40 per cent more than in Sheffield, thereby making the shilling equal to 1s. 5¹/₂d., saw makers and pattern makers, 8s. to 12s. a day, and shears polishers, £2.8s. to £3.12s. a week.¹

The Sheffield Daily Telegraph, nevertheless, hastened to warn its "readers that the Hardware Reporter is a manufacturer's paper". The law of demand and supply operated in the United States as well as in Britain. Even if wages were as high as American manufacturers claimed - and "the employed could probably tell another tale" - the emigration of large numbers of skilled Sheffield workers would soon depress the price of labour across the Atlantic. On the Hardware Reporter's own admission, there was currently "an almost universal demand...by the working classes for a large increase of wages". Some American employers had made concessions, but thousands of workers were on strike demanding a 30 to 40 per cent increase in wages. A large influx of Sheffield puddlers, file cutters,

1. Sheffield Daily Telegraph, 12 Jan. 1864.

grinders and huffers into the United States would hardly strengthen either the American strikers' position or the Yorkshire immigrants'.^{1.}

A few days later, the Sheffield paper added its afterthoughts. Sheffield workers were reminded of the uncertainty of American 'green backs' or 'shin plasters' - compared with the reliability of English gold, silver and notes - expensive coal and clothing, and severe winters. The American Civil War with its inflated demands would not last for ever, and then unemployment and poverty would ensue. Skilled Sheffield men would be well advised to "wait (at home) a little longer".^{2.}

Although many employers feared that the emigration of skilled men would accentuate foreign competition, major labour leaders, refusing to admit the importance of foreign rivalry, declined to use this argument to oppose union emigration. Unions in the 1860s, not least the militant Sheffield unions, were highly conscious of the threat posed to employers by the emigration of skilled men. Trade unions, in dispute with employers, were quick to encourage and publicise emigration schemes in order to effect a successful conclusion to the dispute.^{3.}

1. Sheffield Daily Telegraph, 12 Jan. 1864.

2. Ibid., 16 Jan. 1864.

3. Ibid., 28 Apr. 1866; R.V. Clements, "Trade Unions and Emigration, 1840-80", Population Studies, 1X, 2 (Nov.1955), 172; Charlotte Erickson, "The Encouragement of Emigration by British Trade Unions, 1850-1900", Population Studies, 111 (1949), 261-62.

In June 1866, a general meeting of all branches of the file trade was held in the Temperance Hall, Sheffield, "to consider the resolution passed by the masters to open their works to the men in a body at the old terms". For some three months, 4000 Sheffield operatives had been 'locked out' and had been supported by the Filesmiths' Union to the extent of £22,000. Not one worker, however, was in favour of returning to work "at the old terms". Thereupon, an emigration project was strongly supported by the operatives; and many applications to leave were received, mainly from young single men, "the sinews of the [file] trade", but some from married men with families. As it was impossible to accommodate all the applicants from available funds, it was proposed to raise a small weekly levy from members in order to allow five men to emigrate every week.^{1.} In the event, not only levies raised by the strike committee but also funds from American manufacturers enabled Sheffield file makers to leave for America. Emigration, therefore, was employed as a weapon with

1. Sheffield Daily Telegraph, 2, 11 Jun. 1866;
Sheffield Independent, 2 May, 9 Jun. 1866.

which to intimidate those employers reluctant to raise wages; or, as expressed by one correspondent to the Sheffield press:

"Had emigration been encouraged at first, that battle would have been won by this. The only way to make the masters appreciate workmen is to let them feel the want of them. Persuasion and argument are all a force...Scarcity of hands alone would force an advance".^{1.}

By coincidence or otherwise, an advertisement in the Sheffield press in July and August 1866 was addressed to "FILE FORGERS, GRINDERS, AND CUTTERS; ALSO, SAW MAKERS AND SAW GRINDERS", by Edward J. Holden & Co., File and Saw Manufacturers, of No. 4, Liberty Street, New York City. In the company's "nice, light, airy and comfortable shops" at Williamsburgh, "30 minutes' walk from the City", vacancies existed for 130 men in the above trades at wages higher than those paid in Sheffield. File forgers could expect a 35 per cent advance on Sheffield prices, file grinders, 25 per cent, file cutters (tapers), 45 per cent, and file cutters (all other kinds), 55 per cent. Similarly, saw makers could expect steady employment, and 10s. to 12s. a day in wages.^{2.}

1. Sheffield Independent, 8 May 1866 (cited by C. Erickson, "The Encouragement of Emigration....", 262), 2 Jun. 1866.
2. Sheffield Daily Telegraph, 24, 28, 31 Jul., 4, 7, 11 Aug. 1866.

The example set by the Sheffield file trade in supporting emigration in 1866 was followed by the spring-knife trade early the following year. Some 250 skilled spring-knife workers met at the Green Dragon, Fergate; and their number included deputations from "the firms of Messrs. Turner, Rowbottom, Shirley, Butcher, Needham, Renshaw, Barnes, Ward, Haywood, Gill, Johnson, Matthewman, Wostenholme, Fenton", and others. The meeting was informed that a few firms were intending to lower their workers' wages, and in order to dissuade employers from taking this action, two resolutions were passed. It was agreed that a levy of 5s. a man should be raised to meet possible emergencies; and that "it would be wiser to send the skilled workmen to America, where very probably a great amount of the spring-knife trade would go, irrespective of the tariff which is likely to pass..."¹.

Between 1867 and 1870, at least one American firm, and probably many others, continued to make tempting offers to skilled Sheffield workmen. Thomas J. Bradley, president of the New York Knife Company, manufacturers of fine pen, pocket and table cutlery, of Welden, Orange County, New York,

1. Sheffield Daily Telegraph, 28 Jan. 1867.

wrote to James Roberts, one of the firm's partners currently on an extended visit to his native Sheffield, in mid-1867:

"Mr. Bullcroft thinks you might be induced to come out here if you could make up your mind to do so, and would be willing to turn your hand to Blade forging or what offered. I have no doubt you [would] do well and make money... we will try and make you as comfortable as possible. If you come, you had better bring your hammers and other small tools, and perhaps an Anvil or two...if you know of a fine Blade Forger, a good reliable steady man, we wish you would bring him along with you...."¹

Thomas Bradley wrote again on the same topic two years later:

"We are in want of a Fine Blade Forger and want you to send us one out as soon as possible. Alfred Simpson has informed us that there is a Forger working for Wade & Butcher's [Sheffield]² by the name of Alfred Ellshaw who wanted to come out here. We wish you would call and see him

1. Thomas J. Bradley, Walden, N.Y., to James Roberts, Sheffield, 23 Jul. 1867 (Letters of Emigrants to America, L.S.E., N.627).
2. Sheffield Independent, 22 Mar. 1865, contains a letter from Henry Walker, formerly manager of W. & S. Butcher, Sheffield, describing his experiences as manager of a Pittsburg steel-manufacturing concern.

as soon as you receive this. If Ellishew
can't come, try and engage us another; he
must be a good workman and of steady
habits, and we would prefer him to be
a married man...."¹

In the absence of an immediate reply, Bradley wrote
again with greater insistence:

".....we wrote you to engage us a blade Forger
and that we were very much in want of one....
if you have not the means to spare until
we can send you a [Draft], apply to Mr. Askham
[of Broad Lane, Sheffield],² and he will
find money for the man's passage...."³

It seems that Roberts was able to oblige with not one, but
at least two "very steady" men. Towards the end of
November 1869, Bradley forwarded a draft for £7.6s.,
"in settlement of a/c for money advanced to pay for corkscrews
£1.0.0. and £6.6.0. for the Blade Forger...."⁴ Bradley's
requirements, however, were still not satisfied for in May
1870, he penned:

1. Thomas J. Bradley to James Roberts, 30 Aug. 1869.
2. Thomas J. Bradley to James Roberts, 24 Feb. 1870.
3. Thomas J. Bradley to James Roberts, 18 Oct. 1869.
4. Thomas J. Bradley to James Roberts, 26 Nov. 1869.

"Tom wrote for one of our cutlers to some relations of his to come out here and work for us. As this man has left our employment, we don't want you to find any money for anyone to come out here, but if you can find two or three cutlers, good workmen and steady men, who will pay their own passage out here, we can find them steady work, or you might get the names of men in different branches who would be willing to come here in case we wanted them".^{1.}

A revival of trade in Sheffield in the early 1870s, coupled with hard times in America, prompted some skilled men to return home and tended to dissuade others from leaving for American shops.^{2.} By the end of the decade, however, with unemployment or short-time working rife in Sheffield, substantial emigration again occurred. In 1879, Sheffield workers agreed to support the Working Men's Emigrant Society.^{3.} Moreover, in 1880, about 150 cutlers of a Sheffield firm, bought up the previous year by the New York concern of Wiebush & Hilger, were persuaded

1. Thomas J. Bradley to James Roberts, 16 May 1870.
2. Sheffield Independent, 2 Dec. 1871.
3. Ibid., 26 Aug. 1879.

to emigrate together to work for the American parent company's new factory at Bridgeport, Connecticut. On reaching their destination, they were dismayed to find the building unfinished and no opportunity for out-work - although the firm did pay them for some weeks of enforced idleness. Wages were low and the cost of living higher than expected. In addition, they were expected to instruct uninitiated and poorly paid Europeans in the skills of cutlery making. In their disillusionment, nearly all the workers returned to Sheffield before September 1880, or left to work in Worcester, Massachusetts.¹

In the 1880s, unemployed workers were assisted by Sheffield trade unions to emigrate to American shops. Many Sheffield cutlers, however, would never leave home, the American consul there reported: "Though overcrowded, they love the old hive, their comparative freedom from strict rules, and their 'Saint Mondays' and many holidays". Even so, in 1890, Englishmen formed no less than one-quarter of the foreign-born "tool and cutlery makers" in America.²

1. R.T. Berthoff, British Immigrants....., pp.70-71, 74; P.C. Gerlick, pp. 171-72; S. Pollard, A History of Labour... p.92; Sheffield Independent, 25 Sep. 1880.

2. R.T. Berthoff, British Immigrants....., p.71.

3. AMERICAN CENTRES OF YORKSHIRE STEEL, HARDWARE & CUTLERY IMMIGRATION.

(a) NEW ENGLAND.

From the early days of the Republic to about the 1830s, the small workshops of Connecticut and Massachusetts produced with varying success imitations of imported British metal goods. Changes and improvements in production were effected in the main by a long line of small Yankee manufacturers and workmen who supplied their own capital, but who constantly faced competition from the importation of superior and cheaper British products. British technological leadership rested not only upon long experience with small iron furnaces, but also upon the necessary substitution of coal for charcoal, whereas America's forests ensured the use of charcoal furnaces until at least the 1840s. Moreover, Sheffield or Birmingham expertise in the form of processes, machinery and labour, was an important, often essential, factor in the development of almost every major branch of New England metal-goods production from about the 1820s onwards. As in textiles, skilled British immigrants found their services much in demand, especially after the mid-'thirties, in the manufacturing shops of the Connecticut and Newgustuck valleys,

and in Worcester and Taunton, Massachusetts.^{1.}

By 1830, the establishment of Moses L. Moore at Worcester, Massachusetts, was producing penknives "on an extensive scale... equal in workmanship and quality to those made in England". It seems probable that at least a few of the fifty or so hands employed by Moore hailed from the Sheffield area.^{2.} No doubt the "several grinders and file makers" who left the Sheffield district for America in the same year transferred their skills to the early shops of Connecticut, Massachusetts or New Jersey.^{3.} The same may be said of the fourteen or more (mainly Chertist) saw-, file - and razor-smiths, cutlers and grinders, who left Sheffield for America in 1839. Certainly, the notable local Chertists, Wolstenholme, a filemaker, and Chatterton, a nail-maker, taking their tools with them, were able to join other Sheffield workers already located in Westport and Westbury, Connecticut.^{4.}

1. R.T. Berthoff, British Immigrants..., p.62, also citing James M. Swan, History of the Manufacture of Iron in All Ages (Philadelphia, 1884), p.265; Mary Hewitt Mitchell, History of New Haven County, Connecticut (Chicago & Boston, 1930), I, pp.859-60; Constance McL. Green, History of Naugatuck, Connecticut (New Haven, Conn., 1948), pp.50-56.
2. Dorchester Gazette, 5 Mar. 1830.
3. Ibid., 12 Mar. 1830.
4. Sheffield Iris, 1 Oct. 1839; Sheffield Mercury, 5 Oct. 1839; Bradford Observer, 10 Oct. 1839; Dorchester Gazette, 11 Oct. 1839; R. Boston, British Chertists in America..., pp.22, 90, 96.

By comparison, during the 1620's and particularly the 1830's, Birmingham workers are to be credited with the regular establishment of the Connecticut brass industry in an area centred about Waterbury in the Naugatuck valley; and this area, a century later, produced 80 per cent of "the rolled brass and copper and finished brass wares used in the United States".¹ Indeed, one American writer has commented that "it is no exaggeration to say that the [Waterbury] brass industry was imported from England in machinery, processes and labor".² The Waterbury industry had its antecedents in the small-scale manufacture of brass buttons and buckles in colonial days. The firm of Leavenworth, Hayden & Scovill was formed in 1811, and in 1827, William H. Scovill bought out the other partners to establish the firm of J.N.L. & W.H. Scovill. Again, in 1812, Aaron Benedict established a factory at Waterbury for making bone and ivory buttons; and in 1823, he also began to make brass buttons. About 1820, the Scovills gratefully accepted the services of James Croft, a brass worker, born in a Worcestershire village in 1774, and resident at various times in Birmingham, Philadelphia and (after 1817) Waterbury. In 1821 or 1822, Croft transferred his services in gilt button making to Aaron Benedict, and in 1829, when the firm of Benedict & (Israel) Coe was formed,

1. Joseph Wickham Roe, English and American Tool Builders (New York, 1926), p.231.
2. W.G. Lethrop, The Brass Industry in Connecticut (Shelton, Conn., 1909), cited by W.H. Mitchell, History of New Haven County... I, p.860.

Croft became one of the partners. The connexion lasted until Croft's death in 1837. Both Scovill and Benedict began to do their own rolling on Croft's advice; and they were both encouraged to import workers, processes and machinery from Birmingham. Croft himself went to England seven times for Benedict and Israel Holmes went three times for Scovill. Israel Coe also later visited England. Israel Holmes, ten years in the Scovills' employ, started Holmes & Hetchkiss in 1830, "for the purpose of casting and rolling brass, making brass and copper wire, brass and copper tubes, etc.", with the assistance of men and machinery imported from Birmingham.^{1.}

A number of skilled Birmingham workers, therefore, may be identified as living in Waterbury in the 1830s and later. James Croft, as already noted, arrived in Waterbury after 1817, and was employed for one year about 1820 before joining Aeron Benedict in 1821 or 1822.^{2.} William Stanley, born 1826, emigrated with his parents to Waterbury in 1829, the father being a brass worker whom Israel Holmes brought from England. William, himself, later learned brass rolling and entered the button shop of Benedict and Burnham, remaining there until 1848.^{3.}

1. M.H. Mitchell, History of New Haven County, I, pp.870, 877-78, 933; J.W. Roe, English and American Tool Builders, pp.231-33; Joseph Anderson (ed.), The Town and City of Waterbury, Connecticut (New Haven, Conn., 1896), II, pp.243, 315, 319-24, 326.

2. J. Anderson (ed.), II, p.315: obit., 10 Jun. 1837.

3. Ibid.: pp.322, 405: obit.1877.

John H. Sandland, born in Birmingham in 1813, went to Waterbury in 1830, married there in 1835, and was employed by the Scovill Manufacturing Co. for over fifty years until his death in 1881.¹ William Henry Jones was also born in Birmingham, in 1802. He left for the United States in 1824, and began to manufacture buttons under the style of Robinson, Jones & Co., at Attleborough, Mass. In 1834, he removed to Waterbury and lived there for the remainder of his life, except for two years' residence (1840-41) in Philadelphia. In Waterbury, he carried on the button business as William Jones & Co. until the failure of the concern during the financial crisis of 1837.² Born in Birmingham in 1812, Samuel Taylor began to learn the business of burnishing buttons at an early age in his father's shop. He emigrated to the United States in 1831 and worked at his trade for an Attleborough, Mass., firm for a few years. Taylor married there in 1833 and removed to Waterbury in the winter of 1835-36, perhaps as a result of the example set by William H. Jones. Taylor first found employment in Waterbury with Leavenworth, Spencer, Spencer & Sperry, but soon commenced work with the Scovill Manufacturing Co. Like John H. Sandland, he remained with the

1. J. Anderson (ed.), II, p.294: obit., 28 Feb. 1881.

2. Ibid., p.455: obit., 23 Jan. 1881.

Scovill firm for over half a century, being "considered one of the best workmen at his trade, and [having] a superior knowledge of the burnishing stones used in polishing gilt buttons".¹ Joseph Shipley, born in Birmingham in 1814, left for America in 1830, and settled in Paterson, New Jersey, where he manufactured small machinery and tools. He removed to Waterbury in 1835, and there worked with Abram Ives and others making machinery. From 1850 to 1858, he lived in Newark, N.J., organizing the firm of Joseph Shipley & Co. After his return to Waterbury about 1859, he was employed by the City Manufacturing Co., the Waterbury Brass Co. and the Scovill Manufacturing Co. in making automatic machinery until his death in August 1866. Joseph Shipley's elder son, Alfred John, born in Waterbury on New Year's Day, 1840, was employed as foreman and master mechanic of the button department of the Scovill Manufacturing Co. from 1862 to at least 1896.²

If Birmingham workers were an essential factor in the early years of the Connecticut brass industry, Sheffield immigrants were equally important in the formative years of that State's cutlery and hardware industries. Although native American workers, able to forge, temper and grind, were

1. J. Anderson (ed.), II, pp.294-95: obit., 27 Aug. 1883.

2. Ibid., p.295.

early available in Connecticut valley towns, few possessed the specific skills necessary for the production of fine cutlery. Grinding and finishing, in particular, required many years of training. Again, local apprentices did not take readily to these occupations, unhealthy as they were, often resulting in debilitating, even fatal, lung diseases. Nevertheless, although grinding was a favourite occupation in the 1840s for recruits from the local farming towns around Greenfield, Mass., in the upper Connecticut valley, to the (John) Russell Manufacturing Co. - where "by hard work a man might save a few hundred dollars the quickest at that work" - the men were insufficiently skilled, "too free and independent", and too likely to move elsewhere, often to the West.^{1.}

There is evidence of a few Sheffield workers transferring their skills to Connecticut in the 1830s. By far the greatest influx, however, occurred during the hard years in England of the following decade. Nathan Ames, of the Ames Manufacturing Co.,^{2.} Chicopee, Mass., in the upper Connecticut valley, crossed the Atlantic in 1840, and returned with his observations on arms production, cutlery making and silver plating, together with one or two skilled Sheffield workmen.^{3.}

1. Greenfield Gazette and Courier, 30 Dec. 1872, cited by Marthe van Hoesen Taber, A History of the Cutlery Industry in the Connecticut Valley, Smith College Studies in History, XLI (Northampton, Mass., 1955), pp.94-95.
2. By about 1840, the Ames Mfg. Co. produced swords, guns and brass cannon, paper-mill knives, carpenter's chisels, axes, hatchets, knives, tools of all kinds, and cutlery.
3. M.v.H. Taber, pp.17-18, 96; Vera Shlakman, Economic History of a Factory Town: A Study of Chicopee, Massachusetts (Northampton, Mass., 1935), p.27.

The Russell Company, of Greenfield, Mass., employed Matthew Chepman as soon as he arrived in America from Sheffield in 1841. Later, Chepman, a notable inventor in the cutlery industry, became superintendent at the Lenson & Goodnow Manufacturing Co., at Shelburne Falls, near Greenfield. By 1848, nearly all the twenty workers employed by Lenson & Goodnow had started life in Sheffield. In 1860, the firm employed 340 workers, was capitalised at \$500,000 and was the largest producer of cutlery in the United States.¹ Francis Russell, of the Russell Co., met the young Sheffield immigrant, Joseph Gardner, when the latter arrived in New York in 1843. Gardner was offered a probationary position of hafting knives at a monthly wage for six months, to be followed by remuneration at the piece rates received by other hafters. Gardner obviously impressed his employers for he became superintendent at a later date, before establishing himself as an independent manufacturer of pocket knives and small hardware. The Russell Company's agent made contact with likely employees when they disembarked at New York. Advertisements were also placed in newspapers. Besides recruiting workers from other Connecticut valley shops, Russell also penned inducements to workers in Sheffield whose relatives and friends were already working in New England. Albert Bradshaw from Sheffield was working for the Russell Co. prior to 1842; and when Henry Bradshaw arrived in New York in 1842, he was welcomed with an offer of work as a grinder. Albert Bradshaw

1. M. v.H. Taber, pp.24, 96.

returned to Sheffield by 1845, but when he expressed a desire to return to the company, Russell indicated he would be pleased to take him on again when business improved. The Russell correspondence indicates that Francis Russell met Sheffield workers at New York, and forwarded individuals and groups to Greenfield. Entire families were sometimes brought over from Sheffield. Many Yorkshire cutlers became foremen at the Russell Company.¹

Other cutlery shops were equally eager to accept Sheffield workers. In the Naugatuck valley of Connecticut, the manufacture of pocket cutlery was established at Waterville about 1840, and soon afterwards, Sheffield workers arrived to take up employment.² In nearby Naugatuck (earlier Salem), Lyman Bradley and George Beecher began to manufacture pocket knives in 1841; and for this venture, Bradley induced skilled Sheffield workers to emigrate. Cutlery soon developed into one of Naugatuck's most important industries.³

Notices in the Sheffield press also clearly infer the presence of many named expatriates in Connecticut in the 1840s (and later). John Hall, a spring-knife cutler, late of

1. M. v. H. Taber, pp.96-97.

2. J. Anderson (ed.), The Town and City of Waterbury, II, pp.29-30.

3. C. McL. Green, History of Naugatuck, p.62.

Carver Street, Sheffield,¹ died at Birmingham, New Haven County, Connecticut,² in 1845, the result of injuries received "when the glazer broke...as he was glazing some knives".³ Thomas Kay, a wheelwright, late of Duke Street, Park, Sheffield, also died at Birmingham in 1849, from cholera.⁴ Martha Longden, from Sheffield, married J.P. Benson at Waterville in June 1845; and John Salt, of Cultherpe, near Chesterfield, married Miss M.A. Benesey at Waterbury, Connecticut, early the following month.⁵ Samuel Marshall, formerly of Allen Street, Sheffield, was also living in Waterbury in January 1848 at the time of his daughter Alice's marriage there to William Bessford.⁶ John Clayton, a Sheffield cutler, had only just returned with his family to his native town from America, possibly Connecticut, when his wife died in 1854.⁷

1. Pigot and Co.'s Royal National and Commercial Directory (London & Manchester, 1841), p.336, lists Joseph Hall, Carver Street [Sheffield], under "Pen and Pocket Knife Manufacturers". John Halls are noted under the same heading at No. 28, Coalpit Lane and No. 119, Edward Street [Sheffield].
2. The establishment of small factories in Derby-Birmingham, near the confluence of the lower Naugatuck and Housatonic rivers, began about 1836, (H.R. Mitchell, History of New Haven County, I, pp.877, 916).
3. Sheffield Iris, 11 Sep. 1845; Sheffield Mercury, 13 Sep. 1845: obit., 4 Aug. 1845, aged 22.
4. Pigot and Co.'s Royal National and Commercial Directory (1841), p.348; Sheffield Times, 22 Sep. 1849: obit., 25 Aug. 1849, aged 47.
5. Sheffield Iris, 11 Sep. 1845: marriage, 29 Jun., 6 Jul. 1845.
6. Ibid., 2 Mar. 1848; Doncaster Gazette, 3 Mar. 1848: marriage, 16 Jan. 1848.
7. Sheffield Times, 30 Sep. 1854: obit., 24 Sep. 1854, aged 52.

In the late 1840s, James Roberts and his son James were both in the Sheffield trade of pocket-knife manufacturing; and in the many processes required to make a knife, the Robertses' work was mainly that of fitting blade to handle. James Roberts, sen., may well have been one of the small Sheffield masters. At the time of the emigration of the Roberts family, Sheffield spring-knife makers were experiencing a period of great difficulty, and the Chartist minority on the Sheffield Town Council pressed without success for an investigation into the conditions of such workers. The emigration group consisted of James Roberts, a 59-year old widower and Chartist sympathiser, his son James, aged 26, James's wife Mathilda, and Mary Wilson and her illegitimate son Thomas, "for he will be sold roberts". Other members of the family, including James Roberts' daughter Mary, and her husband, John Loxley, a knife forger, elected to remain in Sheffield and never emigrated.^{1.}

1. C. Erickson, Invisible Emigrants..., pp.319, 321-23; James Roberts & family, Waterville, Conn., to John & Mary Loxley, Sheffield, 30 Sep. 1849 (Letters of Emigrants to America: LSE, N 627).

Emigrating to America in 1849, the Robertses stayed briefly at Williamsburg, New York, "doing verry little until we was complestly tired", before moving on to join other Sheffield expatriates at Waterville, Waterbury, Connecticut, by the September. By 1850, a number of English-born workmen were living at Waterbury, mainly cutlers, but also skilled button-makers, brass-workers and machinists. In that year, 61 English-born cutlers lived at Waterbury, as compared with 47 Connecticut-born. The census return, and James Roberts' statement that his family were "now living at waterville in a street named sheffield street", would suggest that Sheffield cutlers were living together in a compact community, often sharing houses or boarding.^{1.}

The Sheffield cutlers were employed by the Waterville Manufacturing Company, a joint-stock enterprise organised in 1847 with Green Kendrick as president. The firm confined its activities solely to the making of pocket cutlery, and, as a 'vertical' concern manufacturing through all the processes to the finished product, differed considerably from the average Sheffield shop. Consequently, all types of skill were to be found on the premises: grinders, forgers, setters - in end cutlers. In 1854, about a hundred workers were employed

1. C. Erickson, Invisible Immigrants, pp. 319, 322;
J. Anderson (ed.), The Town and City of Waterbury, II, p. 30;
M.H. Mitchell, History of New Haven County, I, pp. 870,
872, 877-78, 881; James Roberts, etc., to J. & M. Loxley,
30 Sep. 1849.

by the company, though the previous year, a 'private act' passed by the General Assembly allowed the company to change its business. The firm was later succeeded by Sprague & Boyden, and later still by the Waterville Cutlery Company, incorporated in 1890 with a capital of \$20,000.¹

On their arrival at Waterville, the Robertses' future was promising. James, father and son, were making knives in September 1849: "we hammer our springs at one stroke under a stamp". After recovering from a bowel complaint, James jun., suffered "a bad misfortune...he was hammering and got fore finger in the left hand crushed under the stamp, but I hope that [he] will soon be better". Mary Wilson and young Thomas arrived slightly later from Williamsburg, N.Y., and "I think Mary will get work at the works to wet knives & then we shal be all in work & in good circumstances". Prices were better than in Sheffield and the Robertses had plenty of work: "I believe", penned James, sen., "when we can take job for job, we can get with ease 7 dollars each, and if Mary gets work I think she will get about 4 dollars". In the winter of 1849-50, the Robertses were "still making knives & can have any quantity out that we think proper. We were cutting stag [for covering knife handles] 6 weeks up to the 1st of January [1850] at 1½ dollars per day

1. C. Erickson, Invisible Immigrants... pp.319-20;
J. Anderson (ed.), II, p.29.

each...." There is no evidence in James Roberts' early letters of resistance to the different methods of production in the Waterville manufactory. Indeed, he was pleased to work in, and benefit from the amenities of

"the best & convenientist shops I ever saw in my life. They have all their scales & springs made by machinery. The drilling is done by machinery except boring on, and we have power to do all the work we want to do by power and they find us every thing that we use to work with and soap and water to wash us with when we go to our dinner & when we give over...."¹.

In 1849-50, James Roberts claimed that "It would not be possible to discribe half the Sheffield people there are at these works. Ther is about 1000 people in the ville [Waterville] & I believe there is a majority of Sheffield people".² Even allowing for some exaggeration on Roberts' part, and the fact that when George Wallis, the English engineer, visited Waterville a short time later, he found only "a few Sheffield workmen" amongst the hundred or so employed

1. C. Erickson, Invisible Immigrants...., pp.319-20, 322-23; James Roberts, etc., to J. & M. Loxley, 30 Sep. 1849, 14 Feb. 1850.
2. The total population of Waterbury, Conn., grew from 3,668 in 1840 to 5,137 in 1850 (despite a loss of several hundred inhabitants to Naugatuck), and to 10,004 in 1860 (W.M. Mitchell, History of New Haven County...., I, p.911).

at the Waterville Manufacturing Company (where "nearly all kinds of the pocket cutlery, of the best qualities, are made, and the taste displayed in the forms and general setting up of the goods is excellent"). Sheffield skills nevertheless made an invaluable contribution to the company's manufacturing development.¹ In early 1850, Roberts reckoned that the firm employed "about one hundred" setters-in, that is, men who set the knife blades into the hafts, "17 or 18 blade makers" and "about 30 grinders".²

Several Sheffield workers in Waterville may be identified in James Roberts' letters of 1849-52. Aaron Burkinshaw (or Burnckenshaw), a Sheffield cutler, aged 38 in 1850, was working for the Waterville Company. Thomas Dodworth, the brother of Matthew Dodworth, pen and pocket-knife manufacturer, of No. 30, Carver Street, Sheffield, and Charles Boden were also

1. C. Erickson, Invisible Immigrants..., p.320; Reports of George Wallis and Joseph Whitworth, British Parliamentary Papers, 1854, XXXVI, 9, p.40; 103, p.9; reprinted in, Nathan Rosenberg (ed.), The American System of Manufactures: The Report of the Committee on the Machinery of the United States, 1855, and the Special Reports of George Wallis and Joseph Whitworth, 1854 (Edinburgh, 1969), p.262.
2. James Roberts, Waterville, Conn., to J. & M. Loxley, 14 Feb. 1850.

at Waterville. On going to Waterville, the Robertses lived for a time "in part of the house with William Stones, but he has bought a house & a quarter of an acre of land & I believ him to flit on Thursday last so we have the whole of the house at present... [Sep. 1849]; but, by February 1850, "We are now living in a house to ourselves wick we pay 40 dollars per year. We have one sailer, 2 low rooms & 2 chambers", and three-quarters to one acre of land. William Green, son of Colin (or Jehn) Green, of perhaps Southeygreen, lived nearby. Mary Wilson, who, with her illegitimate son, had accompanied the Robertses when they emigrated, though working in the Waterville warehouse, was unsettled and thinking of returning to England until she married Thomas Bradley, a thirty-year old cutler from Sheffield, on 1st April 1850. Thomas Bradley, it seems, was a young widower, for two of his children were still in Sheffield "in the care [of] Mr. Joseph Wostenholm [or Wostenholme], file manufacturer, 116 Broad Lane, near Red Hill". Thomas J. Bradley later became president of the New York Knife Company, Walden, New York. James Roberts suggested that William Wright - probably William Wright, of Wright & Wregg, spring-knife manufacturers, No. 23, Leicester Street, Sheffield - would do well with his family

in America.^{1.}

A radical change in the Robertses' situation occurred in early 1852. Many Sheffield workmen in Waterville suddenly became discontented, not with the financial reward or amenities provided by the Waterville Company, nor with the use of power or the methods of work different from those in Sheffield, but with the firm's new requirement that they must provide their own files and tools (which would also have been the case in Sheffield); "and if we refused to do it we might go about our business". By this action, the firm perhaps hoped to reduce the amount of out-work in their employees' own homes, to move their workers into the factory and, consequently, to obtain greater labour discipline. Moreover, the firm "have been setting on so many Yankee boys that we was quite jamd up & if we said any thing they told us we might go about our buisiness".^{2.} The introduction of more native-born workers and the requirement about tools, therefore, appeared to create a threat to the immigrants' status. The cutlers, including James Roberts, responded to these threats of 'tyranny' by setting up a cooperative knife factory -

1. C. Erickson, Invisible Immigrants, pp. 322-26; James Roberts, Waterville, Conn., to J. & M. Loxley, Sheffield, 30 Sep. 1849, 14 Feb. 1850, 6 Feb. 1852. Although William Wright had not emigrated by February 1852, he may well have done so later. Sheffield Telegraph, 20 Jul. 1867, refers to the death in Connecticut of Mrs. Ann Roberts Wright, wife of William Wright, formerly of Sheffield (obit., 16 Jun. 1867, aged 50). James Roberts, sen., refers (letter, 30 Sep. 1849) to "my sister anne...and her family" in Sheffield. There is the inference that the Robertses and Wrights were related by marriage.
2. James Roberts, Waterville, Conn., to J. & M. Loxley, Sheffield, 6 Feb. 1852.

but not in Connecticut. By early 1852, 16 members had paid \$50 each and had agreed to increase the amounts to \$200 each by the July. Others were considering the plan.

"So you see", wrote Roberts, "we are in right earnest. We expect a many more to come when they are able to pay the money, for we have left it open for any body to be proposed & they will become partners as soon as they have the money. We could have plenty of shareholders if we thought proper but we are determined to have nobody but working men, so you see we are determined to have no capitalists..."

Thomas Bradley was due to join later, as were other Sheffield men.^{1.}

From Waterville, James Roberts and the group moved to Matteawan, Dutchess County, New York, in 1852, where they formed the New York Knife Company. Four years later, the concern - at first a cooperative, later an ordinary joint-stock company- was re-located at Walden, Orange County, New York, and was in existence there until as late as 1927. The Waterville Manufacturing Company, which was to fail during the depression of the late 1850s, lost not only Roberts and other Sheffield

1. James Roberts, Waterville, Conn., to J. & M. Loxley, Sheffield, 6 Feb. 1852.

cutlers to the cooperative venture in New York State, but also many more skilled employees who drifted away to work in a multitude of small shops newly established in the Naugatuck valley.¹

A further brief glimpse into the life of a Yorkshire cutler in Connecticut is afforded by a number of letters written to Thomas Henry Moore in the early 1850s. T.H. Moore, it will be recalled, was sent out to New York in December 1852 in the capacity of assistant agent to the Bradford textile merchants, Schwann, Kell & Co. In the September of that year, Thomas Henry's brother, John White Moore (1825-1907), a carver, of Muddersfield, had married Harriet, fifth daughter of the late William Barnes, a pen-knife manufacturer, of Tickhill.²

Harriet's brother, Henry T. Barnes, had clearly followed in his father's footsteps before he and his wife Eleanora emigrated to the United States; and although the immediate motives for their departure are not known, by at least 1852, they were established at Plymouth Hollow, Connecticut, where Henry was employed making knives. From directions sent to Thomas Henry Moore in Boston, their location in Connecticut is readily identified:

1. C. Erickson, Invisible Immigrants... pp.320-22; W.S. Shepperson, British Emigration... p.82.
2. Unidentified newspaper cutting (marriage, 4 Sep. 1852), in Marjorie Moore Blake (ed.), Family Letters of Thomas Henry Moore, 1852-1856 (Muddersfield, 1960.)

"The best [way] is to take your ticket [from Boston] for New Haven; when you get there, ask when the Naugatuck Train leaves, take your ticket for Plymouth, but be sure [to] tell the conductor to let you off at Reynolds Bridge which is only [a] quarter mile from our House; if you go on to P[lymouth], you'll have two miles to walk.... you will change cars twelve miles from N - Haven and take the Naugatuck road..."¹.

Thomas Henry was able to visit Plymouth Hollow by April 1853, though probably from New York, not Boston.²

More precisely, it seems that the Berneses lodged "with a family named Roberts at Plymouth Hollow"; and Henry was employed by the American Knife Company, where (in April 1853) they "have a great call for their goods at present and so are driving us poor Devils as fast as they know how..."

1. Harriet Moore, Gledholt, Huddersfield, to T.H. Moore, Bradford, - Dec. 1852; Henry T. & Eleanora Bernes, Plymouth Hollow, Conn., to T.H. Moore, Boston, Mass., 14 Jan., 22 Feb. 1853 (M.M. Blake, Family Letters..., pp.1-3). The Naugatuck railroad was opened in 1849 (M.H. Mitchell, I, pp.913, 915, 920; J. Anderson, II, pp.30, 157).
2. Harriet Moore, Marsh Cottage, Huddersfield, to T.H. Moore, New York, 19-21 Apr. 1853 (M.M. Blake, Family Letters..., p.21).

But, in answer to Thomas Henry's request for a "sticking knife", Henry was able to promise: "if you send me a little better description of what you want, I will make it if I possibly can".^{1.} For some reason, between about mid-1853 and 1854, the Barneses left Plymouth Hollow for Wallingford, where several shops produced pewter, Britannia ware and German silver (as at nearby Meriden), tinware, brass buttons, pins, combs, metal spoons and cutlery.^{2.} In the autumn of 1854, Henry and Eleanor Barnes suffered a double misfortune: the Wallingford firm failed, and the couple lost their second son shortly after his birth. The Barneses subsequently moved to Woodbridge, twelve miles from Wallingford, where Henry presumably continued to work in a similar occupation.^{3.}

It has already been noted that some Birmingham brass workers, including William Henry Jones and Samuel Taylor, were employed at Attleborough, Mass., for periods in the 1820s and 1830s before moving on to Waterbury, Conn.^{4.} In the early 1850s, the Englishman George Wallis observed that:

1. John Moore, Gladholt, to T.H. Moore, New York, 23 Jan. 1853; H.T. Barnes, Plymouth Hollow, Conn., to T.H. Moore, N.Y., 10 Apr. 1853 (W.M. Blake, Family Letters...., pp.6, 19).
2. M.H. Mitchell, History of New Haven County...., I, pp.872-73, 875, 881.
3. John & Harriet Moore, Huddersfield, to T.H. Moore, N.Y., 2 Nov., 17 Dec. 1854, 17 Jun., 21 Dec. 1855 (W.M. Blake, Family Letters...., pp.43, 45, 53, 59).
4. J. Anderson (ed.), The Town and City of Waterbury...., II, pp.294-95, 455.

"Messrs Reid and Barton, Taunton, Massachusetts, produce Britannia metal goods on a considerable scale, it being the chief branch of their trade. The electro-plated articles of this house, however, are of excellent character.

In Britannia metal originality of design is aimed at, and with some degree of success; but they copy any successful patterns from Europe, more especially those produced at Sheffield.

They employ about 100 persons, but only one Englishman...the lack of accuracy in finish applies to Messrs. Reid and Barton's productions, yet the effect of the work is generally good, and their contributions to the New York Exhibition are at once highly creditable and pleasing specimens of a useful class of articles...."¹

Britannia metal, though bearing a superficial similarity to pewter, differed considerably from that alloy in "surface quality, fabrication, form and metal".² Britannia, perfected

1. N. Rosenberg (ed.), The American System of Manufactures... p.285.
2. Britannia metal was a variable alloy composed mainly of tin with small quantities of copper and antimony; occasionally bismuth or brass (copper and zinc) was added to gain extra hardness. Pewter also consists principally of tin, but with the addition of lead. In appearance, Britannia possessed a lustrous, silvery sheen; pewter is bright, without the gleam of Britannia, and tarnishes more quickly.

in England towards the end of the eighteenth century, and employed in the manufacture of household wares, soon became the object of considerable export to America. In the early nineteenth century, American craftsmen began to develop Britannia metal on their own account; and although facing fierce competition from Sheffield (especially from James Dixon & Sons) and Birmingham, they established a domestic industry which thrived until the Civil War. In the post-bellum years, the metal began to be superseded at the upper end of the market by silver-plated ware.^{1.}

Reed & Barton, of Taunton, Mass., maintained a careful watch on Britannia metal production in England, and especially on items of Sheffield Britannia ware exported to America. In 1847, the firm became aware of goods of a very superior finish entering the United States. Their investigations revealed that laborious hand-rubbing had produced a finish almost equal to that of silver in lustre and surface quality. Arrangements were quickly made for a Mrs. Morris and her three sisters Barber to leave England for Taunton. The same firm, in 1848, induced the Sheffield workers, John Fletcher and the two Furniss brothers, Tom and Ed., to go to Taunton to teach English methods of soldering to the factory's workmen. Whilst the Yorkshiremen were skilled handworkers, it seems that Reed & Barton

1. Nancy A. Coyne, "Britannia in America: The Introduction of a New Alloy and a New Industry", Winterthur Portfolio, II, (1965), pp.160-64; 184-85.

were disappointed to discover that these craftsmen had no superior knowledge of labour-saving devices or advanced methods. Indeed, wrote one observer, "for soldering they all used the jewelers mouth blow pipe that has long since been discarded in the metal trade in [America]".^{1.} Also in 1848, Reed sent to England for a man named Rogers, whose several daughters were skilled burnishers of electroplated silverware. About the same time, Reed also imported an expert electroplater from England named Brown who taught his skills to his employer to such effect that when he left the firm, Reed was able not only to undertake his own plating, but also, in 1850, to teach the next plating manager.^{2.} William Parkin, brought from England to make dies for Reed & Barton's teaware department, was directing the newly established designing room by 1854.^{3.}

1. H.A. Coyne, "Britannia in America...", p.133; George Sweet Gibb, The Whitesmiths of Taunton: A History of Reed & Barton, 1824-1943, Harvard Studies in Business History, VIII (Cambridge, Mass., 1943), pp.121-22, 137.
2. G.S. Gibb, The Whitesmiths of Taunton..., pp.127-28.
3. Ibid., p.132.

Later in the century, the firms employed an increasing number of foreign-born designers and modelers, including the English-born W.C. Beattie and, by 1889, A.F. Jackson, as head designers.^{1.}

Wherever the different branches of cutlery, hardware and metal ware production were in evidence in Connecticut and adjacent Massachusetts in the second half of the nineteenth century, skilled Sheffield workers were to be found, nearly always in small establishments. In 1845, New Haven City, Conn., possessed eleven 'small hard ware' (231 employees), fifteen 'miscellaneous iron' (123 employees) and five Britannia and silver-plated ware (45 employees) establishments.^{2.} John Sawyer, from Sheffield, married a local girl in New Haven in 1855.^{3.}

Similarly, to the north, Meriden and West Meriden could boast, by 1845, of eight 'small hard ware' (65 employees), six 'miscellaneous iron' (75 employees), fourteen light metal

1. G.S. Gibb, The Whitesmiths of Taunton....., p.254.

2. W.H. Mitchell, History of New Haven County.... I, p.880.

3. Sheffield Times, 14 Jul. 1855: marriage to Maria B. Kenneday, eldest daughter of Rev. Dr. J. Kenneday, 12 Jun. 1855.

wares, cutlery, tinware, Britannia ware (183 employees) and six brass wares and brass founding (120 employees) establishments.¹ Britannia ware alone accounted for eight small factories.² The Meriden Britannia Company, a merger of several small Connecticut firms, was established in 1852; and with the sale of \$300,000 worth of wares the following year, the firm at once became a fierce rival of Reed & Berton, of Taunton, Mass. By the 1880s, as at Reed & Berton's, a number of artists and designers at the Meriden Company were English or Continental.³ Thomas Billam, a Sheffield table-knife cutler, died of consumption at West Meriden in 1860.⁴

American manufacturers at West Meriden, as elsewhere, sought the services of Sheffield cutlery because of their versatility, the result of long and careful training in Yorkshire. One Sheffield expatriate wrote thus:

"The superintendent is the head 'boss' over the men, lots the job, sets the price, turns off and sets on, and keeps a few hands always at liberty to go from job to job when needed; and these are called 'company hands'.

1. M.H. Mitchell, History of New Haven County....., I, pp.873, 881.
2. Ibid., I, p.914.
3. G.S.Gibb, The Whitesmiths of Taunton...., pp.171-75,254.
4. Dorchester Gazette, 14 Dec. 1860; Sheffield Times, 15 Dec. 1860; Sheffield Independent, 15 Dec. 1860: obit., 14 Nov. 1860, aged 36.

All are Englishmen, who know where to go to any part of a knife, for the Yankees are brought up to one or two jobs and cannot shift about. Men who have jobs, matching and resining, for instances, set on and turn off their extra hands as they like, and if any of them are stuck with their work, the 'company hands' are sent to help them out, and he has to pay them after the rate the company pays".

Again:

"[The Americans] do far more with machinery in all kinds of trades than you do...Men never learn to do a knife through, as they do in Sheffield. The knives to through thirty or forty hands...If a Yankee can resin a knife they call him a cutler; and by doing one thing all the time they become very expert and they make some very good knives.... such patters as is done easiest by machinery".^{1.}

1. Letter from West Meriden, Conn., in Ryland's Iron Trade Circular, 11 Feb. 1865, p.16, cited by C.J. Erickson, American Industry and the European Immigrant, 1860-1885, pp. 41, 123.

Edmund George Parkin, formerly of Sheffield, and described as a "silver plate mender", was resident in West Meriden at the time of his wife's death there in June 1865.¹ Matthias and Ann Loy, from the Sheffield area, were also living in West Meriden when they lost their young son there in 1868.² Charles Pease, from Sheffield, married at nearby Southington, Conn., in 1870.³

By the early 1850s, Rogers Brothers, of Hartford, Conn., as observed by George Wallis, were producing "forks and spoons of good make".⁴ Rogers Bros. and the Meriden Britannia Company also bought Britannia ware from Reed & Barton; and, to a lesser extent, the reverse occasionally occurred in the 1850s. Reed & Barton Britannia ware was supplied to Hartford to receive a coat of Rogers Brothers' silver plate and a Rogers Brothers' stamp, which in

1. Sheffield Telegraph, 29 Jun. 1865: obit. of Elizabeth Ann Parkin, 7 Jun. 1865. E.G. Parkin was perhaps related to William Parkin, who was imported from England to make dies for the trowers department of Reed & Barton, Taunton, and who, by 1854, headed the firm's designing room (G.S. Gibb, The Whitesmiths of Taunton..., p.132).
2. Sheffield Telegraph, 10 Nov. 1868: obit. of son Matthias, 21 Oct. 1868, aged 3yrs. 7 mths.
3. Ibid., 17 Sep. 1870: marriage, 31 Aug. 1870.
4. N. Rosenberg (ed.), The American System of Manufactures..., p.285.

turn competed with the regular Reed & Barton plated line. At the end of the 1850s, most of the Rogers' concerns were assimilated by the Meriden Company.¹ Though not necessarily employed by the superseded Rogers Brothers, John C. Nicholson, of Sheffield, died in Hartford in early 1863.²

The small shops of the Naugatuck valley, Connecticut, in particular, continued to attract Yorkshire metal workers and cutlers. The presence of James Roberts, of Sheffield, at Waterville, and Henry T. Barnes, of Tickhill, at Plymouth Hollow, in the first years of the 1850s, has already been noted. Naugatuck itself, originally part of Waterbury, but by 1844 incorporated as a town, owed the development of its manufacturing industries to waterpower derived from the Naugatuck river and its branches. By 1845, the town possessed at least the following manufacturing establishments: one (17 employees) for making machinery, and ten (90 employees) for making brass buttons and umbrella trimmings, as well as a cotton mill and a woollen mill.³ Additionally, the small scale enterprise established in 1841 by Lyman Bradley and George Beecher for the production of pocket knives, and for which Sheffield workers were imported, heralded one of Naugatuck's most successful industries. For at least a generation thereafter, cutlery was the principal

1. G.S. Gibb, The Whitesmiths of Taunton...., pp.173-74; J. Anderson (ed.), The Town and City of Waterbury...., II, p.382.
2. Sheffield Independent, 31 Jan. 1863: obit., 8 Jan. 1863, aged 35.
3. W.H. Mitchell, History of New Haven....^{County}, I, pp.881, 915.

items of manufacture of the smaller shops. About 1848, Smith & Hopkins, well established button manufacturers, embarked on the making of cutlery. In 1851, the Union Knife Company opened a well equipped factory on Fulling Mill brook, where, for nearly thirty years, considerable quantities of pocket knives were manufactured. When the factory was destroyed by fire in 1885, and perhaps also because of the brook's insufficient water power, the enterprise was abandoned. Both English and Rhenish cutlers were numbered among the firm's employees; and the former congregated in Sheffield Lane, situated on a hill above Fulling Mill brook.¹ Moreover, in the years after the Civil War, at least three other knife companies were established in Naugatuck. The Connecticut Cutlery Company, though operating for less than fifteen years from 1866 on Fulling Mill brook, produced pocket knives, pocket scissors and tailor's shears. The firm of the German, Leo Benz, ran for a period after 1867 making shears in a shop on Beacon Hill brook. The Naugatuck Cutlery Company operated from 1872 to 1888.²

1. Donald C. Wigglesworth, 205 Birch Court, Severna Park, Maryland, to J.T. Dixon, 8 Jul. 1970.

2. C. McL. Green, History of Naugatuck..., pp.62, 136-37, 141.

John Wigglesworth, the son of a Sheffield cutler, and his wife Rosette (or Rose Anna), daughter of George Heathcote (or Eastcourt), also a cutler, first went to Helsinki, Finland, then a province of Imperial Russia, to establish a partnership business in 1864. When this failed, John returned to Sheffield with his wife and son, where he was re-employed as a cutler for at least two years. Setting out once again, John Wigglesworth, his wife and, by now, three children (including Mary and Frederick), sailed for the United States, locating for short periods at Welden, N.Y., Newark, N.J., and Southington, Conn., before settling permanently at Naugatuck by at least early 1873. At Naugatuck, John Wigglesworth became a contractor for the Union Knife Company, and his death from "cutler's consumption" occurred in 1885. His wife, the mother of some fourteen children, lived on at Naugatuck, until her death in 1908. One son, George Wigglesworth, born at Naugatuck, 5th May 1873, worked consecutively for the Prospect Street Thimble Shop, the Bescon Valley Rubber Shoe Company, the Goodyear India Rubber Glove Company, and the John M. Page Company, a plumbing, hardware, sheet iron work and tinsmith's concern. In 1901, he established and became president of the heating and plumbing firm of George Wigglesworth & Sons, Naugatuck, employing 28 men.¹

Like Naugatuck, Union City was originally part of Waterbury, and

1. Donald C. Wigglesworth, Severna Park, Maryland, to J.T. Dixon, 8 Jul. 1970; M.H. Mitchell, History of New Haven County, I, p.916; III, pp.205-07.

produced hoes and cutlery.¹ Union City also attracted its share of Sheffield workers. John Hancock, for instance, was listed in 1861 as an "earthenware dealer & spring knife manufacturer", of Ecclesall Road (North Side), Sheffield.² By 1870, however, John Hancock and his wife, Mary Ann, were living in Union City when their daughter, Frances Jane, died there.³ Some Sheffield cutlery were transferred to America. One group described how "A Sheffield manufacturer advertised for a lot of cutlers, forgers, and grinders, and we unfortunately were picked out and invoiced to a cutlery company in Union City".⁴

Many of the small Connecticut towns and villages to the west and especially to the north of Waterbury could also boast their share of Yorkshire cutlery in the second half of the nineteenth century. George and James Taylor,

1. M.H. Mitchell, History of New Haven County.... I, p.934.
2. Post Office Directory, 1861 (Street Directory, Sheffield), p.664.
3. Sheffield Telegraph, 27 Aug. 1870: obit., 7 Jul. 1870, aged 28.
4. Letter from eight immigrants in Union City, Newgetuck, Conn., 21 Mar. 1870 (Sheffield Independent, 5 Apr. 1870); Frank Woostenholm to William Abbott and Ned Armitage, 21 Mar. 1870 (Ibid., 6 Apr. 1870): both sources cited by C.J. Erickson, American Industry and the European Immigrant.... p.42.

perhaps brothers, both emigrated from Bath Street, Sheffield and in the 1860s were living in Connecticut. James Taylor was in Hotchkissville, Woodbury, Litchfield County, at the time of his youngest daughter's death there in 1863.¹ George Taylor's wife, Hannah, also died at Hotchkissville, in 1867, "after a long and painful illness".² George Taylor himself, a shear grinder, died the following year at nearby Pegasus, Litchfield County, of the occupational disease, "hemorrhage of the lungs", and typhoid fever.³ Nelson H. Bellamy, not of Yorkshire extraction, was born at Woodbury in 1883, about one mile from the Hotchkissville village knife factory. At the age of fourteen, Bellamy began work at a knife factory in Scotchfield, Woodbury, but in 1899, together with his father, William Francis, and brother, he moved to the Hotchkissville factory, which had been incorporated in 1853 by Edward Cowles as the American Shear and

1. Sheffield Independent, 28 Mar. 1863: obit., Ann Taylor, 2 Mar. 1863.

2. Sheffield Telegraph, 27 Apr. 1867: obit., 28 Mar. 1867, aged 32.

3. Ibid., 2 May 1868: obit., 4 Apr. 1868, aged 36.

Knife Company. While working in these factories, Bellamy met many families who had emigrated from "Old Sheff.": most of his friends at work and play in Hotchkissville village were English, and indeed, he himself married a girl from Sheffield. Bellamy knew personally at least forty -six men, all from Sheffield:

Thomas Arlington, George Axelby, Eugene Benso, Thomas Benson, Thomas Boddington, Harry Booth, the brothers George and Walter Brammer, the brothers Frank, Fred and Joseph Cartledge, George Crownshaw, William Davis, Herbert Dunworth, John Ellis, Ernest Filbert, John Fox, Thomas France, Charles Gill, Thomas Green, Joseph Hague, Thomas Hedford, John Hilton, the brothers Harry and Joseph Holmes, Alfred Lester, Harry Linton, Harry Loomis, Thomas H.R. Maden (once a bugler in the British Army but a cutler by trade), George Mayland, the brothers Sam, Walter and William Nelson, John Niel, Fred Peckard, Arthur and Fred Perkin, Joseph Pierson, Alonso Senior, Harry Sister, Joseph Smith, James Stuart, Fred and John Suckley, William Summerset and Herbert Truelove.¹

In general, Sheffield workers emigrated direct to the American hardware and knife-producing areas. But once in the United States, such men frequently migrated, when work was slack, from Malden and Ellenville, New York, to the Connecticut knife shops of Hotchkissville, Reynold's Bridge, Thomaston, Northfield and Plymouth. Also, for personal and economic reasons, the migration from Connecticut to New York, or solely within the former state, might occur.

1. Nelson H. Bellamy, 1772, Ferrington Ave., Unionville, Conn., to J.T. Dixon, 24 Jun., 28 Jul. 1970; Ruth E. Bredshaw, 19 Goodwin Court, Thomaston, Conn., to J.T. Dixon, 31 Aug. 1970, 11 Jan. 1971.

Thomas Axelby, born in Sheffield in 1860,¹ emigrated to the United States about 1885 with his wife Ann(e) Elizabeth,² and their two children, Thomas and Charles,³ and settled at Northfield, Conn. There, three more children were born: Ernest (1888), William (1891) and Stanley (1896). Thomas Axelby, Sr., worked at the Northfield Knife Shop,⁴ as did his sons later, but he subsequently owned a small knife factory. His son Ernest, reputedly an excellent knife maker, later moved from Northfield to the Thomaston Knife Company.⁵ The Axelby family returned to Sheffield on two visits: about 1892-95, and in 1907.⁶ Henry Gill (1874-1964) also emigrated from Sheffield to Northfield, Conn., where he established a small knife factory. The firm continued under the control of his son, Roward, and was operating as late as 1970.⁷

1. Died 1927.
2. Anna Elizabeth (née Marsden), born Sheffield, prob. Crookes district, 1861; died, 1932.
3. Born Sheffield, 1883, 1884.
4. The Northfield Company building was demolished about 1935.
5. The Thomaston Company became a factory manufacturing plastics in the twentieth century, but was demolished by flood-water in 1953.
6. Gertrude A. Thomas, 409 Reynolds Bridge Road, Thomaston, Conn., to J.T. Dixon, 9, 29 Sep. 1970.
7. Ibid., Fred H. Seelye, RFD1, Box 126, Thomaston, Conn., to J.T. Dixon, 3 Jul, 1970; (Mrs.) Clifford T. Fowler, Box 196, Plymouth, Conn., to J.T. Dixon, 9 Jul, 1970.

Again, Thomas Mott, born at Welney, near Downham Market, Norfolk, first moved to Sheffield, whence, after his marriage to Martha Green and the advent of eight children, he emigrated alone to the United States between 1885 and 1890. At Reynolds Bridge, a section of Thomaston, he found employment in a knife factory; and after he had worked and earned enough money to send back to Sheffield for their passage, his wife and four surviving children (Thomas, Edward, Charles and Mae) sailed to join the father in 1891.¹

The parents of Ada E. Davis arrived in the United States from Sheffield about the end of the Civil War. At the time of her marriage in 1902 to Frank V. Becton, a prominent Waterbury merchant and manufacturer of jewellery, she was living in Thomaston.²

Sheffield workers were also to be found at Lakeville, north-western Connecticut, in the years after the Civil War. Henry Dewsnap died there in 1866,³ as did George Pepe Truelove, a blade forger, in 1870, from consumption.⁴

In 1879, more than a hundred workers from Sheffield were imported by a Bridgeport, Connecticut, cutlery firm. As they transferred to the Bridgeport ferry at New York, the scene was described thus:

1. (Mrs.) Clifford E. Fowler, Plymouth, Conn., to J.E. Dixon, 9 Jul. 1970.
2. M.H. Mitchell, History of New Haven County, III, pp.426, 430.
3. Sheffield Telegraph, 6 Apr. 1866: obit., 24 Feb. 1866, aged 51.
4. Ibid., 1 Oct. 1870: obit., 13 Sep. 1870, aged 38.

"Some of [their luggage] was done up in bedquilts, and there were boxes of all conceivable sizes, colors, and modes of construction that must have descended from the fifteenth century, but scarcely a modern trunk among them all. It was primitive but picturesque - particularly as the stout, stolid-looking women made no more than the men of shouldering 25 cubic feet of box and carrying it as if it had been a hand-box.... Less surliness was never exhibited by a colony of immigrants. The men talked freely of their condition at home, of the cutlery business of Sheffield and of the loss of prestige in the markets of the world which England has suffered of late".¹

When the Sheffielders reached Bridgeport, however, they were dismayed to find that they were expected to instruct uninitiated and poorly paid Europeans, and many left their jobs to take up alternative employment.²

1. New York Times, 7 Aug. 1879, cited by R.T. Berthoff, British Immigrants in Industrial America...., pp.70-71.

2. R.T. Berthoff, p.74.

Sheffield workers continued to settle in the upper Connecticut valley after the Civil War. Ann, the wife of Robert B. Mitchell, died in Greenfield, Massachusetts, in 1866.¹ Again, Thomas Hinchcliff, born in Sheffield, emigrated to the United States with his wife, Ann (née Harris), and four young daughters in 1865. Trained as a shear maker in Sheffield, Hinchcliff settled first at Shelburne Falls, Franklin County, Mass., and worked there in a shear shop. From there, he moved to West Cornwall, Conn., then to Heedleyville, and finally to Milton, Conn., where he operated his own factory. At times, during the 1880s and 1890s Hinchcliff employed a hundred men, some of whom went from Sheffield, for example, Herbert Register and Billy Rose.²

As in the Massachusetts textile towns of Lawrence, Fall River and New Bedford, the major immigrant groups in the cutlery industry of the upper Connecticut valley until the latter years of the nineteenth century were English, German, Irish and Canadian. The numerical ratios of the different groups varied from place to place and from time to time: but the English were always the smallest group, the earliest arrivals, and the most influential in the cutlery industry. The Germans, also a skilled immigrant group,

1. Sheffield Telegram, 10 Nov. 1866: obit., 19 Oct. 1866, aged 27.
2. Fred H. Seelye, Thomaston, Conn., to J. F. Dixon, 3 Jul. 1970.

were more numerous and, by 1870, were prominent in the towns of Greenfield, Shelburne Falls and Turners Falls: they were, however, set apart by linguistic, religious and cultural differences. The Irish were slowly drawn into the cutlery industry, but usually only after assimilation had made training available to them or their children. By the mid-1880s, the Germans constituted the largest immigrant group in the Massachusetts cutlery industry. In 1884, for example, a year of severe unemployment in the industry, workers' birthplaces were recorded as follows: United States, 277; Germany, 130; England, 88; Ireland, 74; Canada, 65; and other countries, 39.¹ Similarly, the polyglot population of Naugatuck, Connecticut, by the 1890s, included two generations of Irish immigrants, German and English (predominantly Sheffield) cutlery makers who arrived after the Civil War, and Swedish iron-foundry workers. These were augmented by infusions of Poles, Italians, Portuguese, Russians and Lithuanians, so that, by 1900, about one-third of Naugatuck's population was foreign-born.²

1. M. v H. Tabor, A History of the Cutlery Industry in the Connecticut Valley, p.98.

2. C. McL. Green, History of Naugatuck, p.171.

3. AMERICAN CENTRES OF YORKSHIRE STEEL, HARDWARE & CUTLERY IMMIGRATION.

(b) NEW YORK AND NEW JERSEY

Yorkshire cutlers and metalworkers were represented at several centres in New York State from the mid-nineteenth century onwards. Fearing a loss of status in Waterville, Connecticut, because of the threatened introduction of more native-born workers, a group of Sheffield immigrants, including James Roberts, snr., decided to establish a cooperative knife factory in New York State. In 1852, the group organised the New York Knife Company at Matteawan, Dutchess County, N.Y. In 1856, the cooperators moved westwards a few miles, across the Hudson river, to Walden, Orange County, a village incorporated in 1855; and there, on the falls of the Walkill¹ river, they bought a former cotton factory, wherein to manufacture fine pen and pocket, later table, cutlery.

By 1860, some 22 English-born cutlers, knife grinders and blade-forgers were residents of Walden; and of these, at least one-third, including Thomas J. Bradley and Joseph Rowland, the firm's president and secretary, respectively,

1. Or 'Walkill'.

had earlier worked in Connecticut.¹ George Barker, a cutler, formerly of Edward Street, Sheffield, had died at Walden in 1858.² Three years later, Barker's second daughter, Elydia, the wife of Alfred Simpson, died at the same place.³ Elizabeth Berlow, the second daughter of Thomas Berlow, of Sheffield, married William W. Johnston at Matteawan (later part of Beacon) in 1853.⁴ James Rothery, a native of Sheffield, but "for many years.... extensively engaged in the business of manufacturer, in which he.... accumulated a handsome property", died at Matteawan in 1858.⁵

Between at least 1867 and 1870, the New York Knife Company at Walden, transformed from a cooperative to an ordinary joint stock venture, continued to seek skilled men from Sheffield, in particular blade forgers and cutlers.⁶ The firm, with the help of James Roberts, jun., who was on an

1. C. Erickson, Invisible Immigrants...., pp.320-21.
2. Sheffield Independent, 3 Apr. 1858; aged 57.
3. Ibid., 29 Jun. 1861: obit., 20 May 1861, aged 28.
4. Sheffield Times, 29 Oct. 1853: marriage, 21 Sep. 1853.
5. Sheffield Independent, 24 Apr. 1858: obit., 1 Apr. 1858, aged 58 (citing Fishkill Standard).
6. Thomas J. Bradley, Walden, N.Y., to brother and sister, Sheffield, 23 Jul. 1867; T.J. Bradley to James Roberts, Sheffield, 30 Aug., 18 Oct. 1869, 16 May 1870. (Letters of Emigrants to America: LSE.M627).

extended visit to Sheffield, was able to obtain the necessary immigrants. "The Men you sent us out seem very steady men", wrote Bradley in 1869, "please accept our thanks for your Trouble". On at least one occasion, also in 1869, the firm paid £6.6s. for the passage of a blade forger. Others, "two or three cutlers, good workmen and steady men, who will pay their own passage out here", could be assured of "steady work" at Walden in 1870. Moreover, Roberts in Sheffield was requested to "get the names of men in different branches [of cutlery making] who would be willing to come here in case we wanted them".¹ Not only skilled workers, but also supplies were requested direct from Sheffield. In early 1870, Bradley wrote to Roberts:

"We wish you to get made for us as follows

2 Gross of Corkscrews with a flat tang.

2 Gross of Corkscrews with a square tang.

1 Gross of tweezers

1 Gross of pickers.

Send them through Mr. Askham of Broad Lane [Sheffield].

We want these immediately as we are entirely out...."²

1. T.J. Bradley to J. Roberts, 18 Oct., 26 Nov. 1869, 16 May 1870.
2. T.J. Bradley to J. Roberts, 24 Feb. 1870.

The New York Knife Company achieved comfortable prosperity. "We have been very busy all this Fall [1869]", recorded president Thomas J. Bradley, "and have done a large business. We had George Wolstenholme¹ up at our place about a week since; he thinks we have made very good progress; he has returned to Sheffield".² By 1870, Thomas Bradley possessed \$13,200 in real and personal property, a ten-fold increase since 1860. Also by 1870, 45 English-born cutlers and employees were working at the knife factory.³ In the autumn of that year, at the Walden home of Thomas Hall, the bride's cousin, Mabel Crookes, eldest daughter of Charles Crookes, printer and stationer, of Sheffield, married Daniel Martin.⁴ John Wigglesworth, a Sheffield cutler, his wife and three children, lived for a short time at Walden, as well as Newark, N.J., and Southington, Conn., before settling permanently at Naugatuck, Conn., by at least

1. George Wostenholm III, of George Wostenholm & Sons, of Sheffield, merchants and manufacturers of table, pen and pocket knives (P.C. Gerlick, The Sheffield Cutlery and Allied Trades, pp. 159-60, 171).
2. T.J. Bradley to J. Roberts, 26 Nov. 1859.
3. C. Erickson, Invisible Immigrants, p. 321.
4. Sheffield Telegraph, 12 Nov. 1870; marriage, 18 Oct. 1870. Post Office Directory of Yorkshire, 1857, pp. 561, 616, lists Charles Crookes at No. 13, Bow Street, Sheffield; and Post Office Directory, 1861, pp. 648, 729, at No. 42, Angel Street, Sheffield.

early 1873.¹ In 1879, Thomas J. Bradley and his wife Mary visited Sheffield, and on their return to Welden in the autumn, "found...we are very busy at the Factory and trade has decidedly improved since we have been in England, and the prices of everything much advanced".² When Thomas J. Bradley suffered a stroke the following year, Thomas Walker Bradley, Mary's son, became president, and the New York Knife Company employed 250 cutlers in the manufacture of "table and knife cutlery of every variety" in the 1880s. The firm continued until 1927.³

In 1870, a rival American firm, the Welden Knife Company, was established;⁴ and it seems likely that Sheffield immigrants were employed by both concerns in the 1880s. Thomas Ashberry, a Sheffield cutler, died at Welden in 1880.⁵ Some cutlers moved to the Naugatuck valley knife shops either temporarily or permanently when work was slack at Welden. But at least one Sheffield family always lived at Welden after leaving England. William Bredshaw and his son Fred, Sheffield cutlers, arrived in Welden in the mid-'eighties. Another son, Aaron, arrived there in 1887, leaving his wife Clara (née Fox)

1. Donald C. Wigglesworth, Severna Park, Maryland, to J.T. Dixon, 8 Jul. 1970.
2. Thomas J. & M. A. Bradley, Welden, N.Y., to the Loxleys, Sheffield, 7 Oct. 1879.
3. C.J. Erickson, Invisible Immigrants..., p.321.
4. Ibid.
5. Sheffield Local Register, 13 Oct. 1880 (noted by P.C. Gerlick, p.171).

and family in Sheffield. When Aeron had acquired sufficient means, Clara emigrated with the couple's seven children, ranging from Walter, aged 13, to William, aged 1 $\frac{1}{2}$. Three more children were born in Walden. Father William, and sons Fred and Aeron, Bradshaw all worked as cutlers in the Walden Knife shop. This later became the Schrade Company, situated, as late as 1970, in Ellenville, Ulster County, New York.¹

The Wahlstenholme File Company,² of Buffalo, N.Y., sent its English superintendent to Sheffield in 1864 to obtain the services of about twenty workers.³

Many skilled Sheffield workers, especially file and saw makers, were also attracted to the New York City area from the 1830s and 1840s onwards, in particular to the manufacturing shops of Williamsburg, a northern district of Brooklyn, across the East River from Manhattan. John Curtis, a Sheffield saw grinder, died in New York, perhaps Williamsburg, in 1836.⁴ The Roberts family, though cutlers, stayed briefly at

1. Ruth A. Bradshaw, Thomaston, Conn., to J.T. Dixon, 31 Aug. 1970, 11 Jan. 1971.
2. Despite the variation in spelling from 'Wolstenholme' or 'Westenhols', the firm may well have had initial connections with Sheffield.
3. C.J. Erickson, American Industry and the European Immigrant, p.42.
4. Doncaster Gazette, 8 Apr. 1836: obit., 3 Mar. 1836, aged 3.

Williamsburg in the summer of 1849 after emigrating from Sheffield, but, "doing very little until we was compleetly tired", the group found work at the Waterville Manufacturing Company. Mary Wilson (and her young son) also soon "tired of Williamsburg" and joined the Robertses in Connecticut.¹ Joseph A. Rhodes, a saw manufacturer from Sheffield, died in New York in 1853.² The following year, John Eyre, second son of the late John Eyre, file manufacturer, of Pond Street, Sheffield, died at Williamsburg.³ William Peece, a native of Wadsley Bridge, near Sheffield, was also resident in Williamsburg in 1862, when his wife Hannah died there.⁴ In the summer of 1866, Edward J. Holden & Co., file and saw manufacturers, of No. 4, Liberty Street, New York City, announced to Sheffield readers that vacancies for 130 "FILE FORGERS, GRINDERS, AND CUTTERS; ALSO, SAW MAKERS AND SAW GRINDERS", existed in the company's "nice, light, airy and comfortable shops" at Williamsburg, "30 minutes' walk from

1. James Roberts and family, Waterville, Conn., to John and Mary Loxley, Sheffield, 30 Sep. 1849 (Letters of Emigrants to America: LSE, M627; C. Erickson, Invisible Immigrants, p.322).
2. Sheffield Times, 28 Jan. 1854: obit., 31 Dec. 1853, aged 41.
3. Ibid., 30 Sep. 1854: obit., 22 Aug. 1854, aged 40, from cholera.
4. Sheffield Independent, 1 Mar. 1862: obit., 2 Feb. 1862, aged 50.

the City". Sheffield immigrants in these categories, it was claimed, could expect to receive an increase of from 25 to 55 per cent on those prices paid at home; and no doubt a number of workers responded to the offer.¹

There is also substantial evidence in Yorkshire press announcements of the residence of Sheffield natives in Brooklyn proper, to the south of Williamsburg, from at least the 1840s to the 1870s. Unfortunately, from these sources, only sparse indication of occupations is available. Even so, it must be assumed that some of the Sheffield immigrants so noted were metal workers, file or edge tool makers. George E. Rowlin, of Sheffield, married Eliza H. Thomas in Brooklyn in 1845.² John Hutchinson, the young child of Matthew Mottren, late of Sheffield, died in Brooklyn the following year.³ By 1850, Matthew and his wife, Mary Jane Mottren, had removed to Walleceburgh, Canada West, where they lost another young child, Mary Ruth.⁴

1. Sheffield Daily Telegraph, 24, 28, 31 Jul., 4, 7, 11 Aug. 1866.
2. Sheffield Iris, 6 Feb. 1845: marriage, 2 Jan. 1845.
3. Sheffield Mercury, 21 Feb. 1846: obit., 20 Jan. 1846, aged 14 months.
4. Doncaster Gazette, 6 Dec. 1850; Sheffield Times, 7 Dec. 1850: obit., 15 Oct. 1850, aged 4 yrs. 4 mths.

Matthew Hottam, perhaps the same, died at Washington, D.C., in 1862.¹ Thomas F. Green, from Sheffield, lived in Brooklyn for many years. In late 1849, he married Hannah Levinia Stevens, second daughter of James Stevens, of Brooklyn.² Green, "an ex-Alderman and supervisor of the Ninth Ward, City of Brooklyn", died there suddenly in 1863.³

Edward and Mary E. Kay, late of Sheffield, lost two daughters in Brooklyn in the 1850s. Katherine Ada died there in early 1853,⁴ as did Mary Augusta, the eldest, in 1855.⁵ Joseph Milner, son of Charles Milner, of Fargate, Sheffield, died in Brooklyn in 1855.⁶ So, too, did Thomas C. Hellely, formerly of Sheffield, and late of the firm of H. Jones & Co., New York brass-founders.⁷ Thomas Hellely, father of Samuel Hellely, of Broomhall Terrace, Ecclesall Road, Sheffield, died in Brooklyn in 1865.⁸

1. Sheffield Independent, 5 Apr. 1862: obit., 19 Feb. 1862.
2. Sheffield Times, 12 Jan. 1850: marriage, 28 Nov. 1849.
3. Sheffield Independent, 31 Jan. 1863: obit., 10 Jan. 1863, aged 50.
4. Sheffield Times, 26 Feb. 1853: obit., 3 Feb. 1853, aged 16.
5. Ibid., 2 Jun. 1855: obit., 15 Apr. 1855, aged 23.
6. Ibid., 25 Aug. 1855: obit., 4 Aug. 1855, aged 22.
7. Ibid., 19 May 1855: obit., 27 Apr. 1855, aged 35.
8. Sheffield Telegraph, 6 Nov. 1865: obit., 18 Oct. 1865, aged 73.

Thomas's wife, Jemina, had died there five years earlier.¹
Alfred Jackson and Mary Reven, both from Sheffield, were
married at St. Luke's Church, Brooklyn, in 1857.²

Sheffield immigrants continued to live in Brooklyn
in the 1860s. Martha Barnes, daughter of Edward Barnes,
of Winter Street, Sheffield, was married to James Fullman
in Brooklyn in 1862.³ George W. Hutton, son of A.C. Hutton,
of Sheffield, died there from "bilious fever" in 1863.⁴
His widow, Margeret, also died in Brooklyn five years later.⁵
In June 1864, Frederic Ellis Holdsworth, second son of
A. Holdsworth, Church Street, Sheffield, died from typhoid
and diphtheria in Brooklyn.⁶ William Hermar, late of
Sheffield, was living in Brooklyn in early 1865 when he
lost his young son of the same name.⁷ William Rawlins,
of Sheffield, was also living in Brooklyn in 1866 when
his wife Helen, whom he had married in New York in 1853,
died at Stockbridge, western Massachusetts.⁸ John Lownd

1. Dorchester Gazette, 26 Oct. 1860; Sheffield Times, 27 Oct. 1860; obit., 6 Oct. 1860, aged 68.
2. Sheffield Independent, 15 Aug. 1857; Sheffield Times, 22 Aug. 1857; marriage, 30 Jul. 1857.
3. Sheffield Independent, 8 Nov. 1862; marriage, 14 Oct. 1862.
4. Ibid., 10 Oct. 1863; obit., 25 Sep. 1863, aged 27.
5. Sheffield Telegraph, 6 Oct. 1868; obit., 22 Sep. 1868.
6. Ibid., 2 Jul. 1864; obit., 12 Jun. 1864, aged 23.
7. Ibid., 4 Feb. 1865; obit., 12 Jan. 1865, aged 1 yr. 9 mths.
8. Sheffield Times, 8 Oct. 1853, marriage, 15 Sep. 1853; Sheffield Telegraph, 16 Oct. 1866; obit., 29 Sep. 1866.

and James Tennant Bradbury both died in Brooklyn in 1866.¹ William H. Kirk, of Sheffield, married Lizzie P. Lamb in Brooklyn in 1866;² and the couple lost an infant son there in 1868.³ The following year, Frederick William Moss, was married to Addie Hohorst at the Methodist Episcopal Church, Pacific Street, Brooklyn.⁴ Henry and Emma Moorey lost their infant son in Brooklyn in September 1869.⁵ Incidentally, in 1871, John Perkinson, who, before emigrating from Yorkshire, had served Messrs. Fairbairn, Wellington Foundry, Leeds, for many years as a mechanic, died from hydrophobia at his house in Union Avenue, Green Point, Brooklyn.⁶ Thomas J. Bradley, president of the New York Knife Company, Walden, and his wife Mary visited friends in Brooklyn on their return trip from Sheffield in 1879.⁷

1. Sheffield Telegraph, 20 Mar., 29 May 1866: obits., Jan., 1st May 1866.
2. Sheffield Telegraph, 8 Dec. 1866: marriage, 7 Nov. 1866.
3. Ibid., 25 Jul. 1868: obit., 6 Jul. 1868.
4. Ibid., 4 May 1869: marriage, 7 Apr. 1869.
5. Ibid., 5 Mar. 1870.
6. Richmond & Biron Chronicle, 30 Sep. 1871: obit., 8 Sep. 1871, aged 40.
7. T. J. and M. A. Bradley, Walden, N.Y., to the Loxleys, Sheffield, 7 Oct. 1879 (Letters of Emigrants to America: L.S.S., N.627).

William Wild, a Sheffield cutler, was living in Bronxville, north of Brooklyn and east of Yonkers and the Hudson River, when his wife Annis, eldest daughter of Charles Fletts, of Cobden Cottage, Crookes, Sheffield, died there in 1863.¹

Less specific than Brooklyn or Bronxville, New York is also noted as the residence of a number of Sheffield immigrants. John A. Martin died there in 1860.² So, too, did Alfred Primrose, eldest son of Edward and Jane Primrose, of Sheffield, in 1865.³ Alfred Littlewood, formerly of Allen Street, Sheffield, lost his wife Mary from cholera in New York in 1866.⁴

The factories of New Jersey presented even greater opportunities to skilled Sheffield metalworkers than those of Williamsburg and Brooklyn, New York. As early as 1835, one Peterson manufacturer, beginning to make saws, was able to obtain at least two batches of men from Sheffield by offering high wages.⁵ But Sheffield edge-tool workers - albeit making many types of product and offering many types of skill - possessed only one group of abilities sought by New Jersey manufacturers. In the following four decades, every type of Sheffield skill was also to be found in firms producing Britannia ware and electro-plated goods.

1. Sheffield Independent, 21 Feb. 1863: obit., 3 Feb. 1863, aged 25.
2. Ibid., 22 Dec. 1860; Sheffield Times, 22 Dec. 1860: obit., 26 Nov. 1860, aged 42.
3. Sheffield Telegr. and, 20 Mar. 1865: obit., 1 Mar. 1865, aged 22.
4. Ibid., 31 Aug. 1866: obit., 11 Aug. 1866, aged 53.
5. The British Mechanic's and Labourer's Hand Book and True Guide to the United States (1840), p. 233, cited by R. F. Berthoff, British Immigrants, p. 70.

Among those whose occupations are specified in the Yorkshire press, Joseph Smith, a scissor smith from Sheffield, died at Newark, N.J., in 1849.¹ About 1861, Henry William and Charles Needham were spring-knife manufacturers of No. 4, Cavendish Street, Broomhall Street, Sheffield. Elizabeth Watson, a day-school teacher, lived with her father, James Watson, at No. 14, Cavendish Street.² Sometime in the early 1860s, Henry W. Needham and Elizabeth Watson married and left for America and Newark, N.J., where the husband presumably continued in the spring-knife trade. Their stay in Newark, however, was relatively short for, by July 1867, Elizabeth had died at her father's home in Sheffield.³

Sheffield workers were also occupied in the making of silverware, Britannia ware and electro-plated goods in New Jersey. Henry Thomas, a Sheffield silversmith, died in New Jersey in 1848.⁴ Zechariah Belcher, from Sheffield, died at Camptown, N.J., in 1849;⁵ and Elizabeth Foster, widow of Elijah Foster, an engraver from Sheffield, died in 1853 at the house of her son-in-law, Henry Belcher, also at Camptown, N.J.⁶ In the early 1850s, George Wallis

1. Sheffield Times, 5 May 1849.
2. Post Office Directory, 1861 (Street Directory, Sheffield), p.657.
3. Sheffield Telegraph, 20 Jul. 1867: obit., 15 Jul. 1867, aged 38.
4. Sheffield Mercury, 29 Jul. 1848: obit., early Jul. 1848, aged 26.
5. Sheffield Times, 15 Dec. 1849: obit., 14 Nov. 1849, aged 52
6. Ibid., 10 Sep. 1853: obit., 28 Jul. 1853, aged 62.

reported that "the Britannia metal goods...of Messrs. Hattersly and Dickenson, of Newark, New Jersey, [are] more ornate [than those manufactured at Troy, N.Y.], but of good forms".¹ Although there is no immediate evidence that this firm was founded by Sheffield immigrants, Charles Dickinson, described as a "manufacturer of electro-plated and Britannia metal goods", died at Newark in 1862.² Moreover, before emigrating to New Jersey, Dickinson, it was noted, had been "for many years with the late firm of Broadhead and Atkin, [Britannia metal] manufacturers, Sheffield".³

1. N. Rosenberg (ed.), The American System of Manufactures..... p.286.
2. Sheffield Independent, 28 Apr. 1862: obit., early 1862, aged 47.
3. Pisot and Co.'s Royal National and Commercial Directory.... (1841), p.325, lists Broadhead and Atkin, North Street Works, North Street, Sheffield. Slater's Royal National Commercial Directory of the Northern Counties (1854-55), I, p.487, lists Broadhead and Atkin, Britannia metal manufacturers and angle-platers, Britannia Works, Love Street, Sheffield, and No. 15, Bouverie Street, Fleet Street, London. An advertisement (Ibid., I, p.11) indicates the firm's wide range of products: "Patent Electro-Silver Platers and Gilders, Merchants and Manufacturers of Electro-plated and British Plate Goods in Spoons, Forks, Ladles, etc. Angle-Argentine Plate in Tea and Coffee Services, Cruet Stands, Candlesticks, Toast Racks, etc. etc. Best Britannia Metal Wares, Stone, Earthenware & China Jugs Mounted with Silver Plated and Britannia Metal Covers".

Again, Joseph Hattersley, a silver plater, and Selina Dewansap, both from Sheffield, were married at Newark in 1849.^{1*} William Hattersley, from Sheffield, was living in Newark when his wife Margeret died there in 1856.^{2*} Additionally, George Wilkinson, a Sheffield silver plater, died at Patsden, N.Y., in 1842,^{3*} as did Henry Beines, a Sheffield silversmith, at Preston, N.J., in 1863.^{4*}

Augmenting those already noted, several press announcements refer to the deaths, marriages or residences of Sheffield or, in one case, Rotherham immigrants in New Jersey. Although in the following record, the immigrants' occupations are omitted, their location in New Jersey, with only two exceptions, is given as Newark; and the inference is clear. Charles Hobson died there in 1861 at the home of Joseph Roberts.^{5*} In 1863, Thomas Lilley, son of George Lilley, of Moorgate, Rotherham, married Edna E. Slater at Newark.^{6*} John Cassin, from Sheffield, died at Newark the following year.^{7*} William Widdowson had returned from Newark to Crookes, Sheffield, at the time of his death in 1866.^{8*} Jane Elisabeth, wife of James Herten

1. Sheffield Times, 22 Sep. 1849: marriage, 26 Aug. 1849.
2. Ibid., 30 Aug. 1856: obit., 30 Jul. 1856, aged 55.
3. Sheffield Mercury, 10 Sep. 1842: obit., 4 Jun. 1842, aged 62.
4. Sheffield Independent, 26 Sep. 1863: obit., 23 Jul. 1863, aged 54.
5. Ibid., 22, 29 Jun. 1861: obit., 22 May 1861, aged 89.
6. Ibid., 22 Aug. 1863: marriage, 13 Jun. 1863.
7. Sheffield Telegraph, 19 Nov. 1864: obit., 1 Nov. 1864, aged 60.
8. Ibid., 20 Mar. 1866: obit., 13 Mar. 1866, aged 41.

formerly of Sheffield, died at Newark later the same year.^{1.}
In 1867, James Norton married again, this time to the widow
(Hannah F.) of another Sheffield immigrant, Thomas Marshall.^{2.}
Hannah's young daughter by her first marriage, Jessie
Flintoft Marshall, died at Newark in 1870.^{3.} In 1868,
Frederick Augustus Mappin, late of Sheffield, married
Arabella Goodlad at Newark.^{4.} Jabez Lee, formerly of
Cemetery Road, Sheffield, lost his wife at Newark, also in
1868.^{5.} William Bellamy, a native of Sheffield, died at
Newark in 1870.^{6.} Mary Bennett, late of Jersey City, N.J.,
died at her nephew's home in Watilda Street, Sheffield,
in 1859.^{7.} John Sawyer, from Sheffield, was living in
Elizabeth, N.J., when his infant daughter Mary died there
in 1868.^{8.}

1. Sheffield Telegraph, 3 Jul. 1866: obit., 14 Jun., 1866, aged 37.
2. Ibid., 10 Sep. 1867: marriage, 13 Aug. 1867.
3. Ibid., 14 May 1870: obit., 27 Apr. 1870, aged 8.
4. Ibid., 3 Oct. 1868: marriage, 25 Aug. 1868.
5. Ibid., 28 Nov. 1868: obit., 3 Nov. 1868, aged 23.
6. Ibid., 7 Jul. 1870: obit., 12 Jun. 1870, aged 39.
7. Sheffield Independent, 24 Dec. 1859; Doncaster Gazette, 30 Dec. 1859: obit., 21 Dec. 1859, aged 55.
8. Sheffield Telegraph, 10 Aug. 1868: obit., 23 Jul. 1868.

The New Jersey industry of wire making also attracted Yorkshire immigrants, especially from Halifax. Samuel Binns, a Halifax wire manufacturer, died in New Jersey in 1875.¹ John Foxler, a wire drawer, formerly of Brunswick Street, Halifax, was working at Trenton, N.J., when his wife Theresa died there in 1884.² Forty years earlier, in 1844, an interesting case had been heard in the Magistrates' Court, Ward's End, Halifax. John Fortune, a wire drawer, was charged with refusing to fulfil a contract entered into by him and several others with Cocker & Co., wire manufacturers, of Derbyshire and New York. The firm of Cocker, hoping to establish a manufactory in New York, had some weeks earlier inserted an advertisement for wire drawers in the Halifax Guardian.³ Subsequently, on 19th July, some fifteen wire drawers, including Fortune, had entered into a written agreement with Messrs. Cocker to go to New York and work there for three years at certain wages. The firm had agreed to pay their passages and to supply them with provisions for the journey. The magistrates decided that the only breach

1. Halifax Guardian, 28 Aug. 1875: obit., 11 Aug. 1875, aged 36.
2. Ibid., 11 Oct. 1884: obit., 17 Sep. 1884.
3. Probably Halifax Guardian, 22 Jun. 1844. The advertisement read "WANTED - A FEW IRON WIRE DRAWERS. Men who thoroughly understand their Business", but did not specify employment in New York.

of contract was in Fortune's refusal to go to Liverpool, in order to sail for America. They also agreed with defending counsel that this was no sort of service of an artificer and that service in New York could not be enforced by magistrates in England. The case was therefore dismissed.^{1.}

1. Halifax Guardian, 31 Aug. 1844.

3. AMERICAN CENTRES OF YORKSHIRE STEEL, HARDWARE & CUTLERY IMMIGRATION.

(c) PITTSBURGH AND PHILADELPHIA

British skills found their way into American furnaces, forges and foundries. Most of the metallurgical advances of the nineteenth century originated in Britain and were copied in the United States. Immigrant British iron and steel workers hastened the transference of these new processes to the United States.¹ Local labourers might form the bulk of the workers at a new Pittsburgh steel mill in the 1860s, but the expertise of production came from skilled Sheffield, Birmingham and Manchester immigrants.²

Prior to the introduction into the United States of the Bessemer steel making process in the years after the Civil War, steel and wrought-iron manufacture was expensive and laborious and required skilled workers. Many of the puddlers and heaters needed to handle the molten iron were obtained from Britain and Germany.³ Although skilled labour such as this was at a premium, by no means all British workers seem to have found favour with their American employers. Joseph Whitworth's 1854

1. R.T. Berthoff, British Immigrants....., p.62.

2. Ibid., pp.64, 70.

3. C.J.Erickson, American Industry and the European Immigrant...., p.40.

Report on the New York Industrial Exhibition observed that:

"The manufacture of cast steel is not carried on to any great extent. Some works have been started in Pittsburgh which have hitherto met with great difficulties, but they are now more successful. Workmen were obtained from Sheffield, but they were intractable, and failed to give satisfaction to their employers".^{1.}

In the mid-'sixties, recruitment through emigrant agencies and occasional importation by manufacturers of key workmen on contracts satisfied some of the demand for foreign expertise in American blast furnaces and in the puddling and moulding processes. William Hellatt, for example, a Sheffield steel smelter, died at Pittsburgh in late 1863.^{2.} Sometimes, foremen or superintendents, or

1. N. Rosenberg (ed.), The American System of Manufactures....., p.336.

2. Sheffield Independent, 5 Dec. 1863: obit., 10 Nov. 1863.

even manufacturers themselves, sailed for England to obtain workmen skilled in specific processes. Twenty workers - melters, forgers, tilers and rollers - were selected by Isaac Jones, a partner in the Pittsburgh firm of Jones, Boyd & Company, when he visited Sheffield in 1863.¹ Again, Sheffield manufacturers sometimes assisted their American counterpart to recruit workers, especially when British capital was invested in American industry. Wade & Butcher, of Sheffield, apparently helped to recruit workers for the Pennsylvania Steel Company at Harrisburg, "the two works being connected together by mutual interest and association".²

By the mid-1860s, immigrant craftsmen were beginning to find that their services were more likely to be required as foremen or supervisors than as "better class workmen".³ One Sheffield immigrant wrote home in 1866:

1. C.J. Erickson, American Industry and the European Immigrant, p.40.
2. Ryland's Iron Trade Circular, 30 Dec. 1865, p.16, cited by C.J. Erickson, American Industry and the European Immigrant, p.42.
3. Ryland's Iron Trade Circular, 3 Jul. 1869, p.7, cited by C.J. Erickson, American Industry and the European Immigrant, p.123.

"I have had a great deal of travelling about...from Boston to Pittsburg, to procure machinery for four new mills and a quantity of steam hammers I am putting down for the Whipple File and Steel Company which has used up my time. I have got a good situation. I am receiving 15 dollars per day for myself and my son. He is turning rolls. I am managing the old steel works and erecting new ones, with a capacity to make 20 tons [of] cast steel per day...."¹

Nevertheless, wrote Henry Walker, formerly manager of W. & S. Butcher, Sheffield, and latterly manager of a steel manufacturing concern in Pittsburgh, "in a short time the services of Englishmen will no longer be required".² Even so, Albert Cecil Maltby, youngest son of Albert and Mary Jane Maltby of Sheffield, was resident in Pittsburgh at the time of his death in June 1870.³ Arthur and Ellen Lee,

1. Letter, 3 Apr. 1866, in Sheffield Telegraph, 21 Apr. 1866.

2. Sheffield Independent, 22 Mar. 1865.

3. Sheffield Telegraph, 28 Jun. 1870: obit., 11 Jun. 1870.

lets of Attercliffe, also lost their young child at Pittsburgh in the same month.¹

In the late 1870s, American manufacturers made renewed efforts to recruit skilled immigrants from British iron and steel centres. The attempts were successful in 1879 in attracting workers experiencing severe unemployment in Sheffield and at the Low Moor Iron Works, Bradford. Between 1880 and 1885, however, the immigration of puddlers and iron moulders declined steadily, mainly as a result of American union opposition to recruitment.²

By the mid-1850s, Pennsylvania's furnaces and forges produced about one-half of America's pig, cast and wrought iron - in 1856, some 448,515 out of 782,958 tons. Philadelphia itself was "situated in the district which is entitled to be called the centre of the Iron production in the United States"; and adjacent Montgomery County provided ore in considerable quantities.³ In the neighbourhood of Philadelphia, forges and rolling mills were usually separate establishments; and in 1856, eastern Pennsylvania possessed 116

1. Sheffield Telegraph, 13 Jul. 1870: obit., 18 Jun. 1870.
2. C.J. Erickson, American Industry and the European Immigrant... pp.128-29.
3. E.T. Freedley, Philadelphia and its Manufactures...in 1857 (1859), pp.96-97, 283-84.

forges and 63 rolling mills, including those in the city. In Philadelphia, however, forges and rolling mills were normally combined establishments, and significantly, in 1860, the majority were situated in the northern districts of the city: in Kensington, Ward 23 (Frankford), Fairmount and Manayunk. Philadelphia was also important for the production of steel castings.^{1.}

As distinct from the manufacture of iron and steel, Philadelphia also produced almost every conceivable type of finished metal product. The following list is by no means exhaustive: stoves, hollow-ware, ornamental ironwork and railings, safes, cotton and woollen machinery, railway machinery, machinists' tools, paper-makers', printers' and bookbinders' machines, fire engines, and gas and water apparatus. Moreover, every type of product under the general heading of 'hardware and tools' was manufactured in the city: saws, forks, shovels, files, locks, bolts, rivets, scales and balances, edge tools and cutlery.^{2.}

1. E.T. Freedley, Philadelphia and its Manufactures...in 1857 pp.286-87, 289-90; S.B. Werner, The Private City: Philadelphia in Three Periods of its Growth, maps oppos. pp.49, 61.
2. E.T. Freedley, Philadelphia and its Manufactures...in 1857. pp.290-304, 328-37.

Silver, gold, electro-plated and Britannia wares were also produced.¹ Philadelphia's forges and rolling mills were mainly located in the city's northern districts, and the north-west also boasted the city's metalworking (and locomotive building) centre by 1860, manned by workers living nearby.²

On the evidence available, English immigrant metalworkers, especially from Sheffield, were never so numerous as Yorkshire textile workers in Manayunk, Germantown (a district which in the 1850's had far more British than German immigrants)³ and Frankford. Even so, it is clear that Philadelphia's vast array of metal-goods production attracted many Yorkshire workers from about the 1840's onwards. These workers, in turn, supplied essential skills which further assisted the growth and development of relevant industries in Philadelphia.

Thomas E. Wells, "for many years an active, and useful member of the society worshipping in Surrey Street Chapel", emigrated from Sheffield in January 1848. Under the style of

1. E.T. Freedley, Philadelphia and its Manufactures...in 1857, pp. 348-51.
2. S.B. Warner, The Private City..., pp. 99, 61.
3. C.J. Erickson, Invisible Immigrants..., p. 331.

T.E. Wells & Co., he manufactured joiners' tools at the Union Works, Philadelphia, until his death there in 1853.¹ After Wells' demise, Booth & Mills, themselves perhaps Yorkshire collaborators, succeeded T.E. Wells & Co.² Although the new firm employed only about twenty workers, its manufactures continued to receive the acclaim of T.E. Wells & Co.'s products. Freedley recorded proudly that the latter company "received the prize medal at the London World's Fair; and the workmanship which was awarded that high distinction over Sheffield and Birmingham, was executed, in part, at least, by the members of the present firm".³ The Franklin Institute Report for 1856 listed: "Braces and Bits, Saw Pads, Snake Shaves, and other light tools, by BOOTH & MILLS, Philadelphia, Excellent quality, good workmanship, and reasonable in price. - A First Class Premium".⁴ Freedley reported again:

1. Sheffield Times, 20 Aug. 1853; Doncaster Gazette, 26 Aug. 1853; obit., 2/3 Aug. 1853, aged 45/42, from dysentery.
2. E.T. Freedley, Philadelphia and its Manufactures...in 1857, p.474, lists: "Braces and Bits - BOOTH & MILLS, Little Washington, below Ninth [Philadelphia]".
3. Ibid., p.337.
4. Ibid., p.336.

"In 1857, the American Institute in New York awarded [Booth & Mills] a prize medal; and it would seem that, by the consent of experts and good judges, both in England and in the United States, they are unsurpassed, if equaled, in the production of these important tools. They claim that the best or first quality of their manufactures is both cheap and better than any imported. The mode of tempering adopted by them is said to be specially remarkable in its durability; and the stocks of their tools are certainly noteworthy for their elegance. Their manufactures comprise Braces and Cast-steel Bits, Squares, Devils, Spoke-shaves, Turnscrows, Saw-pads, Pricker-pads, Cast-steel Gimlets, &c. They are sole manufacturers of T.E. Wells & Co.'s Braces, Bits, &c.; also Patent Anti-friction Braces...."¹

Michael Potter Fartridge, "Late from England", was engaged in making awl blades and mattress and collar needles

1. E.T. Freedley, Philadelphia and its Manufactures...in 1857.
pp. 337.

in Blair Street, between Morris and Wood Streets, Kensington, Philadelphia, in 1857.¹ Thomas C. Barrow, a surgical instrument maker from Sheffield was married in Philadelphia in 1854.² Henry Moore, by inference a fairly recent immigrant, died in Philadelphia in July 1859, aged 39. Before leaving England, he had been "for 27 years a faithful servant in the employ of Messrs. Barber & Son, Norfolk Street, Sheffield".³

1. E.T. Freedley, Philadelphia and its Manufactures....in 1857 pp. 470, 490.
2. Sheffield Times, 16 Sep. 1854: marriage, 6 Aug. 1854, to Elizabeth, eldest daughter of Capt. R. Corson, H.S., of Port Richmond, Pennsylvania.
3. Sheffield Times, 23 Jul. 1859: obit., 20 Jul. 1859. Hannah Moore, widow of Joseph Moore, and perhaps mother of Henry Moore, died in Philadelphia in 1857, aged 62 (Sheffield Independent, 24 Oct. 1857: obit., 12 Oct. 1857). John Barber was in business from about 1817 at South Street, Sheffield. By 1828, the firm of John Barber & Son, merchants and manufacturers of "Old English razors, pen and pocket knives, scissors, razor strops and cases", was at No. 12, Norfolk Street. From 1852 to 1865, "Stephen Martin, (late John Barber & Son), merchant and old English razor....etc., Manufacturer", was to be found at 29 Norfolk Street and 19 Sycamore Street. From 1863, Stephen Martin, Jr. & Co., "Spiegel, bar and pig iron; menses and gunnister merchants", were at 29 Norfolk Street. Stephen Martin, junior, eventually moved to premises at Brightside. From 1865 to 1879, John Arthur Warburton Barber was a manufacturer of razors in Norfolk Street. On one occasion, the early John Barber issued a notice claiming that some manufacturers had been imitating his stamp and that in future he would stamp his articles with a square and compass (Sheffield City Libraries, L.C. 5-37).

Before about 1860, 95 per cent of all files used in the United States was supplied by overseas manufacturers, mainly in England.¹ Nevertheless, in 1857, nine Philadelphia establishments were manufacturing rasps ("made here more cheaply than in Europe, except the large sizes, where the price of steel may affect the cost of the manufactured article") and files of every type ("from those used by jewelers, dentists and watchmakers, to those required by metal-workers in heavy operations"). In that year, John B. Smith, of New Street, was Philadelphia's largest file and rasp manufacturer.² George Machen, a file manufacturer, late of Sheffield, died in Philadelphia in 1859.³

Several Philadelphia firms were also producing cutlery in 1857. Some concerns specialised in making razors, some in shears and scissors, and yet others in table cutlery. Of the last, B. Richardson's products were perhaps the most celebrated.⁴ In 1860, George Shaw, a Sheffield haft presser, died at his son's home in Philadelphia.⁵

1. J.T. Macfarlane, Manufacturing in Philadelphia, 1683-1912, p.53.
2. E.T. Freedley, Philadelphia and its Manufactures...in 1857, pp.331-32, 482.
3. Sheffield Independent, 19 Mar. 1859: obit., 26 Jan. 1859, aged 66.
4. E.T. Freedley, Philadelphia and its Manufactures...in 1857, pp.337, 480, 487.
5. Sheffield Times, 14 Apr. 1860; Sheffield Independent, 14 Apr. 1860: obit., 22 Mar. 1860, aged 68.

References to Sheffield natives living in Philadelphia in the middle decades of the nineteenth century are scattered throughout contemporary Yorkshire press announcements. Apart from those noted earlier, not all these expatriates, of course, would be engaged in producing metal goods. It seems safe to assume, however, that although their occupations do not receive mention, some at least were, or had been, employed in one or another branch of Philadelphia's iron and steel and metal goods industries.

William and his wife Mary Hodgson, late of Endcliffe Hall, near Sheffield, died at advanced ages at Germantown in 1856 and 1857.¹ Charles Heppenstall, from Sheffield, died in Frankford in 1867.² Two years later, Charles Asquith, late of Sheffield, was living in Germantown when his wife Maria died there.³

1. Doncaster Gazette, 3 Oct. 1856; Sheffield Times, 4 Oct. 1856; Leeds Mercury, 7 Oct. 1856; Sheffield Independent, 31 Jan. 1857: obit., Mary H., 13 Sep. 1856, aged 82; obit., William H., 3 Jan. 1857, aged 80.
2. Sheffield Telegraph, 23 Jul. 1867: obit., 8 Jul. 1867, aged 35.
3. Ibid., 19 Jun. 1869: obit., 12 Jun. 1869, aged 42. Germantown and Frankford, as well as other nearby villages and towns, were absorbed by Philadelphia in 1854 (E.T. Freedley, Philadelphia and its Manufactures....in 1852, p.57).

Though less specific than Germantown or Frankford, Philadelphia is noted many times. Robert Wade, of Sheffield, was married in Philadelphia in 1845;¹ and he was still living there when his wife died in 1852.² Mary Jarvis, the wife of a Sheffielder, died in Philadelphia in 1848.³ John M. Fisher, from Sheffield, was living in Philadelphia when his wife Hannah, also from Sheffield, died there in 1849.⁴ In 1853, William Henry Woodhouse, eldest son of the late James Woodhouse, of Sheffield, died in Philadelphia.⁵ William Richardson, from Sheffield, died in Philadelphia in 1855,⁶ though whether he had any connection with B. Richardson table cutlery manufacturer, of No. 117, South Second Street, Philadelphia, is not known.⁷ John Ferist, late of Sheffield, lost his wife Ann in Philadelphia, also in 1855.⁸ Sallie Westenholm Fisher, daughter of Joseph S. Fisher, formerly of Sheffield, married William B. Kempton in Philadelphia in 1863.⁹ Again, whether there was any connection with Samuel Fisher,

1. Sheffield Iris, 12 Feb. 1846: marriage, 15 Dec. 1845, to Charlotte Bourne Swett.
2. Doncaster Gazette, 18 Jun. 1852: obit., 21 May 1852.
3. Ibid., 28 Apr. 1848: obit., 19 Mar. 1848, aged 77.
4. Sheffield Times, 22 Sep. 1849: obit., 13 Aug. 1849, aged 51.
5. Ibid., 21 Jan. 1854: obit., 11 Nov. 1853.
6. Ibid., 10 Feb. 1855: obit., 20 Jan. 1855, aged 50.
7. E.T. Freedley, Philadelphia and its Manufactures... in 1857, pp. 337, 480, 487.
8. Sheffield Times, 25 Aug. 1855: obit., 30 Jul. 1855.
9. Sheffield Independent, 19 Dec. 1863: marriage, 23 Nov. 1863.

manufacturer of pearl card cases, jewellery and pearl work, and mirrors, of No. 1509, Linden Street (west of Fifteenth, between Market and Chestnut), Philadelphia, or with Fisher & Co., manufacturers of gift mouldings, of No. 141, South Second Street, is not known.¹ George Goodall, eldest son of George Goodall, of Wentworth Place, Sheffield, died in Philadelphia in 1865.² Later, the same year, the Sheffielder Walter Smith married Amy Wood in Philadelphia.³ Andrew Staley, formerly of Sheffield, died in Philadelphia in 1866,⁴ as did William Cokes (of Spitalfield, Sheffield) and Matthias Scott.⁵

Additionally, several manufacturers operating in Philadelphia in 1857 possessed names of distinct Yorkshire, or at least North-country, character. There is, of course, no certainty that they were Yorkshiresmen, or if so, that Yorkshire forebears or connections were recent. Further exhaustive research would be necessary to obtain evidence,

1. E.F. Froodley, Philadelphia and its Manufacturers...in 1857, pp. 477, 480, 483.
2. Sheffield Telegraph, 2 Feb. 1865: obit., 6 Jan. 1865, aged 32.
3. Ibid., 25 Nov. 1865: marriage, 26 Oct. 1865.
4. Ibid., 6 Mar. 1866: obit., 3 Feb. 1866, aged 60.
5. Ibid., 25 Aug. 1866: obits., 20 Jul., 1 Aug. 1866, aged 38 and 66.

if available, verifying or disproving the relationship between Yorkshire and Philadelphia. In textiles, James Crawshaw, of No. 1516, North Second Street, Philadelphia, was manufacturing list and rag carpets.¹ In hardware and edge tools, C. Hammond, of No. 503, Commerce Street, was manufacturing axes and cutlery.² George F. Pilling, of No. 214, Gold Street, above Second, Philadelphia, was producing gold and silver combs and thimbles.³ George C. Howard, of No. 15/17, South 18th Street, Philadelphia, manufactured air pumps, bonnet pressing machines and engravers' tools.⁴ J. Howard & Co., of No. 112, Bred Street, made steam lasts;⁵ and Henry Howard, at Twenty-third and Hamilton, manufactured machinery.⁶ Moreover, Henry Calverley at No. 205, Quarry Street, Philadelphia, manufactured candle moulds, coffin trimmings and fancy wares in Britannia metal;⁷ and John Calverley, at No. 305, Race Street, produced candle moulds.⁸

1. E.T. Freedley, Philadelphia and its Manufactures...in 1857, p. 476.
2. Ibid., pp. 471, 481.
3. Ibid., pp. 479, 500.
4. Ibid., pp. 469, 473, 481, 488.
5. Ibid., p. 487.
6. Ibid., p. 488.
7. Ibid., pp. 475-76, 496.
8. Ibid., p. 476.

PART 5: EMIGRATION FROM THE NORTH YORKSHIRE LEADMINING
INDUSTRY TO NORTH AMERICA.

1. THE BACKGROUND TO YORKSHIRE LEADMINING EMIGRATION.

In the Middle Ages, the chief leadmining areas were to be found at Alston in Cumberland, in south Derbyshire, and on the Mendips, the country rock in each case being Carboniferous Limestone.¹ As in these areas, however, the extraction of lead ores in Yorkshire had a far earlier history, for the Old Gang mines in Swaledale were worked in pre-Roman times. These and others were worked extensively by the Romans themselves, by the monks of the Cistercian abbeys, and also in Tudor times.² The industry reached its peak in the late eighteenth and nineteenth centuries, but declined rapidly during the decade 1860-70. By 1880, mining had almost ceased, though small scale extraction producing modest profits continued in Arkengarthdale until the early years of the present century.³

1. W. Smith, An Economic Geography of Great Britain, p.75.
2. Cuchleine A.M. King, The Yorkshire Dales (The Geographical Association, Sheffield, 1960), p.21.
3. Ibid.; Arthur Reistrick, Lead Mining in the Yorkshire Dales (Clapham, N. Yorkshire, 1972), p.27.

Leadmining in Yorkshire was virtually confined to the Pennine Dales, the ores, by far the most important of the Dales' mineral resources, occurring in rocks of the Carboniferous age - Carboniferous Limestone, the Yoredale Series and Millstone Grit. Consequently, the most important centres about which there was the greatest concentration of mines were at Reeth (Swaledale), Greenhow Hill (Nidderdale) and Grassington (Wharfedale). Scattered lead mines also occurred in some of the other Dales, in addition to one or two in Bowland, around Chatburn, at Cononley (near Skipton), and in Wensleydale, with a few at Lunehead on Stainmore. The two outstanding Yorkshire leadmining fields, however, produced the considerable number of mines in Swaledale and Arkengarthdale, extending southwards over the hills into the north-side of Wensleydale, and the mines of the Grassington, Hebden and Greenhow area, between Wharfedale and Nidderdale.

Whilst the history of the Yorkshire leadmining industry lies outside the scope of the present study, certain broad stages in its development must be noted as a precursor to the peak exploitation - and periodic depression - of the nineteenth century. The lead veins of the northern Pennines had their richest ores near the weathered outcrop, so that the

1. A. Raistrick, Lead Mining in the Yorkshire Dales, pp.3-4.

unplanned, shallow mining methods of the Middle Ages presented little handicap.¹ Individual miners extracted small amounts of ore which were sold to merchants who in turn passed on the ore to a smelter. Large companies, such as the Society of Mines Royal, appeared in the Elizabethan period: grants allowed the companies to mine over many counties and sufficient capital enabled them to employ men skilled in mining and smelting techniques from abroad, especially from Saxony. Again, large landowners, now the possessors of former monastic estates and keen to profit from their lands, developed mining on a larger scale. Typical of these were Lord Wharton, in Swaledale and Arkengarthdale, the Metcalfes and Conyers, in Wensleydale, and the Earls of Cumberland, in Wharfedale. These owners appointed managing agents, skilled in mining; and some encouraged prospecting in new areas as well as the immigration of miners from outside the county.² Bell pit workings gradually gave way to shafts, more widely spaced along the veins, in the seventeenth century, though sooner or later, despite the use of buckets, the existence of water limited, or indeed prevented, the exploitation of a particular shaft.³

1. W. Smith, An Economic Geography..... p.75.

2. About 1603, for instance, the Earl of Cumberland introduced miners from his Derbyshire mines to develop mines on Yarnbury and Grassington Moor.

3. A. Reistrick, Lead Mining in the Yorkshire Dales, pp.13, 16.

Yorkshire lead mining expanded rapidly in the eighteenth century. In Swaledale, mines were being worked in the early years of the century on Beldi Hill at Swinnergill, near Keld, and along the Frierfold vein eastwards to the Old Gang. Enterprises south of the river included those at Oxnop Gill, on Whiteside and Harkerside, and on Grinton Moor. Several mines were operating in Arkengarthdale and on Hurst and Herrick Moors. The use of gunpowder after 1700 effected an increased rate of working. The Wharfe estates were confiscated after the 1715 Jacobite Rebellion, and the later recipients of the land - the Denys family - placed lead exploitation in the hands of new companies. The London (Quaker) Lead Company, already working mines in North Wales, Derbyshire and Alston Moor, controlled the mines of Grinton and Herrick, together with some in Wensleydale and most of those in Teesdale. The company rebuilt the old mill at Grinton, leased and developed the Merryfield mines and the Frierfold veins, and leased the Hurst mines, rebuilding the Low Hill at Herrick. The company relinquished its interests in Swaledale by 1790. Dr. Bathurst purchased the Arkengarthdale mines from the Crown in 1656, and these were later worked under the style of the C.B. Company.^{1.}

1. i.e., Charles Bathurst Company.

A powder house was erected near Lengthwaite, the location of the firm's principal smelt mills. In Wensleydale, mines were worked on the moors behind Askrigg and in Apedale; and at Keld Heads, above Wensley, the Chaytor family exploited rich finds. To the south, the Proctor family developed the mines on Greenhow Hill and Appletreewick Moor in an area earlier held by Fountains Abbey, though the exploitation was by means of bell pits and shallow shafts. The Stoney Grooves and Merryfield groups of mines were worked in the Ashfoldside Beck valley, Greenhow. Deep shafts in the area were overcome by water, though later in the eighteenth century, some alleviation of the problem was obtained by the use of pumps operated by a large water-wheel, and then, from 1784 onwards, by the use of steam engines. Similarly, in upper Wharfedale, exploitation was early restricted to mines worked by bell pits, except for the levels and deep shafts at Kettlewell opened by Swaledale men. Kettlewell possessed one smelt mill, and Grassington, two. A period of expansion began in the 1730s under agents appointed by the Earl of Cumberland. Deeper mining and better drainage was made possible throughout the field by the example set by the horse whim constructed on the Coalgrove mine. A large new smelt mill with ore hearths of greater capacity was erected near the mines in 1765. The latter years of the eighteenth century

heralded Yorkshire lead mining developments in the nineteenth. Large companies were formed which secured leases of mining ground rather than leases of specific veins. Heavy capitalisation enabled the undertaking of non-productive but investigatory work, especially the driving of long levels to prospect for new veins or to drain already productive workings; and some levels were planned as a principal ore-gate for a number of mines. Large companies were able to introduce mining engineers as agents and general managers; and individual mines were managed by deputy - and local agents.¹

Two further aspects of the lives of Yorkshire lead miners in the early nineteenth century need to be broadly outlined: the organisation of the miners' work and their general working and social conditions. During the eighteenth century, many miners formed small partnerships of three or four men - or, on Greenhow, Nidderdale, more commonly of from four to six men² - who contracted to work in a particular place in the mine and who bargained to be paid a price for work done and for any ore produced. This system of 'bergeins' continued for most of the nineteenth century. Work and wages were, however, very uncertain: when good ore was available, especially when unexpected, good money might be made for a time, but the reverse could be equally

1. A. Reistrick, Lead Mining in the Yorkshire Dales, pp.16-18, 20; Ella Pontefract & Marie Hartley, Wharfedale (London, 1938), pp. 10, 57, 65, 72, 74-75, 91, 110, 123, 132, 140-46, 174, 176, 187, 189.

2. Bernard Jennings (ed.), A History of Nidderdale, p.296.

true. Estimates of the possible ore and difficulty of ground were made beforehand both by miner and agent, and this knowledge gained from experience guided the bargaining before the price was finally agreed. Some miners, however, worked for a direct wage agreed at so much a fathom out in sinking a shaft or driving a level. Other workers, like the smelters, might be paid by the shift or by an amount per ton of lead smelted. When levels were driven in 'lead' ground (which did not produce ore), this was done either by bargains of piece work, varying from £1 to £15 a fathom according to difficulty, or by direct wages.¹

Whatever the agreed system of payment, wages varied considerably according to the luck of the mine. Clearly, the prosperity of the mines was also greatly affected by the market price of lead. World prices fluctuated widely, and in the first half of the nineteenth century, periods of boom were punctuated by several great depressions. In the serious depression between 1829 and 1833, the price of lead dropped to a level lower than for fifty years before or after. In periods of crisis, the smaller the mine, the lower the wages generally were; and the less able the mine was to continue exploitation. Wages were poor in the eighteenth century, rarely rising above an average of 6s. a week. By the middle of the nineteenth century, average weekly earnings in the Pennine mines seem to have been mainly between 14s. and 18s.

1. A. Reistrick, Lead Mining in the Yorkshire Dales, pp. 19, 26.

a week, but with very wide fluctuations. In 1832, when average wages were claimed to have fallen from between 14s. and 16s. a week to about 7s. or 8s. because of the depression, the Poor Law Commission was informed that "the miner...sometimes may earn £1 a week, at other times he may get only 3s. a week, and sometimes nothing at all".¹ In Swaledale, during the eighteenth and early nineteenth centuries, the average rate of payment was about 1s. a shift, or 6s. a week. After about 1850, this rose to 1s.3d. or 1s.6d. a shift, and by 1870, 10s. or 12s. a week was the average wage for daytime workers.² In upper Wharfedale, boys were hired out for £6 a year, or they could earn from 3d. to 6d. a day. The boys' chief work was to wash ore outside, but if they wished to earn more, they had to go to "t' boddom" (of the mine). In the same dale, miners usually worked in three shifts of eight hours each, beginning at 6 a.m., 2 p.m. and 10 p.m., whereas on Greenhow it was most commonly arranged that a partnership divided its members into two six-hour shifts beginning at 6 a.m. and noon. Nevertheless, the ore-men could often decide their own hours.³ For the dead-men, that is, those workers who drove levels, and sank and walled shafts in 'dead' ground, wages were little if any better, but there was a greater degree of security for the driving of levels frequently took many years to complete.⁴

1. A. Reistrick, Lead Mining in the Yorkshire Dales, pp.19, 26; B. Jennings (ed.), A History of Nidderdale, p.298.
2. A. Reistrick, Mines and Miners of Swaledale (Clapham, N.Yorkshire, 1955), pp.83-84.
3. E. Pontefract & M. Hertley, Wharfedale, p.143; B. Jennings (ed.), A History of Nidderdale, p.298.
4. A. Reistrick, "The Lead Mines of Upper Wharfedale", Yorkshire Bulletin of Economic and Social Research, 5, 1 (Feb. 1953), 14.

Apart from relatively poor pay, lead mining was arduous and uncomfortable: after perhaps a two or three miles' trudge across the open moors in all weathers, the miner often worked in confined, wet places with ventilation so poor at times that his candle would barely flicker. Lead mining itself was not unduly dangerous and rarely were explosive gases encountered as in coal mining. Occasional accidents did occur: in blasting, by the miner falling down a section of the shaft,¹ from rock falls,² or by the in-rush of water from old workings.³ Health hazards, however, constituted a permanent danger to many lead miners and smelters. The common Pennine complaints of rheumatism and bronchitis were readily aggravated when miners toiled for long

1. B. Jennings (ed.), A History of Riddersdale, p.299;
A. Raistrick, Lead Mining in the Yorkshire Dales, p.19.
2. Margaret Betty, Gunnerside Chapel and Gunnerside Folk (Bernard Castle, 1967), p.33, notes that William Alderson, of Gunnerside, was badly injured in 1839 at the age of 17, as the result of a roof fall; and his leg was subsequently amputated without anaesthetic. Craven Herald, Jan. 1853, records that on 16th Dec. 1852, Thomas Rodgers was killed in Beaver Lead Mine by a large stone falling; and that his grandfather, great-grandfather and mother's cousins had all been killed in the mines on Grassington Moor.
3. A. Raistrick, Mines and Miners of Swaledale, pp.55-56, recounts the narrow escape of two miners in 1882 when water burst into the Plate Holes Level from the Landy Level in Upper Swaledale.

hours in wet conditions.¹ More serious, miners working in sandstones, rather than in limestones, were liable to contract silicosis - "miner's consumption" or "miner's asthma" - caused by the regular inhalation of insoluble siliceous dust. Thus, chest complaints, including tuberculosis, materially shortened many lives. Smelters were also liable to suffer from poisoning caused by absorbing lead fume and dust. A very rough indication of the health hazards inherent in lead mining and smelting is contained in the mortality figures collected by the Kinnsaid Commission which investigated the health and working conditions of metal miners in 1862-64.² In 1859-61, the average age at death of men (excluding deaths under 15) in the Pateley Bridge sub-district was for miners (including agents and smelters), 55.7, and for non-miners, 54.6.³ But, corresponding figures for Grassington Registration sub-district were 45.7 and 55.9, and for Beeth and Muker sub-districts in Swaledale, 46.7 and 60.8.⁴

1. A. Raistrick, Lead Mining in the Yorkshire Dales, p.19.
2. Cited by B. Jennings (ed.), A History of Nidderdale, pp.299-300.
3. The age at death of miners in the Pateley Bridge sub-district may be artificially 'high' because, although the Greenhow workings were in limestone, those in Ashford Gill, in sandstone and shale, were little worked between 1843 and 1857.
4. Exact correlation between early age at death and work in limestone and sandstone cannot be made for a number of reasons: not all miners necessarily worked all their lives in one type of rock or the other; some miners spent more time in agricultural pursuits than others.

In Swaledale, 55 of the 85 miners died of chest diseases.

In the lead-mining districts of upper Teesdale, Weardale and Alston Moor, there was also a very high incidence of death from respiratory diseases, particularly silicosis, often accompanied by infectious tuberculosis.¹

Lead mining and agriculture in varying degrees commonly formed a duality of occupation in the Pennines. Indeed, lead mining provided the main alternative occupation to farming. In the seventeenth century, the development of mining was almost certainly stimulated by fragmentation of holdings: farmers or their sons worked in the mines or prospected for veins at quieter times of the agricultural year. The two occupations could be easily combined for, whether working as an independent miner or as an employee, the farmer-miner could often decide his own hours of work. Swaledale farmers, in the mid-seventeenth century, began to turn increasingly to part-time mining; and by the end of the eighteenth century, many of their descendants were miners engaged in part-time farming.² Men who were primarily miners were encouraged by low and erratic wages underground or in the smelting mill to rent a small piece of intake land on which to keep a cow or a pig and to grow a hay crop. The acquisition of a smallholding, therefore, augmented earnings as well

1. Christopher J. Hunt, "The Economic and Social Conditions of Lead Miners in the Northern Pennines in the Eighteenth and Nineteenth Centuries", M.Litt. thesis, University of Durham, 1968, 346, 348, 351.
2. A. Reistrick & B. Jennings, A History of Lead Mining in the Pennines (London, 1965), p.313.

as providing some slight relief from the foul air below or the poisonous fumes of the smelting mill. In Swaledale, and doubtless in other dales, some miners left the mines for a few weeks when additional farm labour was required, especially at haymaking time, whilst other miners in their spare time cut and prepared peat for use in the smelt mills. Many miners found an occupation as wallers or as road-makers. Miners, too, were famous for their knitted goods, especially stockings, made in their spare time or even as they walked to and from the mine. Their products were either sold to an agent or provided part payment for groceries and other goods. The celebrated Swaledale and Wensleydale cheeses were also produced.¹ In Muker, Swaledale, in the 1830s and later, the primary calling of sheep and cattle raising drew the whole community together. A duality of occupation was common, for not only lead miners but also shop-keepers, inn-keepers, game-keepers, persons and the school-master all added farming to their interests.²

1. A. Raistrick, Lead Mining in the Yorkshire Dales, p.19, and Mines and Miners of Swaledale, pp.34-36; Edmund Cooper, Muker: The Story of a Yorkshire Parish (Clepham, N.Yorkshire, 1948), pp.78-79, 107-08.
2. E. Cooper, Muker, pp.56-57.

The pattern of dual occupations in the Yorkshire dales was repeated to the north in Teesdale and Weardale. At the time of the expansion of silver-lead mining in the eighteenth century, Durham dales' miners were members of families occupying scattered smallholdings; and as mining employment expanded, these smallholdings multiplied and encroached upon moorland. The Parliamentary enclosure movement, coinciding as it did with considerable mining expansion, produced division and colonisation of large areas of moorland in the last years of the eighteenth century and the first of the nineteenth. A growing number of farmer-miner families, therefore, occupied the large tracts of new, if marginal, farmland carved out of moorland.¹

The double occupation of mining and agriculture was to be found throughout the Pennines. When Yorkshire lead miners emigrated to the Upper Mississippi region in the nineteenth century, they took with them the same traditions of occupation; or, because of the nature of their occupations, they were encouraged, even obliged, to follow similar pursuits in America.

1. A.E. Smiles, North England (London & Edinburgh, 1960), pp. 148, 151.