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**Improving the Social and Working Conditions of
Miners 1920-1946: The Contribution of the Miners'
Welfare Fund**

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Improving the Social and Working Conditions of Miners 1920-1946: The Contribution of the Miners' Welfare Fund

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Abstract

A lack of attention to the Miner's Welfare Fund (hereafter M.W.F.) is a gap in the history of the coal industry. The unique statutory requirement upon the industry in 1920, which was originally a five-year experiment, was to provide financial resources for social welfare, education and research purposes. The application of M.W.F. resources to enhance the working conditions of mineworkers and the social environment in mining communities was an important aspect of the industry, which requires a more detailed examination in order to reconfigure the historiography of the coal industry.

The contribution of the M.W.F. deserves this detailed attention as it positively affected the lives of so many mining families.

Declaration

I, the author, confirm that the thesis is my own work. I am aware of the University's Guidance on the Use of Unfair Means (www.sheffield.ac.uk/ssid/unfair-means).

This work has not previously been presented for an award at this, or any other, university.

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ABBREVIATIONS

B.M.A.	British Medical Association
D.S.I.R.	Department of Scientific and Industrial Research
D.N.A.	District Nursing Association
D.W.C.	Divisional Welfare Committee
H.A.C.	Health Advisory Committee
L.E.A.	Local Education Authority
I.W.S.	Industrial Welfare Society
M.A.G.B.	Mining Association of Great Britain
M.A.S	Medical Aid Society
M.F.G.B.	Miners' Federation of Great Britain
M.R.C.	Medical Research Council
M.W.C.	Miners' Welfare Committee/Commission*
M.W.F.	Miners' Welfare Fund
N.H.S.	National Health Service
N.M.W.J.C.	National Miners' Welfare Joint Council
N.P.F.A.	National Playing Fields Association
N.U.M.	National Union of Mineworkers
S.M.R.B.	Safety in Mines Research Board
S.M.R.E.	Safety in Mines Research Establishment
S.W.C.O.A.	South Wales Coal Owners Association
S.W.D.W.C.	South Wales Divisional Welfare Committee
S.W.M.F.	South Wales Miners' Federation
T.U.C.	Trades Union Congress

* The M.W.C. has been used by historians as either the Miners' Welfare Committee or the Miners' Welfare Commission. It did not become a commission until 1938.

Improving the Social and Working Conditions of Miners 1920-1946: The Contribution of the Miners' Welfare Fund

INTRODUCTION

The Coal Industry Act 1920, the political response to the Sankey Commission, established the Miners' Welfare Fund (hereafter M.W.F.), the income of which was to be 1d per ton of coal production levied from the owners. The objects of the M.W.F. were: 'to establish a fund for such purposes connected with the social wellbeing, recreation, and conditions of living of workers in or about coal mines and with mining education and research as the Board of Trade, after consultation with any government department concerned, may approve'.¹ An overview of the origin and legislative structure of the M.W.F. is contained in Appendix 1.

The extensive historiography of the coal industry has primarily focussed on the dramatic aspects of a unique, complex and diverse industry. The tendency of historians to concentrate on thematic topics has produced only modest references to the M.W.F. in particular fields of examination such as Gillian Drake's reference to the Fund's grant-making which contributed to the establishment of lidos in South Wales, or in broader areas such as recreation, health and social policy.²

One perspective during the inter-war years of the industry was its ever presence as a political issue due to its operational dangers, economic significance and confrontational industrial relations. The M.W.F.'s integral part within this profile has been neglected. Historians who have specialised in the study of mining unions at national or regional levels have tended to concentrate on terms and conditions of employment, accident rates and industrial disputes. Robin Page Arnot, who has two volumes on the Miners' Federation of Great Britain (hereafter M.F.G.B.) which span the inter-war years, hardly mentions the M.W.F. or its origins, despite his role as Secretary of the Labour Research Department, which produced most of the evidence used by M.F.G.B. officials in submissions to the Sankey Commission.³ His references to the Commission are factors in the debate on nationalisation.

¹ The Mining Industry Act 1920, 10 & 11 Geo. 5, Para. 20 (1).

² Gillian Drake, 'The Lost Lidos of South Wales', *Llafurl*, Vol. 11 No. 2 2013, pp. 77-93.

³ Robin Page Arnot, *The Miners: Years of Struggle 1910-1929*, (London, 1953);
Page Arnot, Robin, *The Miners: In Crisis and War*, (London, 1961).

Regional mining trade union histories are equally quiet on the M.W.F.⁴ William Garside however does offer examples of M.W.F. expenditure that was appreciated by the officials of the Durham Miners' Association.⁵

This dissertation will evidence how the M.W.F. was an integral element of the industry's political profile as it was an element of a governmental intervention in the industry, which was normally evident in times of war or economic crisis. Chris Wrigley and Peter Rowland refer to Lloyd George's relationship with the industry, being primarily confined to the Sankey Commission and view his strategy as a planned and devious method of avoiding a national dispute, recognising that parliament would not support nationalisation.⁶ However, the process was more opportunistic in response to unfolding circumstances than a strategic plan.

A subtlety of the M.W.F. was an intervention which utilised the industry's own resources to deliver mining and community objectives which support Kirby's contention that the Mines Department was capable of acting as a partial, but significant, counterweight to the lobby of the Mining Association of Great Britain (hereafter M.A.G.B.).⁷

This application of resources by the government significantly enhanced their role in health and safety standards for the mining industry and developed a national framework, in conjunction with education authorities and universities, for mining and technical education within the coalfields. This was an outcome greatly assisted by the initial dominance of government appointees and assessors to the Central Committee of the M.W.F.. This mechanism of decision making contrasts with 80% of the M.W.F.'s income which was applied in coalfields through District Welfare Committees. By exploring in chapters, utilising the expenditure headings of the Fund, a number of significant issues emerge. The

⁴ Frank Machin, *The Yorkshire Miners – A History Volume I* (National Union of Mineworkers, Yorkshire Area, 1958);

J.E. Williams, *The Derbyshire Miners – A Study in Industrial and Social History*, (London, 1962);

Hywel Francis, & David Smith, *The Fed - A History of the South Wales Miners in the Twentieth Century*, (London, 1980);

Colin Griffin, *The Leicestershire Miners Volume II, 1914-1945*, (London, 1988);

Alan Griffin, *The Miners of Nottinghamshire 1914-1944*, (London, 1962).

⁵ William R. Garside, *The Durham Miners 1919-1960*, (London, 1971).

⁶ Christopher Wrigley, *Lloyd George and the Challenge of Labour*, (London, 1990);

Peter Rowland, *Lloyd George*, (London, 1975).

⁷ M.W. Kirby, 'The Politics of State Coercion in Inter-war Britain: The Mines Department of The Board of Trade 1920-1942', *Historical Journal*, Vol.22 2 (1979), pp. 373-396.

antagonistic relationship between the owners and the mining unions was reflected in their refusal to comply with the Advisory Committees and Pit Committees, detailed in the Mining Industry Act, to facilitate a more collegiate approach to decision making. For welfare purposes, at the invitation of the government, they voluntarily accepted a committee structure at divisional and local level for which equitable representation was a fundamental requirement. M.W.F. expenditure required jointly agreed decisions on priorities and the consideration of local projects, which also had to be jointly determined and managed. A cooperative and conciliatory decision-making framework, was established at variance with the public image of the industry, and endured during national and regional stoppages, and a period of poverty and destitution due to significant economic decline, particularly in the exporting coalfields. The M.F.G.B.'s desire to achieve a nationally determined wage structure contrasted with significant regional differences on how the M.W.F. levy should be applied. Health expenditure exhibited major priority differences between coalfields. The access to, and determination of, resources for recreation do not support theories which advocate social control, rational recreation or welfare capitalism. The physical manifestation of recreation facilities, which often produced a green lung and dominant community building, engendered a sense of place presenting recreational, cultural and educational opportunities for different generations.

The initial success of the M.W.F. resulted in an extension of the statutory mandate and a separate fund to progress industrial welfare through the establishment of Pithead Baths for which a lobby, contributed to by miners' wives, can be identified. However, the changes did not alter significantly gender differences, in that while Pithead Baths relieved women of some domestic chores, the pace of construction only impacted on a progressive annual basis. Despite claims that increased earnings and employer-provided recreational facilities enhanced female participation, those criteria did not apply in coalfield villages.

A health facility which reflected additional intervention by the government as a consequence of war was a requirement of the M.W.C. to develop a rehabilitation service, using the resources of the Pithead Bath Fund, to reduce the time following accidents when miners could return to productive work. Health benefits for mineworkers did not underpin some aspects of medical research where the driving force was the escalating cost of compensation or, in the case of rehabilitation, the war effort.

This dissertation brings a broader understanding of an aspect of the mining industry which has not attracted significant historical attention and redresses the observation by Jenny Cronin when she declared, 'In the vast amount of general literature on the mining industry there is surprisingly little attention paid to the M.W.F.'⁸

Chapter 1 - Health

The investment of the M.W.F. into a range of health provisions within mining communities brought, according to the Ministry of Health's own evaluation, significant improvements in health care in mining communities.

This chapter will also show that Aneurin Bevan's experiences within a coal mining community influenced his commitment to the establishment of a national health service funded and managed centrally to ensure equality of access and provision.

Also included is The Miners' Rehabilitation Service, which the Miner's Welfare Committee (hereafter M.W.C.) developed under the Government's direction, using the redirected resources of The Pithead Baths Fund. This fund was unable to function due to wartime building restrictions. Attention has been focussed on how the Second World War acted as a catalyst to enhance medical services for miners, producing rehabilitation facilities that the industry was reluctant to later transfer to the National Health Service, much to the annoyance of Aneurin Bevan.

The historiography of health provision during the inter-war years cites examples of coalfields producing income streams for voluntary hospitals. John Mohan, Martin Powell and Martin Gorsky and Steven Cherry do so in the context of diluting the emphasis placed by Brian Abel-Smith, and Richard Titmuss on a declining contributory income stream.⁹ The contribution of capital grants from the M.W.F. for voluntary hospitals does not feature within expositions of how these coalfield hospitals were funded. Martin Powell quotes the

⁸ Jenny Cronin, 'The Origins and Development of Scottish Convalescent Homes 1860-1939', PhD Thesis 2003, p.115.

⁹ Martin Gorsky, John Mohan & Martin Powell, 'British Voluntary Hospitals 1871-1938' *Journal of Historical Geography*, Vol. 25 No. 4 1999, pp. 463-482;
Steven Cherry, 'Accountability, Entitlement & Control Issues and Voluntary Hospital Funding 1860-1939', *Social History of Medicine*, Vol. 9 Issue 2 1 August 1996, pp. 215-233;
Brian Abel-Smith, *The Hospitals 1800-1948* (London, 1964);
Richard Titmuss, *Essays on the Welfare State*, 3rd edition, (London, 1976).

ratio of doctors to patients in coalfields to emphasise poor health provision and includes the geographical availability of specialists to discredit Titmuss' implied view of equitable availability. Barry Doyle, Alyson Levene, Martin Powell and John Stewart's contributions to the studies of the growing municipal involvement in health provision support Pat Thane's view that the development of social policy in its broadest context was a response to a variety of issues as opposed to Titmuss' assessment of a well-defined evolutionary process within a strategic plan.¹⁰

Keith Laybourn, Derek Fraser and Norman McCord endorsed the view that enhancements in health provision should be seen within the country's economic performance and the need to maintain social stability.¹¹ However, M.W.F. expenditure was determined through local assessment of need, the main health priority being the provision of convalescence. Jenny Cronin highlighted a dearth of historical examination on convalescent facilities for miners.¹² Elizabeth Gardiner's view misunderstood the structure of the M.W.F., attributing the expansion of convalescent home provision to the Ministry of Health.¹³ Cherry viewed an important role for convalescent homes as being the reduction of bed blocking. The primary purpose of convalescent homes, many of which were associated with voluntary hospitals, was to aid post-hospital recovery which, given the poor quality of working class homes, was essential.¹⁴

Helen Sweet, Carrie Howse and Enid Fox who explore the professional development of nursing associations funded by voluntary income, apart from child and maternity services supported by local authorities, do not include the support of the M.W.F. to maintain or

¹⁰ Barry Doyle, 'Labour and Hospitals in Urban Yorkshire, Middlesbrough, Leeds and Sheffield, 1919-1939', *Social History of Medicine*, Vol. 23 No.2 2010, pp. 374-392;

Alyson Levene, Martin Powell & John Stewart, 'Patterns of Municipal Health Expenditure in Inter-war England and Wales', *Bulletin on the History of Medicine*, Fall 2004, pp.635-669;

Pat Thane (ed.), *The Foundations of the Welfare State*, (London, 1982).

¹¹ Keith Laybourn, *The Evolution of British Social Policy and the Welfare State c. 1800-1993*, (Keele, 1995); Derek Fraser, *Evolution of the British Welfare State*, (Basingstoke, 2009);

Norman McCord, 'Rate Payers and Social Policy 1870-1914', in *The Origins of British Social Policy* in P. Thane (ed.), (London, 1978).

¹² Cronin, Jenny, 'The Origins and Development of Scottish Convalescent Homes 1860-1939', PhD Thesis 2003, University of Glasgow.

¹³ Elizabeth Greene Gardiner, *Convalescent Care in Great Britain*, (Chicago, 1935).

¹⁴ Steven Cherry, *Medical Services at the Hospitals in Britain 1860-1939*, (Cambridge, 1996).

establish coalfield district nursing associations.¹⁵ A similar perspective may be applied to the provision of ambulance services which were either specifically targeted for particular coalfield communities or through those offering a broader geographical coverage. Surprisingly little examination has been directed to the unique coalfield ambulance coverage in the South Wales coalfield established in conjunction with St John's Ambulance. Specific benevolent expenditure through funds established by Divisional Welfare Committees (hereafter D.W.C.) received little attention despite the extent of the expenditure for individual recipients in need. The key exception is the Tredegar Medical Aid Society which the M.W.F. supported and in which Aneurin Bevan played a leading role. According to Kenneth Morgan, Ben Curtis and Steven Thompson, and John Campbell this society positively conditioned Bevan's view on the need for a National Health Service and how it should be managed.¹⁶ Dai Smith expands this understanding of Bevan's perspective by recounting his experience across a range of locally managed and funded community services.¹⁷

Medical commentators have complimented the achievements of the Miners' Rehabilitation Service, developed by the M.W.C. during the Second World War at the behest of government, although the literature is silent on the painfully lengthy arguments between Bevan, the M.F.G.B. and the leadership of the recently nationalised coal industry over the transfer of these facilities to the National Health Service (hereafter N.H.S.) which could only be achieved by voluntary agreement.

¹⁵ Helen Sweet, 'District Nursing in England and Wales c. 1919-1979 in the Context of the Development of a Community Health Team', PhD Thesis 2003;

Carrie Howse, 'From Lady Bountiful to Lady Administrator: Women and the Administration of Rural District Nursing in England 1880-1925', *Women's History Review*, Vol. 15 No. 3 July 2006, pp. 423-441;

Enid Fox, 'District Nursing in England and Wales Before the National Health Service: The Neglected Evidence', *Medical History*, No. 38 1994, pp.303-321.

¹⁶ Kenneth Morgan, Chapter 5, 'Aneurin Bevan' in *Labour Focus from Ernest Bevin to Gordon Brown*, Kevin Jeffreys (ed.) (London 2002);

Ben Curtis & Steven Thompson, 'A Plentiful Crop of Cripples Made by all this Progress: Disability, Artificial Limbs and Working Class Mutualism in the South Wales Coalfield 1890-1948', *Social History of Medicine*, Vol. 27 No. 4 2014, pp. 708-727;

John Campbell, *Nye Bevan and the Mirage of British Socialism* (London, 1987).

¹⁷ Dai Smith, *Aneurin Bevan and the World of South Wales*, (Cardiff, 1993).

Chapter 2 - Recreation

The historiography of recreational facilities provided by the M.W.F. does not reflect the scale and speed of their development, the involvement of miners in all aspects of the provision, or the recreational and cultural opportunities which they encouraged.

This chapter will explore the first major opportunity for the working class to determine the application of significant resources to develop leisure facilities within their own communities. This gave mineworkers a significant responsibility and assisted in removing barriers to participation. Consideration is given to the role of miners' institutes as community centres, offering an extensive range of activities.

The facilities were designed to enable participation regardless of gender or age; however, the barriers to female participation in sport will be a feature of the review of the growth in sporting and recreational activity.

Because facilities had to be settled on charitable trusts, with mineworkers having an equitable role in their management, this supports the argument that the growth in working-class recreation between the wars was a bottom-up approach.

A survey of these recreational facilities is tabled in Appendix 2. The definitional arguments over sport, recreation and leisure profiled by Tony Mason, Andrzej Olechnowicz and Jeffrey Hill are for practical purposes contained within the M.W.F.'s broad expenditure heading 'Recreation'.¹⁸ Those who specifically researched the histories of individual sports such as Mason, and Peter Swain and Adrian Harvey, (football) did so with reference to the sports' developing popularity in coalfields, although there is no correlation with the number of facilities provided by the M.W.F. which reduced obstacles to access.¹⁹ While Kathleen McCrone and Neil Tranter explore the divisions affecting female participation in sport,

¹⁸ Tony Mason, *Association Football and English Society 1863-1915*, (Brighton, 1980); Andrzej Olechnowicz, 'Unemployed Workers, 'Enforced leisure' and Education for the Right Use of Leisure in Britain in the 1930s', *Labour History Review*, Vol. 70 (1) 2005, pp. 27-52; Jeffrey Hill, *Sport, Leisure and Culture in Twentieth Century Britain*, (Basingstoke, 2002).

¹⁹ Tony Mason, *Association Football and English Society 1863-1915*; Swain, Peter & Harvey, Adrian, 'On Bosworth Field or The Playing Fields of Eton and Rugby. Who Really Invented Modern Football?', *International Journal of the History of Sport*, Vol. 29 No. 10 July 2012, pp. 1425-1445.

Catriona Parratt refines this concept by distinguishing between women by reference to age, marital status and earnings.²⁰ She, together with Jo Halpin offer the example of hockey to emphasise the developing participation of working-class women in competitive sport, although S. Todd's calculation that young working-class employed women participated in the playing of sport through access to employer provided facilities does not apply within mining communities, when female employment opportunities were very limited.²¹ Mike Huggins and Adrian Bingham view the media coverage of female sport, determined by male newsrooms, profiling individual sportswomen in a range of activities which were largely the preserve of upper and middle-class women.²² Joyce Kay refers to the popularity of tennis in Nottinghamshire mining communities for both genders, but without reference to how tennis facilities were funded.²³

Sport, within a wider political context, has reflected views by Roy Hay that employers viewed facilities they provided as instruments of social control, but the nature of recreational facilities funded by the M.W.F. enhanced participation opportunities and the responsibility for their management became an integral part of the mineworker's role.²⁴ Such provision supported the views of Steven Crewe and Stephen Jones that the growth of recreational activity was bottom-up, although they give no credit to the role of the M.W.F. in this process.²⁵

²⁰ Kathleen McCrone, 'Class, Gender, and English Women's Sport 1890-1914', *Journal of Sport History*, Vol. 18 No. 1 Spring 1991, pp. 159-182;

Neil Tranter, *Sport, Economy and Society in Britain 1750-1914*, (Cambridge, 1998);

Catriona Parratt, 'Little Means or Time: Working Class Women and Leisure in Late Victorian and Edwardian England', *International Journal of the History of Sport*, Vol. 15 No. 2 1998, pp. 22-53.

²¹ Jo Halpin, 'Thus Far and No Further: The Rise of Women's Hockey Leagues in England from 1910 to 1939', *Sport in History*, Vol. 37, Issue 2, 2017, pp. 146-163;

S. Todd, *Young Women, Work and Family 1918-50*, (Oxford, 2005).

²² Mike Huggins, 'BBC Radio and Sport 1922-39', *Contemporary British History* 21, (4) 2007, pp. 491-515;

Adrian Bingham, 'An Era of Domesticity? Histories of Women and Gender in Inter-War Britain', *Culture and Social History*, 2004: 1, pp. 225-23.

²³ Joyce Kay, 'Grassroots: The Development of Tennis in Britain 1918-1978' *International Journal of the History of Sport*, Vol. 29 Issue 18 December 2012, pp. 2532-2550.

²⁴ Roy Hay, 'Employers and Social Policy in Britain: The Evolution of Welfare Legislation 1905-1914', *Social History*, Vol. 2 Issue 4 1977, pp. 435-455.

²⁵ Steven Crewe, 'What about the Workers? Work Based Sport and Recreation in England c. 1918 – c. 1970', *Sport in History*, Vol. 34 No. 4 2014, pp. 544 – 568;

Stephen G. Jones, *Sport, Politics and the Working Class – Organised Labour and Sport in Inter-war Britain*, (Manchester, 1988).

Miners' institutes have been studied, especially in South Wales, in the context of cinema provision by Bert Hogenkamp and Stephen Ridgewell with similar exposure to the provision of libraries by Chris Baggs and Hywel Francis.²⁶ Their contributions do not quantify the involvement of the M.W.F. and these thematic perspectives exclude a more expansive perception of the community functions delivered within miners' institutes. Dennis Warwick and Gary Littlejohn criticise Norman Dennis, Fernando Henriques and Clifford Slaughter's conclusions about one institute, which is also a direct contrast to the views of Stephen Jones and Kenneth Morgan who emphasise the cultural sphere of miners' institutes.²⁷ Local histories, such as those by D.J. Davies embrace examples of the range of activities delivered from institute premises.²⁸

Chapter 3 – Education

This chapter examines the contrast between the lack of vocational education in mining, which required the government's intervention to rectify, with the desire for self-improvement through education which was evident in mining communities.

²⁶ Bert Hogenkamp, 'Miners' Cinemas in South Wales in the 1920s and 1930s', *Llafur* 4 (2), 1985, pp. 64-76; Stephen Ridgewell, 'South Wales and the Cinema in the 1930s', *Welsh History Review*, Vol. 17 No. 4, December 1995, pp. 590-615;

Christopher Baggs, 'The Whole Tragedy of Leisure in Penury: The South Wales Miners' Institute Libraries During the Great Depression', *Libraries and Culture*, Vol. 39 No. 2 Spring 2004, pp. 115-132;

Christopher Baggs, 'Carnegie Offered Money and a Lot of South Wales Libraries Refused to Have it: It was Blood Money Bringing Public Libraries to the South Wales Valleys 1870-1939', *Library History*, Vol. 17 No. 3 2013, pp. 171-179;

Christopher Baggs, 'A Welsh Affair at the Parliament of Libraries in Cardiff, 1922', *Library History*, Vol. 13 No. 1 1997, pp. 16-28;

Hywel Francis, 'Origins of the South Wales Miners' Library', *History Workshop*, No. 2 Autumn 1976, pp. 183-205.

²⁷ Dennis Warwick & Gary Littlejohn, *Coal, Capital and Culture – A Sociological Analysis of Mining Communities in West Yorkshire*, (London, 1992);

Norman Dennis, Fernando Henriques and Clifford Slaughter's, *Coal is our Life*, (London, 1956);

Stephen Jones, S.J. Davies, *The Tredegar Workmen's Hall 1861-1951 – Ninety Years of Endeavour*, (n.d. no stated publisher).

²⁷ George H. Winstanley, *Transactions of the Manchester Geological Society*, Vol. 28 June 1904, pp. 571-577; I.C.F. Statham, 'Mining Education and Training', *Journal of the Royal Society of Arts*, Vol. 105 No. 5001 April 1957, pp. 409-428.

²⁷ Gordon Roderick, 'Technical Education, the Performance of South Wales Industrialists and the Haldane Sport, Politics and the Working Class – Organised Labour and Sport in Inter-war Britain', (Manchester, 1988); Kenneth Morgan, *Rebirth of a Nation. Wales 1880-1980*, (Oxford, 1981).

²⁸ D.J. Davies, *The Tredegar Workmen's Hall 1861-1951 – Ninety Years of Endeavour*, (n.d. no stated publisher)

This chapter explores the strategy that underpinned the delivery of a national system of mining education and M.W.F. funded non-vocational educational opportunities which facilitated the educational aspirations of miners and their children who pursued higher education with grant support.

The fifty years between George Winstanley's critical remarks on the standards of mining education and the review by Professor Statham witnessed the introduction and operation of a coalfield structure embracing technical colleges and selected universities.²⁹ Statham incorrectly credits the coal owners with establishing the foundations for this development, but it was the Mines Department which, through the M.W.F., identified the necessity for change and secured the funding for its delivery. Gordon Roderick and John Field concurred with Winstanley's criticisms and Richard Redmayne, the Head of His Majesty's Inspectorate of Mining, advocated a need for broader educational opportunities for miners.³⁰ Alison Fuller and Lorna Unwin emphasised that there was no overall government strategy to improve industrial technical performance through sponsoring a national system, only intervening on a piecemeal basis.³¹ James Foreman-Peck criticises the reliance placed on industries for technical training as they had traditionally neglected vocational education with which Michael Dintenfass concurs in relation to the coal industry as it was reluctant to adapt, a view supported by Bruno Turnheim and Frank Geels, and Roger Penn and Rob Simpson.³²

²⁹ George H. Winstanley, *Transactions of the Manchester Geological Society*, Vol. 28 June 1904, pp. 571-577; I.C.F. Statham, 'Mining Education and Training', *Journal of the Royal Society of Arts*, Vol. 105 No. 5001 April 1957, pp. 409-428.

³⁰ Gordon Roderick, 'Technical Education, the Performance of South Wales Industrialists and the Haldane Commission', *Journal of Educational Administration and History*, Vol. 39 No. 2 August 2007, pp. 193-208; John Field, 'Unemployment, Training and Manpower Policy in Inter-War Britain', *British Journal of Education and Work*, Vol. 2 Issue 1 1988, pp. 39-49; Richard Redmayne, *The British Coal Mining Industry*, (Oxford, 1923).

³¹ Alison Fuller & Lorna Unwin, 'Reconceptualising Apprenticeship – Exploring the Relationship Between Work and Learning', *Vocational Education and Training*, Vol. 50 No. 2 1992, pp. 153-173.

³² James Foreman-Peck, 'Spontaneous Disorder? A Very Short History of British Vocational Education and Training 1863-1973', *Policy Futures in Education*, Vol. 2 No. 1 2004, pp.72-101; Michael Dintenfass, 'Family Training and Career in the British Coal Industry in the Era of Decline', *Business and Economic History*, Vol. 22 No.1 1993, pp. 273-284; Bruno Turnheim & Frank Geels, 'The Destabilisation of Existing Regimes. Confronting a Multi-Dimensional Framework with a Case Study of the British Coal Industry (1913-1967)', University of Manchester. Research Policy 42 (2013), pp. 1749-1767;

Despite the earlier criticism of Statham, his review of the achievements which had led to ten percent of the mining workforce requiring statutory qualifications was endorsed by Martyn Walker who recognised the contribution of the M.W.F. towards a national system of technical education for the mining industry that enabled the N.C.B. to continue raising standards.³³

The introduction of scholarship and exhibition schemes to provide opportunities for university education for miners and their children is viewed against evidence within coalfields of an enthusiasm to learn, identified by Lawrence Goldman and R.A. Lowe, particularly in relation to the Workers' Educational Association (hereafter W.E.A.).³⁴ Goldman also credits the University Extension Movement's (hereafter U.E.M.) contribution to adult education within the coalfields. Robert Neville and J.F.C. Harrison attribute the M.W.F. expenditure upon adult education through D.W.C.s reinforcing a desire to learn amongst miners that led to increased opportunities for leadership roles within a variety of local political settings.³⁵ According to Deirdre Beddoe, the provision of university scholarships for the daughters of miners was one of the prerequisites for studying at degree level.³⁶ Although Elizabeth Edwards argued that young women who wished to teach preferred teacher training colleges, this contrasted with M. Cruikshank's study in Scotland which identified that two thirds of the annual output of graduates then pursued training to enter the teaching profession.³⁷ Chris Baggs refers to Welsh colliers buying more books

Roger Penn & Rob Simpson, 'The Development of Skilled Work in the British Coalmining Industry 1870-1985', *Industrial Relations Journal*, Vol. 17 Issue 4 December 1986, pp. 339-349.

³³ Martyn Walker, 'Rule of Thumb Methods No Longer Suffice: Development of British Coal Industry Education and Training 1900-circa1970 and Lessons for Present Day Education Policy Makers', *Journal of Educational Administration and History*, Vol. 47 No. 4 2015, pp. 367-387.

³⁴ Lawrence Goldman, 'Intellectuals and the English Working Class 1870-1945: The Case of Adult Education', *History of Education*, 2000, Vol. 29 No. 4, pp. 281-300;

R.A. Lowe, 'The North Staffordshire Miners' Higher Education Movement', *Educational Review*, Vol. 22 No. 3 2006, pp. 263-277.

³⁵ Robert G. Neville, 'The Yorkshire Miners and Education 1881-1930', *Journal of Educational Administration and History*, Vol. 8 No. 2 1976, pp. 30-37;

J.F.C. Harrison, *Learning and Living 1790-1960*, (London, 1961).

³⁶ Deirdre Beddoe, *Back to Home and Duty. Women Between the Wars 1918-1939*, (London, 1989).

³⁷ Elizabeth Edwards, 'The Culture of Femininity in Women's Teacher Training Colleges 1900-1950', *History of Education*, Vol. 22:3 September 1993, pp. 277-288;

Cruikshank, Marjorie, 'A Short History of the Training of Teachers in Scotland: Scottish Council for Research in Education', University of London.

than any other class of worker, which correlates with a high demand from Welsh candidates to the scholarship schemes.³⁸

Chapter 4 - Research

This chapter will examine how the government became involved in enhancing health and safety standards through opportunistically utilising the industry's resources, applied through a third party, the M.W.F., to fund research throughout the inter-war years.

The focus on health and safety demonstrates how it was often driven by the cost of compensation. The chapter highlights how the resistance of coal owners, supported by strong, contemporary medical opinion, delayed the recognition that the inhalation of coal dust was harmful.

The technical competence of the research is reflected in reviews by J.W. Whitaker.³⁹ David Edgerton and Sally Horrocks detail the initial involvement of the government into publicly funded research and development through the establishment of the Department of Scientific and Industrial Research (hereafter the D.S.I.R.).⁴⁰ Sabine Clarke concludes that government intervention was to ensure and support a supply of scientific researchers and technicians through university to industry and encourage the growth of trade research associations.⁴¹ Edgerton explains how the D.S.I.R. funded the Fuel Research Board which was of commercial assistance to the coal industry. He compares the lack of a research emphasis by the coal industry with other developing industries, such as I.C.I. and Pilkingtons, the glass manufacturers. The importance of the M.W.F. funding for the Safety in Mines Research Board is emphasised within this context.

³⁸ Christopher Baggs, 'Carnegie Offered Money and a Lot of South Wales Libraries Refused to Have it: It was Blood Money Bringing Public Libraries to the South Wales Valleys 1870-1939', *Library History*, Vol. 17 No. 3 2013, pp. 171-179.

³⁹ J.W. Whitaker, 'The Prevention of Mine Explosions with Special Reference to the Work of the Safety in Mines Research Board', *Science Progress*, Vol. 29 No. 115 1935, pp. 438-455;
J.W. Whitaker, 'Some Recent Safety in Mines Research Publications', *Science Progress*, Vol. 31 No. 121 1936, pp. 137-140.

⁴⁰ David Edgerton & Sally Horrocks, 'T.S. Ashton Prize Essay for 1991-1992. British Industrial Research and Development Before 1945', *The Economic History Review*, Vol. 47 (2) 1 May 1994, pp. 213-238.

⁴¹ Sabine Clarke, 'Pure Science with a Practical Aim: The Meaning of Fundamental Research in Britain circa 1916-1950', *History of Science Society*, Vol. 101 No. 2 June 2010, pp. 285-311.

Landsborough Thompson explains the establishment of the Medical Research Council in 1913 as representing the government's first major role in this field.⁴² He highlighted that the Industrial Fatigue Research Board, subsequently renamed the Industrial Health Research Board, which despite being administered by the M.R.C., received grant funding directly from the Department of Scientific and Industrial Research.

Haldane's view that silica bearing rock and not coal dust was harmful became the orthodox medical view. Andrew Perchard and Keith Gildart reflected that even the Trade Union Congress' own medical adviser was an advocate of this perspective.⁴³ They emphasise the resources of the owners in relation to the funding and direction of medical research to minimise the cost of compensatory payments and Arthur Mclvor supported this view.⁴⁴ Bufton and Melling defend the role of mining unions pursuing preventative measures within the context of their campaigns to establish compensatory schemes.⁴⁵ The transformation in medical opinion which identified that coal dust contributed to respiratory ill health is described by Andrew Michaeljohn, S. Lyle Cummins and Mclvor with detailed references to those responsible for the medical research.⁴⁶ Mclvor credits the political lobbying role of the M.F.G.B., but does not record the M.W.F.'s resources in conjunction with those of the Medical Research Council, which funded the major research project leading to the scheduling of pneumoconiosis within the Workmen's Compensation Act.

Dr Sydney Fisher recounts the research into the causes of nystagamus and the consequential research by the Safety in Mines Research Board to develop different forms of

⁴² A. Landsborough Thompson, *Half a Century of Medical Research. Origins and Policy of the Medical Research Council, Volume 1*, (London, 1973).

⁴³ John Scott Haldane, 'The Health of Old Colliers', *Transactions of the Institution of Mining Engineers*, 8 June 1916, p. 477;

Andrew Perchard & Keith Gildart, 'Buying Brains and Experts: British Coal Owners, Scientific Knowledge and Miners' Health 1918-1946', *Labour History*, Vol. 56 No. 4 2015, pp. 459-480.

⁴⁴ Arthur Mclvor, 'Germs at Work: Establishing Tuberculosis as an Occupational Disease in Britain c. 1900-1951', *Social History of Medicine*, Vol. 4 2012, pp. 812-819.

⁴⁵ M.W. Bufton, & J. Melling, "'A Mere Matter of Rock": Organised Labour, Scientific Evidence and British Government Schemes for Compensation of Silicosis and Pneumoconiosis Among Coal Miners 1926-1940', *Medical History*, Vol. 49 (2) April 2005, pp. 155-178.

⁴⁶ Andrew Michaeljohn, 'History of Lung Diseases of Coal Miners in Great Britain Part 3 1920-1952', *British Journal of Industrial Medicine*, Vol. 9 (3) 1952, pp.208-220;
S. Lyle Cummins, 'Pneumoconiosis with Special Reference to Silico-anthrocosis of Coal Miners', *British Medical Journal*, Vol. 2 (3893) 17 August 1935, pp. 287-290.

underground lighting.⁴⁷ Reference is also made to the contributions of the M.W.F. into the scheduled compensatory 'Beat' injuries and recommendations to prevent the onset of these conditions.

Chapter 5 – Pithead Baths

Prior to the introduction of Pithead Baths, miners' wives and families experienced high levels of disease and infant mortality. The campaign for the introduction of Pithead Baths was driven by women and trade union leaders, supported by medical opinion. A successful educational campaign helped deliver the resources to construct Pithead Baths through legislation, thus changing living conditions for mining families. The original apathy of mineworkers to the provision of Pithead Baths quickly changed, and by 1930 there were complaints that financial resources could not meet demand.

Catherine Mills identified a number of critical factors that influenced the prioritisation of statutory hygiene precautions in the mining industry.⁴⁸ Pithead baths did not come within this definition. Catherine Bruce Glasier highlights the lobbying contribution made by the Women's Labour League in their crusade 'Baths for Miners'.⁴⁹ Barry Supple attributed the failure of the provision to be implemented as required by the 1911 Act, to the onerous maintenance requirements within costings which were unlikely to be met.⁵⁰ Roy Gregory blamed the unworkable provisions in the legislation being a consequence of the successful political lobby by the coal owners.⁵¹ June Hannam credits Elizabeth Andrews, a miner's wife, as being responsible for maintaining the provision of pithead baths as a priority issue for social reform, but Sue Bruley regarded the campaign as having little impact in South Wales.⁵² The campaign for pithead baths was an example of women's increasing

⁴⁷ S.W. Fisher, 'Health Hazards of Coal Mining', *British Journal of Industrial Medicine*, 1944, p.155.

⁴⁸ Catherine Mills, 'The Emergence of Statutory Hygiene Precautions in the British Mining Industry 1890-1914', *The Historical Journal*, Vol. 51 No.1 2008, pp. 145-168.

⁴⁹ Bruce Glasier, Katherine, *The Labour Women's Battle with Dirt* in Philips, Melanie ed., *Women and the Labour Party* (B.W. Huebsch, MCMXVIII) pp. 88-93.

⁵⁰ Barry Supple, *The History of the British Coal Industry Vol. 4 1913-1946. The Political Economy of Decline*, (Oxford, 1987).

⁵¹ Gregory, Roy, *The Miners and British Politics 1906-1914*, (Oxford, 1968).

⁵² June Hannam, 'Women as Paid Organisers and Propagandists for the British Labour Party between the Wars', *International Journal and Working Class History*, No 77 Spring 2010. pp. 69-88; Sue Bruley, 'The Politics of Food: Gender, Family, Community and Collective Feeding in South Wales in the General Strike and Miners' Lockout of 1926', *Twentieth Century History*, Vol. 18 No. 1 2007, pp. 54-77.

campaigning for a variety of social reforms that Thane attributed to the extension of women's suffrage.⁵³ Arguments that in the absence of pithead baths the arduous requirement of washing and drying clothes in a home environment contributed, according to Valerie Hall, towards a higher rate of maternal mortality in Northumberland than the death rate for miners.⁵⁴ Sally Sheard highlights the lack of municipal bathing facilities, despite enabling legislation, giving the example of Barnsley which had only one public bath in 1913.⁵⁵

While primary sources detail the timing, funding and construction timetables, literature on design and innovative architecture is reflected by Cheryl Buckley, David H. Kennett and Justin Blanco-White.⁵⁶ Georgina Allison links the innovative design of pithead baths with a disciplined requirement to work within financial constraints.⁵⁷ Henry Townshend-Rose and Clinton Jencks regarded the provision of pithead baths as the outstanding achievement of the M.W.F. – a view supported by William Garside when he quotes a Durham Miners' Association official who referred to pithead baths having revolutionised village life. Garside himself described baths as being one of the most welcome features of the Fund.⁵⁸

⁵³ Pat Thane, 'What Difference did the Vote Make? Women in Public and Private Life in Britain since 1918', *Historical Research*, Vol. 76 Issue 192 May 2003.

⁵⁴ Valerie G. Hall, 'Women in Coal Mining Communities in Northumberland, England 1900-1939', *Journal of Women's History*, Vol. 13 No. 2 Summer 2011, pp. 107-13.

⁵⁵ Sally Sheard, 'Profit is a Dirty Word: The Development of Public Baths and Wash-houses in Britain 1847-1915', *Social History of Medicine*, Vol. 13 No. 1 2000, pp. 63-85.

⁵⁶ Cheryl Buckley (ed.), 'Going Modern but Staying British: Design and Modernisms, 1930-1950(1)' in *Designing Modern Britain*, (London, 2007);

David Kennett, 'A Vanishing Heritage', *Coal and Brick*, Information 75 October 1998, pp. 2-4;

Justin Blanco-White, 'What is your Future?' *The Association of Architects, Surveyors and Technical Assistants Focus One*, Summer 1958, p. 50.

⁵⁷ Georgina Allison, 'The Miners' Welfare Commission and Pithead Baths in Scotland', *Twentieth Century Architecture*, No. 1 *Industrial Architecture*, Summer 1994, pp. 55-64.

⁵⁸ Henry Townshend-Rose, *The British Coal Industry*, (London, 1950);

Clinton E. Jencks, 'Social Status of Coal Miners in Britain since Nationalisation', *American Journal of Economics and Sociology*, Vol. 26 (3) 1967, pp. 301-312;

William R. Garside, *The Durham Miners 1919-1960*, (London, 1971).

CHAPTER 1 – Health

Introduction

Resources to apply for health improvements enabled consideration to be given to conditions experienced by mineworkers, which Angela Turner and Arthur McIvor listed as paraplegia, damaged bodies, lost limbs, eyesight deficiency, arthritis, Beat diseases and respiratory illness.⁵⁹ Ben Curtis and Steven Thompson describe the impact of mining as an occupation which, in Wales, produced a country of old men.⁶⁰ Health was a broad expenditure heading for the M.W.F. with no specific definition attached. However, D.W.C.s collectively applied resources across a range of services provided by contributory schemes for hospitals, which according to Barry Doyle also supported district nursing associations, convalescent homes and ambulance provision.⁶¹ This ethos of developing a range of these services was mirrored by D.W.C.s, but also included individual support through benevolent funds.

The M.W.F.' district and local committee structures determined priorities which resulted in contrasting patterns of expenditure. The chapter refers to examples of individual hospital support and a further example of how the government directed the application of resources for a rehabilitation service in response to the coal production levels required during the Second World War, rather than responding to the medical needs of miners who had experienced industrial accidents. In this context consideration is given to Aneurin Bevan's coalfield experience, which drove his commitment for a National Health Service and his frustrating experience transferring the rehabilitation service from an industry proud of what they had established and determined to have an ongoing role in the management of the service.

From 1921 to 1945 during a period of significant economic and social change Divisional Welfare Committees applied £4,179,677 (31.8 percent) of their incoming resources for

⁵⁹ Angela Turner and Arthur McIvor, "'Bottom-Dog Men: Disability, Social Welfare and Advocacy in the Scottish Coal Fields in the Inter-War Years 1918-1939', *Scottish Historical Review*, Vol. XCVI 2 No. 243 October 2017, pp. 187-213.

⁶⁰ Ben Curtis and Steven Thompson, 'A Plentiful Crop of Cripples Made by All This Progress: Disability, Artificial Limbs and Working Class Mutualism in the South Wales Coalfield 1890-1948', *Social History of Medicine*, Vol. 27 No. 4 2014, pp.708-727.

⁶¹ Barry Doyle, 'The Economics, Culture and Politics of a Hospital Contributory Scheme: The Case of Inter-War Leeds', *Labour History Review*, 77 (3) December 2012, p

convalescence, hospitals, ambulance and nursing services, and special benevolent/medical funds.⁶²

The Inter-War Years – A framework of Developing Health Services

The activity of the M.W.F. in the field of health began when new lasting principles underpinning social policy were introduced by the Liberal Government of 1906-1914, a period which Layborne identified as achieving a new balance between the state and philanthropic bodies. Martin Daunton listed twelve relevant Acts of Parliament during this period relating to social policy reform or extension.⁶³ Derek Fraser described this period as a government utilising social insurance to head off socialism, reflected by the election of 53 Labour M.P.s in 1906.⁶⁴ If the health of conscripts in 1917-1918 reflected the health of the nation, or more particularly the working class, further reform was urgently required. Pat Thane referred to medical examinations for conscripts revealing that for every nine men, three were fit and healthy, two were infirm, three were physical wrecks and one an invalid. She attributed subsequent policy to humane pressure reinforced by the political, military and economic implications of producing a physically substandard population.⁶⁵ Jay Winter questioned the medical categorisation of conscripts and the lack of standard examinations.⁶⁶ However, any slight statistical variation did not alter the correlation between poverty and poor health.

Keith Layborne, Derek Fraser, Norman McCord and Thane argued that that nature and pace of social reform should be viewed against the country's economic performance and the political need to maintain social stability. This was a rejection of Richard Titmuss's perception of evolutionary policy which implied a degree of strategic government planning with defined longer term objectives. Geoffrey Finlayson's criticism of Titmuss was more direct and he regarded the development of inter-war social policy as haphazard.⁶⁷ Simon

⁶² All individual grants quoted are from an analysis of over 25,000 payments detailed in the minutes and agenda papers of the Miners' Welfare Committee/Commission held by the National Archives for the years 1921-1952 under the references POWE 1/1 to POWE 1/15.

⁶³ Martin Daunton, *Wealth and Welfare: An Economic and Social History of Britain 1851-1951*, (Oxford, 2007).

⁶⁴ Derek Fraser, *Evolution of the British Welfare State*, (Basingstoke, 2009).

⁶⁵ Pat Thane, 'The Foundations of the Welfare State', (Longmans, 1982) p. 134.

⁶⁶ Jay Winter, 'Military Fitness and Civilian Health in Britain During the First World War', *Journal of Contemporary History*, Vol. 15 No. 2 April 1980, pp. 211-244.

⁶⁷ Geoffrey Finlayson, 'A Moving Frontier? Voluntarism and the State in British Social Welfare 1911-1949', *Twentieth Century British History*, Vol. 1 No.2 1990, pp.183-206.

Szreter and Michael Woolcock attributed the drivers of welfare reform to include social injustice, rising expectations and the historic exclusion which contributed to poor health outcomes.⁶⁸ Some politicians may originally have envisaged the M.W.F. as an organisation which addressed rising expectations and would help to achieve a less fractious industry. Layborne emphasised that poverty was a driver of social change and the government had a particular need to reform the Poor Law. John Mohan argued that the Commissioners for the Special Areas, through grant funding, became involved with the formation of hospital policy attempting a degree of coordination of hospital development. Steven Thompson extended this analysis, arguing that it is important to take into account the particular social, economic, political and cultural concerns which determined the mixed economy of care in different parts of Britain.⁶⁹ The M.W.F.'s ability to access resources gave mineworkers the opportunity to redress some of the poor health provision within mining communities.

Miners' access to doctors was initially through the mechanisms of contributory schemes, and financial assistance for sickness and accidents were facilities which Thane, and John Benson regarded as important elements of trade union membership, contradicting the Webbs' dismissal of such funds as having no impact on the development of trade unions.⁷⁰ In 1892 the Northumberland and Durham Miners' Permanent Relief Fund had 108,000 members.⁷¹

In 1914 there were 40,000 beds in military, fever and smallpox hospitals run by public authorities and 120,000 beds in Poor Law institutions. Abel-Smith concluded that few of the Poor Law facilities were suitable for those who were actually sick.⁷² The 800 voluntary sector hospitals contained 45,000 beds. Martin Gorsky, John Mohan and Martin Powell criticise Brian Abel-Smith and Titmuss's views on the insufficient income flows of voluntary hospitals and share Steven Cherry's assessment that the diversification of income streams, including charging for services, enabled them to increase the number of their beds per 1,000

⁶⁸ S Szreter & M Woolcock, 'Health by Association? Social Capital, Social Theory, and the Political Economy of Public Health', *International Journal of Epidemiology*, Vol. 33 Issue 4 August 2004, pp. 650-667.

⁶⁹ Steven Thompson, 'The Mixed Economy of Care of the South Wales Coalfield', in 'Health Care in Ireland and Britain 1850-1970' eds Donnache Sean Lucey and Virginia Crossman (School of Advanced Study, University of London, 2014)

⁷⁰ John Benson, 'English Coal Miners Trade Union Accident Funds 1850-1900', *Economic History Review*, Vol. 28 No. 3 1975, p. 411.

⁷¹ Pat Thane, 'Old Age in English History; Past Experiences, Present Issues, (Oxford, 2000), p. 246.

⁷² Brian Abel-Smith, 'The Hospitals 1800-1948', (Heinemann, London, 1964) p. 252

persons from 1.8 in 1921 to 2.1 in 1931 and 2.4 in 1938.⁷³ Such broad statistics mask the inequitable regional distribution of hospitals and medical provision, but do not detract from Geoffrey Finlayson's conclusion that voluntarism could not cope with social need through a lack of resources, no overall planning or integration.⁷⁴

There is a considerable historiography dealing with voluntary hospitals with particular reference to their financial framework which required the introduction of patient charges to supplement traditional income streams. Their income deficiencies were the conclusion of detailed examinations by Abel-Smith and Titmuss.⁷⁵ Abel-Smith's criticism that voluntary hospitals were not charitable institutions because they were trading was a traditional conservative view as charities could trade without affecting their legal status. Cherry emphasises the importance of workplace collections and contributory schemes which by 1930 had 6 million members and 10.3 million by 1938. He relates these increasing sources of income to changing patterns of representation upon the management committees of voluntary hospitals and quotes the example of Doncaster Infirmary in 1924, when the miners withheld £4,000 of contributory income until they were granted greater representation.⁷⁶ The Depression in mining resulted in a loss of income for coalfield hospitals, which contributed to the Commissioner for the Special Areas providing grant aid to specific hospitals on a selected basis. John Mohan calculated that between 1935 and 1938 the Commissioners provided £2,097,059 for local authority hospitals and £1,030,489 in England and Wales.⁷⁷ He refers to the closure of Preston Colliery (1929) and the Northumberland Ship Building Company resulting in the loss of £700 p.a. (8 percent) of the income of the Tyneside and Victoria Jubilee Infirmary. The impact, however, would have

⁷³ Martin Gorsky, John Mohan and Martin Powell, 'British Voluntary Hospitals 1871-1938', *Journal of Historical Geography*, Vol. 25 No. 4 1999, pp. 463-482.

⁷⁴ Geoffrey Finlayson, 'A Moving Frontier: Voluntarism and the State in British Social Welfare 1911-1949', *Twentieth Century British History*, Vol. 1 No. 2 1990, pp. 183-206

⁷⁵ *Ibid.* Abel-Smith referred to voluntary hospitals as primarily being trading centres as 40 percent of their income was generated through patient charging. p. 402.

⁷⁶ Stephen Cherry, 'Accountability, Entitlement and Control Issues and Voluntary Hospital Funding 1860-1939', *Social History of Medicine*, Vol. 9 Issue 2 August 1996, pp. 215-233.

⁷⁷ John Mohan, 'Neglected Routes of Regionalism? The Commissioner for the Special Areas and Grants to Hospital Services in the 1830s', *Society for the Social History of Medicine*, Vol.10 (2) 1997, pp.243 – 262. Mohan explains that the Commissioner did not favour cottage hospitals or new hospitals and before considering allocating financial assistance, made assessments of management strengths and the ability to raise revenue to support any new-build projects.

been over a longer period because the run down in colliery manpower went from 1,076 in 1924 to 27 in 1927.⁷⁸

Powell attributes the geographical distribution of doctors as more problematic than that for hospitals. His conclusion that doctors were positively associated with affluence and negatively associated with need led to his summation that, 'they were drawn to coasts and repelled by coalfields.'⁷⁹ Samuel Leff shared this sentiment when he described the distribution of doctors determined less on medical need, but more on the capacity to pay.⁸⁰ Martin Powell's tabulation of doctors per 1,000 patients based on the 1931 census revealed that 16 of the worst 25 areas were mining constituencies.⁸¹ The distribution of specialists was also inequitable. In 1929, for the ratio of specialists per 10,000 persons coalfield boroughs accounted for 11 of those in the lower range. Kirkaldy, Wakefield, and Dunfermline had no resident specialists, whereas Brighton had 42, a ratio of 2.8 per 10,000.⁸²

The municipalisation of health reveals an upward trend in spending on health services, particularly from 1930 which Alyson Levene, Powell and John Stewart attributed to the increase in general hospitals after the Local Government Act 1929.⁸³ For the Socialist Medical Association the Act represented new possibilities for welfare provision and the key to a complete municipal system.⁸⁴ Paradoxically, Bevan was opposed to local government control of hospitals because they lacked the financial and managerial capacity and had a track record of inequitable provision.⁸⁵ Moses Humberton, despite his role as an alderman

⁷⁸ www.dmm.org.uk – Please refer to collieries.

⁷⁹ Martin Powell, 'Coasts and Coalfields: The Geographical Distribution of Doctors in England and Wales in the 1930s', *Social History of Medicine*, Vol. 18 No. 2, p. 263.

⁸⁰ *Ibid*, Powell (p. 250) refers to this supporting argument from Leff in 'The Health of the People', (Clarendon Press, 1950) p. 210.

⁸¹ *Ibid*, Powell pp. 259-259. Ince in Lancashire had 0.05 doctors per 1,000 people, Smallthorne in Staffordshire 0.07, Stanley in Durham 0.07 and Abersychan in Glamorgan 0.08, which contrasted with Orpington in Kent which had a ratio of 3.26 per 1,000. In the case of Smallthorne there was one doctor for a population of 14,013.

⁸² Martin Gorsky, John Mohan and Martin Powell, 'British Voluntary Hospitals 1871-1938: The Geography of Provision and Utilisation', *Journal of Historical Geography*, Vol. 25 Issue 4 October 1999, p. 473.

⁸³ Alyson Levene, Martin Powell and John Stewart, 'Patterns of Municipal Health Expenditure in Inter-war England and Wales', *Bulletin of the History of Medicine*, Vol. 78 No. 3 Fall 2004, pp 643-644.

⁸⁴ John Stewart, 'Socialist Proposals for Health Reform in Inter-War Britain', *Medical History*, Issue 39 1995, pp. 338-357.

⁸⁵ Martin Gorsky, 'Local Government Health Services in Inter-War England: Problems of Quantification and Interpretation', *Bulletin of the History of Medicine*, Fall 2011, pp. 384-412.

in Sheffield and Lord Mayor in 1927, was also President of the Sheffield and District Association of Hospital Contributors from 1927-1939, but did not advocate municipal control as he was a passionate supporter of the contributory system.⁸⁶ While Gorsky criticised Levene, Powell and Stewart for not including education and public assistance within their calculations for local authority spending on health, Sue Bowden and Alex Saddler viewed the important role of local government as their willingness to ensure close cooperation between the delivery agencies.⁸⁷

Local government's role in aspects of health provision was affected by Winston Churchill's de-rating of industry and the introduction of central government block grants, which also extended the Government's role in welfare provision.⁸⁸ Norman McCord's explanation of property franchise extension impacting on the rateable income, engendered views about the deserving and undeserving poor. He described mining communities as inward looking, which reflected their expenditure choices.⁸⁹ Powell stresses that choices on important initiatives at local level, such as maternity and child welfare, were influenced by the growth of Labour Party representation on local councils.

G.E. Godber argued that the Poor Law reforms brought Medical Officers of Health into a more prominent strategic role in the development of personal health and hospital services. He recognised that despite improvements in sanitary conditions, overcrowding and poor housing were significant issues to be resolved, evidenced by 800 children out of every

Nicklaus Thomas-Symonds in his book *Nye – The Political Life of Nye Bevan* (London, 2015) explains that in Cabinet Herbert Morrison argued with Bevan as he favoured local government control, based on his experience in the London County Council.

⁸⁶ B. Doyle, 'Labour and Hospitals in Urban Yorkshire, Middlesbrough, Leeds and Sheffield 1919-1938', *Social History of Medicine*, Vol. 23 No. 2, pp. 374-392.

⁸⁷ Sue Bowden & Alex Saddler, 'Getting it Right: Lessons from the Inter-War Years on Pulmonary T.B. Control in England and Wales', *Medical History*, 2015 (HTMC) n.h.gov. Barnsley is cited as encouraging close cooperation between agencies; general practitioners, maternity, child welfare and school clinics worked closely with Tuberculosis Officers. The Public Assistance Board and Unemployment Board provided special nourishment for needy cases. The Housing Committee worked to move families suffering from tuberculosis from poor housing conditions. The Education Committee provided free school milk. Doctors and Nurses advised, through meetings and home visits, how to identify warning symptoms and limit infection.

⁸⁸ Alyson Levene, Martin Powell and John Stewart, 'Patterns of Municipal Health Expenditure in Inter-War England and Wales'. They refer to the rateable value per head in Merthyr Tydfil in 1931 being just over £3, while in Eastbourne it was £14 10s.

⁸⁹ Norman McCord, 'Rate Payers and Social Policy 1870-1914', in *The Origins of British Social Policy* ed. P. Thane, (London, 1978).

100,000 in the early 1930s dying of common notifiable infectious diseases.⁹⁰ Infant mortality rates within mining communities detailed in the evidence to the Sankey Commission (1919), associated with poor housing conditions, aroused considerable public concern which contributed to the justification for the M.W.F.. Post-neonatal (5-52 weeks) mortality statistics revealed that by World War II the highest rates were still evidenced in mining households. Although they reduced from 113.7 in 1911 to 32.4 in 1939, the national reduction during this period was 90 percent. The study referred to in *The Lancet* selected mining families because their infant mortality experience in the 1930s was 'particularly unfortunate'.⁹¹

It was within the aforementioned context that D.W.C.s determined priorities within their respective coalfields and established the resources to be applied and upon which services, contributing to the uncoordinated and unplanned development of health related services on a national basis.

Expenditure on Hospitals

D.W.C.s, by 31 December, 1945, had provided £500,489 in support of 109 hospitals.⁹² The expenditure patterns reflect significant differences in priorities. In addition to grants towards construction costs and for endowment purposes, there were a considerable number of grants for X-ray equipment and radiography departments which reflected advances in medicine, particularly in orthopaedics and for categorising respiratory diseases.

The economic decline, caused mass unemployment and many miners working occasional shifts, and resulted in a loss of weekly income for the voluntary hospitals, which some grants were able to partially compensate. Of the £40,900 spent by the Lancashire and Cheshire D.W.C. on 16 facilities, £30,900 was grant aided in 1936 with most grants coded to meet special expenditure, although the South Yorkshire D.W.C. granted the largest amount, £124,334 for eight hospitals, the South Derbyshire D.W.C.'s support of £19,945 for six

⁹⁰ G. E. Godber, 'Medical Officers of Health and Health Services', *Community Medicine*, Vol. 8 No.1 1986, pp. 1-14.

⁹¹ J.N. Morris & J.A. Heady, 'Social and Biological Factors in Infant Mortality', *The Lancet*, 1955 Vol. 1 January – June. This involved a series of articles pp. 343-349; 395-397; 445-448 and 499-502. A further article headed 'Mortality in Relation to the Father's Occupation 1911-1950 by the same authors was published in *The Lancet* Vol. 265 1955(6863), pp. 554-560.

⁹² Report of The Miners' Welfare Commission for six and a half years to 30 June 1946, p. 75.

hospitals accounted for the highest percentage of their total receipts up to 1945 (22.3 percent). However, that statistic masks a disproportionate level of support for the Burton on Trent General Infirmary which received 14 grants totalling £15,935. The Leicestershire D.W.C. expended £10,000 of which £8,500 was for the Leicestershire Royal Infirmary, which included the cost of constructing a new outpatients department and waiting room after men had complained to the Leicestershire Miners' Association of having to wait outside in inclement weather, an example of supply responding to demand. The D.W.C. was invited to nominate two members of the Hospital's Management Committee as a consequence of this funding, a position which evidences Cherry's identification of increasing working-class representation on hospital management committees arising from their financial contributions. In addition to the funding for a new accident and casualty wing, the Leicester Royal Infirmary received an endowment of £3,000 in 1926. The significance of the relationship between the Leicester Royal Infirmary and Leicestershire mining families is evidenced by the number of days members of mining families received treatment.

Table 1:1: *Number of Days Treatment in 1931 at Leicester Royal Infirmary for Miners and their Families*⁹³

Colliery	Miners	Dependents	Days of Treatment
Coleorton	8	13	521
Desford	37	29	1,192
Ellistown	12	14	494
Lount	15	13	486
Nailstone	19	15	785
New Bagworth	14	10	583
South Leicester	22	29	1,384
Snibston	15	19	563
Whitwick	32	18	1,114
Totals	174	160	6,922

⁹³ The cost per patient day was 9s, creating a cost for the year of £3,115. In 1924 the Infirmary approached the D.W.C. with a request to assist with the cost of an extension, arguing that the treatment costs for 166 miners and 141 dependents was £3,030, for which industry contributions were £2,969.

Source: Leicestershire District Miners' Welfare Committee Minutes 1931-1936 -
Leicestershire County Record Office File DE1177/32

Financial assistance often supported key coalfield hospitals. The Barnsley Beckett Hospital received £32,560 through 14 separate grant payments from the South Yorkshire D.W.C. whereas they provided in 1933 one grant of £25,000 for a new endowed X-ray department to mark the centenary of the Sheffield Royal Hospital. The Northumberland D.W.C. only assisted the Ashington Hospital (£11,500) but in neighbouring Durham the Welfare Committee applied £64,976 for six hospitals. The contrasting priority choices in Scotland varied greatly, with no expenditure in Ayrshire, only £500 in both Lanarkshire and the Lothians, whereas the Fife and Clackmannanshire D.W.C. grant aided £19,900 for six hospitals. The initial statutory duration of the M.W.F. is reflected in the Cannock Chase D.W.C.'s application in 1922 of £3,000 in support of five hospitals which was their only hospital expenditure.

The benefits of hospital support were not confined to miners as grants were applied which benefitted family members.⁹⁴ Wives and daughters benefitted through designated female wards. An endowment of £250 for female accommodation at the Royal Mineral Water Hospital in Bath was provided by the South Wales D.W.C.. The Leicestershire D.W.C. provided £300 in 1938 for maternity equipment for the Loughborough and District General Hospital. The South Yorkshire D.W.C. grant aided in 1938 and 1940 a total of £1,300 for an extension of the female ward at the Frickley Maternity Home, which they had originally funded in 1924 at a cost of £2,000. Such facilities reflected a response to the high maternal and infant mortality rates highlighted by Bowden and Sadler, which Pamela Michael stated were exacerbated by a high number of home births due to a lack of acute facilities in west Wales.⁹⁵ Grant aid was often applied to construct residential hospital accommodation for

⁹⁴ Aberdare and District General Hospital in 1926 received £5,200 for the erection of a children's ward. A decade later the Maesteg Hospital received £1,000 to develop a children's ward. The Warwickshire D.W.C.'s grant to the Coventry and District Crippled Children's Hospital in 1923 of £1,000 was to produce an income to pay for 25 percent of the cost for treating the children of mineworkers. £3,000 was granted in 1936 by the Lancashire and Cheshire D.W.C. to the Manchester Royal Children's Hospital for exceptional expenditure.

⁹⁵ Pamela Michael, 'Public Health in Wales' published by the Welsh Assembly Government 2008, pp.1-31.

nurses.⁹⁶ While most grants were for voluntary hospitals located within coalfield communities, some were exclusively for mineworker patients. £14,000 was provided by the South Wales D.W.C. in 1926 and 1927 to establish the Treherbert Cottage Hospital. The Gordon House Hospital Ward, named after the colliery, located in Cockfield South West Durham, was a 3 bed facility funded by a grant of £1,010. In South Yorkshire the Fullerton Hospital named after the donor of the land, was built for the workmen of Denaby and Cadeby Collieries. After a public meeting in September 1903 when it was proposed to build and maintain a cottage hospital, a ballot in October resulted in 2,440 miners voting in favour of a weekly contribution deducted from their wages, with 970 voting against. In 1928, the workmen's contributions were £5,534 and the hospital received grants from the D.W.C. totalling £5,445 of which £4,400 was for an extension in 1933 and an outpatients department in 1934. In Somerset, the Paulton Memorial Hospital received a grant of £2,000 in 1929 for a new wing comprising 8 beds and two observation wards, one of which was reserved exclusively for miners and their dependents which constituted 70 percent of patients treated. There was no difficulty in identifying that the Caerphilly and District Miners' Hospital where the men contributed towards the upkeep was exclusively for coal miners, as each ward was named after a colliery. The hospital opened in 1923 with the colliery owners having donated £3,250 to the building fund, but the mineworkers contributed £38,955 and 90 percent of the hospital's subsequent income. Between 1935 and 1945, the D.W.C. provided £5,002 for X-ray equipment and a fracture department.⁹⁷

The geographical coverage of coalmining in South Wales resulted in a grants pattern that reflected a degree of fairness influenced by the way the South Wales Miners' Federation (hereafter S.W.M.F.) was organised into 19 districts. The total financial support of £79,114 was granted to 22 hospitals.

⁹⁶ **Residential Nursing Accommodation in Voluntary Hospitals Grant Aided by D.W.C.s 1920-1946**

D.W.C.	Hospital	Year	Amount in £
Fife and Clackmannanshire	Randolph Weymms Memorial Hospital	1926	200
South Derbyshire	Derbyshire Hospital for Women	1937	100
South Derbyshire	Derbyshire Royal Infirmary	1928	25
South Derbyshire	Leicester Royal Infirmary	1933	1,000
South Yorkshire	Barnsley Beckett Hospital	1939	1,000
Warwickshire	Tamworth Hospital	1930-36	3,250
Lancashire and Cheshire	Leigh Infirmary	1937	1,000

Source: Annual Reports of the Miners' Welfare Committee 1921-1939.

⁹⁷ Stephen Thompson, 'The Mixed Economy of Care of the South Wales Coalfield', in *Health Care in Ireland and Britain 1850-1970*. eds Donache Sean Lucey and Virginia Crossman (School of Advanced Study, University of London, 2014)

Upon the formation of the National Health Service the Ministry of Health and the M.W.C. took advice concerning the endowment funds provided by D.W.C.s and whether they were transferrable under the legislation. It was determined that as separate trusts with specific objects which allowed for a variation of how income could be applied for alternative mining charitable application, they were preserved as independent charitable funds.

Holmeside and South Moor Cottage Hospital (Durham)

The combination of local demand and available capital expenditure through the M.W.F. resulted in the local welfare committee developing their own hospital facility. The need for a local hospital had originally been recommended in 1909 by the coroner after the West Stanley pit disaster, but the capital cost could not be raised. Following the Mining Industry Act 1920, the trade union lodges and colliery personnel held meetings to determine preferences for welfare expenditure, which initially included a hospital, a pithead bath and a labour hall and institute. At a joint meeting in November 1922, they agreed on the provision of a hospital. The colliery company made a gift of a 5 acre site and committed to provide £1,000 per annum towards the maintenance costs, to which the men contributed 1d per week.⁹⁸

The hospital opened on 29 January, 1927. The facility accommodated 28 patients in four wards, of which two were for men, one for women and one for children, plus two single rooms. The facilities included an operating theatre, X-ray room, dispensary, waiting room, secretary's office, porter's lodge, garage accommodation for two ambulance drivers, small mortuary and laundry. The upper floor accommodated the nurses and domestic staff. Between 1924 and 1942 there were 36 separate grant payments from the M.W.F.. A total of £55,231 was provided for the construction and equipping of the hospital. The £16,000 endowment fund did not transfer to the N.H.S. and was applied for the development of local miners' welfare recreational facilities. The hospital, following its conveyance to the N.H.S., continued to operate until 2008 when it closed and the buildings were demolished.

⁹⁸ In 1932 the colliery company employed 1,906 men at eleven local collieries. Two of the directors, Sir Claude Morrison-Bell and Sir Arthur Morrison-Bell M.P. were descendents of the original colliery owners, William Bell and James Morrison.

Convalescent Provision

Jenny Cronin, in her review of convalescence in Scotland, refers to a lack of attention given to the history of convalescent homes and the Miners' Welfare Commission.⁹⁹ She attributes only a few lines on convalescence in Abel-Smith's *The Hospitals* and can offer no explanation as to why Burdett's *Hospital and Charities Yearbooks*, which were published from 1890 to 1930, did not include miners' convalescent homes.

Elizabeth Gardiner, in her appraisal of convalescent care, affords a definition of a home as: 'admitting primarily patients who have passed an exacerbation of a chronic condition and keeping them while their condition is improving, often until the maxim of physical efficiency has been reached.'¹⁰⁰

Given the range of providers, which included voluntary hospitals, religious and temperance organisations, co-operative and friendly societies, private benefactors, mutual assurance societies, and occupational groups, usage would require a multiplicity of definitions. Cherry attributed one third of convalescent homes linked to voluntary hospitals having the important objective of avoiding hospital bed blocking.¹⁰¹ Convalescent provision funded from the M.W.F. involved no *in situ* medical care, but attendees were regarded as patients.¹⁰² The availability of resources produced a considerable activity for convalescent provision implying a significant level of demand, which was not being met by existing voluntary arrangements. An important aspect of convalescent provision recognised that a patient's recovery would be aided rather than returning to the appalling social and environmental conditions that were experienced in many working class homes. The interim Report of the Sankey Commission contained a reference to the quality of some colliery housing: 'There are houses in some districts which are a reproach to our civilisation. No

⁹⁹ Jenny Cronin, *The Origins and Development of Scottish Convalescent Homes 1860-1939*, (PhD Thesis 2003, University of Glasgow, [www.thesis.gla.ac.uk]).

¹⁰⁰ Elizabeth Greene Gardiner, 'Convalescent Care in Great Britain', (Chicago, 1935) pp. 8-9.

¹⁰¹ Stephen Cherry, 'Medical Services at the Hospitals in Britain 1860-1939' (Cambridge, 1996).

¹⁰² Right Honourable Viscount Chelmsford, *The Miners' Welfare Fund*, (London: H.M.S.O. 1927) p. 35.

judicial language is sufficiently strong or sufficiently severe to apply to their condemnation.’¹⁰³

Elizabeth Gardiner attributes the surge in convalescent home provision from 1921–1930 to the leadership of the Ministry of Health, but offers no evidence to justify this comment. Cronin concludes that: ‘The most recent evidence indicates that the M.W.F. provided the incentive for the majority of new convalescent homes during this period.’¹⁰⁴ Cherry makes no reference to miners’ convalescent homes despite ascribing two thirds of all homes being outside the hospital system.

A survey of homes by the Institute of Almoners under the leadership of Ms C. Morris, considered 318 homes in England and Wales which contained 14,000 beds. 270 were visited and the majority declined to take patients who required medical treatment at night. They were described as institutional with rigid rules and the lack of provision in the Midlands produced a waiting time of between 6 and 8 weeks for patients to be admitted.¹⁰⁵

Up to 30 June, 1946, the M.W.F. had applied £2,933,025 for convalescent provision, which was 76.5 percent of all the resources applied for health projects, and 24.8 percent of all district expenditure. Appendix 3 details the range of expenditure by D.W.C.s as a percentage of their health expenditure and as a percentage of the total resources applied. The Lancashire and Cheshire D.W.C. afforded convalescence the greatest priority as they spent 86.98 percent of their health expenditure and 73.94 percent of their total allocation on the construction and operation of their home at Blackpool. A more accurate explanation of priority expenditure on all convalescent provision is that which took place within the first five years of the Fund’s initial statutory life. By 31 December, 1925, this was 99.91 percent for Ayrshire, 99.92 percent for Lancashire and Cheshire, 69.94 percent for Nottinghamshire, 100 percent for North Staffordshire, 93 percent for Cannock Chase and 39.3 percent for South Wales.

By 1948, the Fund had established sixteen homes for 13 D.W.C.s. In addition, Mr Charles Carlow of the Fife Coal Company gifted a large property at Culross for a convalescent home

¹⁰³ Coal Industry Commission – Reports and Minutes of Evidence on the First Stage of the Inquiry – H.M.S.O. Cmd 359 1919, para. xxi, p. ix.

¹⁰⁴ Jenny Cronin *op cit* p. 23.

¹⁰⁵ ‘Convalescent Homes’, *British Medical Journal*, 11 October 1947, p. 580.

for miners and their wives. The North Staffordshire home, Horton Lodge, had proved unpopular because of its location and its low occupancy rate resulted in the highest patient cost per week of all the homes. Permission was given for the trustees to sell the home and purchase the Russell and Hood Home at Blackpool from the trustees of the Derbyshire Convalescent Home who had bought this property as their Skegness Home had been requisitioned for use as a military hospital. The detail of those homes which provided convalescence for 15,122 patients in 1948 of whom 2567 were female are detailed in Table 1:2.

Table 1:2: *Convalescent Homes, Number of Beds and Patient Occupancy 1948*

District Welfare Committee	Home	Number of Beds	Number of Patients
Fife and Clackmannanshire	Blair Castle (Culross)	41	389
	Lynwood Hall (for wives)	24	294
Lanarkshire	Saltcoats	60	650
	Skelmorlie (for women)	40	740
Ayrshire	Kirkmichael	48	344
	Troon (for women)	48	468
Durham	Conishead Priory	140	2369
Lancashire and Cheshire	Blackpool	144	2696
South Yorkshire	Rhyl	64	1424
	Scalby	48	799
	Scarborough (for women)	34	564
West Yorkshire	Lytham St Annes	43	901
Derbyshire	Skegness	162 (includes 30 for women)	830 men 501 women
North Staffordshire	Blackpool	60	244 (part year)
	Rudyard (Being sold)	42	Nil

Cannock Chase	Weston-Super-Mare	48	446
Warwickshire	Swanage	18	330
South Wales	Bournemouth	60	1133
Total		1,124	15,122

Source: First Annual Report of the National Miners' Welfare Joint Council incorporating the Annual Report of the Miners' Welfare Commission for the year ended 31 December, 1948, p. 26.

Provision was supplemented by the provision of convalescence purchased by ticket schemes which operated in nine districts, although four ticket schemes also operated in districts which had their own homes. The number of patients funded cannot be calculated due a paucity of records and because many of the funds had a range of charitable objectives, not just convalescence. However, in 1948 their total expenditure was £25,542.

In Leicestershire all the miners contributed to the Saturday Fund for the Leicester and County Hospital Society which entitled them to stay at the Cromer Convalescent Home. Additional provision by the Leicestershire Convalescent Ticket Fund, established by the D.W.C., included the purchase of bed space in convalescent homes in Skegness, Mablethorpe, Clevedon, Overstrand, Littleport and Roecliffe Manor. In 1936 the ticket scheme paid for 53 patients. Additional expenditure was incurred through the provision of 'outfits'. It was a mark of poverty that pyjamas, the wearing of which was a condition of occupation by the homes, often had to be provided as in mining families they were deemed an unaffordable luxury. In 1929 the South Derbyshire Benevolent Fund paid for 71 convalescent placements whereas in South Yorkshire in 1936 their main convalescent funds paid for 1,672 patients to undertake convalescence in homes not associated with the industry.

The Northumberland Miners' Welfare Convalescent Scheme, endowed by the M.W.F. with a grant of £50,000 in 1936, paid for 466 patients in 1937. They utilised homes in Whitley Bay (Northumberland coast), Gisland (Northumberland/Cumberland border) and Silloth (Cumberland coast). The cost per bed fortnight was £2 10s in Gisland, £2 1s in Silloth and £1 1s in Whitley Bay. The Fund also paid for the transportation of patients.

The two purpose built homes in Blackpool and Skegness were enormous structures and their official openings were significant events. The Blackpool home was originally to be opened in May 1927 and the Prince of Wales had been invited to conduct the official opening, but he was otherwise committed. However, he expressed the desire to open the home and the 28 June was subsequently agreed. Over 2,000 mining family members were in the grounds of the home to witness the official opening.¹⁰⁶ The Skegness home was opened by Lord Chelmsford on 10 March, 1928. Over 500 mining families attended the opening for which special trains had been arranged.¹⁰⁷ While the M.W.F. provided endowment funding for convalescent homes, the income was insufficient to meet maintenance costs and miners were expected to make a contribution which was usually 1d per week, although some support was provided by owners. In North Staffordshire the owners contributed £500 per annum to the maintenance of Horton Lodge. In Ayrshire the owners advanced the purchase money for Kirkmichael House which was to be repaid by the D.W.C. in five subsequent annual instalments. The commitment of the owners was also reflected in the time given to meetings of trustees and management committees, and often included the provision of accountancy services. In South Yorkshire their home was subject to joint visit by two members of the Convalescent Management Committee which took place on a monthly basis with written reports submitted to the full Committee. Such visits were undertaken on a Saturday and Professor Douglas Hay from the Newton Chambers and Co. Ltd made a disproportionately high number of visits on behalf of the owners.¹⁰⁸

Convalescence was deemed by most D.W.C.s to be an important provision, which in homes they provided was free of charge and in some cases supplementary to convalescence provided by the voluntary hospitals. Declining employment levels adversely affected the mineworkers' contributory income towards maintenance costs, but the M.W.F. was sympathetic to D.W.C.s increasing endowment funds to maintain income levels. From 1930 to 1939 it is estimated that over 150,000 patients enjoyed convalescent provision, either in homes provided and/or equipped by the Fund, or patient stays in homes purchased through ticket schemes. Despite the observation by Cronin that doctors were ambivalent towards

¹⁰⁶ 'The Prince in Lancashire. A Workers' Welcome. Visit to Miners' New Convalescent Home', *The Times*, 29 June 1927, p. 18.

¹⁰⁷ '£50,000 Home for Miners. Fine Skegness Building Opened by Lord Chelmsford', *Skegness Standard*, 14 March 1928, p. 5.

¹⁰⁸ Professor Hay was appointed the N.C.B.'s first Director of Mining upon nationalisation.

convalescence, which they viewed as a social provision, Dr L.A. Parry, writing in the B.M.J., argued that the convalescent facilities provided during the Second World War for service personnel and evacuated children under five years of age upon which £5,000,000 had been spent adapting large country homes, should be retained as convalescent provision was medically important.¹⁰⁹

Nursing Associations

The establishment of Queen Victoria's Jubilee Institute for Nurses in 1887, following a proposal from Florence Nightingale and William Rathbone to provide district nurses for the poor, acted as a catalyst for the professionalism of nursing and the development of County Nursing Associations. Howse described this landmark as 'perceived need translated into action with Royal patronage.'¹¹⁰ The transition from the lady bountiful provision of untrained nurses to the employment of district nurses was not without disagreement within the medical profession. In 1909 a series of correspondence from medical practitioners published in the *British Medical Journal* emphasised their concerns about the role of community nurses, although it is not apparent whether such concerns were upon medical grounds or threats to their income.¹¹¹ However, one correspondent advocated the development of the Queen Victoria's Jubilee Nurses as they could be of considerable help working under a medical practitioner and County Associations were to be encouraged in their efforts to raise standards.¹¹²

Many coalfield nursing associations predated the Miners' Welfare Fund. The Coedpeth and Minerva Association in North Wales which affiliated to the Queen's Nursing Institute (Q.N.I.) in 1908 received funds from public subscriptions, the coal owners and a weekly levy from the miners. The nurses employed had to be Welsh speaking and in 1935 the mining population (families) was in the region of 5,000.¹¹³ The First World War was a significant

¹⁰⁹ L.A. Parry, 'Convalescent Home Accommodation', *British Medical Journal*, 19 May 1945, pp. 710-711.

¹¹⁰ Carrie Howse, 'From Lady Bountiful to Lady Administrator: Women and the Administration of Rural District Nursing in England 1880-1925', *Women's History Review*, Vol. 15 No. 3, p. 429.

¹¹¹ Refer to *British Medical Journal* Vol. 1 10 April 1909 p. 929 – a letter headed 'Rural District Nursing Association from an anonymous country practitioner. See also correspondence from W. Windley headed 'Rural District Nursing Associations' in the *British Medical Journal* Vol. 1 (2529) 19 June 1909, p. 1512.

¹¹² Edward P. Furber, *British Medical Journal*, 24 April 1909, Vol. 1 (2521) p. 1039.

¹¹³ Helen Mary Sweet, 'District Nursing in England and Wales c. 1919-1979 in the Context of the Development of a Community Health Team', [radar.brookes.ac.uk] PhD 2003 p. 163. A pay note for a North Wales Miner for the week beginning 19 August 1944 reveals deductions of 4d for the hospital, 4d for the doctor, and 2d for the

landmark in the field of health provision, particularly regarding the role of government through legislative changes, such as the Maternity and Child Welfare Act 1918 and the Nurses Registration Act 1919. Not all District Nursing Associations were allowed to affiliate to the Q.N.I. as some were sectarian. In 1920 the distribution of District Nursing Associations (D.N.A.s) showed remarkable differences in regions with substantial coal interests. South Wales only had 3 percent of the affiliated associations, whereas the West Midlands had 16 percent, 2 percent more than London.¹¹⁴ The D.N.A.s in coalfields were established either as broad community facilities or specific colliery related services. However, the availability of capital grants from the M.W.F. was not primarily responsible for the establishment of new nursing schemes as the critical factor was the men's willingness to make a weekly financial contribution.

The Dawdon Colliery Workmen's Nursing Association, established in 1923, by 1925 enjoyed an annual income of £560 from the colliers' 1d weekly contribution, which was sufficient to employ two nurses. While the M.W.F. provided a £650 grant in 1925 to purchase and furnish a house for the nurses, the success of the Association was attributable to the quality of its governance and contributory income. In 1934, 5,100 visits were made to 301 patients, which included 52 maternity cases. They also paid £102 to Seaham Urban Council for the use of their ambulance for 279 return journeys to the infirmary.¹¹⁵ The workforce at Silverwood Colliery, South Yorkshire, through their Penny in the Pound Scheme, contributed monthly donations to the three nursing associations in areas in which the men resided.¹¹⁶ In 1924 the income of the Clowne and District Nursing Association in Derbyshire was £625, of which the colliers contributed £300.¹¹⁷

The growth of D.N.A.s reflected medical need, more diverse income streams, and enhanced client satisfaction, particularly in rural areas where, according to Howse, 'urban hospitals

Red Cross. There was, in addition, a 1d deduction for Dr Barnardo's Home. The net pay for a 6 day working week with overtime was £5 3s 6d – Flintshire Record Office File D/NM/417. Headed correspondence regarding compensation claims.

¹¹⁴ Helen Mary Sweet, *op cit* p. 58.

¹¹⁵ 'Dawdon', *Hartlepool Northern Daily Mail*, 26 January 1925, p. 4.

'Dawdon Colliery Workmen's Nursing Association. Annual Report', *Sunderland Daily Echo and Shipping Gazette*, 15 April 1935, p. 3.

¹¹⁶ A monthly grant of £18 was provided to the Dalton and Thybergh Nursing Association and £5 each to the Bramley and Wickersley Nursing Association and the Rotherham and District Nursing Association. *Sheffield Daily Telegraph*, 7 March 1924, p. 3.

¹¹⁷ 'Clowne and District Nursing Association', *Sheffield Daily Telegraph*, 21 March 1924, p. 3.

were beyond the reach of many rural villages'.¹¹⁸ Enid Fox records that in 1935 there were 5,733 nurses, nurse midwives, midwives, and trainees in the Q.N.I., a threefold increase upon 1906. By 1934 there were 62 administrative counties in England and Wales which had 60 County Nursing Associations of which 50 were affiliated to the Q.N.I.. Although there were 2,361 Queen's Nurses and 2,853 village midwives, 4 percent of the English population and 13 percent of the Welsh had no access to nursing associations.¹¹⁹

While Howse emphasised the transition from lady bountiful to lady administrator in the provision of nursing services, there were coalfield schemes in the 1920s which benefitted from the patronage of titled female presidents, particularly through fundraising requirements. The President of the Bolton and Goldthorpe Nursing Association in South Yorkshire in 1924 was Lady Dorothy Wood, the Countess of Halifax, who resided in the 64 bedroomed Hickleton Hall. This service had sufficient income to employ two nurses.¹²⁰ In 1925 Lady Barnard of Barnard Castle expressed an interest in forming a nursing association for the isolated mining communities of Cockfield and Staindrop in south-west Durham.¹²¹

Despite some D.N.A.s in Welsh mining communities experiencing financial difficulties, others enjoyed aristocratic support. The Marchioness of Bute and Lady Aberdare were supporters of the Glamorgan County Association.¹²² Lady Kensington personally supported the St Bride D.N.A. and Lady Dillwyn-Llewellyn was associated with the Swansea Federation. Lady Gerrard helped fund the Ashton in Makerfield D.N.A. in Lancashire with an initial grant of £100 together with funds from the colliery owners.¹²³ There is little evidence of support from colliery owners for nursing services, but one notable exception was Pilkingtons of St Helen's, the glass manufacturers with significant colliery interests, who in 1935 supported 25 district nurses for which a contributory scheme was also in operation.

¹¹⁸ Carrie Howse, 'From Lady Bountiful to Lady Administrator: Women and the Administration of Rural District Nursing in England 1880-1925', *Women's History Review*, Vol. 15 No. 3, p. 424.

¹¹⁹ Enid Fox, 'District Nursing in England and Wales before the National Health Service: the Neglected Evidence', *Medical History*, 1994, 38, p. 311.

¹²⁰ 'Bolton and Goldthorpe Nursing Association Formed', *Sheffield Daily Telegraph*, 19 April 1924, p. 5.

¹²¹ 'A Durham Nursing Scheme', *Yorkshire Post and Leeds Intelligentsia*, 8 October 1925, p. 7.

¹²² Lady Aberdare had established a cottage hospital in 1886 for colliery casualties and the hospital was supported by a 1d per week scheme from the local miners. She leased the hospital to the trustees of the Mountain Ash General Hospital which provided patient facilities whilst the General Hospital was being built. Upon its construction in 1925 the lease was surrendered and Lady Aberdare's hospital became the first maternity hospital in Mountain Ash.

¹²³ Helen Mary Sweet, *Ibid.*

By 1934 the annual income of District Nursing Associations had reached £1,059,667 of which 25 percent came from voluntary subscriptions and donations, 24 percent from provident schemes and 17 percent in grants from local authorities, mostly for midwifery services. Legacies were often a significant source of income. In 1925 the Coalfield Nursing Associations of Bedworth (£2,500), Coventry and District (£1,500) and Nuneaton and District (£500) benefitted under the will of H.G. Tetley, the Chairman of Courthaulds.¹²⁴

Although many of the coalfield based associations were affiliated to the Q.N.I., it was not until 1934 that the M.W.F. required endowments to be conditional upon affiliation. This policy was determined when the West Yorkshire D.W.C. wanted to endow a Nursing Association in the Castleford area. The expenditure of the M.W.F. on nursing services by 31 December 1945 was £89,424 for 67 schemes, but considerable disparity was evident within and between coalfields. Such disparity reflected local perspectives on the quality, scope and financial stability of existing nursing provision. Fourteen D.W.C.s scheduled no support and across the East and West Midlands only the Warwickshire D.W.C. provided grant aid, a substantial sum of £17,399 for 16 associations. In Scotland, the combined support of £3,763 from four D.W.C.s was for four schemes.¹²⁵ Of the total granted by the M.W.F. 87.1 percent was attributable to the South Yorkshire, West Yorkshire, and Warwickshire D.W.C.s. The size of coalfields did not affect levels of support. The D.W.C. for the tiny Forest of Dean coalfield approved modest expenditure for four associations, whereas the South Wales D.W.C. committed no expenditure at all. This lack of consideration by the South Wales D.W.C. is surprising given that Sweet records some coalfield schemes experiencing financial difficulties. Bridgend District Nursing Association only employed one Queen's Nurse in 1926 to serve a population of 10,000 and they disaffiliated in 1929 due to financial problems. The Neath Association had insufficient resources to provide nursing services for a population of 33,000 and they experienced a high turnover of nurses due to overwork.¹²⁶

The Ammanford Association disaffiliated in 1931 due to financial difficulties. Helen Sweet refers to a lack of funding owing to the 1926 miners' strike, which resulted in the suspension of the Treherbert D.N.A. from affiliation to the Q.N.I. and their nurse was relocated to

¹²⁴ '£10,000 from Tetley Legacy', *Coventry Herald*, 3 April 1925, p. 7.

¹²⁵ £2,489 was applied to 2 schemes in the Lothians, £110 for one scheme in Lanarkshire, £1,000 for one scheme in Fife and Clackmannan and no provision in Ayrshire.

¹²⁶ Helen Mary Sweet, 'District Nursing in England and Wales.'

Swansea. When the Ministry of Health was reviewing the expenditure of the M.W.F. on health related issues, they concluded that by the end of 1945 the expenditure for 67 nursing schemes in eleven districts comprised endowments of £61,934 and nursing centres and cottages had been financed by £23,547 of grant expenditure. This assistance had been approved by the Ministry, with trust deeds executed to protect endowment funding. The Ministry concluded that the M.W.F.'s expenditure on nursing services resulted in a marked improvement in facilities, although they commented that the improvements may have been greater had a coordinated network of schemes been agreed in advance. Given the initial five yearly statutory timelines, which underpinned the output levies, and locally determined prioritisation, together with a number of existing nursing associations, improved coordination was unlikely to have been a realistic outcome.¹²⁷ With the establishment of the N.H.S. the nursing associations with houses provided by the M.W.F. were sold and the proceeds, together with any endowment funds, were applied for alternative mining charitable application.

Ambulance Services

By 31 December, 1945 D.W.C.s had applied £169,929 for the provision of ambulance services and the expenditure identified varying priorities between coalfields. 55 percent of the total expenditure was applied by just two D.W.C.s, South Wales and Durham. The M.W.C.'s subsequent concept of coordination in the context of ambulance provision was appropriate but a little late given the example set in South Wales following the return of military ambulances after the First World War. In October 1914 *The Times* commenced an appeal for an ambulance fund. The Duke of Portland was Chair of the British Ambulance Committee and Sir Henry Dennis Readett-Bayley was the founder and organiser of the Dennis Bayley Fund, established to raise funds from within the coal industry.¹²⁸ Over £700,000 was raised and the King inspected a fleet of 25 ambulances costing £15,000 at Buckingham Palace; these were presented to the Red Cross Society and Order of St John by

¹²⁷ National Archive File 'N.H.S. Report on Future Programme. Draft M.W.C.' MH 77/32.

¹²⁸ William Cavendish-Bentinck, the Sixth Duke of Portland, was a royalty owner with significant colliery holdings located on his estates. Sir Henry Dennis Readett-Bayley was the managing director of the Digby Colliery Company, a director of the Manners Colliery Company, a governor of the British Ambulance Committee, member of the British Red Cross Society, and member of the St John's War Executive Committee, Collections Committee, and Motor Ambulance Committee. He subsequently served as a member of the Nottinghamshire D.W.C..

the Yorkshire miners.¹²⁹ The Nottinghamshire and Derbyshire coal owners and miners subscribed £80,000 to the Fund with a proviso that ambulances, when returning to Britain after the War could be used for the benefit of mining communities.¹³⁰ However, the subsequent coverage would not appear to have been extensive as the Heage Colliery Company was granted permission in 1921 to use the town's ambulance in case of accident providing they used their own horse.¹³¹

The Joint Committee of the British Red Cross Society and the Order of St John in 1919 placed 500 ambulances in county areas under the control of regional directors. A small charge of 1s 3d per mile was suggested as an appropriate patient charge. The most strategic coordination of an ambulance service within a coalfield was developed in South Wales. Lord Merthyr, the owner of Lewis Merthyr Consolidated Collieries Limited and founder member of the South Wales and Monmouthshire Coal Owners' Association, had been a keen supporter of St John's. The South Wales and Monmouthshire Miners' Permanent Provident Society established branches, training miners who were termed 'dirty doctors' to administer first aid.¹³² The Priory of Wales established 'a valuable scheme to meet coalfield ambulance needs.'¹³³ Fully equipped ambulances were available in the event of colliery accidents. Ambulance stations were initially opened in the mining districts of Glamorgan and Carmarthenshire, with locations to follow in Monmouthshire, West and North Wales. The Home Office had approved the scheme and all colliery owners who entered into a contract for the use of the service were exempt from Regulation 14 of the Coal Mines Act 1911 which required them to have an ambulance appliance available.¹³⁴

The Chelmsford Committee of Enquiry criticised the support for individual community based ambulances in both Northumberland and Durham, preferring coordination with other providers. The average annual mileage for 29 of the ambulances was only 4,000, although the revenue for the upkeep was provided by colliery levies which varied from ½d to 3d per

¹²⁹ 'The King and Miners' Ambulances', *The Times*, 7 October 1916, p.11.

¹³⁰ 'Verdun Ambulances for Miners', *The Times*, 21 May 1919, p. 14.

¹³¹ 'Ambulance', *Ripley and Heanor News and Ilkeston Division Free Press*, 15 April 1921, p. 3.

¹³² Stephen Thompson, *op cit*. Thompson explains how Lord Merthyr, then plain William Thomas Lewis, started the South Wales and Monmouthshire Miners' Permanent Provident Society in 1881 and paid a sum equal to 25 percent of the men's contribution in response to the Employers' Liability Act. This enabled his company to contract out of the legislation which also undermined the appeal of the mining unions.

¹³³ 'Motor Ambulances. Priory of Wales Provision for the Coalfield', *Western Mail*, 24 May 1919, p. 10.

¹³⁴ 'Ambulance Transport: Fine Scheme for Priory of Wales', *Western Mail*, 2 June 1919, p. 4.

week. The M.W.C. attempted to restrict support for ambulances in Durham and Northumberland to those which formed part of a scheme of coordination. This was one of the issues discussed at a joint meeting of the Northumberland and Durham D.W.C.s attended by three members of the M.W.C., including the chairman. There were 169 ambulances in Durham of which only 28 were provided by the M.W.F. and only 10 out of 55 in Northumberland. Both D.W.C.s were opposed to any integrated scheme of coordination. The M.W.C. withdrew their opposition to individual ambulance grants in these coalfields which may have been linked to not wishing to antagonise the committees given the orchestrated objections by the Nottinghamshire D.W.C. to arrange a deputation in order to object to Headquarter's levels of expenditure, centralisation and the dilution of D.W.C. levels of responsibility.¹³⁵

The availability of motorised ambulances in mining communities was a significant advance. The Mines Inspectorate unsuccessfully prosecuted the Ocean Coal Company for not having a motorised ambulance when a collier suffered an accident which resulted in a broken spine, fractured leg and head injury. The only facility available was an ambulance litter for short journeys and the judge determined that the law did not specify what type of ambulance transport had to be made available by the company.¹³⁶

The industry, through the D.W.C., enthusiastically embraced the St John's Scheme. Initial grants in 1922 (£2,000), 1923 (£2,500) and 1924 (£2,500) were to assist and extend the scheme. The *Western Mail* declared that 'The Service in colliery districts had been satisfactory in every way and a large number of stations has been set up.'¹³⁷ The South Yorkshire D.W.C. reviewed the South Wales Scheme and identified that in 1935 there were 19 stations, with each no more than 10 miles apart, housing 23 ambulances which transported 13,838 patients a total of 248,978 miles. Each station had a transport engineer and drivers with first aid qualifications were available 24 hours a day. The stations and the St John's Headquarters were linked by telephone. The workmen's subscription for themselves and dependents was 1d per week and half that amount for widows, old age pensioners and the unemployed. Non-subscribers had to pay 1/3d per mile for the first 100

¹³⁵ At a meeting of the Durham D.W.C. on 14 September 1946 it was determined that HQ expenditure was not unreasonable and they would not support the action proposed by the Nottinghamshire D.W.C..

¹³⁶ 'Ambulances at Collieries', *Western Mail*, 20 September 1918, p. 6.

¹³⁷ 'Ambulance Transport', *Western Mail*, 5 November 1923, p. 8.

miles and 1/5d per mile thereafter. The colliery companies subscribed 1s per man per annum to meet their statutory obligations and the D.W.C. gave an annual grant to support the service which included the replacement of vehicles. Each ambulance station had an advisory committee upon which the local Lodge Secretaries served. The Central Ambulance Committee had industry representatives, of whom Thomas Richards, the General Secretary of the S.W.M.F. was a founding member. The large grants in support of the service did not preclude many small awards for equipment for the ambulances halls or more sizeable grants to purchase the halls themselves.

The South Derbyshire Ambulance Scheme was the D.W.C.'s major health expenditure (£26,943 by the 31 December, 1945) which represented 30.2 percent of the D.W.C.'s total receipts. In 1926 a grant of £12,000 paid for the construction of a driver's cottage, garage and ambulance. The service was endowed, the income of which met maintenance expenditure. Subsequent grants enabled the purchase of additional and replacement vehicles. Between 1928 and 1942 the vehicles carried 127,863 passengers, involving a distance of 599,883 miles. While the M.W.C. praised the South Derbyshire Scheme for a strategic approach and criticised the provision of ambulances for specific locations in Durham, the manpower of the South Derbyshire coalfield in 1932 was 3,684, compared to 3,886 in Dawdon Colliery, located on the Durham coast.

The relationship between the industry and St John's was not confined to the provision of ambulances because every coalfield held annual first aid competitions for colliery ambulance associations which were organised by the Priory with D.W.C.s providing trophies and associated costs. The return of ambulances after the First World War combined with financial support from a number of D.W.C.s, and colliery levies to support local ambulance provision irrespective of how the ambulances were managed, greatly enhanced the accessibility of hospitals for accident victims or those in need of hospital treatment arising from illness. Pollock cites 375 ambulance stations in England and Wales in 1925 whereas the *British Medical Journal* referred to 384 ambulances which were responsible for 1,500 patient journeys per week.¹³⁸

¹³⁸ Alexander Pollock, 'Ambulance Services in London and Great Britain from 1860 until Today: A Glimpse of History Gleaned Mainly from the pages of Contemporary Journals' *Emergency Medical Journal*, 16 March 2013 Vol. 30 (3), pp. 218-222:

Upon the formation of the N.H.S., ambulances funded by the M.W.F. and subject to mining trusts, were sold and the proceeds, together with any endowment funds, were applied for alternative mining charitable applications. Any accommodation bought to house ambulances and/or drivers was similarly treated.

Special Medical Treatment

The expenditure under Health, which is coded 'Special Medical Treatment', covered a variety of funding arrangements including for some D.W.C.s convalescence. Several D.W.C.s applied all special medical treatment expenditure directly from their allocation, such as the Durham D.W.C., whereas other D.W.C.s created special benevolent funds which had a separate legal existence and decision making processes, such as in South Derbyshire and Nottinghamshire. Special medical treatment included such provision as orthopaedic treatment for adults and children, medical equipment, surgical appliances, splinterless glasses, wheelchairs and other mobility aids. The enhancement of ambulance services, nursing provision, and the funding of voluntary hospitals all contributed to the enhancement of medical facilities in coalfields, but the expenditure on special medical treatment reinforced two persistent themes. Firstly, the dangerous nature of mining with its high accident rate and secondly, that poverty often precluded individuals from appropriate medical support unless third party financial assistance was available. The expenditure, like that for individual education grants, enabled an identification of the M.W.F. directly benefitting miners and family members.

Between 1921 and July 1952, £189,907 was expended on 96 schemes, but 6 D.W.C.s accounted for the majority of the expenditure.¹³⁹ The Lancashire and Cheshire D.W.C. expended £50,052 on a Convalescent Health Treatment Scheme which operated as a separate fund with a constitution and rule book, which funded hospital treatment, surgical appliances and mobility aids, and convalescence in homes not associated with the industry.

The Nottinghamshire expenditure of £43,397 included an endowment of £39,000 for a special treatment after accident fund, which in 1938 paid for the treatment of 29 spinal

British Medical Journal, 12 December 1925 Vol. 2 (3389), pp. 1136-1137.

¹³⁹ Fourth Report of the National Miners' Welfare Joint Council incorporating The Report of The Miners' Welfare Commission for the one and a half years ended 30 June 1952, p. 39.

injury cases and provided 43 men with artificial limbs and/or surgical appliances. A total of £2,400 had been applied for the medical treatment of physically disabled children and in the 1939 annual report of the M.W.C. there is reference to a child with diseased hips who received treatment at a cost which would have been prohibitive to the parents. The Nottinghamshire D.W.C. also paid £3,000 to the British Empire Cancer Campaign to provide radium for the treatment of miners or their dependents who suffered from cancer, but this was recorded as hospital expenditure.

Another unique item of expenditure was £7,987 in South Wales. The D.W.C. provided grant funding to two independent charities which offered workshop facilities for miners - the Pontypridd and Rhondda Institutes for the Blind. The revenue was provided by a weekly contribution from miners but during the Depression the income of the Institutes was significantly reduced and they had to embrace extensive fundraising activities. Financial support for surgical equipment in South Wales was not detailed under this heading as it was contained within grants to the St John's Ambulance Association for equipment for their halls. No funding was provided for artificial limbs because separate arrangements operated in many of the valleys.

Curtis and Thompson regard the historians of orthopaedics and artificial limb provision having concentrated on servicemen and neglected industrial casualties. They also criticised Bloor, Melling, Bufton, Johnston and Campbell whose emphasis on the mining unions struggle to achieve compensation for industrial accidents neglected their role over the advancement of occupational health and the provision of assistance for the disabled.¹⁴⁰ Curtis and Thompson argue that insufficient attention has therefore been given to the role of mutualism through trade unions and friendly societies. They detail examples of artificial limb funds established by some District Associations of the South Wales Miners' Federation.¹⁴¹ The medical aid societies had different rules to the trade union schemes in that they covered women and children. Despite the name of the trade union funds, they

¹⁴⁰ Ben Curtis and Steven Thompson *ibid*;

¹⁴¹ Ben Curtis and Steven Thompson *ibid*;

Afan District Artificial Limb Fund;

Maesteg District Artificial Limb Fund;

Area Number 2 District Artificial Limb Fund;

In South Wales, the District Associations were able to pursue additional benefits associated with both need and trade union membership. While the mining unions were dominant; they needed to recruit and retain members, which was often achieved through well-publicised schemes of mutual benefit.

provided more than artificial limbs. The Maesteg Fund also provided false eyes, teeth, bath chairs, orthopaedic beds, surgical belts, spinal corsets and spectacles. The Tredegar Medical Aid Society spent £61,800 on surgical appliances between 1916 and 1948. Most of the artificial legs provided by Artificial Limb Funds or Medical Aid Societies (hereafter M.A.S.) or D.W.C.s were fitted rather than a simple wooden peg-leg and repaired as a matter of course. Bevan specifically commented on the poor quality of most artificial limbs stating, 'When the National Health Service started and free artificial limbs were made available, it was a revelation to witness the condition of the old ones left behind. It was a grim reminder of the extent to which the crippled poor had been neglected.'¹⁴²

Although the South Wales D.W.C. only provided limited surgical equipment through their grant funding of the St John's Ambulance Association, the expenditure of £17,215 in Durham was considerable. This was divided between mobility aids for 26 colliery locations, and the provision of artificial limbs. The mobility aids were loaned to those recovering from a serious accident or until an individual was able to secure a permanent aid. The loss of limbs was not addressed by the committee until the Second World War. Between 1940 and 1948 the Durham D.W.C. spent £2,780 through 79 grants, often for multiple supplies of artificial arms and legs, surgical boots and towards repair facilities. They provided 50 percent of the cost, which was approximately £9 per limb, and it is estimated that they provided in excess of 300 artificial limbs.

In Leicestershire the Educational Trust Fund's objects were varied to include benevolent provision and the Convalescent Fund established with an endowment of £10,000 contained wide charitable objects. As at the 30 June, 1952 a nil entry is recorded for expenditure on Special Medical Treatment, because of the operation of these two designated funds. Individual grants evidence the hardship experienced in coalfields. On 26 August, 1925 a grant of 3s per week for two years to pay for insulin was approved for a collier boy, but sadly he died in the following February. A miner from Coalville, off work due to his accident for which he received 5s a week from the Friendly Society was provided with a grant of £2 17s 6d for surgical appliances for two of his five children. A grant of £5 was approved to help pay for a child attending a specialist tuberculosis hospital in Ascot and £3 for a miner's

¹⁴² Nye Bevan, 'In place of Fear', (London, 1952) p. 121.

wife to enable her to visit her husband in a tuberculosis sanatorium in Northamptonshire. A miner's wife was provided with a surgical boot costing £24 18s.

The full effect of poverty was reflected in the case of Mr John Petcher, a miner resident in Barlestone. His wife died during the 1926 dispute, leaving him responsible for seven children. In 1929 he was off work due to an accident in the home and the family's only income was the oldest daughter's earnings. They were to be evicted and he could not have two of his children placed in the Primitive Methodists' Orphans Home in Harrogate as they did not have the requisite clothing or equipment for admission. He was provided with a grant of £5 which enabled the admission of the children to the orphanage. At a meeting on 24 September, 1930, when discussing a hardship application to provide an artificial foot for the young daughter of an Ellistown miner, one of the owner's representatives, Mr Edwards, offered to take the family to their appointment with a consultant in Derby. He was given authority to order the limb if the cost was deemed reasonable (in the region of £15). Quoting individual grant payments provides a clear identification of need, but not the level of demand. Four meetings of the Leicestershire D.W.C between 17 June and 18 November, 1931 considered 71 individual requests for assistance.¹⁴³

The aforementioned examples emphasise that access to grant making bodies for relatively modest amounts made a significant difference to relieving health issues exacerbated by the effects of poverty. Due to differing priorities, not all coalfields offered such support directly to individual miners. The D.W.C.s were precluded from assisting unemployed miners until the 1934 Mining Industry (Welfare Fund) Act revised eligibility, to include those who ceased to be employed for any reason and had not changed their occupation. The Mines Department was reluctant to redistribute resources from those districts with unexpended balances to the distressed areas of the North East and South Wales as it was implied that any directly targeted forms of relief for the distressed areas could hamper the fundraising by the Lord Mayor's Fund which had reached £500,000.¹⁴⁴

¹⁴³ The details of grants were extracted from records held at the Leicestershire County Record Office, namely: File DE 1177/30 Minutes of the Leicestershire District Miners' Welfare Committee 1921-1927; File DE 1177/31 Minutes of the Leicestershire District Miners' Welfare Committee 1927-1931; File DE 1177/32 Minutes of the Leicestershire District Miners' Welfare Committee 1931-1936; File DE 1177/33 Minutes of the Leicestershire District Miners' Welfare Committee 1936-1937.

¹⁴⁴ National Archive File, 'Cabinet Papers – Miners' Welfare Fund and Distress' 15 January 1929, CAB 24/201/5.

The Tredegar Medical Aid Society and Aneurin Bevan M.P.

Kenneth Morgan emphasises that the community roles undertaken by Bevan and his knowledge of the M.W.F. helped condition his views on the need for a national health service.¹⁴⁵ In 1929, in addition to his role with the Medical Aid Society, he was Chair of the local Miners' Welfare Committee, Chair of the Workmen's Library, which was an integral part of the Miners' Institute, a member of the County Omnibus Committee, County Councillor, Vice- Chair of the Hospital Committee and member of the Unemployment Committee. Dai Smith credits Bevan's philosophy being that for Labour to act as a vehicle for working-class aspirations its representatives had to be actively involved at community level.¹⁴⁶

By 1920, the M.A.S. employed five doctors, one surgeon, two pharmacists, one physiotherapist, one dentist, one district nurse and covered 95 percent of the town's population.¹⁴⁷ The contribution of 3d in the £ income scheme, which was paid by 1,810 members, meant that those who were better paid assisted the less well-off. Curtis and Thompson record that the M.A.S. spent £61,800 between 1916 and 1948 on surgical appliances. A fitted wooden leg cost £22 and the Fund provided for the fittings as a prosthetic leg helped some disabled men perform light work. Bevan's experience of the local Hospital Committee and the M.A.S. was, according to John Campbell, a valuable apprenticeship for medical administration and politics.¹⁴⁸ However, this would have been reinforced by his personal experiences of health issues as his father's premature death was attributed to pneumoconiosis and of his nine siblings, two died in infancy and a further two died before adulthood. The Tredegar Cottage Hospital, to which the Tredegar Iron and Coal

¹⁴⁵ Kenneth O. Morgan, Chapter 5 'Aneurin Bevan' in 'Labour Focus from Ernest Bevin to Gordon Brown' ed. Kevin Jeffreys (London 2002);

Morgan emphasises Bevan's community experience, but Bevan himself referred to his knowledge in a House of Commons debate, 'I sat on a welfare committee for many years and I have an intimate knowledge of the local administration of this fund.' House of Commons Debates Vol. 28.5 – 8 Feb 1934 Column 1432.

¹⁴⁶ Dai Smith, 'Aneurin Bevan and the World of South Wales' (Cardiff, 1993).

¹⁴⁷ Ben Curtis and Steven Thompson, 'A Plentiful Crop of Cripples Made by all this Progress; Disability, Artificial Limbs and Working Class Mutualism in the South Wales Coalfield 1890-1948', *Social History of Medicine*, Vol. 27 No. 4 2014, pp. 708-727.

One of the doctors was AJ Cronin whose novel *The Citadel* reflected his frustration at having no involvement in issues to prevent poor health.

¹⁴⁸ John Campbell, 'Nye Bevan and the Mirage of British Socialism', (London 1987).

Company made a contribution to the original construction costs, opened in 1904. Bevan's view on the funding of the hospital was reflected in a speech in the House of Commons:

When I was on the Hospital Committee we had an annual general meeting and a cordial vote of thanks was moved and passed which great enthusiasm to the managing director of the colliery company for his generosity towards the hospital: and when I looked at the balance sheet, I saw that 97.5 percent of the revenues were provided by the miners' own contributions, but nobody passed a vote of thanks to the miners.¹⁴⁹

Miners' Rehabilitation Service

Stephen Mottingly identified that the specialised rehabilitation treatment for injured servicemen was not sustainable after World War 1 for the treatment of civilians.¹⁵⁰

Following the appointment of E.A. Nicholl as resident Surgical Officer in Mansfield, the Midland Colliery Owners Mutual Indemnity Company asked him to establish a fracture clinic at the Mansfield and District General Hospital for the treatment of injured miners.¹⁵¹ In 1935 the Lanarkshire Orthopaedic Association established an outpatients department at Motherwell County Hospital financed by the Lanarkshire Association of Colliery Owners, 'because of the lack of light work and facilities for suitable exercise, thus increasing the amount of compensation, which is a charge upon the industry.'¹⁵²

During the first six months of 1938, 540 Nottinghamshire colliery accident victims were admitted to the fracture clinic in the Mansfield and District General Hospital and after rehabilitation 503 resumed work.¹⁵³ The British Medical Association (hereafter B.M.A.) and Trades Union Congress (hereafter T.U.C.) submitted evidence to an interdepartmental committee on the rehabilitation of persons injured by accidents.¹⁵⁴ The final report recommended the establishment of fracture services and rehabilitation of a man to his employment was a priority. This recommendation was driven by financial costs as compensation under the Workmen's Compensation Acts for the first five years ending 1937

¹⁴⁹ Hansard. Deb 30 April 1946, Vol. 422 cc 47.

¹⁵⁰ Stephen Mottingly, 'Medical Rehabilitation Centres', *Rehabilitation Today*, 1977, pp. 18-26.

¹⁵¹ Behzed Mostofi, 'Who's Who in Orthopaedics', PDF Ismuni.it, pp. 242-243.

¹⁵² 'Orthopaedic Clinic for Lanarkshire', *British Medical Journal*, 18 May 1935, p. 1046.

¹⁵³ 'Work of Mansfield Hospital', *Nottingham Evening Post*, 8 April 1939, p. 5.

¹⁵⁴ 'Scheme of Centres for Rehabilitation', *Yorkshire Post and Leeds Intelligentsia*, 11 December 1937, p.11.

averaged about £11,900,000.¹⁵⁵ The Nottingham coal owners, through their indemnity company, asked E.A. Nicholl to convert the Berry Hill Convalescent Home in Mansfield into a miners' rehabilitation centre. The North Staffordshire Collieries Mutual Indemnity Company subsidised a ward at the North Staffordshire Royal Infirmary and gifted Betley Court to the hospital for the purposes of rehabilitation. The Wigan Outpatients Centre was initiated in 1940 by the Northern Employers Mutual Indemnity Company, a company of Lancashire colliery owners.

Dr Sydney Fisher's recommendation in the Royal Commission on Safety in Mines 1938-1939 that fracture clinics should be established to achieve improved outcomes for men returning to work resulted in this section of the Commission's report being investigated by an inter-departmental committee. Rehabilitation services in a localised environment, driven by the cost of compensation were modest developments compared to initiatives driven by the manpower shortage during the Second World War. The White Paper on Coal in 1942 emphasised the need to reverse an output decline. The Ministry of Fuel and Power established the Mines Medical Service and referred the issues of medical treatment of miners to a committee chaired by Tom Smith, M.P., which reported in September 1942. Professor Edgar Collis of the M.W.C. and Dr Fisher, the Chief Mines Medical Officer, had reviewed facilities in the coalfields and found that few hospitals had any rehabilitation facilities and those that did could not spare beds for in-patient treatment. The M.W.C., in April 1942, had determined a policy permitting D.W.C.s to make grants up to 50 percent of the cost of establishing centres where injured miners could receive in-patient treatment. However, Mr Smith's committee recommended that the M.W.F. should provide specialist centres.

A unique feature of D.W.C. expenditure was the support for fracture clinics as part of the war effort which, unlike the main rehabilitation service, was not paid for by the Pithead Baths Fund.¹⁵⁶

¹⁵⁵ 'Call to Government for Lead', *Nottingham Evening Post*, 11 August 1939, p. 5.

¹⁵⁶ Grants for fracture and orthopaedic departments were made to the following hospitals: Blaenavon, Caerphilly and District, Clydach, Gorseinon, Llanelli and District, Lord Buckland Memorial, Measteg, Mountain Ash and Penrhiwceiber, Oakdale Cottage, Royal Gwent, Tredegar Park Cottage and Treherbert Cottage.

In South Wales 14 of the hospitals supported included grants for rehabilitation services. In South Yorkshire the D.W.C. granted £200 p.a. during the war years to the seven major hospitals in the region.¹⁵⁷ All of the Cumberland D.W.C.'s support for the Whitehaven and West Cumberland Hospital (£6,574) was during the war years for rehabilitation services.

The subsequent direction of the Ministry to provide the Miner's Rehabilitation Service was accompanied by permission to use the Baths Fund for the acquisition and equipment for specialised rehabilitation centres. The M.W.C. was given an assurance that the output levy would be increased, if so required, in order to meet the revenue costs of a coalfield rehabilitation service. The M.W.C. appointed a Miners' Rehabilitation Service consisting of surgeons under the chairmanship of Mr Reginald Watson Jones (who was subsequently knighted), the consultant orthopaedic surgeon to the R.A.F.. One member of the service, E.A. Nicholl, was subsequently appointed as the Commission's consulting surgeon. The Commission bought and equipped eight centres. These were the Berry Hill Centre in Mansfield, the former miners' convalescent homes of Talygarn in South Wales and Higham Grange in Warwickshire, and the large country mansions of Hartford Hall (Northumberland), The Hermitage (Durham) and Oakmere Hall (Cheshire). In Scotland a miners' welfare institute in Uddingston Lanarkshire was suitably converted. The last centre to be provided was Firbeck Hall in South Yorkshire, which was not operational until early 1947. In addition, other facilities were grant aided. These included the Gleneagles Fitness Centre in the emergency hospital operated by the Scottish Department of Health, the Whitehaven and West Cumberland Hospital, the Pinderfields Emergency Hospital in West Yorkshire and the Kent and Canterbury Hospital. It was judged that existing hospitals in South Yorkshire were providing a satisfactory service, although it was subsequently centralised in Firbeck Hall.

Of the centres vested in the M.W.C. each was operated by a management committee comprising at least four members of a D.W.C. plus a nominee of the M.W.C.. Relationships with local hospitals were important to ensure appropriate treatment and referrals. By June 1946 the six residential centres had treated 4,033 mineworkers who had suffered serious accidents. In 1945 the average stay for 1,246 in-patients was 10.5 weeks after which 33.6 percent were fit for pre-accident work, 35.36 percent for lighter work graduating to pre-

¹⁵⁷ These were the Barnsley Beckett Hospital, the Doncaster Hospital, the Fullerton Hospital, Mexborough Montague Hospital, Rotherham Hospital and the Worksop Victoria Hospital.

accident work, and 18.5 percent for light colliery work only. 5.6 percent were transferred to other industries, 1.1 percent retired and 5.9 percent returned to hospital for further medical treatment.¹⁵⁸ The war time expenditure for the service was £420,497 but the service continued after the war, delivered by the National Miners' Welfare Joint Council. This Council comprised the M.W.C and representatives of the National Coal Board. By the 31st December, 1948, the M.W.F. spent £896,280 of which £448,436 was for revenue requirements.¹⁵⁹

Kit Harling stated that upon the formation of the N.H.S. it was, 'not going to concern itself with the prevention of occupational disease, nor in large measure would it concern itself with returning ill or injured workers back to work – occupational rehabilitation.'¹⁶⁰ However, the N.H.S. continued the Miners' Rehabilitation Service for a further four decades, although the transfer of facilities was problematic. A surprising issue given the support of the National Union of Mineworkers (hereafter N.U.M.) for a N.H.S., a recently nationalised industry with board members appointed by the government, and the close relationship of Aneurin Bevan, the Minister of Health, to the miners' union.

Anthony Ward's history of rehabilitative medicine commences with the development of physical medicine after World War II and cites the value of physical training for miners as an integral part of the development of the rehabilitation centres. However, he underestimates the holistic approach of a community environment when all patients had suffered injuries through a shared occupation, recovering in a non-hospital location where treatment was free, return fares were provided for weekend home visits with continuous family liaison. This latter function being part of the role of medico-social workers employed at the centres after the War, under the direction of a chief medical social worker.

The very success of the process provided a paradox as the industry was reluctant to transfer the service to the N.H.S. without retaining a role in their management, which had successfully delivered a quality service. The Ministry of Health's legal advice was that these

¹⁵⁸ The statistics in this paragraph have been extracted from the Report of the Miners' Welfare Commission for six and a half years to June 30th 1946.

¹⁵⁹ First Annual Report of the National Miners' Welfare Joint Council, incorporating the Annual Report of the Miners' Welfare Commission – for the year ended 31 December 1948.

¹⁶⁰ Sian Griffiths and David J. Hunter (eds), *New Perspectives in Public Health*, Chapter 21 'Work and Health: What Direction for Occupational Health Practice' Kit Harling, (Radcliffe Oxford: e-book)

centres did not vest in the N.H.S. by virtue of legislation and would have to be conveyed. It was suggested that trusts should initially be established with purposes specifically for workers in or about coal mines, but this suggestion was not agreed.

Bevan met a deputation from the National Miners' Welfare Joint Council (hereafter N.M.W.J.C.) on the 21 September, 1948 and he welcomed a proposed transfer of the service, but the N.M.W.J.C. preferred to retain ownership and have a contractual arrangement for services with the N.H.S.. Such a condition was not acceptable to the Minister. On 30 November, Bevan proposed a transfer based on his assurances that each centre would have its own management committee that would include representatives of the current managerial arrangements, and the facilities would have priority usage for mineworkers until alternative facilities were available. On 2 March, 1949, Bevan met a deputation from the N.M.W.J.C. and pressed for a transfer as he argued that there was no reason to oppose the transfer given the assurances he had given. He met the N.U.M. Executive the following day and they agreed to the transfer. This meeting was widely reported.¹⁶¹ However, following a meeting of lawyers, the N.M.W.J.C. asked to discuss with the Ministry of Health issues of surgical control and medical direction for which Sir Reginald Watson-Jones prepared a memorandum. This was discussed on 11 July at a meeting attended by representatives of the Ministry of Health, the Ministry of Fuel and Power, the N.M.W.J.C., Watson-Jones and E.A. Nicholl, the Consultant Surgeon to the M.W.F..¹⁶²

The N.M.W.J.C. wanted the Minister's assurances to be a formal agreement as part of the model conveyance or linked to it. The Ministry of Health proposed that the assurances could be resolved through an exchange of letters, but the N.M.W.J.C. rejected this on 21 September and further complicated the issue by raising the question of buildings acquired in South Wales for pneumoconiosis, in Durham for an additional rehabilitation centre, and proposals for an additional rehabilitation facility in Scotland, together with a paraplegic unit in Yorkshire. The Treasury Solicitor had advised the Ministry of Health that without assurances for services for mineworkers, a transfer would be ultra-virus because they had

¹⁶¹ For example, the *Nottingham Journal* of 4 March 1949 had an article on p. 4 entitled 'Future of Miners' Rehabilitation Centres'.

¹⁶² A meeting of the rehabilitation surgeons took place on 30 June which recorded their opposition to the transfer. This is referred to in the National Archive File BX7/3 entitled Proposed Transfer of Rehabilitation Centres. This opposition may have reflected the views of Watson-Jones who had been opposed to the formation of the N.H.S. This was referred to by George Bentley in the Oxford Dictionary of National Biography.

been purchased within the provisions of the Mining Industry Act 1920 which specified objects for workers in or about coal mines.

The miners' rehabilitation service had in war time treated 3,000 per annum with a 92.3 percent success rate of returning injured men to work, at a cost of less than £50 per man.¹⁶³ Industry representatives organised a well publicised event when a weekend conference was held at the Mansfield Rehabilitation Centre attended by the chairman of the East Midlands division of the National Coal Board (hereafter N.C.B.), Sir Hubert Houldsworth, with surgeons and management representatives of all the rehabilitation centres. The speakers included Sir Geoffrey Vickers V.C., Board Member for Manpower and Welfare Services. Arthur Horner's contribution mentioned the importance of rehabilitation to help offset the shortage of manpower within the industry.¹⁶⁴ By November 1949, Bevan's impatience over a lack of progress was reflected in correspondence from the Minister to the Ministry of Fuel and Power on 11 November and he was aggrieved that his personal assurances had not been accepted. He blamed delays on legal advisers, surgeons, and officials of the M.W.C. and N.M.W.J.C.. The Ministry of Health indicated that unless the matter was resolved quickly, the Minister would not accept the transfer or contractually pay to utilise the service. Bevan's letter to Hugh Gaitskill was an attempt to enlist the support of the Ministry of Fuel and Power to pressurise the industry to conclude the transfer. Gaitskill subsequently arranged a meeting attended by civil servants for the relevant ministries, the M.W.C., the N.M.W.J.C., and Lord Hyndley who was chair of the N.C.B. and the N.M.W.J.C.. Sir Duncan Ferguson, the Permanent Secretary of the Ministry of Fuel and Power contradicted Gaitskill when he determined that Bevan's assurances, however well intentioned, would not be binding upon his successor.¹⁶⁵ At this meeting the participants were informed that the N.U.M. were now less keen on a transfer and the opponents included James Bowman, the Vice-President of the N.U.M., who had been appointed to become the chairman of the Northumberland and Cumberland Division of the N.C.B. with effect from 1 January, 1950. Lord Hyndley's reticence upon a transfer would have been conditioned by the views of T.A.

¹⁶³ National Archives File BX7/3 Proposed Transfer of Rehabilitation Services.

¹⁶⁴ 'Welfare of Disabled Miners', *Nottingham Journal*, 22 October 1949, p. 5;

'N.C.B. Officials' Concern', *Nottingham Journal*, 22 October 1949, p. 5;

'Rehabilitation Centres Transfer Proposals', *Nottingham Journal*, 22 October 1949, p. 5.

¹⁶⁵ Sir Duncan Ferguson was a career civil servant who had previously served as the Permanent Secretary in the Ministry of Agriculture and Fisheries for nearly two decades.

Freston, the head of the N.C.B.'s rehabilitation and health section, who was antagonistic to the terms of the transfer.

Specific issues which the M.W.C. and the N.M.W.J.C. wanted resolved were the assurances given by Bevan to be contractualised, the continued payment of patients' fares, the payments to surgeons who provided consultant services and the payment for additional refreshments provided to patients. On 17 July, 1950 Bevan had met Lord Hyndley, W.J. Drummond and Arthur Horner.¹⁶⁶ The Minister was keen to resolve the issue and the N.M.W.J.C. would cease to be financially responsible for the service which now had to be met from the production levy and adversely impacted on the resources available for local committees. The subsequent agreement determined that the buildings acquired for additional centres were not to be transferred as alternative rehabilitation services would be available through existing hospitals. Staff would be transferred to the N.H.S., the remuneration for consultants was resolved and the management of each centre would be served by committees comprising five persons nominated by the N.U.M., three by the N.C.B. and three by the Regional Health Board. Patient fares and any additional refreshment costs were to be met by the respective local welfare committees.¹⁶⁷ The operational transfer took place on 1 April, 1951, although properties were not conveyed until after 1 June, 1952, the operational date of the M.W.C.'s successor body, the Coal Industry Social Welfare Organisation (hereafter C.I.S.W.O). Title to the rehabilitation centres was transferred to C.I.S.W.O. by virtue of the Miners' Welfare Act 1952. The national status of the rehabilitation service was often recognised in regional newspapers.¹⁶⁸ This was reinforced when Princess Margaret visited the Hermitage Centre in Durham.¹⁶⁹ The property conveyances had to embrace some of the assurances originally given by Bevan and accounted for the phrase 'no less adequate'. This wording only allowed the Minister to

¹⁶⁶ W.J. Drummond was a member of the M.W.C. nominated by the M.A.G.B.. Arthur Horner was the General Secretary of the N.U.M., a member of the M.W.C. whose relationship with Bevan spanned two decades.

¹⁶⁷ Bevan that written to Lord Hyndley on 19 September 1950 confirming that the N.H.S. would construct, in South Wales, a special facility for pneumoconiotics with linked treatment to existing hospitals which allowed the M.W.C. to sell Llanellay Hall, which had been acquired for this purpose.

¹⁶⁸ The *Sheffield Daily Telegraph* in their edition on 22 June 1950, p.3 referred to a number of interviews with patients and the article was headed, 'Miracles are Daily Events at Firbeck';

The *Aberdeen Press and Journal* on 15 August 1950, p. 2 had an article from Professor Collis headed 'Making the Worker and the Job Fit Each Other' which included the phrase 'the British rehabilitation centres for coal miners are leading the world.'

¹⁶⁹ 'Royal Visit to Hermitage', *Sunderland Daily Echo and Shipping Gazette*, 12 May 1951, p. 5.

close a rehabilitation centre after a consultation process if the alternative rehabilitation facilities were deemed 'no less adequate'.

Despite Harling's comment, Ward attributed the N.H.S.'s priorities being re-ablement, resettlement, and the provision of disabled persons earning a living which was, by the mid 1970s, to be regarded as a core specialisation. Although the service was transferred after Bevan moved from the Ministry of Health on 18 January, 1951, he had been determined that it should take place as a failure would have implied a lack of confidence in the N.H.S.'s ability to maintain such high standards of patient care. Non-cooperation from what was regarded as his own industry would have been politically damaging. The industry's determination to secure the most favourable arrangements possible for mineworkers reflected the growing confidence of a trade union with a greater national profile, having been established in 1944 when the M.F.G.B. agreed constitutional changes. Such confidence was reinforced by a newly determined relationship within a nationalised industry and a strong parliamentary presentation as 45 mining M.P.s were elected in 1945.

Conclusion

The historiography of health provision during the inter-war years covers different strands of interest, and there is no consensus on weighting given to various factors affecting improvements in the health of the population. There are, however, two key themes evident irrespective of which aspect of health provision is studied. There was correlation between poor health and poverty and also it was evident that the voluntary sector could not accommodate the volume of medical needs with which it was confronted. However, the M.W.F. brought significant resources to the voluntary sector and the positive outcomes were recognised in the Ministry of Health's own assessment prior to the establishment of the N.H.S..

The choices of health priorities were taken by local representatives within the analytical framework Thompson defines, because social, economic, political and cultural concerns determined the contrasting regional patterns of expenditure of D.W.C.s.¹⁷⁰ The M.W.C.'s national involvement in the establishment of a rehabilitation service successfully pioneered

¹⁷⁰ Steven Thompson, 'The Mixed Economy of Care of the South Wales Coalfield'.

a process dealing with the medical problems resulting from industrial injuries, which Bevan was determined should become an integral part of N.H.S. provision.

It has been demonstrated that Bevan's experience within the mining community of Tredegar underpinned his determination that a centrally funded and managed national health service was vital to ensure equal access to treatment. Many of the M.W.F.'s provisions, for example convalescence, district nurses, ambulances, rehabilitation services, medical aids, community clinics and investments in hospitals which reflected medical advances, were evident in the early National Health Service.

Writing in 1952, W. Court concluded that, 'Good work was done by the Miners' Medical Service and the M.W.C. in the improvement of medical services upon the coalfields during the war,' and 'the health of the miners had never been so well looked after before.'¹⁷¹ This wartime experience for mineworkers extended the improvements in access to a wide range of health facilities funded by the M.W.F., which also included their dependents.

¹⁷¹ W.H.B. Court, *Coal*, (HMSO and Longmans Green & Co., 1952), p. 302

CHAPTER 2 - Recreation

Introduction

The historiography of recreational facilities provided by the M.W.F. does not reflect the scale and speed of their development, the involvement of miners in all aspects of their provision, or the recreational and cultural opportunities which they encouraged. Expenditure of £5,990,000 on 1,523 recreational charities was an extraordinary scale of democratically determined facilities responding to indoor and outdoor priorities within coalfield communities. Historians have been silent on the positive involvement of some colliery companies which maximised the value of grants by providing long-term leases on peppercorn rents rather than through commercial arrangements.¹⁷² As the original statutory life of the M.W.F. was five years, some companies advanced construction costs which were to be repaid through subsequent allocations.¹⁷³ The chapter explores the first major opportunity for the working class to determine the application of significant resources within mining communities which removed barriers to recreational participation, although gender divisions adversely affected opportunities for female involvement. Expenditure by the M.W.F. was indicative of a 'bottoms up' approach to sport and leisure as it could not be categorised as an arm of recreational hegemony. The mining communities were not merely recipients of largesse, as they were equitably responsible with the owners' representatives for the legal and managerial requirements of recreational charities. They contributed revenue funding and were accountable within the communities for the ongoing provision of these facilities, a framework which enhanced the role of mining trade unions at local level

¹⁷² The Directors of the Great Western Colliery Co. Ltd leased land for the construction of the Cwm and Llantwit Workmen's Hall and Institute for 99 years from 1st January 1932. The Directors of The Amalgamated Anthracite Collieries Co. Ltd leased land for playgrounds in Tairgwaith and Cwmgorse for 99 years, and two recreation grounds at Gwae-cae-Gurwen containing 6 and 2.4 acres for 99 years from 25/3/1930. The Burn brothers who owned the Stobswood Coal Company, which employed 300 men, leased 1,963 square yards for 99 years from 1st January 1933 for the site of an institute and bowling green.

¹⁷³ The Directors of the Butterley Co. Ltd, which included A.F. Wright, the M.A.G.B.'s nominated member of the M.W.C., leased in East Kirkby two acres for 60 years for an institute, bowling green and tennis court, projected to cost £9,000. They contributed £3,000 and advanced £6,000 to be repaid through four annual grant payments of £1,500.

and further reinforced the interconnected ties of work, leisure, family and neighbourhood.¹⁷⁴

Issues of Definition

The M.W.F. expenditure heading 'Recreation' covers the provision of facilities utilised for a variety of indoor and outdoor sporting and leisure pursuits. Definitions are an integral part of academic argument and emphasis; Tony Mason's definition of sport refers to a physically strenuous activity, usually in the open air, which may involve team against team, individual against individual or individual against the clock.¹⁷⁵ Jeffrey Hill defines leisure as an activity that provides personal satisfaction and pleasure in what is termed free time.¹⁷⁶ However, Andrzej Olechnowicz referred to the free time created by unemployment as enforced leisure.¹⁷⁷ Wendy Frisby and Sydney Millar refer to sport and leisure as two distinct aspects of community development, whereas Matthew Taylor concludes that labour historians who write on the history of sport do so in the context of the leisure of the working-class.¹⁷⁸ Taylor's contention that labour history and sport history remain connected is reinforced by Darryl Leeworthy's argument that the Labour Party had needed to embrace sport through the Miners' Welfare Associations, as these represented a mechanism through which working-class desires and visions could be expressed.¹⁷⁹

Hill views sport and leisure as processes themselves rather than by-products of other developments that can be examined through a variety of themes and he criticises Holt for ignoring leisure which provides satisfaction and pleasure during free time. He regards the concept of social control through rational recreation as highly questionable given the

¹⁷⁴ A. R. Townsend and C.C. Taylor refer to these criteria in their assessment of the social characteristics of a mining village.

¹⁷⁵ Mason's definition of sport is quoted by Jeffrey Hill in *Sport Leisure and Culture in Twentieth Century Britain* (Basingstoke, 2002) p. 10.

¹⁷⁶ *Ibid* p. 6.

¹⁷⁷ Andrzej Olechnowicz, 'Unemployed Workers, "Enforced Leisure" and Education for the Right Use of Leisure in Britain in the 1930s' *Labour History Review*, Vol. 70 No. 1 April 2005, pp. 27-52.

¹⁷⁸ Wendy Frisby & Sydney Millar, 'The Actualities of Doing Community Development to Promote the Inclusion of Low Income Populations in Local Sport and Recreation', *European Sport Management Quarterly*, Vol. 20 No. 3 2002, pp. 209-233;

Matthew Taylor, 'Parallel Fields: Labour History and Sport History' *International Journal of the History of Sport*, Vol. 32 No. 15 2015, pp. 1769-1774.

¹⁷⁹ Daryl Leeworthy, 'Partisan Players: Sport, Working-Class Culture, and the Labour Movement in South Wales 1920-1939', *Labour History*, Vol. 55 No. 5 2014, pp. 580-593.

increased commercialisation of sport and leisure.¹⁸⁰ Richard Holt is critical of both Norbert Elias and Eric Dunning's concept of the civilising process of sport and John Hargreaves's bourgeois model, preferring to emphasise its importance within a historically cultural analysis. He uses cricket, with its earlier arrangement of teams which included both amateur and professional players, to undermine hegemony as a rational explanation of sports development by and for the working class. Although he attributes urbanisation as an important factor in working-class sport which had little impact in mining communities, it cannot explain the distinctiveness of certain sports within and between classes.¹⁸¹ Peter McIntosh also expresses the importance of sport in a cultural context, bringing meaning and values to life.¹⁸² Holt refers to cricket in the context of the Lancashire leagues, which were organised for Saturday afternoons for the benefit of working-class players and spectators who worked on Saturday mornings.¹⁸³

Holt and Stephen Jones both identify sport as fostering a sense of place, which John Bale endorses with the concept of 'home advantage'.¹⁸⁴ Kent offers an innovative example of a sense of place when at the Chislet recreation ground eight shrubbery beds, one for each street, were planted by miners and their wives and were to be maintained by their children.¹⁸⁵ Associated with a sense of place is a reverence for those who achieve a degree of proficiency and status through sport. Hargreaves refers to Harry Clasper who was probably the first example from a mining community. He was an illiterate former miner who became a professional rower in competitions held on the Tyne and other major rivers,

¹⁸⁰ Jeffrey Hill, *Sport, Leisure and Culture in Twentieth Century Britain*, (Basingstoke, Palgrave, 2002). Hill's themes for the analysis of sport and leisure include Quantitatively, Economically, Theoretically, Semiotically, Historically, Whiggishly, Reverently and Chronologically.

¹⁸¹ Richard Holt, *Sport and the British*, (Oxford, 1987).

Lincoln Alison in an article entitled 'Batsman and Bowler: The Key Relation of Victorian England', in *The Journal of Sport History*, Vol. 7 No. 2 (Summer 1980), pp. 5-19, referred to batting being for gentlemen and bowling for players, who were usually manual labourers. Bill Voce and Harold Larwood from the Eastwood and Hucknall colliery villages in Nottinghamshire were bowlers who travelled on the 'Bodyline' series against Australia, as third class passengers paid for by the Test and County Cricket Board, while their captain, Jardine, a batsman, travelled first class, having paid his own fare.

¹⁸² Peter McIntosh, *Sport in Society*, (London, revised 1987).

¹⁸³ Richard Holt, *Sport and the British*.

¹⁸⁴ Bale, John, *Sports Geography* (London, 1989).

¹⁸⁵ M.W.F. Annual Report 1937, p.50.

including the Thames, during the 1840s and it is recorded that 130,000 people attended his funeral.¹⁸⁶

Jones, in his rejection of leisure being imposed upon the working-class through social control, underplays, according to Helena Chance, the importance of industrialists. While Chance's text contains examples of the corporate provision of recreational facilities, there is no mention of the mining industry. Either she was unaware of the scale of provision, or did not regard the M.W.F. as falling within a corporate definition.¹⁸⁷ Matthew McDowell refers to Roy Hay's analysis that while industrialists provided extensive facilities, they did not necessarily have control over sport.¹⁸⁸ Hay had suggested that the model colliery villages established in Cresswell and Bolsover by the Bolsover Colliery Company in the 1890s were reflective of measures designed to influence the environment in which labour lived and worked.¹⁸⁹ In 1922 H. Cropper, a mine owner and mayor of Chesterfield, said, 'One of the reasons why this country would never witness a political or social revolution or upheaval was because the average Englishman was immersed in sport.'¹⁹⁰ Some colliery owners were not alone in providing recreational facilities in the belief that it encouraged social control, corporate loyalty and industrial efficiency.¹⁹¹ This quotation evidences McCrone's view that sport was a method of reinforcing social control and distinctions of class and gender. Helen McCarthy and Pat Thane argue that to maintain social stability it was important for government to foster harmonious industrial relations, to ensure that social conditions did not worsen further, and if possible should be improved. In the context of the

¹⁸⁶ John Hargreaves, *Sport, Power and Culture*, (Polity Press, reprinted 1993), p. 52;

In a reference to a race on Tuesday 25 November 1845 for a purse of 5 guineas, the amount that changed hands in betting by spectators was between 3,000 and 4,000 guineas. Special trains had been organised for spectators. For a full account of Clasper's career, refer to See Bell's *Life in London and Sporting Chronicle*, 20 July 1870, p. 4.

¹⁸⁷ Helena Chance, 'Mobilising the Modern Industrial Landscape for Sports and Leisure in the Early Twentieth Century', *The International Journal of the History of Sport*, Vol. 29 No. 11, pp. 1600-1625; She gives examples of large corporate provision such as John Player (33 acres) and Raleigh (37 acres) together with an I.W.S. survey of 88 firms, 75 of which had local sports grounds, most with pavilions.

¹⁸⁸ Matthew Lynn McDowell, 'Football, Migration and Industrial Patronage in the West of Scotland c. 1870-1900', *Sport in History*, Vol. 32 No. 3 September 2012, pp. 405-425.

¹⁸⁹ J. R. Hay, 'Employer Attitudes to Social Policy and the Concept of Social Control 1900-1920', in *The Origins of British Social Policy*, ed. Pat Thane, (London, 1978) p. 116.

¹⁹⁰ Quoted by J.E. Williams in *The Derbyshire Miners*, (London 1960), p. 790.

¹⁹¹ The Ashington Coal Company had provided institutes and recreation grounds and was one of the two last remaining colliery company members of the Industrial Welfare Society (1928). Pease and Partners who were controlled by Pease family members who were Quakers constructed several institutes in Durham. The Fletcher Burrows and Co. Limited Colliery Company with mines in Lancashire operated a sports and social club with an extensive range of activities.

coal industry, government thinking may have reflected these views to underpin the rationale for the M.W.F., but the way resources were obtained, applied and managed does not fit this perspective. The number of working days lost through industrial disputes during the first decade of the operation of the M.W.F. are detailed in the table below. These statistics undermine any concept that the recreational investments delivered social control.

Table 2:1: Number of Disputes, Workpeople Affected By, and the Aggregate Number of Working Days Lost Through Disputes in the Coal Mining Industry 1921-1930

Year	Number of Disputes Commencing in Each Year	Number of Workpeople Directly and Indirectly Affected	Aggregate Duration in Working Days of All Disputes in Progress Each Year
1921	147	1,251,000	72,693,000
1922	155	116,000	1,246,000
1923	186	187,000	1,183,000
1924	190	134,000	1,563,000
1925	164	130,000	3,435,000
1926	58	1,098,400	146,992,000
1927	110	72,700	693,000
1928	97	82,200	452,000
1929	153	78,500	576,000
1930	150	148,600	663,000

Source: Colliery Yearbook and Coal Trades Directory 1932, (London, The Louis Cassier Co. Ltd, 1933), p. 661.¹⁹²

Hargreaves equated the access to resources providing the key control mechanism for sports strategies. The M.W.C. afforded the control of resources to local committees upon which

¹⁹² There is no correlation between the number of days lost and size of coalfield. In 1925 168,000 working days were lost in North Wales when 2,251 miners were involved in a dispute from 15 June to 29 October. During this decade colliery employment fell from 1,131,596 to 931,376.

miners enjoyed equality of representation. However, the miners would have exerted the major influence on what facilities were to be provided and how managed. They were to be responsible for maintenance and their weekly monetary contributions were usually determined by ballot. While the employers' representatives would be trustees and management committee members, the dominant recreational activities were dependent upon extensive voluntary activity. Each sport was deemed a sectional activity with its own committee which would be responsible for a raft of associated requirements.¹⁹³ The actual operation of the facilities supported the bottom-up analysis of recreational and leisure development, as advanced by Crewe, Jones and Holt.

Recreational provision was viewed by church groups and some employers as an important contribution for the moral perspective of the working-class, but Brigadier-General R.J. Kentish the first Honorary Secretary of the N.P.F.A., attributed that a shortage of playing fields had undermined 'the nation's health and efficiency'.¹⁹⁴ The correlation between recreation and the nation's health was dismissed by Neil Tranter who stated that improvements in public health and nutrition dwarfed any contribution by recreation.¹⁹⁵ John Welshman quotes N. Bennet of the British Dental Association who stated in 1904 that it was, 'impossible to remedy by physical exercise in adolescence and early manhood the physical effects which are the result of unhygienic environment and neglected minor ailments.'¹⁹⁶

The Need for Advice

Whereas for expenditure on health, research and education the M.W.C. had advice on policy and process through the active involvement of government assessors and ministries, it was necessary to secure external services in order to process applications for recreational projects. The M.W.C. turned to the Industrial Welfare Society (hereafter I.W.S.) which had initially been established to provide welfare services in the munitions industry for young

¹⁹³ Such requirements included finance, coaching, liaising with county associations, selection of teams, travel and grounds maintenance.

¹⁹⁴ Ina-Zyeiniger Bargielowska, 'Keep Fit and Play the Game: George VI: Outdoor Recreation and Social Cohesion in Inter-war Britain', *Culture and Social History*, Vol. 2 (1) March 2014, p. 116.

¹⁹⁵ Neil Tranter, *Sport, Economy and Society in Britain 1750-1914*, (Cambridge, 1998).

¹⁹⁶ John Welshman, 'Physical Culture and Sport in Schools in England and Wales 1900-1940', *International Journal of the History of Sport*, Vol. 15:1: 1998, p. 63.

male employees, under the active guidance of Seebohm Rowntree and the Reverend Robert Hyde. Chris Wrigley regards the impetus for welfare provision in the munitions industry being to resolve indiscipline amongst boys and for women who had not previously been employed.¹⁹⁷ The Boys' Welfare Society was re-titled the Industrial Welfare Society in 1918. Their philosophy that difficult industrial relations were caused by issues of human interaction rather than structural problems would have appealed to many colliery employers, particularly those who had developed recreational facilities on a paternalistic basis.¹⁹⁸ R. Moore states that paternalistic provision generally ceased by 1920, but he specifically recounts that the 1926 dispute terminated any direct provision by Pease and Partners, a large colliery company chaired by Lord Gainford. The I.W.S. initially provided professional services from their headquarters under the direction of Commander B.T. Coote, for which the M.W.C. paid. The Lanarkshire and South Wales District Welfare Committees, initially utilised on a commercial basis, full-time organisers who were regional officers of the society. The regional staff of the I.W.S. did not enjoy universal support, with the Leicestershire and Staffordshire committees declining to have them recognised as their official consultants or advisors.¹⁹⁹ Coote may have had some difficulty dealing with D.W.C.s due to his background and primary interests.²⁰⁰ While working for the I.W.S. he became an organiser for the Duke of York's summer camps and had a working knowledge of the Mining Association of Great Britain (hereafter M.A.G.B.). At the 1923 Duke of York Camp the President of the M.A.G.B. attended the dinner.²⁰¹

¹⁹⁷ Chris Wrigley, 'The Ministry of Munitions: An Innovatory Department', in *War and The State*, ed. Catherine Burk, (London, 1982).

¹⁹⁸ An undated list of individual subscribers to the I.W.S., which reflects the class interests of the Society, lists 18 Lords, 34 Knights and 16 M.P.s. By 1921, of the 508 firms affiliated to the I.W.S., 20 were colliery employers. The patron of the I.W.S. was the Duke of York and the aims of the society had been placed before the Mining Association of Great Britain. University of Warwick, Special Collections Department. MSS292/147.8/1 and a box of loose papers on the I.W.S.

¹⁹⁹ Leicestershire D.W.C. Minutes 16 January 1922;
Staffordshire D.W.C. Minutes 10 April 1922.

²⁰⁰ He was the son of an Irish Baron and had been responsible for physical training at Eton College from 1908-1912 and Harrow School from 1912-1914. During the Great War he was appointed a Commander in the Royal Navy in charge of physical and recreational training in Portsmouth.

²⁰¹ *Sheffield Daily Telegraph*, 9 August 1923, p. 5.

Tensions

Recreational expenditure identified some significant tensions between the M.W.C. and certain D.W.C.s over issues of process, policy and jurisdiction. Despite advising, in 1921, that no colliery or group of collieries had a prescriptive right to the return of their contributions and that the role of D.W.C.s was purely advisory, some D.W.C.s had a strong sense of regional independence which necessitated the M.W.C. in their 1926 Annual Report referring to the separation of roles which should operate.²⁰² Apart from Lanarkshire and South Wales, D.W.C.s were initially reluctant to appoint organisers to assist with the professional preparation of grant applications and monitor construction works and the subsequent management of facilities. The South Yorkshire and Nottinghamshire D.W.C.s regarded the levy as if it was their resource to apply and applications they supported should have been automatically approved by the M.W.C..

In South Yorkshire there were projects commenced before grant approvals and there were examples of poor designs through the use of local surveyors and architects who had no experience of recreational facilities. When they eventually agreed to appoint an organiser he was a mineworker member of the D.W.C. who had no practical experience for what was required from the role and was not permitted to attend some annual meetings of district organisers. A distinct contrast was evidenced by other D.W.C.s such as Durham when they decided to appoint an organiser, the position was advertised and the successful candidate was an architect who worked for Chester-le-Street Urban District Council. The Nottinghamshire D.W.C., which preferred large facilities identified with collieries, rather than communities, wrote on several occasions to other D.W.C.s to gain support for deputations to the M.W.C. complaining about such issues as the costs of the Advisory Board and the alleged autocratic stance of the M.W.C. over grant applications.²⁰³ Captain P. Muschamp, the agent for the New Hucknall Colliery Company, was a member of the Nottinghamshire D.W.C. and the regional committee of the National Playing Fields Association (hereafter N.P.F.A.). He resigned from the N.P.F.A. because the M.W.C. declined

²⁰² The Fifth Report of the Miners' Welfare Fund 1926, p.11.

²⁰³ When the statutory mandate was renewed and the Pithead Bath Fund established, staff numbers were expanded to form the Advisory Board with costs coming from the General Fund. This included the organisers who assisted 15 D.W.C.s. The pithead baths staff were paid for from that fund and staff employed by the Mines Department processed all payments, maintained the accounts and provided legal assistance.

to approve a grant of £5 5s recommended by the D.W.C. for the N.P.F.A. The issues with South Wales on policy and procedure were attributed primarily to the role exercised by their organiser who, despite having originally been an employee of the I.W.S., showed a reluctance to cooperate with or consult the M.W.C's Advisory Body.

Playgrounds and Young People

Coote's employment history reflects his commitment to the provision of playgrounds and leisure facilities for older children and two of his six guidance notes issued by 31 December 1926, dealt with outdoor recreation for those under 16. His suggested designs to maximise the use of space for recreation grounds of varying acreages always included play areas. Coote was also keen to advocate facilities for boys' and girls' clubs and he continued to assist organising the Duke of York camps in conjunction with the I.W.S.. The M.W.C. grant aided a summer camp for boys at St Athans which was a major project of the Ocean Area Recreation Union. By December 1939, the South Wales D.W.C. had invested £86,554 in the camp which in that year provided a holiday for 1,953 boys. The South Wales commitment to youth clubs was reflected in grant aid of £25,162 provided for the South Wales Federation of Boys' Clubs. Several boys' clubs were established as Miners' Welfare recreational charities, such as the Ynys Park Recreation Association, a boys' club which benefitted from the first grant of £5,000 in January 1923. In 1938 they won the National Junior Basketball Championship of England and Wales.²⁰⁴

Other D.W.C.s embraced the concept of playgrounds and boys' clubs in different ways. In Scotland the playgrounds became synonymous with a specific area within a large park following the successful development of the Newtongrange Park. Three acres of the sixteen acre park were set aside for children and contained 23 items of apparatus. The opening took place on 11 September 1926 by Lord Chelmsford with 2,000 children present. The event was filmed by Pathe News.²⁰⁵ The Cannock Chase D.W.C.'s policy on playgrounds was

²⁰⁴ Daryl Leeworthy, 'Partisan Players: Sport, Working-Class Culture, and the Labour Movement in South Wales 1920-1939', *Labour History*, Vol. 55 No. 5 2014, pp. 586-7. This facility has recently undergone a complete refurbishment, funded by external grant aid, which included the construction of a 3G football pitch.

²⁰⁵ 'Lord Chelmsford opens first children's playground to be erected under Miners' Welfare Fund in Colliery Districts' [Newsreel] *British Pathe*, www.britishpathe.com>lordchelmsford-1>query>playgrounds [accessed 20 January 2020];

'Miners' Welfare', *Dalkeith Advertiser*, 16 September 1926. p. 3.

determined by the issue of maintenance. They grant-aided 17 playgrounds which were transferred to local authorities as it was believed that they would be able to sustain the facilities in perpetuity.²⁰⁶ Referring to the transfer of the 22 acre site in Bolton on Dearne in South Yorkshire to the local council, Lord Williams who was then a working miner who had been elected to the Urban District Council (hereafter U.D.C.) in April 1919 explained that such transfers were facilitated because representatives of both the M.W.C. and the U.D.C. were the same individuals.²⁰⁷ The Warwickshire D.W.C. funded the acquisition of land adjacent to Dosthill School, part of which was for a recreation ground with the remainder of the site being used for the children to grow vegetables which they could take home. The influence of Coote is evident in the Chelmsford Report where a case is presented for boys' and girls' clubs, which could be rooms made available within institutes, and that they should be included in the development of outdoor recreation facilities. 'The first consideration should be given to the children.'²⁰⁸ In 1934 Coote publicised a memorandum on Youth and Recreation, where he suggested that the M.W.C. could claim to be the pioneers of beautiful children's playgrounds and he wanted to extend the accolade for other children.²⁰⁹

The concept of beautiful children's playgrounds was evident in the description of the Llanbradach facility:

Less than two years ago that land was just a dreary waste, flanked by a slag heap, so typical of much which industrialisation has wrought in South Wales. The art of the landscape gardener has converted it into a paradise for children, with rockeries ablaze with flowers, miniature rocks over which tumble in white cascades to be trapped in a long swimming pool of clear water 80 yards long.²¹⁰

Helen Woolley, in her account of the design of children's playgrounds, attributes local authorities and the N.P.F.A. providing the stimulus for their expansion, but makes no

²⁰⁶ Eleventh Report of the Committee Appointed by the Board of Trade to Allocate the Fund 1932, H.M.S.O. 1933. There is a picture of the boys' vegetable garden on p. 60 Fig. 49.

²⁰⁷ Lord Williams, *Digging for Britain*, (London, 1965).

²⁰⁸ Departmental Committee of Inquiry. Report to the Secretary of Four Mines January 1933 H.M.S.O. 1933 Cmd 4236 p. 75.

²⁰⁹ Thirteenth Report of the Committee Appointed by the Board of Trade to Allocate the Fund 1934, H.M.S.O. 1935, p. 39.

²¹⁰ 'Miners' Welfare: A model Playground in Wales', *The Times*, 2 June 1930, p. 11.

reference to the M.W.F., which preceded the N.P.F.A. by five years.²¹¹ The M.W.F. developed 504 children's playgrounds, but there are very few secondary sources linking M.W.F. expenditure to such provision and where a linkage is evidenced, little detail is provided.²¹² Coote was also very keen to ensure that leadership should play an integral part in the provision of youth clubs and other forms of leisure activity. In the 1935 Annual Report of the M.W.C. he refers to the system of trained salaried leaders and volunteers who support youth activities. He had previously recommended the N.P.F.A. Programme of training for play leaders and indicated that the General Fund might consider assisting with the costs of those who wished to pursue such opportunities. He suggested that district organisers could approach the Y.M.C.A. and Y.W.C.A. for volunteers. 150 Boys' Clubs and 36 Girls' Clubs were established by the M.W.C., most of which operated in designated rooms within institute buildings.

Outdoor Recreation

Coote advocated that recreational facilities should be for participation and not excellence, although some members of the M.W.C. had personal interests in a range of sporting activities.²¹³ While the M.W.C. advocated participation, they would also have celebrated success.

By 1952 an extensive array of recreational facilities had been established. In Appendix 2 these have been separated into Indoor Facilities and Outdoor Facilities. The proportion of their incoming resources which D.W.C.s applied for recreation varied, with 17 of the 25 committees applying more than half. The table below shows the amount each D.W.C. applied and the percentage of their total receipts which this represented. These statistics clearly demonstrate that D.W.C.s had flexibility in determining their priorities.

²¹¹ Helen Woolley, 'Watch This Space. Designing for Children's Play in Public Open Spaces and Parks', *Geographical Compass*, Vol. 2 (2) March 2008, pp. 495-512.

²¹² Douglas Hindmarch, *Sheffield Parks and Gardens*, (Stroud, Tempus, 2005). On page 92 below a picture of a children's gala in Hollinsend Recreation Ground in the 1950s, the text records, 'In south-east Sheffield where mining was one of the traditional industries, the Miners' Welfare Committee contributed to the purchase of several recreation grounds.'

²¹³ Lord Chelmsford, the Chair, captained the Oxford University Cricket Team. Lord Aberdare, the representative of the royalty owners, won the British, French and U.S. amateur tennis titles, qualified for the Open Golf Championship, chaired the National Fitness Campaign from 1932 to 1946, and played first class cricket for Middlesex from 1908-1922. Herbert Smith was a keen supporter of Barnsley Football Club.

Table 2: 2: *Recreational Expenditure by District Welfare Committees 1921-1939*

Committee	Amount (£)	Percent of Total Receipts
Fife and Clackmannan	278,983	76.8
The Lothians	129,900	63.7
Lanarkshire	676,196	89.4
Ayrshire	0	0
Northumberland	371,951	60.2
Durham	803,496	51.5
Cumberland	70,727	80.8
Lancashire and Cheshire	2,043	0.26
North Wales	117,008	82
South Yorkshire	651,202	46.2
West Yorkshire	219,194	36.5
Nottinghamshire	316,761	52.2
Derbyshire	376,108	61.4
South Derbyshire	6,999	8.9
North Staffordshire	37,949	13.9
Cannock Chase	106,034	44.4
South Staffordshire	45,274	56.9
Leicestershire	53,946	51.5
Warwickshire	121,381	54
Shropshire	30,632	90.5
Forest of Dean	28,242	49.9
Somerset	23,444	58.7
Bristol	6,541	63.6
South Wales	1,274,831	66
Kent	14,268	33.9
TOTAL	5,763,108	54.5

Source: Annual Report of the Miners' Welfare Commission 1939 – extracted from Table 11 pp. 114-115

Opportunities for Women

While outdoor recreational facilities were intended for a wide range of users, active recreational opportunities for women were very limited. Tranter recounts that the inter-war sporting revolution expanded class divisions for working-class female participation as they experienced low incomes, low sporting experience through school, a subservience to fathers and husbands and pre-determined roles as wives and mothers.²¹⁴ Kathleen McCrone argues that sport was a way of reinforcing social control, distinctions of class and of gender. She explains that this was particularly evident in hockey when company provision emphasised that no married women were employed or retained upon their marriage. Her examples of sports facilities provided by Cadbury were therefore male dominated.²¹⁵ The enthusiasm for ladies' football, that developed as a consequence of the Dick Kerr's Team, which played to raise money for soup kitchens during the 1921 miners' strike, came to an abrupt end when the Football Association threatened to ban football clubs which allowed their facilities to be used by female footballers.²¹⁶

Catriona Parratt argues that historians who speak of working-class leisure do not distinguish between men and women; young or married women, mothers and married women without children or various female earnings or the number of weekly hours worked.²¹⁷ She refers to the magazine *Womanhood*, a monthly publication up to 1907, which included information on women's sport, although they were exclusively for middle and upper-class women.²¹⁸ Miss Gladys Walton-Brown of Sedgehill Hall, the sister of the Managing Director of the Sedgehill Colliery Company, represented the North at hockey, captained the Northumberland Tennis Team and was a keen golfer.²¹⁹ A profiling of lady hockey players

²¹⁴ Neil Tranter, *Sport: Economy and Society in Britain 1750-1914*, (Cambridge, 1998).

²¹⁵ Kathleen McCrone, 'Class, Gender and English Women's Sport 1890-1914', *Journal of Sport History*, Vol. 18 No. 1 Spring 1991, pp. 159-182.

²¹⁶ Aletha Melling, 'Plucky Lasses', 'Pea Soup' and Politics: The Role of Ladies' Football During the Miners' Lockout in Wigan and Leigh', *The International Journal of the History of Sport*, Vol. 16:1 1999, pp. 38-64.

²¹⁷ Catriona M. Parratt, 'Little Means or Time: Working-Class Women and Leisure in Late Victorian and Edwardian England', *The International Journal of the History of Sport*, Vol. 15:2 1998, pp. 22-53.

²¹⁸ Catriona M. Parratt, 'Athletic 'Womanhood': Exploring Sources for Female Sport in Victorian and Edwardian England', *Journal of Sport History*, Vol. 16 No. 2 (Summer 1999), pp. 140-157; Individual sports included were archery, tennis and swimming; the field sports quoted were hunting, shooting and fly fishing. Team sports were limited to field hockey and water polo. Holt refers to 297 English Ladies' Golf Sections in 1914 in his article 'Golf and the English Suburbs. Class and Gender in a London Club c. 1890-c.1960', *Sports Historian*, No. 18(1) May 1998, p. 78.

²¹⁹ 'Obituary', *Morpeth Herald*, 5 March 1937, p. 8.

referred to Miss K.E. Lidderdale, the England Captain and first class tennis player, having been educated at Cheltenham Ladies' College.²²⁰ However, Fiona Skillen argues that swimming was an example of a popular leisure activity for married, working-class women in Scotland.²²¹ The All England Women's Hockey Association, established in 1895, was essentially for upper-middle class university educated women who did not encourage competitive sport. Jo Halpin attributes the increase in the popularity of women's hockey to the formation of the English Ladies' Hockey League Association in 1932, which had 250 member clubs in Lancashire, as a rival organisation which fostered competition and matches on a Saturday afternoon which allowed working-class women to participate.²²² Marples identifies a contribution to increased leisure time to the Factories Act 1847 which banned the employment of women and children on a Saturday afternoon.²²³ For young women employed in the Lancashire mills such 'free time' would have opened up opportunities for a variety of recreational activities. This assists the explanation underpinning the development of the Lancashire and Cheshire hockey leagues when matches were played on Saturday afternoons.

Athletics opportunities for women were extremely limited and the Women's Amateur Athletic Association, founded in 1922, was essentially a southern based activity. Although women were allowed to compete in a limited number of Olympic sports, Joyce Kay argued that this further extended the class divisions in female sport as so few of the sports featured were available to working-class women.²²⁴ Selina Todd emphasises that the increase in spending power of young women expanded their leisure interests.²²⁵ Fiona Skillen concluded that, 'The diversity of goods and sports facilities available ensured that women of all budgets could participate, if they chose to.'²²⁶ These were not sustainable arguments in isolated colliery villages where there was very little female employment. Supple's analysis

²²⁰ 'Lady Hockey Players', *Illustrated Sporting and Dramatic News*, 14 January 1922, p. 20.

²²¹ Fiona Skillen, 'Preventing Robotised Women Workers: Women, Sport and the Workplace in Scotland', *Labour History*, Vol. 55 No. 5 2014, pp. 594-606.

²²² Jo Halpin, 'Thus Far and No Further: The Rise of Women's Hockey Leagues in England from 1910 to 1939', *Sport in History*, Vol. 37 Issue 2 2017, pp.146-143.

²²³ Morris Marples, *A History of Football*, (London, 1954).

²²⁴ Joyce Kay, 'A Window of Opportunity? Preliminary Thoughts on Women's Sport in Post-War Britain', *Sport in History*, Vol. 30 Issue 2 June 2010, pp. 196-217.

²²⁵ Selina Todd, *Young Women, Work and Family 1918-50*, (Oxford, 2005).

²²⁶ Fiona Skillen, 'Women and the Sports Fetish: Modernity, Consumerism and Sports Participation in Inter-War Britain', *International Journal of the History of Sport*, Vol. 29 Issue 5 April 2012, p.762.

of the 1921 Census identifies that over 300,000 miners lived in locations where 12% or less of the local labour force was female. Mari Williams refers to the 1931 Census, which evidenced that 88.6% of females in the Rhondda over the age of 14 were labelled unoccupied.²²⁷ Steven Crewe refers to two contrasting views on female participation in sport. He compares Todd's view that 45 percent of the female workforce between the wars was young girls for whom the prospect of playing sport in the workplace was greatly increased with those of Claire Langhamer who refers to a lack of facilities beyond the factory gates and therefore opportunities for women to play sport were extremely limited.²²⁸

The opportunities for women in mining communities to participate in competitive sports were confined to bowls and tennis. The popularity of tennis between the wars was reflected in the provision of 1,256 tennis courts as an integral part of Miners' Welfare recreational facilities. Several annual reports of the M.W.C. show photographs in the 1930s of mixed tennis competitions. Robert Lake attributes the inclusion of a broader population in tennis during the inter-war years developing a more professional and disciplined sport.²²⁹ Kay in her account of the history of tennis explains that it was not only for the privileged as clubs were established on company sports grounds and low income families could play in public parks. She makes reference to the Mining Industry Act 1920 as a consequence of records maintained by a Nottinghamshire tennis historian, Andrew Lusic. Kay recalls competitions involving colliery and Miners' Welfare teams taking place outside the Lawn Tennis Association system. Nottinghamshire had a Colliery Alliance League, which featured mixed and men only leagues in addition to knock-out tournaments. There were twelve different colliery/welfare teams which formally participated, but there were a further twenty four welfare schemes where tennis was played in the county.²³⁰

²²⁷ Barry Supple, *The History of the British Coal Industry, Vol. 4 1913-1946, The Political Economy of Decline*, (Oxford, 1987), p. 480.

Mari Williams, 'Aspects of Women's Working Lives in the Mining Communities of South Wales c. 1891-1939', *Folk Life*, Vol. 38 (1) 1 January 1999, pp. 56-70.

²²⁸ Steven Crewe, 'What About the Workers? Work Based Sport and Recreation in England c. 1918 – c. 1970', *Sport in History*, Vol. 34 No. 4 2014, pp. 544-568.

²²⁹ Robert J. Lake, 'Social Class, Etiquette and Behavioural Restraint in British Lawn Tennis 1870-1939', *International Journal of the History of Sport*, Vol. 28 No. 6 2011, pp. 876-894.

²³⁰ Joyce Kay, 'Grass Roots: The Development of Tennis in Britain 1918-1978', *International Journal of the History of Sport*, Vol. 29 Issue 18 2102, pp. 2532-2550.

Mike Huggins, who concurs with Adrian Bingham's view that masculine media coverage shaped gender issues, reflects that cinema coverage of women's sport through newsreels portrayed opportunities for middle and upper class women, particularly through the developing sports of golf, mountaineering, motor sport and aviation, which allowed those young women who were financially and socially independent to participate. He describes opportunities for working-class women being limited, despite the growth in hockey as there were over 1,000 women's hockey clubs in 1938 and 160,000 registered netball players in clubs affiliated to the All England Women's Association for Netball. He attributes bowls as the main opportunity for working-class women and girls to participate in sport. The English Women's Bowling Association was formed in 1931 and by 1939 there were 7,000 members in 278 clubs.²³¹ The Pegswood Miners' Welfare Ladies' Bowling Club was established in 1936.²³² In 1939 the Northern Counties Women's Bowls Association (Durham B Division) held a competition and teams from the Usworth and New Lambton Miners' Welfare Schemes participated.²³³ The Welsh Ladies' Bowls Team, in June 1939, included two players from the Abercynon and Penclawdd Miners' Welfare Schemes.²³⁴

One exceptional female sporting personality who played exhibition games in a number of miners' welfare institutes was Ruth Harrison. She won the titles of World Women's Professional Billiards Champion and World Women's Professional Snooker Champion. Ms Harrison was born in the Durham colliery village of Lintz and learned to play in the Miner's Institute.²³⁵

The Growing Popularity of Football, Rugby and Bowls

Football was popular in mining communities prior to the M.W.F.. Holt described the sport experiencing a phenomenal expansion as a consequence of grass roots demand and Tranter refers to one in twenty of all men aged between 15 and 19 having actively participated in

²³¹ Mike Huggins, 'And Now Something for the Ladies: Representation of Women's Sport in Cinema Newsreels 1918-1939', *Women's History Review*, Vol. 16 (5) November 2007, pp. 681-700.

²³² 'Pegswood Ladies', *Morpeth Herald*, 30 October 1936, p. 2.

²³³ 'Northern Counties Women's Bowls Association', *Sunderland Daily Echo and Shipping Gazette*, 1 June 1939, p. 11.

²³⁴ 'Welsh Ladies' Bowls Team', *Western Mail*, 1 June 1939, p.5.

²³⁵ 'Taught by Miners. She Staggered Billiards World', *Manchester Evening News*, 9 May 1939, p. 4.

soccer during 1914.²³⁶ Two of the seven founding clubs of the Northern Football Alliance, established in 1890, were from the mining villages of Willington and Shankhouse. Teams from mining communities participated as original entrants in the first F.A. Amateur Cup in 1893/94.²³⁷ A team of miners from West Aukland in County Durham, at the invitation of Sir Thomas Lipton, represented England against teams from Germany, Switzerland and Italy in competitions which took place in Italy in 1908 and 1911.²³⁸ Blackwell Colliery F.C. competed against other Derbyshire colliery teams in 1890.²³⁹

Mason attributed the King's attendance at the 1914 F.A. Cup final giving a seal of approval to a sport which Morris Marples defined as an emerging industry through the charging of spectators and the professionalism of players.²⁴⁰ Organised competitive football was evident in mining communities by 1920. In Ashington there were 16 football teams at four collieries, whose matches were reported in the *Morpeth Herald*.²⁴¹ Twelve colliery teams competed in the Derbyshire Senior League.²⁴² Silverwood Colliery in Rotherham had a team in the Midland League, which also contained the reserve teams of Barnsley F.C., Sheffield United and Sheffield Wednesday. In the same newspaper article, it was reported that three players from Wellbeck colliery village had signed professional terms.²⁴³ Holt refers to the phenomenal speed at which football developed as a spectator and participatory sport which Mason associated with the expansion of football newspapers.²⁴⁴ The enthusiasm for football in mining communities represented, according to James Walvin, 'A powerful tradition of viewing the game as the surest and fastest route out of the area.'²⁴⁵ This implies an escape from a working-class mining community, but for many it represented an

²³⁶ Neil Tranter, *Sport, Economy and Society in Britain 1750-1914*, (Cambridge, 1998) p. 13

²³⁷ G Green, *The History of the Football Association*, (St Leonards by the Sea, 1953), p. 186;

The football clubs included Bishop Aukland, Leadgate Parks, Leadgate Exiles, Willington Athletic and Ashington.

²³⁸ West Aukland F.C. was founded in 1893 and they won the Sir Thomas Lipton Cup on both occasions. It was reported that some of the players pawned possessions to fund their travel and accommodation costs in 1908. 'TheFirstWorldCup - WestAuklandWeb', www.westaukland.plus.com

²³⁹ 'Blackwell Miners' Welfare F.C.', www.blackwellmwfc.org.ok

²⁴⁰ Morris Marples, *A History of Football*, (London, 1954). By 1914 Division Two of the Southern League contained 15 teams of which ten were from mining communities; of the occupational background of professional football players between 1907 and 1910 14 were coal miners – Tony Mason, *Association Football and English Society 1863-1915*, (Brighton, 1980), p. 93.

²⁴¹ 'Football Notes', *Morpeth Herald*, 12 November 1920, p.3.

²⁴² 'Derbyshire Senior League', *Derbyshire Times and Chesterfield Herald*, 27 March 1920, p. 7.

²⁴³ 'Sports and Pastimes', *Derbyshire Times and Chesterfield Herald*, 27 March 1920, p. 7.

²⁴⁴ Tony Mason, *Association Football and English Society 1863-1915*, p. 193.

²⁴⁵ James Walvin, *Football and the Decline of Britain*, (London, 1986) p. 74.

opportunity for alternative employment after which they returned to the industry or the community. Billy Meredith, an illiterate miner who worked at Black Park Colliery in Chirk, North Wales, from the age of ten to twenty, played professional football for both Manchester City and Manchester United. He retained his colliery culture as he helped form the Players' Union, the forerunner of the Professional Footballers' Association. Jackie Fell, a miner from Hamsteels Coliery in Durham, returned to work at Blackhall Colliery at the end of his professional career and became secretary/coach of Blackhall Colliery F.C..²⁴⁶ Walter Bennett of Sheffield United and England died in a colliery accident in Denaby Main Colliery in 1908 at the age of 33.²⁴⁷

Football was extremely popular in Scotland, producing many of the early professional players. Stephen Jones reported that Kier Hardie's son signed professional terms with Sunderland F.C..²⁴⁸ In 1895, when Sunderland played Hearts, all 22 players were Scottish.²⁴⁹ The correlation between professional football and mining communities is reflected by the unique significance of the tiny Ayrshire community of Glenbuck. The last colliery closed in 1930 and the village had been demolished by 1950. Between 1880 and 1930 the village produced 53 professional footballers, one of whom was Bill Shankley.²⁵⁰

The M.W.F. provided 516 pitches which reflected priority choices enhancing participation opportunities within mining communities. John Bale records that by 1950 the North of England had produced professional footballers at 2.45 times the national per capita norm, while the ratio for Northumberland was 3.97.²⁵¹

Commander Coote's desire that recreational facilities should be for participation and not excellence was laudable, but a little naive, given the number of competitive sports which had developed in mining communities before 1920. He must have been aware that competition developed performance standards as his son, Patrick, played rugby for Ireland.

²⁴⁶ 'Leeds United F.C. History', www.ozwhitelufc.net.au/players.profiles/F/FellJW

²⁴⁷ Wikipedia, Dennis Clarebrough and Andrew Kirkham, *Sheffield United's Who's Who*, (Hallamshire Press, 2008).

²⁴⁸ Stephen G. Jones, *Sport, Politics and the Working Class. Organised Labour and Sport in Inter-war Britain*, (Manchester, 1988), p. 26.

²⁴⁹ 'Sunderland's Victorian Allstars Blaze a Trail for Dominance of Football'. *Observer*, 26 April 2020, p.65.

²⁵⁰ Adam Powley and Robert Gillan, *Shankley's Village*, (Durrington, 2015). Shankley was not the only successful manager who started life underground. They included Sir Matt Busby, Jock Stein, Jack Charlton, Sir Bobby Robson and Bob Paisley. The last three played for their colliery and/or welfare teams.

²⁵¹ John Bale, *Sports Geography*, (London, 1989), p.211.

Many of the facilities which were used for football and rugby involved clubs, which were adversely affected by the depression in the mining industry. Gareth Williams referred to the impact of large scale unemployment as a slump which disembowelled the whole area. Unemployment in Merthyr in the early 1930s reached 62.3percent and 76 percent in Pontypridd. Half a million people moved from South Wales and a number of rugby clubs in mining communities disbanded.²⁵² The impact of miners moving out of South Wales was particularly problematic at Pencoed, where 9 of the first 15 left in a two week period. Some miners joined the Police and between the wars more policemen than miners played rugby for Wales. Football also suffered from the effects of unemployment and depopulation. Five teams had to withdraw from the Southern and Welsh Leagues in the 1920s.²⁵³

Although rugby union's popularity extended to the working-class, Williams comments that it was originally a middle-class sport, which was introduced to Wales by a range of university educated, professional men.²⁵⁴ The split between rugby union and rugby league in 1895, over lost time payments, resulted in rugby league becoming the dominant game in the north, particularly in mining communities, although the sport was still administered by amateurs. However, a serious attempt to introduce rugby league into Wales was undertaken by the Welsh Rugby League Commission and two of its Vice-Presidents were Tom Richards the General Secretary of the S.W.M.F. and Finlay Gibson the Honorary Secretary of the South Wales and Monmouthshire Coal Owners Association (hereafter S.W.C.O.A.) and Joint Honorary Secretary of the South Wales and Monmouthshire District Miners' Welfare Committee (hereafter South Wales D.W.C.). Evidence does not reveal whether their interest was confined to the sport or focussed on the commercial opportunities which could be developed in the depressed South Wales coalfield. A friendly international rugby league match between England and Wales, played in Pontypridd, attracted a crowd of 22,000 and generated £2,300 in gate receipts. A junior rugby league league attracted teams from nine mining communities, three of which also had senior teams. Six colliery villages also had senior teams but no junior representation. The rugby

²⁵² The Pontnewydd R.F.C. disbanded in 1927 and in 1929 clubs in Treherbert, Nantyllyllan, Pencoed and Tredegar all closed. Aberaman, Cwm Twrch and Taibach disbanded between 1934 and 1937.

²⁵³ These were Treherbert, Ton Pentre, Maerdy, Porth and Mid Rhondda.

²⁵⁴ Gareth Williams, 'From Popular Culture to Public Cliché: Image and Identity in Wales 1890-1914', Chapter 7 in *Pleasure, Profit, Proselytism. British Culture and Sport at Home and Abroad 1700-1914* ed. J.A. Mangam, (London, 1988), p. 135.

league authorities promoted the use of miners' welfare recreation grounds, but the Welsh Rugby Union were extremely hostile to rugby union clubs allowing rugby league to be played on 'their grounds'. The South Wales D.W.C. became involved in this argument when it stated, 'No sporting organisation should attempt to dictate to welfare associations for what purpose their grounds shall be used.'²⁵⁵ Despite the D.W.C. providing a grant in 1927 to promote the Pontypridd District Rugby League and a Challenge Cup, the game ceased to be played in Wales by 1931 when the Welsh Rugby Union threatened to expel any registered rugby union club which allowed their grounds to be used for rugby league matches.

Despite the popularity of rugby union amongst the working-class in South Wales, it was a number of years before this was evident in the selection of players for the national team. Morgan identifies that in the 1935 Welsh team which played against New Zealand, all the three-quarters had been university educated. His detailed analysis of the development of rugby in Wales makes no comment upon where and how the facilities to play the game developed, despite 37 rugby grounds having been funded by the M.W.F. compared to 24 for the rest of the British coalfield.²⁵⁶

Bowling was popular in mining communities, although originally the sport in Northumberland was referred to as 'potshare bowling' where the ball was thrown over distance/time and the pot was the winner's purse.²⁵⁷ Crown and flat green bowling developed in mining communities although originally crown green bowling was the most popular. Swain refers to 131,000 players in the Parks Association at the beginning of the twentieth century and the British Crown Green Bowling Amateur Association having 200,000 members. The Talbot Cup in 1913, held in Blackpool, had 1,000 entrants.²⁵⁸ Publicans recognised the commercial opportunities of large spectator crowds for both bowls

²⁵⁵ Daryl Leeworthy, 'The Dragons of the North: Working-class Culture, the Miners' Lockout, and the Development of Rugby League in South Wales 1926-1931', *Sport in History*, Vol. 33 Issue 1 March 2013, pp. 49-71;

Leeworthy provides all the information on rugby league and the quotation is on p. 64.

²⁵⁶ Kenneth O. Morgan, *Rebirth of a Nation. Wales 1880-1980*, (Oxford, 1981).

²⁵⁷ Alan Metcalfe, 'Potshare Bowling in the Mining Communities of East Northumberland 1800-1914', Chapter 2 in *Sport and the Working Class in Britain*, ed. Richard Holt, (Manchester, 1990).

²⁵⁸ Peter Swain, 'Bolton Against All England for a Cool One Hundred: Crown Green Bowls in South Lancashire 1787-1914', *Sport in History*, Vol. 33 No. 2 2013, pp.146-168.

and quoits and many constructed facilities adjacent to public houses.²⁵⁹ The M.W.C. funded 546 bowling greens, primarily for flat green bowling, many of which had their own pavilions. Bowling was competitively organised by county associations and miners' welfare schemes participated in these leagues.²⁶⁰

Ashington

Although competitive recreational activity by miners' welfare scheme representatives is recorded in local newspapers within various sporting leagues, the evidence does not facilitate the identification of how popular recreational activities were in mining communities. The most comprehensive portrayal of the scale of recreational activities in a mining community is a media account of the Ashington Coal Company's Welfare Sports Club. The sixteenth annual reunion involved a tea for 500 members preceded by a demonstration by the gymnastics team. The annual report summarised the activities:

- There were 26 football teams in the Colliers' League featuring 3 divisions with a first division for over 18 players, the second division had players aged 16-18 and the third division was for the under 16s. 265 matches were played.
- The rugby first team played 40 matches.
- The hockey first team played 22 games.
- There were 8 Badminton tournaments involving 31 matches.
- Nine table tennis teams played 40 matches.
- The billiards team played 31 matches in the Ashington and District league.
- 5 cricket teams competed in local leagues. They played a total of 133 matches and 10 teams competed in the Ashington Collieries' Midweek Cricket League.
- In the colliery leagues of which 1 was Gents' Doubles and another Mixed Doubles, 724 tennis matches were played on the available 36 courts.

²⁵⁹ Neil Tranter, 'The Patronage of Organised Sport in Central Scotland 1820-1900', *Journal of Sports History*, Vol. 16 No. 3 (Winter) 1989, pp. 227-247.

²⁶⁰ 'Bowls' *Sheffield Daily Telegraph*, 28 March 1927, p. 6

- Professional gymnastics coaching was available in both gymnasia, which were also open two evenings a week for schoolchildren.
- Boys aged 14-16 who had not yet started work could use any of the recreational facilities for a subscription of 1d per week.²⁶¹

Scale

Although facilities often included a significant acreage, it was also the number of locations where funds were applied that was impressive. In the Northumberland coalfield, which Metcalfe described as an area 27 by 7 miles containing 66 villages and towns, there were 33 separate miners' recreational facilities. In one year 9,272 people participated in 39 different activities in Nottinghamshire Miners' Welfare Schemes.²⁶²

The outdoor facilities could vary in size from one bowling green, which was often the only outdoor facility attached to a Scottish miners' institute, to the 85 acres and large country house at Backworth in Northumberland. The extensive outdoor facilities included a nine-hole golf course. The acquisition and lay out of this facility in 1935 reflected a growing interest by miners in affordable golf.

Value for Money

The M.W.C. was keen to publicise that facilities often represented good value for money, particularly where voluntary effort had been involved. A key ingredient of value for money was well-designed layouts for recreational facilities. Local Authorities tended to rely on horticultural expertise. The British Institute of Landscape Architects was formed in 1930, which two years earlier had been established as the Institute of Garden Architects. Specimen designs for recreation grounds were issued by the M.W.C. from 1921 with the I.W.S.'s input having been acknowledged. The advisory committee of the M.W.C. subsequently developed a level of expertise in the design and layout of parks, recreation

²⁶¹ 'Sportsmen All', *Morpeth Herald*, 29 May 1936, p. 2.

²⁶² A survey of Miners' Welfare facilities and activities in the Nottinghamshire coalfield produced in 1951 by the East Midlands Divisional Miners' Welfare Committee.

grounds and children's playgrounds.²⁶³ In the village of Lydbrook in the Forest of Dean the D.W.C.s grant could only fund the purchase of one and a half acres adjacent to a two acre colliery tip which had been given to the trustees, plus a culvert. 286 volunteers whose ages ranged from eight to eighty-five, cleared 32,000 tons of colliery waste to lay a football pitch and children's playground.²⁶⁴ Not all facilities represented good value for money. In addition to examples of poor design, some facilities were abandoned, and subsequently sold, after colliery closures and housing demolition, such as a recreation ground in Dawley, Shropshire, and the Doneybristle Institute in Fife. Land acquisition could often indicate a colliery company's commitment to welfare provision. Those companies who wished the grant aid to be maximised on facilities either gifted land or made it available on long-term leases at peppercorn rents. Other companies conveyed land to local welfare trustees at commercial values.

Indoor Recreation

Graham Humphries, in referring to the scale of buildings as part of the industrial landscape in South Wales, states, 'The most prominent of these were the large non-conformist chapels and churches, public houses and miners' institutes'.²⁶⁵

The M.W.F.'s budget heading of 'Recreation' also covered indoor facilities. Stephen Jones saw the miners' institutes being a central part of the communities' social, cultural and educational needs, which were free from middle-class hegemony. The literature on mining libraries concentrates on South Wales where there were 144 and 163 reading rooms, although, the M.W.F. established or contributed towards the total of 381 libraries and 563 reading rooms.²⁶⁶ Christopher Baggs emphasises the independence of miners' libraries in

²⁶³ The primary records are silent on those individuals who developed design expertise, although Coote is given much credit for maximising the use of recreational space for a variety of activities.

²⁶⁴ 1934 Annual Report Figures 54-57;

Other examples included the laying out of a 13 acre site at Rhos in North Wales by unemployed miners and by volunteers from the International Student Service. (Annual Report 1933 p. 23). The village hall in Bynea South Wales was constructed using bricks from an old colliery chimney stack after they had been cleaned by volunteers on a site which they had previously levelled (Annual Report 1938 p. 90). The Ruardean Hill Recreation Ground in the Forest of Dean was laid out on land leased from the Forestry Commission after volunteers had uprooted 200 tree stumps.

²⁶⁵ Graham Humphries, 'Dealing with Dilemmas: Industrial Landscapes in South Wales' *Landscape Research*, Vol. 1 No. 1 1986, pp. 12.

²⁶⁶ Directory of Coal Industry Welfare Facilities 1952.

South Wales and describes the long process driven by revenue issues which led to their cooperation, and subsequent merger, with local authority provision.²⁶⁷ He recognised the contribution of the M.W.F. but misunderstood the funding policy because he stated that grants for books were dependent upon additional allocations from local authorities. Hywel Francis describes the subsequent merger of library facilities as the success of municipalism over local socialism.²⁶⁸ However, Baggs implied a degree of inevitability hastened by economic depression and earlier refusals to accept funding from the Carnegie Trust. A more productive relationship with municipal authorities existed in Scotland where libraries in Fife were often located in institutes. The Cowdenbeath Institute had a library containing 66,880 books, a librarian employed by the local authority, which also made a contribution towards maintenance.²⁶⁹ Kenneth Morgan emphasises the importance and scale of South Wales miners' libraries, which in the 1930s contained three quarters of a million books and were a local institution offering a local experience which reinforced the sense of place concept ascribed to outdoor recreational provision.²⁷⁰

The Welsh emphasis in relation to miners' cinemas is understood given that 46 of the 55 British miners' cinemas were located in South Wales.²⁷¹ S. Rowson's statistical survey of the cinema sector in 1934 emphasised that it was the major leisure activity between the wars with 963million admissions in 4,305 cinemas during 1934.²⁷² Bert Hogenkamp emphasised the ability of miners' cinemas to educate and entertain.²⁷³ Miners' cinemas relied upon the entertainment factor because, according to Archie Lush, this generated much needed revenue.²⁷⁴ Stephen Ridgewell credits miners' cinemas with offering non-discriminatory

²⁶⁷ Christopher Baggs, 'Carnegie Offered Money and a Lot of South Wales Libraries Refused to Have it: It was Blood Money Bringing Public Libraries to the South Wales Valleys 1870-1939', *Library History*, Vol. 17 No. 3 2001, pp. 171-179.

²⁶⁸ Hywel Francis, 'Survey of Miners' Institutes and Welfare Hall Libraries in South Wales', *Library History*, Vol. 3 No. 1 1973, pp. 28-32.

²⁶⁹ M.W.C. Annual Report 1938, p. 26;

The Lochgelly Institute contained 88,187 books, Lohore 36,670, Kelty 33,587, Bowhill 28,395 and Glenrain 15,420.

²⁷⁰ Kenneth Morgan, *Rebirth of a Nation*.

²⁷¹ Directory of Coal Industry Welfare Facilities 1952.

²⁷² S. Rowson, 'A Statistical Survey of the Cinema Industry in Great Britain in 1934', *Journal of the Royal Statistical Society*, Vol. 99 (1) January 1936, pp. 67-129.

²⁷³ Bert Hogenkamp, 'Miners' Cinemas in South Wales in the 1920s and 1930s', *Llafur*, 4 (2) 1985, pp. 64-76.

²⁷⁴ Archie Lush oral history recording 11 May 1973, quoted in R. James, 'A Very Profitable Enterprise: South Wales Miners' Institute Cinemas in the 1930s', *The Historical Journal of Film, Radio and Television*, Vol. 27 (1) March 2007, pp. 27-61.

leisure as the bulk of audiences were female and special films were selected for children.²⁷⁵ He portrays the significant progression of 'cinemisation' in South Wales being dependent upon the advent of the M.W.F. but incorrectly qualifies expenditure restrictions by referring to grants being limited for projection equipment and seating only.

Ridgewell described the great mass of cinema goers as being from industrial communities. 4,305 of the cinemas operating in 1934 were in urban working-class areas and Wales had the highest proportion of cinemas per head of population. 21 of the 25 cinemas located in Glamorgan in 1940 were miners' cinemas. Merthyr Tydfil, which suffered high unemployment levels, had six cinemas, which collectively could seat 6,000 people. Cinemas offered no restrictions for gender, age or employment status. There was a proliferation of cinema openings in the 1930s, which reflected both demand and their commercial possibilities. The third largest cinema in the U.K. was the Plaza in Swansea which opened in 1931 and could seat 3,000.

Valley cinemas were predominantly small, seating fewer than 1,000 people. Ridgewell credits that the 'welfare halls built in the smaller mining villages during the inter-war period were largely paid for out of the Miners' Welfare Fund.'²⁷⁶ The cinema at Tredegar was a response to the income problems caused by the significant reduction in the miners' contribution, but such commercialisation did not detract from the cinema being part of a community facility. In Mardy cinema prices were lowered during times of reduced earnings, and between 1930 and 1939 on new year's day approximately 200 children attended afternoon matinees followed by tea, all of which was free. Left wing films had little appeal compared to attractions of Hollywood and British productions, as audiences wanted to be entertained not lectured.²⁷⁷ Ridgewell attributes to miners' cinemas, which played an active and vital role in community life, examples of how a commercial culture could be absorbed into a working-class culture without any sign of ideological exploitation.

²⁷⁵ Stephen Ridgewell, 'South Wales and the Cinema in the 1930s', *Welsh History Review*, Vol. 17 No. 4 December 1995, pp. 590-615.

²⁷⁶ Stephen Ridgewell, 'South Wales and the Cinemas in the 1930s', *Welsh History Review*, Vol. 17 No. 4 December 1995, pp. 602.

²⁷⁷ The Citadel, a Hollywood production, was very successful in South Wales and in the Cwmllynfell Institute in 1937 they screened a world title boxing match between Joe Louis and Tommy Farr, a former Rhondda miner.

A Variety of Facilities

Some institutes had activities which reflected exceptional issues of local need. The Wilncote Hall and Child Welfare Centre in Warwickshire featured two distinct uses.²⁷⁸ The cellar in the Sauchie Institute in Clackmannanshire housed a rifle range.²⁷⁹ The Lanarkshire D.W.C. promoted an inter-institute games league which commenced in 1922 and as many as 1,600 men competed in a single season. The Pinxton Scheme in Derbyshire had a home hobbies and model engineering section.²⁸⁰ This featured Mecano competitions for boys under 14 and those over 14. An exhibition was staged each year featuring woodwork, painting and drawing, scientific apparatus and engineering models. In 1937/8 there were 186 exhibits and after 11 years of activity needlework was introduced in 1939.

The Treycnon Coliseum was developed in 1935, built from stone from old colliery buildings, and its justification was the popularity in the community of drama, opera and oratorios. The Shotts Institute in Lanarkshire boasted an international standard swimming pool together with an indoor facility for carpet bowls. Some facilities such as Cawthorne in Yorkshire and Seven Sisters in South Wales had open air swimming pools constructed by diverting local streams. The Somerset D.W.C. held an annual children's music festival. The Hanwood Institute in an isolated village in the west of Shropshire was constructed on part of the recreation ground in 1935 specifically to accommodate social events and educational classes. In Warwickshire the Bermuda Village Institute had a grant to construct a football changing room with six baths, which were also to be used by the villagers. The village comprised 111 houses, none of which had a bath. One of the most adventurous facilities was the Derbyshire D.W.C. funded holiday camp in Skegness on a coastal location adjacent to their convalescent home. The original construction and layout costs of £37,400 provided accommodation and a range of social and recreational activities for 900 people per week when it opened in 1939.²⁸¹

Billiards was a very popular indoor activity which was also regarded as an income generator. Some of the larger institutes had eight full-sized tables. Ray Reardon, a former miner, was

²⁷⁸ Annual Report 1932.

²⁷⁹ Annual Report 1937, p. 50.

²⁸⁰ Derbyshire County Council Records Office, Pinxton Miners' Welfare, Files D4524/1/1 and D524/2/1.

²⁸¹ It was requisitioned by the army for the duration of the war.

world snooker champion six times and learned to play in the Tredegar Institute. The scale of the institutes varied from those which resembled a village hall to structures which dominated the community. The Ferndale Institute in South Wales contained junior and senior libraries, a hall seating 400 which could be used for a variety of activities, a reading room, boys' club, games room, billiard room with six tables and a cinema seating 1,000 people. David Davies, in his *History of the Cwmaman Institute*, lists during the inter-war years more than 100 organisations, societies and activities which were based at the institute or utilised its facilities.²⁸²

Robert Moore suggested that the employers' paternalistic approach towards providing facilities was removed as a consequence of the 1920 Act.²⁸³ H.F. Smithson in evidence to the Samuel Commission on 3 December, 1925 emphasised the interest which managers took in the provision of social welfare facilities and gave the workmen their full share of credit in developing and enhancing these. He described welfare development emerging from an unenlightened past. A report by the Pilgrim Trust describes miners' institutes as excellent buildings which had not succeeded in adjusting to extensive unemployment with few willing to make provision for the unemployed.²⁸⁴ Such comments were based on a visit to two locations in South Wales and the authors admitted that the comments were generalisations. It is highly unlikely that any such antagonistic attitude would have prevailed towards unemployed miners and the emphasis upon the report may have been linked to securing additional funding. The Cwmaman Institute established an unemployed club in October 1932 which included the provision of a hall to assist unemployed miners learning new skills to help them find work.²⁸⁵

Jones referred to miners' institutes as a sign of working-class autonomy in the cultural sphere and Morgan credited them with keeping alive the educational and cultural aspirations of the movement for adult education and improvement. He viewed the institutes as providing intellectual stimulation and fellowship. While historians are

²⁸² David L. Davies, *A History of Cwmaman Institute 1868-1993*, (1994). The users included four M.F.G.B. Lodges, four Friendly Societies, four dramatic societies, six operatic societies, four male voice choirs, a young choristers combination, a United Choral Society, two football teams, two billiard teams, two table tennis teams, three air rifle clubs, a physical culture club, a horticultural society, an ambulance division and a silver band.

²⁸³ Moore, R., *Pit-men, Preachers and Politics*, (Cambridge, 1974).

²⁸⁴ The Pilgrim Trust, *Men without Work* (Cambridge, 1938).

²⁸⁵ David L. Davies, *op cit.*, p.50.

complimentary about the institutes and the activities they accommodated, a different perspective was argued following research by two sociologists and an anthropologist. They undertook research in Featherstone, West Yorkshire, which they gave the fictitious name of Ashton. They concluded in 1955 that, 'the miners' welfare institute does not play a very important part in the leisure time of the miner above the age of 20.'²⁸⁶ This was a strange conclusion given that the trustees in that year secured a grant to extend the building to cope with increasing levels of demand and the miners voted to increase their weekly contributions from 1¾d to 3d. Dennis Warwick and Gary Littlejohn were critical of the conclusions reached by Norman Dennis, Fernando Henriques and Clifford Slaughter, suggesting that the research involved their fixed stereotypes and many locals felt outraged and hurt; they suggested that the conclusions reflected the disgruntled views of former trade union officials.²⁸⁷ The positive view of institutes was reinforced by James Bullock, a former president of the British Association of Colliery Managers, whose autobiography recounts that when he was manager of Fryston Colliery in West Yorkshire the miners supplemented a grant through voluntary labour. 'We worked all through the day and at night lit the area with hundreds of miners' lamps. Work continued – as one set of men came on, another set went home.' As a consequence a notice was affixed to the entrance of the institute which stated: 'This hall was built in 12 days by miners, out of monies raised by miners, for themselves and their families, for culture and entertainment.'²⁸⁸

Conclusion

This chapter has presented an overview which has commented upon the scale and quality of recreational facilities from the M.W.F. enhanced by the design and management advice from the M.W.C.. The involvement of mineworkers in determining and managing resources negates arguments of recreational hegemony and the application of welfare capitalism to achieve social control, and reinforces the 'bottoms up' approach to the development of recreational activities in mining communities.

²⁸⁶ N. Dennis, F. Henriques & C. Slaughter, *Coal is our Life*, (London 1956), p. 128.

²⁸⁷ Dennis Warwick and Gary Littlejohn, *Coal, Capital and Culture. a Sociological Analysis of Mining Communities in West Yorkshire*, (London, 1992).

²⁸⁸ James Bullock, *Them and Us*, (London, 1972), p. 126 & p. 128.

Secondary sources available have been dominated by a Welsh historiography which has created a level of historical significance and relevance not evidenced in other coalfields. However, these sources do not identify the positive close working arrangements between the coal owners and mining unions which enabled the successful application of recreational resources, a relationship absent from all other aspects of the industry.

The Miners' Welfare Schemes were major, dominant, positive, physical features within mining communities. These recreational and cultural assets reflected a sense of place, which was underpinned by a concept of 'ownership' through determining how the Schemes were established and utilised. The sense of place was highlighted through official openings which were significant events. The opening of the Llanbradach Playground had a ceremony which was described as 'almost assumed importance of a State occasion.'²⁸⁹

Sporting activities, in contrast with underground work, involved fresh air and freedom of movement, produced individuals and teams which represented their communities, positive outcomes associated with the industry which expanded the interrelationship between community, family and colliery.

The involvement of nominees by mining unions at colliery level in the management and legal responsibilities for recreational charities enhanced their influence and importance beyond the colliery gates. Historians have often only made limited references to the M.W.F.'s recreational role, usually in selected contexts, such as the development of a specific sport or activity within an institute.

Morgan concluded that, 'Miners' libraries are a remarkable testimony to the variety of political, economic, philosophical and imaginative literature that refreshed the minds of the Welsh workers.'²⁹⁰ Stephen Jones ascribed to institutes a sign of working-class autonomy in the cultural sphere.²⁹¹

Statistics on the range and scale of facilities provided, and activities delivered, are impressive but it is local histories which reflect a real fondness and warmth for the impact

²⁸⁹ 'Miners' Welfare: A Model Playground in Wales', *The Times*, 2 June 1930, p.11.

²⁹⁰ Kenneth Morgan, *Rebirth of a Nation*, p. 239.

²⁹¹ Stephen Jones, *Workers at Play. A Social and Economic History of Leisure 1918-1939*, (London, 1986). p. 7.

such provision made for individuals and their communities. The Edwinstowe Historical Society include fond memories from residents recalling the activities available in the Welfare Hall when they were children.²⁹² Jack Davison, a former miner, writing about his village and the introduction of 'picture shows' states,

They offered escapism from the harsh realities of life in those days. For many of the older people it was not uncommon to hear a child reading the written dialogue on the screen aloud to his aged grandparents who could not read.²⁹³

Davison in reflecting upon a broader application of the M.W.F.'s investments in his community notes,

The organising and staging of the village's annual show, sports, children's sports, and old people's trips and treats became the function of local welfare. Their contribution to ease the mining communities' hardships and miseries of those days was immeasurable.²⁹⁴

Coote's ambition that recreational facilities should be made available to all in the community was not always achieved, but the M.W.F. provided miners with access to resources to deliver this objective. Apart from some failures *en route* they were successful in providing facilities and opportunities which reflected their culture, sense of place, and commitment to communities which were so deserving of such advancement.

²⁹² edwinstowehistory.org.uk/local-history/buildings/welfare-hall

²⁹³ Jack Davison, *Northumberland Miners' History 1919-1939*, (Newcastle upon Tyne, 1973), p. 250.

²⁹⁴ *Op cit.* p. 253.

CHAPTER 3 - Education

Introduction

The phrase 'mining education' in the Mining Industry Act 1920 was undefined. This was subsequently interpreted to embrace the development of professional standards through a framework of technical schools, colleges and university departments, all suitably equipped; the financing of opportunities for miners and their sons and daughters to pursue further and higher education, and to support adult education initiatives within the coalfields.

The role of George Winstanley confirmed Peter Musgrave's contention that the leadership of outstanding individuals often outside the industry was more important to the development of education than the demands of the industry itself. Consideration is given to the educational opportunities provided to coalfield residents through the technical schools and colleges together with those for mineworkers and their children who were afforded the chance to study vocational or non-vocational subjects at universities and colleges. While for some this may have enabled individuals to succeed either through personal advancement or escaping from their environment, for others it enabled them to apply the benefits of their education within the industry or their community.

Early Provision

Professor Statham of Sheffield University described mining training at the end of the 19th century as practically non-existent with very few facilities for technical mining education. Despite some local authorities providing scholarships, a university mining education was for those who could afford to pay and the number of mining graduates was insignificant. At the University College of South Wales and Monmouthshire in 1907 there were only four undergraduates on a three-year degree course. The introduction of statutory qualifications for a variety of specified positions was designed to improve engineering and safety standards for positions which required formal certification.²⁹⁵ These were considerable improvements upon the examinations required by the Board of Education which George H. Winstanley described as inadequate and inefficient.²⁹⁶ Statham emphasised that training

²⁹⁵ By 1911, these colliery positions included managers, under-managers, surveyors, deputies and shot-firers.

²⁹⁶ George H. Winstanley, *Transactions of the Manchester Geological Society*, Vol. 28 June 1904, pp. 571-577; Winstanley was a mining engineer and former lecturer at the Wigan District Mining and Technical College and subsequently appointed as an Inspector of Technical Education,.

was not viewed as an integral part of employment and, prior to World War I, mining engineering students were apprenticed to practising mining engineers, most of whom did not have a university education.²⁹⁷ Gordon Roderick and Michael Stephens list four English establishments in 1880 that offered advanced mining education, namely the Royal School of Mines, the Wigan Mining School, the Bristol Mining School and the Newcastle College of Physical Science.²⁹⁸ By 1900 there were only five universities or university colleges with mining departments, some of which only offered evening lectures.²⁹⁹ Roderick described Welsh provision as languid because, although the University College of South Wales and Monmouthshire had 15 mining students in 1907, they were undertaking diploma courses or only attending occasional lectures.³⁰⁰ F.G. Ogilvie, the Principal Assistant Secretary to the Board of Education for Technical and Higher education, in his evidence to the Royal Commission on Mines said, 'The possibilities of education in mining areas have been less readily appreciated than in other districts.'³⁰¹ There was no specialist school of mines until 1913 when a consortium of colliery employers established the Treforest School of Mining in South Wales. These colliery companies would neither fund nor cooperate with the University College as they wanted to control the finances, staffing and curricula, preferring a practical rather than an academic approach. Musgrave and Alistair Black both emphasised that the value of book knowledge was widely questioned with practical experience often valued more highly than theory.³⁰²

Despite a lack of advanced mining instruction, some local education authorities provided a range of junior opportunities. Henry Davis, the Director of Mining Instruction for Glamorgan County Council and Secretary of the South Wales and Monmouthshire Mining Education Board, in evidence to the Royal Commission on Mines in 1908, described the provision of special preparatory classes in mining education spread over four years in every continuation

²⁹⁷ I.C.F. Statham, 'Mining Education and Training', *Journal of the Royal Society of Arts*, Vol. 105 No. 5001 April 1957, pp. 409-428.

²⁹⁸ This was primarily for metalliferous mining with no students from coalfields.

²⁹⁹ These institutions were Sheffield, Leeds, Birmingham, Nottingham and Newcastle (part of Durham).

³⁰⁰ Gordon Roderick, 'Technical Education, The Performance of South Wales Industrialists and the Haldane Commission', *Journal of Educational Administration and History*, Vol. 39 No. 2 August 2007, pp. 193-208.

³⁰¹ Royal Commission of Mines – Minutes of Evidence Vol. 3 1908 CD 4349 HMSO Paragraph 37481.

³⁰² Alistair Black, 'Arsenals of Scientific and Technical Information: Public Technical Libraries in Britain During and Immediately After World War One', *Library Trends*, Vol. 55 No. 3 2007, pp. 474-489; P.W. Musgrave, 'Constant Factors in the Demand for Technical Education 1860-1960', *British Journal of Educational Studies*, Vol. 14 No. 2 May 1966, pp. 173-187.

school for those children who were insufficiently prepared for technical school. Significantly, Richard Redmayne, the Head of His Majesty's Inspectorate, who was subsequently to exert considerable influence upon mining research and education, advocated in his evidence to the Commission, broader educational opportunities for miners.

A Desire to Learn

Miners and mining communities had demonstrated an enthusiasm for adult education, especially through the Workers' Education Association which Lawrence Goldman described as politically progressive and socially reformist.³⁰³ The involvement of intellectuals with working-class education commenced through the university extension movement. John Harrison was critical of the movement as, 'the inescapable conclusion is that the university education movement in its attempt to reach the working class was a failure, despite limited success in a few locations.'³⁰⁴ A number of these locations were mining communities. Norman Jepson credits Professor Robert D. Roberts of Durham University in 1880 arranging courses delivered by Cambridge University staff in five centres in Durham and Northumberland which had an aggregate attendance of 1,300 miners, 40 of whom took formal examinations.³⁰⁵ Stuart Marriott credits the University Extension Movement as the forerunner of University Adult Education Departments.³⁰⁶

R.A. Lowe describes the Movement in North Staffordshire as the most successful, which was led by Richard Tawney from 1908-1911, and quotes J. T. Stobbs, a lecturer in mining who participated in the North Staffordshire Miners' Higher Education Movement who stated, 'one thing the movement has revealed is that there is in the mining villages working men who with little libraries of their own, are striving without guidance for self-development.'³⁰⁷ This conflicts with Marriott's view that the primary interest was amongst pupil teachers and those who wished to acquire the Affiliation Certificate. The first colleges to affiliate to Cambridge University were Sheffield and Nottingham which both subsequently developed mining departments. Ken Coates referred to the W.E.A. as the greatest supporter of

³⁰³ Lawrence Goldman, 'Intellectuals and the English Working Class 1870-1945: The Case of Adult Education', *History of Education*, Vol.29 No. 4 2000, pp. 281-300.

³⁰⁴ J.F.C. Harrison, *Learning and Living 1790-1960*, (London, 1961) p. 243.

³⁰⁵ N. A. Jepson, *The Beginnings of English University Adult Education Policy and Problems*, (London, 1973).

³⁰⁶ Stuart Marriott, 'The University Extension Movement and the Education of Teachers 1873-1906', *History of Education*, Vol. 10 (3) 1 September 1981, pp. 163-177.

³⁰⁷ R.A. Lowe, 'The North Staffordshire Miners' Higher Education Movement', *Educational Review*, Vol. 22 No. 3 2006, p. 266.

capitalist teaching, but Robert Tubman described it as the educational wing of the Labour Movement.³⁰⁸ John Holland enhanced this perspective in that much of the desire to learn about social, political and economic matters stemmed from trade union and co-operative activities.³⁰⁹ Rachael Sharp, Mervyn Hartwig and Jan O’Leary concluded that the working class should, through its own political, industrial and cultural organisations, educate itself, but they neglected to identify the resources necessary for such educational advancement.³¹⁰

A Structure for Technical Education

According to Alison Fuller and Lorna Unwin, the state had no coordinated approach to technical education and training, as it was left to industry to bear the responsibility for improving the country’s technical performance. They concluded that the State only intervened during times of particular stress, which was evident in World War I and subsequently in mining.³¹¹ Ian Varcoe argued that a British reliance on German imports impacted on the war effort and underpinned discussions on the application to industry of science and research.³¹² James Foreman-Peck attributed industries having insufficient flexibility to change when economic conditions altered after World War 1 due to the neglect of vocational education and training.³¹³ However Michael Dintenfass’s Analysis of the Colliery Guardian’s ‘Men of Note’ series between 1923 and 1929 indicated that a barrier to adapting to changing circumstances was enhanced by the stability of colliery companies.³¹⁴ The absence of a varied experience required change to be generated internally from an industry that, however, had an emphasis on stability and traditional methods of extraction when the main variables to market conditions were hours and rates of pay. Bruno Turnheim and Frank Geels regarded the industry’s main actors as being constrained by regime

³⁰⁸ Ken Coates ed., *Democracy in the Mines*, (Nottingham, 1974) p. 38.

³⁰⁹ S.K. Richards ed., *A Ministry of Enthusiasm: Centenary Essays on the Workers’ Education Association* (London, 2003) Chapter 9 – John Holland, ‘Unions, Adult Education and Post-War Citizenship: the W.E.A. and the Construction of Trade Union Education’.

³¹⁰ Rachael Sharp, Mervyn Hartwig & Jan O’Leary, ‘Independent Working Class Education: A Repressed Historical Alternative’, *Discourse*, Vol.10 No. 1 October 1989, pp. 1-26

³¹¹ Alison Fuller and Lorna Unwin, ‘Reconceptualising Apprenticeship – Exploring the Relationship Between Work and Learning’, *Vocational Education and Training*, Vol. 50 No. 2 1992, pp. 153-173.

³¹² Ian Varcoe, ‘Government and Organised Research in Great Britain 1914-1916: The Early History of the Department of Scientific and Industrial Research’, *Minerva*, Vol. 8 No. 2 April 1970, pp. 192-216.

³¹³ James Foreman-Peck, ‘Spontaneous Disorder? A Very Short History of British Vocational Education and Training 1863-1973’, *Policy Futures in Education*, Vol. 2 No.1 2004, pp. 72-101.

³¹⁴ Michael Dintenfass, ‘Family Training and Career in the British Coal Industry in the Era of Decline’, *Business and Economic History*, Vol. 22 No.1 1993, pp. 273-284.

inertia.³¹⁵ Roger Penn and Rob Simpson evidenced the industry's ambivalence to mining education because only 20 percent of coal was mechanically mined by 1924 and owners and managers were steeped in the autocratic atmosphere of industrial mining villages that education and training threatened to disrupt.³¹⁶ A reluctance to enhance procedures and training was evidenced by A.J. Cronin when he undertook, for the Medical Inspector of Mines, a survey of colliery first aid provision which highlighted the extensive requirements for a radical change in regulations, including that all deputies should be qualified first aiders.³¹⁷ The Board of Education was well aware of the deficiencies in mining education as Winstanley, an Inspector of Technical Education who had previously been Director of the Wigan Mining School, had prepared a memorandum on the teaching of coal mining in part-time schools which concluded that the general education of boys entering the industry was insufficient. The government therefore drafted the 1920 Mining Industry Act to procure resources from the industry, part of which had to be applied for mining education. This cleverly by-passed any requirement to apply the state's resources and circumvented Sir Philip Cunliffe-Lister's view, when he was President of the Board of Trade, that it was not a function of government to force an industry along lines which it was not prepared to adopt.³¹⁸

The M.W.C. was faced with poor industrial educational provision within coal fields, evidenced by limited facilities, high failure rates in examinations for managers' certificates, a shortage of secondary schools, and a significant proportion of 13 year-old school leavers who had no education beyond elementary school.³¹⁹ An industry which John Field described as, 'chronically undertrained.'³²⁰

³¹⁵ Bruno Turnheim and Frank W. Geels, 'The Destabilisation of Existing Regimes. Confronting a Multi-Dimensional Framework with a Case Study of the British Coal Industry (1913-1967)', University of Manchester. Research Policy 42 2013, pp. 1749-1767.

³¹⁶ Roger Penn and Rob Simpson, 'The Development of Skilled Work in the British Coalmining Industry 1870-1985', *Industrial Relations Journal*, Vol. 17 Issue 4 December 1986, pp. 339-349.

³¹⁷ A.J. Cronin, 'First Aid Organisations at Collieries in Great Britain', *Colliery Guardian*, 7 October 1927, pp. 527-529.

³¹⁸ John Field, 'Unemployment, Training and Manpower Policy in Inter-war Britain', *British Journal of Education and Work*, Vol. 2 Issue 1 1988, p. 47.

³¹⁹ Sanderson estimated that 2,000,000 children were unable to access secondary school and only 1 in every 1,000 elementary school pupils reached university.

Michael Sanderson, *Educational Opportunity and Social Change in England*, (London, 1939)

³²⁰ John Field, 'Unemployment, Training and Manpower Policy in Inter-War Britain', *British Journal of Education and Work*, Vol. 2 Issue 1 1988, pp. 39-49.

The M.W.C. invited the University Grants Commission to appoint a special sub-committee 'to enquire into the existing facilities for education in coal mining and the universities and technical schools in Britain, and to recommend the principles upon which public or other funds as may from time to time be available should be applied to meet the educational requirements of the coal mining industry.'³²¹ The sub-committee included George H. Winstanley, who would subsequently be appointed as an assessor to the M.W.C. and play a significant role in the development of mining education. The report compared the existing framework to a 5-rungged ladder and recommended that the lower rungs should be provided solely from local resources with assistance from the General Fund being confined to higher levels of provision. The Fund's subsequent suggestion that assistance for the lower rungs might come from divisional allocations proved overly optimistic, but may well have been based upon initial grant applications from Warwickshire, Leicestershire, South Derbyshire and Cannock Chase to develop mining schools. The financial support of the Cannock Chase D.W.C. for the Hednesford Technical Institute would have been encouraged by Mr J. Hunter, a colliery manager, member of the D.W.C., and Chair of the Local Authorities' Higher Education Committee. However, most D.W.C.s thought funding for buildings and equipment should be the responsibility of the General Fund.

The M.W.C. asked their assessors from the Board of Education and the Secretary for Scotland to review the provision of existing technical education in the coalfields. Winstanley, upon his appointment as an assessor, structured the review of technical instruction in coalfields by county, county boroughs and universities. He recommended that the framework existed to expand and improve the arrangements, developing mining schools for advanced instruction, or mining departments in technical schools. Key requirements were more suitable accommodation and equipment and to continue the education of boys during their early years of employment. While progressive county education authorities had appointed organisers of mining instruction, he emphasised that there were some authorities where provision left much to be desired. Although, the Technical Instruction Act of 1891 gave education authorities the power to provide technical education, it was not a statutory duty.

³²¹ First Report of the Committee appointed by The Board of Trade to allocate the Fund, 1921-1922, H.M.S.O. 1923, p. 26.

The coalfield review evidenced significant regional contrasts. In Northumberland the organisation of mining education was poor but Staffordshire County Council, in collaboration with the county boroughs provided well-structured courses with full-time organisers. The M.W.C. was committed to spend £500,000 in the five years of its political mandate, targets that were broadly achieved through confirmed or provisional allocations.

The 1926 'Report of the Committee on Education and Industry in England and Wales' regarded training for a specific trade or job as the transfer of responsibility from the employer to the state as unacceptable, but technical schools were essentially facilitating such a role, particularly when education authorities were paying an allowance to those pupils where employers would not release them unless it was without pay. Although some education authorities recompensed mining employees who were studying, a limited number of D.W.C.s also financially assisted students. The Cannock Chase and Pelsall D.W.C. made grants of 7s 6d to 316 students attending junior courses in 1929. Those attending part-time day advanced courses received £5 for the duration of the course. They also provided grants of £20 to three students studying degree courses at Birmingham University.³²² The Ammanford Mining and Technical Institute, that opened in 1929, provided 8s per day for a man attending day release matriculation courses.³²³ While only representing two thirds of a day wage, it was provided as an incentive to study.

The 1926 Survey of Technical and Further Education in England and Wales referred to the Miners' Welfare Fund and specific mining institutes at Coalville and Nuneaton, and the Chesterfield Technical School as good examples of facilities. However, it described many technical schools as having inadequate buildings with poor conditions for staff and pupils. The survey highlighted the unique degree of standardisation in mining due to statutory requirements which provided exceptional opportunities for the M.W.F.. In their statistics on companies which allowed employees to take part in sandwich schemes or grant time off in working hours, mining was not mentioned. In the following year the reluctance of employers to release miners for educational purposes was again publicised when the 1927

³²² 'Mining Instruction', *Staffordshire Advertiser*, 6 July 1929, p. 2

³²³ Ammanford Technical College – www.terrynorm.ic24.net/ammanfordtechnicalcollege

Committee on Industry and Trade viewed miners to be under educated from the viewpoint of safety, because shift work rendered attendances at evening classes difficult.³²⁴

The 1931 Mines Department's Committee of Enquiry quoted the Board of Education which viewed the positive achievements of the Fund in developing vocational education as inestimable. The report also detailed how the Fund's assessors had advised on equipment required and developed, with local education authorities, programmes of mining education. Bill Bailey, in considering the 1935 Board of Education Survey into technical education, concluded that little had been achieved by 1939, partly because of the restricted influence of the Treasury and inertia by the Local Education Authorities (hereafter L.E.A.s) which he partly attributed to industrial areas not being coterminous with L.E.A.s and quoted mining and textile industries as examples. However, one principle of the M.W.F.'s strategy was to divide the 27 mining districts into 8 regions in which education authorities were to co-operate over the provision of higher standards of technical education. The Third Report of the Central Committee of the M.W.F. for the year 1924 stated in reference to the North Midlands Area that, 'The extent to which co-operation between neighbouring authorities has been attained may well serve as an example to other coalfields.'³²⁵ Richard Evans, in explaining how the regional development of technical education was slow, inaccurately credits the first example of regional co-ordination being the Yorkshire Council for Further Education established in 1928.³²⁶ Co-operation between education authorities in mining areas was, however, not universal as resources were held back from Northumberland and Durham because they had no formal coalfield education programmes.³²⁷

The investment in technical schools where mining was one of the subjects taught, had a wider impact on educational opportunities which did not always lead to enhanced mining careers. The opening of the Ammanford Mining and Technical Institute on April 10th 1929 was viewed retrospectively by the Rev. Elwyn Thomas as 'A day of salvation because it

³²⁴ J. Foreman-Peck, 'Spontaneous Disorder? A Very Short History of British Vocational Education and Training 1863-1973', *Policy Futures in Education*, Vol. 2 No. 1 2004, p 87.

³²⁵ Third Report of the Committee appointed by the Board of Trade to allocate the Fund, 1924, H.M.S.O. 1925, p. 29.

³²⁶ www.technicaleducationmatters.org - R Evans ed. 'A Short History of Technical Education – Chronology', 20 July 2016.

³²⁷ The National Archives 'Ashington Miners' Welfare Educational Evening Institute', 1925-1935, ED 41/640.

enabled local people to facilitate access to university.³²⁸ One of the first students, Bryn Banfield, a miner for eight years, subsequently progressed to obtain a science degree and teaching diploma. Another miner, O.J. Anthony, who studied at the Institute, joined the police and achieved the rank of inspector. Delme Bryn Jones, who studied to be a colliery electrician, subsequently attended the Guildhall School of Music and Drama and the Vienna Academy.³²⁹ The benefits from the enhancement of technical educational facilities by the M.W.F. extended beyond those who were employed in the industry. Maude Storey, a miner's daughter, studied nursing at Wigan College and served as President of the Royal College of Nursing from 1986 to 1990.³³⁰ Professor Anthony Ledwith, C.B.E., also studied at the Wigan College, becoming Professor of Chemistry at Sheffield University and a President of The Royal Society of Chemistry. Prior to undertaking a degree at Bedford College, Baroness Ashton of Upholland, also studied at Wigan. She became a Vice-President of the European Union. Professor Lawrence Lacey, who commenced colliery employment at the age of 14, won an exhibition award to Sheffield University, after matriculating through studying at the Chelmsford Mining and Technical Institute in Dinnington. Professor Lacey's last position was Deputy Director of the British Council. Professor Raymond Page, whose specialisation was Anglo-Saxon runes, studied mechanical engineering at the Rotherham Technical College before pursuing an English degree at the University of Sheffield. Professor Dennis Anderson, the son of a Sheffield coalman, failed his 11+ and as an apprentice for the Central Electricity Generating Board studied at Rotherham Technical College for an H.N.D.. He subsequently studied economics at the University of Sheffield and became Economic Adviser at the Ministry of Technology and for 20 years worked as a senior economist for the World Bank. On the Dinnington Heritage website there is a comment that could easily apply to most, if not all, the technical schools and colleges part funded by the M.W.F. – 'It would, however, require a very big honours board to take all the names of the old students of the tech. who have acquitted themselves very creditably in many walks of life.'³³¹

The technical education facilities developed or established were regionally and politically significant in that they attracted resources from L.E.A.s and received extensive local media

³²⁸ Ammanford Technical College – www.terrnorm.ic24.net>ammanfordtechnicalcollege.

³²⁹ www.terrnorm.ic24.net>ammanfordtechnicalcollege.

³³⁰ 'Obituary Maude Storey', *Independent*, 2 April 2003

³³¹ <https://dinningtonheritage.weebly.com>

coverage. Emanuel Shinwell, during his periods of office as Secretary for Mines, opened the Coalville Mining Institute and the Worksop Mining and Technical Institute.³³² The redeveloped Armstrong College in Newcastle was opened by the Prince of Wales on the 14 May 1929.³³³ He was assured of a warm welcome because of his noted support of, and sympathy with, mining communities, having been the first major donor to the Miners' Relief Fund in 1926. In January 1929 he undertook a three day visit to nearly 100 villages and towns, over a 200 mile route.³³⁴

Lord Eustace Percy, the President of the Board of Education, when opening the new technical institute in Wrexham, referred to 'a branch of education much neglected in the past'.³³⁵ This included a reference to the M.W.F.'s funding contribution. Lord Halifax, when President of the Board of Education, opened the new Doncaster Technical College which had 2,700 registered students.³³⁶ The increased demand was attributed to the expanding Doncaster coalfield and the release for part-time instruction by staff of the London and North-East Railway Company. His statement referred to the grant of £14,700 from the M.W.F.. Upon the opening of the Barnsley Mining and Technical College, the largest in the country, Sir Michael Saddler paid tribute to the M.W.F. for what it had achieved.

By the 31 December 1938 a total of £730,837 had been invested in 79 education authority facilities and eight universities (Appendix 5). The Royal Commission on Safety in Coalmines, which reported in 1938, concluded that, 'there appears to be little or no organised provision

³³² 'Mr Shinwell M.P. Opens an Institute', *Falkirk Herald*, 12 July 1924, p. 9.

'Need for Education among Miners', *Tamworth Herald*, 12 July 19 24, p. 7.

'Mining Institute', *Sheffield Daily Telegraph*, 7 July 1924, p. 6.

'Secretary for Mines Opens Worksop Technical Institute', *Sheffield Daily Telegraph*, 24 October 1930, p. 10.

'Miners' Welfare – Scheme to go on', *Sheffield Independent*, 24 October 1930, p. 5.

³³³ 'Friend of the Miners. Armstrong College Opened by H.R.H. Prince of Wales', *Hull Daily Mail*, 14 May 1929, p. 12.

'Royal Occasions Near and Far', *Illustrated London News*, 25 May 1929, p. 34.

'The Prince at Newcastle', *Leeds Mercury*, 15 May 1929, p. 10.

³³⁴ 'The Prince and the Miners', *The Times* 31 January 1929, p. 12;

The Prince witnessed squalor and deprivation and made unarranged domestic visits. One was to Martin McCann, a widower with eight children and only one son was working. His accommodation comprised one downstairs room and a garret in Wapping Square in Benton, an area where the properties had previously been condemned as insanitary. The household income was less than £2 per week for the entire family. The Prince had undertaken numerous visits to coalfields, became a Patron of the National Council of Social Services, and his Christmas day broadcast in 1928 included an appeal for contributions to the Lord Mayor's Fund for distressed mining communities. In a speech at the Royal Albert Hall in January 1932, he spoke of his keenness to help alleviate the effects of unemployment and to improve social conditions.

³³⁵ 'New Technical Institute at Wrexham', *The Times*, 20 October 1927, p. 9. This was the old infirmary site renamed the Denbigshire Technical Institute.

³³⁶ 'Man's Misuse of His Machines', *The Times*, 21 September 1934, p. 14.

in the industry itself as a whole or in the separate coalfields for the education and training of its officials.³³⁷ Although not clearly defined, the phrase 'industry itself' implies the colliery companies, rather than the M.W.F. which had created and funded structural opportunities.

Although the concept of a vocational scholarship scheme for miners was first discussed by the M.W.F. in 1924, and publically referred to by Winstanley in the following year,³³⁸ the proposal was not progressed until 1938 when the Miners' Welfare National Mining Education Scheme was endowed with a grant of £75,000 from the General Fund. The scheme was to fund a four-year day release programme for advanced courses in mining at approved technical institutions. The first mining students were supported in 1939 (£20 p.a.) and by June 1946, 251 scholarships had been awarded and 76 students had completed their studies.

Statham attributes the 1945 Coal Mines (Training) General Regulations as the first occasion when training became an integral part of employment, although he credits some colliery companies with enlightened attitudes to education and training schemes prior to them becoming compulsory. He compared the number of mining graduates from nine British universities in 1936 (22) with Germany which only had three universities offering mining degrees but educated twice the number of graduates for an industry which produced 40 percent less coal than Britain. Michael Sanderson criticised Britain having ten universities offering mining qualifications as too many, having produced a situation whereby: 'scarcely any industry had more university attention lavished on it than mining.'³³⁹ This general criticism failed to recognise the regional structure of a dominant industry with geographical associations of coal owners, mining unions, royalty owners, professional associations, local authorities and mining inspectors. The M.W.F. itself was primarily regional, given that four fifths of its income was applied upon the recommendation of D.W.C.s.

The M.W.C. tried to avoid duplication, but in the face of vested interests, this was often impractical. The concentration on one mining university in Yorkshire was resisted by the West Yorkshire and South Yorkshire Coal Owners' Associations, both of which had

³³⁷ Royal Commission on Safety in Coal Mines. Report Cmd 5890 1938, p. 7.

³³⁸ 'Items', *Ripley and Heanor News and Ilkeston Division Free Press*, 13 March 1925, p. 2.

³³⁹ Michael Sanderson, *The Universities and British Industry 1850-1970*, (London, 1972), p. 87.

previously made separate financial contributions to Leeds and Sheffield Universities. Greater success was achieved in minimising the competing aspirations of education authorities, particularly in South Wales where the position was further complicated because the coal owners were reluctant to transfer higher standards of provision from their own schools of mines in Treforest and Crumlin to education authorities. The latter issue was not resolved until 1928 when a grant of £7,750 for initial maintenance was provided for the transfer which established an extensive provision of mining and technical schools negotiated by Winstanley.

Although Statham's lecture on the development of mining education ignored structural funding by the M.W.F., Martyn Walker provides detailed references to grant allocations but regrettably some of the contextual information is inaccurate.³⁴⁰ However, he does correctly credit the M.W.F. with financially supporting the establishment and expansion of mining departments in existing and new colleges and schools. Statham refers to the Mines and Quarries Act 1954 which required about 10 percent of the workforce to hold statutory certificates but credited, 'the present structure for education and training has been built on foundations laid or planned by the earlier mine owners.'³⁴¹ This was an inaccurate statement which directly contradicted the Royal Commission's conclusions in 1938. Of the facilities enhanced by the M.W.F. for mining and technical education, many have survived and still fulfil an educational function, although no longer linked to mining.³⁴²

The investment in educational facilities played a significant part in enhancing the qualifications and technical knowledge of those in positions of responsibility, especially where certification was required. Winstanley recorded, when giving presentation certificates at the Coalville Mining Institute, that 40 years prior to that event, when he was first associated with miners, very few could read or write.³⁴³ The 1931 Departmental Report emphasised that the Fund's investment in mining education was for the future benefit of the industry. By the 31st December 1945 the M.W.F. had invested £1,154,985 in education

³⁴⁰ He quotes dates for grants prior to the establishment of the M.W.F. and the Education Fund did not require miners who applied to study a vocational course.

³⁴¹ I.C.F Statham, *Journal of the Royal Society of Arts*, Vol. 105 No. 5001 April 1957, p. 412.

³⁴² The former Worksop and Mansfield County Technical Colleges prosper as the North Notts and West Notts Colleges. The Clowne Mining and Technical Evening Institute forms part of the North Derbyshire Tertiary College. Following a sale to the University of Huddersfield, the Barnsley Mining and Technical College is now the University Centre, Barnsley. The Treforest School of Mines is now part of the University of Glamorgan.

³⁴³ 'Stidious Miners. HM Inspector and Value of Education', *Nottingham Journal*, 5 March 1927, p. 8.

of which £947,811 was contributed by the General Fund. £665,000 was invested in buildings and equipment to which D.W.C.s added £24,020. The availability of significant grant aid encouraged partnership funding from education authorities to create a network of technical schools and colleges to deliver courses and programmes to assist regional commercial activities, not just those of mining. The technical schools also enabled inhabitants to matriculate and develop skills which facilitated entry into a variety of professions. Specific universities benefitted through the expansion of mining departments which offered a range of degree courses leading to an increase in the number of graduates entering the industry. Winstanley was able to develop improvements in curricula and examination requirements and recommend the equipment required for mining schools. Writing in 1945, Court emphasised that mechanisation required a new kind of mineworker and official. The Nationalisation Act placed upon the N.C.B. a statutory duty to advance the skills of persons employed, or to be employed, to provide and assist others in the provision of facilities for training and education as approved by the Minister of Fuel and Power. The training programmes for all new entrants, craft apprenticeships, and qualifications required for specific tasks required by the 1954 Mines and Quarries Act, and scholarships for existing employees together with a graduate entry programme were all made possible by the educational infrastructure developed and financed by the M.W.F.. That infrastructure, according to Statham, played a significant, but unquantifiable, contribution to enhance safety standards and assisted the modernisation of a nationalised industry to accommodate the changing technical requirements necessary as part of post-war reconstruction.

The Miners' Welfare National Scholarship Scheme and the Miners' Welfare National Students' Exhibitions Scheme

The original discussions in 1924 on a scholarship scheme related expressly to employees who wished to pursue degree subjects related to mining. However, in the following year the Chair of the M.W.F., Lord Chelmsford, advocated extending scholarships to mineworkers (coded A candidates), their sons and daughters (coded B candidates), with freedom of choice over the academic subjects to be studied.³⁴⁴ As legal advisers expressed doubts over

³⁴⁴ National Archives file ED54/23;

the eligibility of the children of miners the issue was the subject of a meeting held at the Board of Education.

These reservations were overcome by the influence of Sir Ernest Gowers, the Permanent Under-Secretary, who suggested that while such eligibility might not conform to the letter of the law, such expenditure would be, 'in the spirit of the Act,'³⁴⁵ and he was determined that the scholarship scheme should be advanced on this basis. The scheme, drawn up by Winstanley and Professor Hudson Beare, was originally endowed with £150,000 from the General Fund and grants were to be recommended by a selection committee whose members were to comprise a number of academics, one of whom was to be female.³⁴⁶ The draft scheme and allocation of the endowment prior to the end of the initial statutory period and before any consideration of a legislative extension is indicative of the M.W.C.'s desire to establish a permanent mechanism to assist mineworkers and/or their dependent children to access a university education.

Chelmsford's commitment to the Scholarship Scheme and the scholars was evidenced by a lunch he organised at All Souls College Oxford on Saturday 30 November 1929 for the six students studying at Oxford. He also intervened on behalf of individual applicants. In correspondence he congratulated the Rector of Wishaw High School on the success of a

When Chelmsford was Vice-Roy of India, Sir Michael Sadler, the Vice-Chancellor of Leeds University, from 1917 to 1919 examined the state of Indian education as requested by the Cabinet. The friendship of Chelmsford and Michael Sadler may well have impacted on the former's views of education as Sir Michael had been very involved with the university extension movement. Lord Chelmsford was aware of juvenile unemployment issues and training needs as he had prepared a report to Cabinet in 1921 on a jurisdictional dispute between the Board of Education and the Board of Trade. Lord Chelmsford may have also received support for his views from W.R. Davies the Principal Assistant Secretary to the Board of Education for Technical Education. He had served as an assessor to the M.W.F. in 1921 and subsequently had a considered input to the Scheme.

³⁴⁵ National Archives Notes of a meeting at the Board of Education 12 January 1926, File ED 54/23 Miners' Welfare National Scholarship Scheme 1926-1935.

³⁴⁶ It would appear that the trustees were trying to achieve a degree of educational balance between the Scottish (H.F. Stockdale) and English (Sir Theodore Morrison) universities, technical education (G.H. Winstanley), female education (Lady Mabel Smith), adult education (R.H. Tawney) and industrial experience (Alderman W.N. Jenkins, M.P.). Alderman Jenkins had unique qualifications for the position as he was an official of the S.W.M.F., a former member of a school board, Chair of Glamorgan County Council and chaired the Federation of Education Authorities of Wales. Upon the expiry of Lady Mabel Smith's five-year term of office she was replaced by Ms Alice Silcox, the Dean of Women Students at Leeds University, who in turn was succeeded in 1935 by Ms Edith H. Major, who had been Mistress of Girton College Cambridge from 1925 to 1931. The appointment of Lady Mabel Smith was surprising, given that she had been fined £5 at Leeds Assizes for slandering the Denaby and Cadeby Colliery Company over the poor state of their housing stock during a W.E.A. lecture she delivered on the 25 March 1920. Lady Mabel Smith was a member of the country's wealthiest family (Wentworth-Fitzwilliam), who had interests in mining companies. She was an active socialist and undertook a job-share as Manager of the Manchester Settlement. A detailed report of the Court case can be found on www.conisboroughanddenabyhistory.org.uk.

student who received a scholarship to attend Baliol College, Oxford, to which Chelmsford had made representations on the student's behalf.³⁴⁷ He also encouraged another student, Arthur A. Eaglestone to attend Oxford, rather than his original preference for Sheffield. Eaglestone, a miner who had previously studied with the W.E.A., had literary publications to his credit. He had adjusted well to his new environment with supervisors who included Clive Staples Lewis and George D.H. Cole, but for recent school leavers university must have represented a different world. Field described university as 'a tiny social world made up of upper and middle class students and staff'.³⁴⁸ Eaglestone refers to mixing with other working class students, one of whom was Archibald Lush who on one occasion brought his friend Aneurin Bevan, who wished to study at Oxford and thought that he would be able to obtain a miner's scholarship.³⁴⁹ There is no reference to this in the detailed biography of Bevan by Michael Foot. As Aneurin Bevan was elected M.P. for Ebbw Vale on 30 May 1929, the visit was most likely to have taken place between September 1928 when Eaglestone commenced his studies and the date of the general election.

Elaine Morgan (nee Floyd) O.B.E., a miner's daughter, having obtained a scholarship to Oxford, was greeted upon arrival by university staff who thought, because of her accent, that she had applied for the position of cleaner; she became a W.E.A. tutor, a BAFTA winning playwright, author and scriptwriter. Gwyn Thomas, an author, playwright, journalist and teacher, was the youngest of 12 children whose mother died when he was six. He received a scholarship to study foreign languages at Oxford, an experience which he described as 'not very pleasant..... surrounded by sad men with height looking down at me. They lived in a world that could not have been more alien to me.'³⁵⁰ As the son of an unemployed miner, he also remarked 'there were thousands of people at Oxford whose fathers were *unemployed*, mine was the only one officially unemployed.'³⁵¹ His experience reinforces Carol Dyhouse's description of Oxbridge as having a 'function to confirm privilege rather than opportunities for social mobility on any scale.'³⁵²

³⁴⁷ 'Miner's Son for Oxford', *The Scotsman*, 22 June 1927, p. 12.

³⁴⁸ Field, John, 'Service learning in Britain Between the Wars: University Students and Unemployed Camps', *History of Education*, Vol.41 (2) March 2012, p. 195.

³⁴⁹ Eaglestone notebooks, Sheffield University Special Collections Ref. MS 253.

³⁵⁰ Interview with Michael Parkinson 1971.

³⁵¹ *Ibid.*

³⁵² Carol Dyhouse, 'Going to University in England Between the Wars: Access and Funding', *History of Education*, Vol. 31 No. 1 2002, p. 2.

This enormous class difference between mining scholars and other students was also reflected in the membership of the Central Committee of the M.W.F.. Chelmsford was a barrister, educated at Winchester and Oxford, who had served as Governor of Queensland, Governor of New South Wales and Vice-Roy of India.³⁵³ In contrast the President of the M.F.G.B., Herbert Smith, who for the first five years of the Fund was the Federation's only representative, was orphaned at a young age and adopted from the workhouse. His colliery employment commenced at the age of 10 and he never enjoyed the benefit of schooling. Although expected to contribute to the governance of the Fund on an equal basis he was, according to his biographer, devoid of finesse, lacking knowledge of all but mines and miners.³⁵⁴

The ethos of the resources made available for scholarships, exhibitions, or grants was primarily one of opportunity to support those who demonstrated educational ability and who would make the most of that support.³⁵⁵ The sense of pride associated with the successful award of financial support was often reflected in local newspapers. The *Derby Daily Telegraph* reported that the County Education Committee had placed on record their appreciation of Doris Fretwell from Shirebrook for having received an exhibition to study Zoology at Bristol University.³⁵⁶ The *Stirling Observer* in response to the award of a scholarship to F. Bell stated, 'We congratulate our young fellow citizen and in his medical studies feel sure that he will make his mark and in time bring much honour to his native town.'³⁵⁷ The reporting of an award sometimes implied uniqueness and surprise. The heading 'Alfreton Man to go to University' implies an unusual event, although the article gave full credit to the achievement of a 24 year-old miner going to Cambridge to study

³⁵³ Frances Guest, Lady Chelmsford, was the daughter of Baron Wimbourne. The Guest family developed the largest ironworks in the world at Dowlais and established the steel conglomerate G.K.N. The letter G stood for the family name Guest.

³⁵⁴ J.J. Lawson, *The Man in the Cap: The Life of Herbert Smith*, (London, 1941).

³⁵⁵ Roger Macleod & E. Kay Andrew, 'The Origins of the D.S.I.R., Reflections on Ideas and Men 1915-1916'. *Public Administration*, Vol. 48 1 March 1970, p. 29;

The emphasis on those who would make the most of educational support was also evident in the proposals to establish the Department of Science and Industrial Research, drafted by Dr Addison and presented to the Cabinet on 3 May 1915 by Sir Joseph Pease, the President of the Department of Education. The proposal for educational grants was 'for students whose capacity to benefit from further education justified public support'.

³⁵⁶ 'Scholarship Success', *Derby Daily Telegraph*, 29 May 1940, p. 3.

³⁵⁷ 'Scholarship', *Stirling Observer*, 24 May 1945, p. 5.

Economics.³⁵⁸ This referred to Harry Dawes who established the Cambridge University Socialist Society of which Guy Burgess was a member. Another M.W.N.E.F. scholar, J. Lees, also studied at Trinity College and was a member of the Society and close friend of Burgess.³⁵⁹

Some journalistic commentary viewed the Scholarship Scheme in a wider socio-economic and political context. *The Times*, when referring to a report of the Adult Education Committee of the Board of Education in 1927 which highlighted the inadequate access for adult students to attend university, welcomed the M.W.F. scheme.³⁶⁰ The *Sheffield Daily Telegraph*, in the first year of the scheme, commented, 'The problem of widening the avenue leading to the universities is receiving very serious attention in various quarters at the present time. The Miners' Welfare Scholarship Scheme must be welcomed as a valuable contribution to the solution of the problem.'³⁶¹

The *Liverpool Echo* reporting on the scholarship for Mary Garbet of Atherton to study at St Hugh's College, Oxford described the award as, 'Probably the most valuable that can be won by any English boy or girl as it carries with it emoluments which will amount in 4 years to nearly £1000.'³⁶² *Common Cause*, in reporting the same scholarship stated, 'The academic life of Oxford and the working class of Atherton are lived out in two different worlds and the contacts between them are few and tortuous. The individual who stands like a colossus with a foot in either world is a genuinely privileged member of society with great opportunities for vision and understanding.'³⁶³ A key word in this quotation is 'privileged' as many graduates, through their choice of employment and/or geographical location, ensured that a return on their educational investment was applied within mining communities.

Despite extensive regional media coverage of the scholarships awarded each year, some prominent individuals were unaware of the scheme's purpose and significance. A letter in

³⁵⁸ 'Alfreton Man to Goes to University', *Derbyshire Daily Telegraph*, 30 May 1929, p. 11.

³⁵⁹ Geoff Andrews, *The Shadow Man: At the Heart of the Cambridge Spy Circle*, (London, Tauris, 2015), p. 36.

³⁶⁰ 'Adult Education Committee of the Board of Education', *The Times*, 23 March 1927, p. 6.

³⁶¹ 'The Miners' Welfare Fund Scholarships', *Sheffield Daily Telegraph*, 28 February 1927, p. 6.

³⁶² 'Girl's £1,000 Scholarship', *Liverpool Echo*, 31 May 1929, p. 9.

³⁶³ 'The Miner's Scholar', *Common Cause*, 14 June 1929, p. 2.

Common Cause was the journal of the Women's Movement for Reform. In 1916 the journal offered three scholarships of £50 each for women who wanted to become industrial chemists. Sally M. Horrocks, 'A Promising Pioneer Profession? Women in Industrial Chemistry in Inter-War Britain', *The British Journal for the History of Science*, Vol. 33 No. 3 September 2000, pp. 351-367.

the *Western Mail* expressed surprise that none of the panel of the Brains' Trust, which included Jennie Lee, a mineworker's daughter and M.P. for a mining constituency, in response to a question on the chances of a miner's son getting to Oxford, were unaware of the Scheme.³⁶⁴ The non-response is difficult to comprehend as Carol Dyhouse refers to Jennie Lee's autobiography where she noted that she had often been asked how it had been possible for her, a daughter of a coal miner, to go to university. The formal answer was grants from the Carnegie Trust, the Fife Education Authority, and parental support, which on occasions necessitated her father undertaking a 40 mile cycling trip to bring food supplies and clean laundry.³⁶⁵ She initially served as M.P. for the mining constituency of North Lanarkshire from 1929 to 1935 and was re-elected in 1945 for the mining constituency of Cannock. She played a key role in the establishment of the Open University as she had a passionate interest in adult education.³⁶⁶

Eaglestone, reflecting on his position as a W.E.A. lecturer in South Yorkshire, records in his autobiography, 'In the first place there was the Yorkshire pull, social and domestic, and in the second the feeling that somehow, profiting as I had done from the Miners' Scheme, I had a dedicated duty to return to the coalfield and do what I could in terms of extra-mural education.'³⁶⁷ Whether students were driven by a sense of duty or a desire to apply their education achievements in coalfield communities many did so through teaching.

Table 3:1: *Employment Categories of Scholarship Graduates 1927-1936*

	A Candidates	B Candidates	Total
Teaching	18	28	46
Librarian	-	1	1
Medicine	2	5	7
Research	2	4	6

³⁶⁴ 'Miners' Scholarships', *Western Mail*, 7 January 1944, p. 3.

³⁶⁵ Carol Dyhouse, 'Going to University in England between the Wars: Access and Funding', *History of Education*, Vol. 31 1 2002, pp. 1-14.

³⁶⁶ 'From Miner's Daughter to Trailblazing M.P.', *The Scotsman*, www.scotsman.com>political-catalysts>jennie-lee [7 March 2017].

³⁶⁷ Unpublished Draft Autobiography, 'A Yorkshire Lad', Special Collection, University of Sheffield, Reference MS 425.

Not known	-	3	3
Private Sector	7	6	13
Coal Industry	6	2	8
Community Centre	2	-	2
HMI (Factories)	1	-	1
Minister of Religion	1	-	1
Diplomatic Service	-	1	1
	39	50	89

Source: Tenth Annual Report of the Miners' Welfare National Scholarship Scheme Selection Committee

The freedom of choice of non-vocational education witnessed some scholars progress in noteworthy careers away from the coalfields. Edgar Jones, whose colliery employment commenced at the age of 14, studied Economics at University College Aberyswyth. He became the Deputy Director of the International Monetary Fund's Exchange Restriction Department in 1958 at the age of 46, and his last position prior to retirement was the International Monetary Fund's permanent representative in Geneva. Joseph Ford, the son of a Chesterfield Rescue Brigadesman, entered the Diplomatic Service after graduation. He accompanied Anthony Eden to the 1954 Geneva Conference and, from 1967 to 1970, was the Director of Research at the Foreign and Commonwealth Office. He was an acknowledged expert on China and knighted for his public service.

The exceptional career of George Keeling demonstrated the wider human role of the M.W.F. through personal advice he received on several occasions. Keeling was the subject of the 'On the Air' BBC Home Service programme on the 16th April 1944. He was adopted, having been abandoned at the age of 10 and commenced colliery employment at the age of 13. He served for two years as an air gunner during World War I and then returned to work as a miner, but faced unemployment in 1921. By 1925 he was widowed with 2 young children. M.W.C. staff encouraged him to attend the M.W.F. funded adult education programme at

Nottingham University, and during 1926 an M.W.C. staff member encouraged him to operate camping opportunities for juvenile mineworkers during the long dispute. After spending 17 weeks in a tuberculosis sanatorium he was subsequently encouraged to apply to the scholarship scheme. In 1929 he commenced an Economics degree at the London School of Economics. While in London he organised a book collection for the unemployed in Yorkshire and the East Midlands to which the King donated 250 books. By the date of the BBC programme, he was the Managing Director of two engineering companies and two foundries, all located in the Coventry area. His business interests were consolidated into Keelavite Hydraulics Limited and sold for an undisclosed sum to Joseph Lucas Limited in December 1969, leaving him a wealthy man who resided in a country house on a 10 acre estate.

Successful female B candidates had defied an education system which, according to Deirdre Beddoe, limited them to the elementary sector with a heavy emphasis to equip them to become competent, thrifty wives.³⁶⁸ Keith Vernon emphasised that it was fruitless to contemplate university without financial assistance.³⁶⁹ Dyhouse provides statistical evidence that girls were discriminated against in that after the increase in state scholarships in 1930 to 300 students, only 112 were allocated to female students. She also concludes that girls were less well catered for by scholarships from schools, universities and trusts.³⁷⁰ Elizabeth Edwards highlighted that up to 1945 only a small minority of girls proceeded beyond elementary school to secondary education and of those who did few went to college or university.³⁷¹ However, academic performance and external financial assistance had to be supplemented by parental sacrifice and encouragement. For any child pursuing full-time education beyond the age of 14 this resulted in a loss of income for the family. For daughters there was positive recognition that they deserved opportunities beyond the traditional stereotypical role ascribed to them by the elementary education system. However, for some children, whatever the level of parental support, education beyond 14 was unrealistic. In 1919 18,051 elementary schoolchildren who qualified for secondary

³⁶⁸ Deirdre Beddoe, *Back to Home and Duty. Women Between the Wars 1918-1939*, (London, 1989) p. 47.

³⁶⁹ Keith Vernon, 'The Health and Welfare of University Students in Britain 1920-39', *History of Education*, Vol. 37 No. 2 March 2008, pp.227-252.

³⁷⁰ Carol Dyhouse, 'Going to University Between the Wars: Access and Funding', *History of Education*, Vol. 31 No. 1 2002, pp. 1-14.

³⁷¹ Elizabeth Edwards, 'The Culture of Femininity in Women's Teacher Training Colleges 1900-1950', *History of Education*, Vol. 22 3 1 September 1993, pp. 1-14.

education were excluded either because of a lack of school accommodation or a shortage of free places.

Grants from D.W.C.s facilitated teacher training opportunities - a popular career choice for girls. Elizabeth Edwards argued that teacher training colleges were preferred by girls and viewed as an extension of the service orientation of domesticated family values. This contrasts with Marjorie Cruikshank's study of teacher training in Scotland whereby two thirds of the annual output of university graduates subsequently trained to teach.³⁷² This was reinforced by the Scholarship Scheme's experience of the 15 female graduates between 1927 and 1935, 11 of whom were teachers who had previously graduated in specific subjects. However, three ceased to be teachers upon marriage, as most education authorities operated a marriage bar. Such sexism also applied in medicine, as several teaching hospitals had ceased to accept female applicants.³⁷³

The number of applications from 1927 to 1937 inclusive is detailed in Appendix 6, although the statistics for 1927 have been excluded from the totals of coalfield applications because a disproportionate number of applicants in the scheme's first year was attributable to many not having the appropriate entry qualifications for university and the M.W.F. had failed to set an age limit for B candidates.

The number of candidates from South Wales from 1928 to 1937 was consistently high bearing no relationship to coalfield levels of employment. They provided 42.49 percent of A candidates, 43.5 percent of male B candidates and 46.15 percent of female B candidates. The report of the Selection Committee for 1927 attributed the disproportionately high number of South Walian applications to the comparative ease of entry for University of Wales degree courses, lower educational costs, and where a foreign language attainment was required as an integral part of the entrance criteria, the Welsh language qualified. Such remarks were inappropriate as much of the coalfield's manpower had been populated by internal migration from England and Ireland. The Welsh language was primarily spoken in North, Mid, and parts of South West Wales. The remarks underestimated the cultural importance of education within the mining communities of South Wales. D.J. Davies cites

³⁷² Marjorie Cruikshank, 'A Short History of the Training of Teachers in Scotland: Scottish Council for Research in Education', University of London Press, (PDF) ed.gov.ERIC ED104864.

³⁷³ This was at London Hospital in 1922, St Mary's Paddington in 1924, Westminster, Kings, and Charing Cross all in 1928

the Tredegar Workmen's Institute Society paying the school fees of promising children from 1910 onwards and in 1923 their library issued 47,000 books. The Society also paid the fees for those who took examinations set by the Associated Board of the Royal School of Music. Fees were also paid for those who sat elocution examinations and trophies were provided for school-based educational and cultural achievements.³⁷⁴ The enthusiasm of candidates, especially those from South Wales, to teach reflects how the profession was valued, which would also have been enhanced by The Schoolteachers' (Superannuation) Act 1918. Of the 395 eligible B candidates who applied to the scholarship scheme from Wales, 209 wanted to teach, (53 percent).

Prior to the commencement of the scheme, a number of D.W.C.s established trust funds to facilitate educational opportunities, but only if they related to mining.³⁷⁵ During the first statutory period of the Fund, individual grants were regarded as revenue expenditure and therefore not eligible, but the income from endowment funds could be used for individual grants.

The limited number of scholarships generated by the national scheme compared to the number of applicants, encouraged the Fund to provide a modest budget for unsuccessful scholarship candidates who, without assistance, would not be able to continue with existing degree courses. In 1927 six grants were approved at a total cost of £320. In order to increase the number of special grants, D.W.C.s were invited to contribute half the value of awards and only one D.W.C. refused.

Those candidates who were unsuccessful, particularly A candidates who had studied to obtain university entry qualifications must have been extremely disappointed. Walter Brierley, a Derbyshire miner who commenced work at the age of 13, attended W.E.A. evening classes prior to studying at University College Nottingham from 1927 to 1931 on the 2 day a week adult education project funded by Derbyshire D.W.C.. His disappointment at rejection would have been compounded by his subsequent unemployment in the early 1930s. While unemployed, he wrote two successful novels, *'The Means Test Man'* and *'The*

³⁷⁴ D.J. Davies, *The Tredegar Workmen's Hall 1861-1951 – Ninety Years of Endeavour*, (n.d. no stated publisher).

³⁷⁵ The scholarship minutes reveal that very few A candidates returned to the industry after graduation but one who did was Dr David Watham Phillips who spent 15 years as a researcher for the Safety in Mines Research Board, 2 years as its Director, and became the N.C.B.s first Chief Safety Engineer.

Sandwich Man'. *The Means Test Man*' reflects the poverty of a mining family during a period of economic depression and the intrusive nature of a home visit to establish the level of household income. Walter Brierley's own circumstances are reflected in the character of Arthur Gardner who is the Sandwich Man. His focus to secure an education resulted in the loss of his employment, the antagonism of his step-father and the breakdown of his relationship. His failure to access university came at great personal cost as the book ends with him penniless, entering the workhouse. The novel reinforces the difficulties faced by working-class men and women trying to educate themselves.³⁷⁶ Although Brierley could not earn a living as a full-time author, his educational achievements enabled a change of career when he became an education welfare officer.

The number of special grants totalled 97 but shared funding ceased in 1934 when the levy was reduced to ½d. They were replaced in 1936 when the Fund endowed (£25,000) the Miners' Welfare National Scholarship Exhibition Scheme.

Although the reduction in the levy reduced D.W.C. resource availability, the enthusiasm for the committees to support individual educational opportunities was undiminished. They made 117 grants in 1936, 196 in 1937 and 177 in 1938. These increases were against a declining manpower level. The Miners' Welfare National Scholarship Scheme, by the 31st December 1938, had supported 168 students (75A and 93B candidates) and in the three years of operation the Miners' Welfare National Students' Exhibitions Scheme supported 40 students.

Educational Grants Awarded by Divisional Welfare Committees

The joint funding of special grants indicated a significant development by D.W.C.s which began to award individual grants, for which an endowed fund was no longer required, for a variety of educational courses not limited to degree level study. The flexibility afforded to D.W.C.s over expenditure reveals significant variations in regional priorities. By December 31st 1945 they had spent £207,174 on education (1.72 percent of their total allocation)

³⁷⁶ Walter Brierley was twice a winner of awards given by the Arthur Markham Memorial Prize for Literature. On the first occasion in 1928 the judges were Sir Henry Hadow the Vice-Chancellor of the University of Sheffield, Professor Lascelles Abercrombie Professor of English at the University of Leeds and Professor B. Ifor Jones Professor of English at the University of Sheffield.

which included several unique projects.³⁷⁷ £25,225 had been allocated by five D.W.C.s to provide grant assistance for employees and their dependents specifically to study mining and £24,020 was applied towards 14 senior and advanced centres.

D.W.C.s contributed £5,297 towards special grants up to 1934. By the 30 June, 1946 1,113 other students were assisted through the expenditure of £56,484 for courses at universities, training colleges, technical schools and other educational establishments. Durham applied £12,535 to assist 212 students (0.74 percent of their total allocation) but the small North Wales coalfield granted £10,059 for 193 students (6.57 percent of their total allocation).³⁷⁸ The M.W.C also recognised the priority that the North Wales D.W.C. had given to education:

The educational grants from the District Fund may be considered heavy when the limited income is taken into account, but this is explained in large measure by the characteristic urge towards educational progress which is found in the mining villages of North Wales.³⁷⁹

Although the number of students assisted either through the scholarship or exhibition schemes or individual D.W.C. grants was a tiny proportion of those eligible to apply, the students' achievements were recognised and celebrated. The subsequent career choices of these students, particularly the teaching profession, and their employment within mining communities contributed to the improvement of social wellbeing which was required by the 1920 Mining Industry Act.³⁸⁰ The original concept that former miners and their children were deserving of financial support if they met the educational requirements to access university continues to this day.

The Selection Committee of the M.W.N.E.F. has benefitted from the voluntary service of individuals who had been recipients of educational grants from either the Scholarship

³⁷⁷ £20,000 was contributed by the Northumberland D.W.C. towards Armstrong College's new mining department. The Nottinghamshire D.W.C. invested £14,000 in 1944 to develop the South Nottinghamshire Colliery Training Centre for new entrants. £24,020 was applied for buildings and equipment. £25,225 was allocated to a number of Trust Funds to assist mineworkers and the children of mineworkers for a variety of educational opportunities in mining and £14,195 was applied by the Northumberland and Durham D.W.C.s for specific university mining scholarships.

³⁷⁸ *Report of the Miners' Welfare Commission for Six and a Half Years to June 30th 1946*, HMSO London, p.63.

³⁷⁹ Annual Report of the Miners' Welfare Committee 1938 p. 52.

³⁸⁰ Dr Thomas A. Blyton, a former miner, became a tuberculosis specialist who X-rayed nearly 1,000 children in Caernarvonshire during 1947.

Scheme, the M.W.N.E.F. or the N.C.B., providing further evidence of individuals returning the benefit of their educational support to others from mining communities.³⁸¹

Non-vocational Adult Education and Total Education Expenditure by Divisional Welfare Committees

In addition to individual grants through the Scholarship Scheme or from District Welfare Committees, some specific coalfield programmes were developed. In the 1923 M.W.F. Annual Report there is a recommendation that the provision of suitable popular lectures and attendances at classes should be promoted.

At the first meeting of the M.W.F. which was attended by the Secretary of Mines, the Chair (Lord Chelmsford) raised a desire to link the Fund into the University Extension Movement.³⁸² The assessor appointed from the Board of Education would have been aware that the President of the Board, H.A.L. Fisher, a former Vice Chancellor of Sheffield University, was a keen advocate of adult education.

Harrison refers to the subsequent Miners' Lecture Scheme for West Yorkshire, South Yorkshire and Derbyshire with D.W.C.s contributing 80 percent of the cost and the General Fund the balance. However, the Derbyshire D.W.C. believed that this scheme had been progressed by the Central Committee with insufficient consultation so they withdrew and joined with the Nottinghamshire D.W.C. to form the Nottinghamshire and Derbyshire Miners' Welfare Adult Education Joint Committee.

The Yorkshire arrangement was organised by an extensive partnership which included representatives from the D.W.C.s, the Universities of Leeds and Sheffield, the L.E.A.s and the Workers' Education Association (hereafter W.E.A.). Single lectures, courses, tutorials, concerts and entertainments were arranged. By 1938 the programme had cost £17,940. The Yorkshire Miners' Association were extremely supportive of the W.E.A., sharing in their

³⁸¹ Professor Ken Brown, a former miner, was a recipient of a grant from the Scholarship Scheme. Dame Patricia Morgan Webb received a grant from the M.W.N.E.F.. Professor Douglas Hodges and Mr Robert Roundhill, an H.M.I. of Technical Education, were young miners who received N.C.B. scholarships.

³⁸² When Viceroy to India, Lord Chelmsford developed a friendship with Michael Sadler, the Vice Chancellor of Leeds University, who chaired a commission into the affairs of the University of Calcutta. Sadler had been a member of the Oxford University Extension Movement, lecturing in the midlands, and had edited a publication on continuation schools; he valued the contribution of the settlement movements for their social and educational work in poor communities.

ethos of education for public service, and financially supported branches which organised W.E.A. lectures.

In 1949 the W.E.A. South Yorkshire District claimed, 'We are of the opinion that the committee has accomplished the best piece of educational work done for workers in the mining industry in this country.' and also, 'Thousands of workers have passed through our classes, many of them are now serving the community to which they belong in all kinds of public service from the House of Commons to the Parish Council, in the trade unions and in many other forms of communal activity.'³⁸³ This perspective would have pleased Richard Tawney, the President of the W.E.A. from 1928 to 1944, a member of the Sankey Commission, who saw such education as a preparation for the exercise of social rights and civic responsibilities.

The Nottinghamshire and Derbyshire arrangements were similar to those in Yorkshire, but specific part-time courses were also funded at University College Nottingham. The total cost of these arrangements by 1938 was £38,932 to which the General Fund contributed 20 percent. The programmes were well received by the local media. In 1925 the Mansfield Reporter detailed lectures given at 24 different community locations, which included the subjects of music, history and health. They recorded an average attendance of 38 at single lectures and thanked the D.W.C. for making possible such a real advance in adult education in the coalfield.³⁸⁴

These regional schemes dominated the total expenditure by D.W.C.s for programmes on non-vocational education. However, the North Staffordshire D.W.C. continued the geographical commitment to adult education pioneered through the University Extension Movement, in which Tawney had played a significant part. Their expenditure was modest, although the Staffordshire Sentinel when detailing the expanded activities of the W.E.A. in 1940 referred to the payment of fees for 227 miners and dependents together with the costs of six one-day schools in which 180 miners and dependents participated. Although many D.W.C.s did not fund extensive non-vocational adult educational projects, such arrangements were delivered in coalfields. The Quaker inspired Educational Settlements

³⁸³ Workers Educational Association - Yorkshire District (South) – Annual Report and Balance Sheet, 1 June 1948 to 31 May 1949, p. 6.

³⁸⁴ 'Notts Miners' Welfare Adult Education. Work in the Villages', *Mansfield Reporter*, 15 May 1925, p. 8.

Associations which primarily delivered education and cultural opportunities for the unemployed were very active in South Wales and the North-East coalfields. In Scotland and South Wales the mining unions advocated independent working class education rooted in Marxism and financed coalfield lectures and the Central Labour College. In Scotland the Cooperative Movement funded educational programmes which did not involve the participation of the W.E.A. or the universities. Robert Turner attributes the low profile of the W.E.A. in Scotland to local authorities preferring public provision to the voluntary sector, the absence of funding from the Scottish Education Department, the unwillingness of the universities to co-operate, and low levels of literacy where the priority of family income outweighed that of educational advance.³⁸⁵

The programmes co-ordinated by the South Wales and Monmouthshire Council of Social Service had an extraordinary number of participants, including the W.E.A. and the Ocean Area Recreation Union, but not the D.W.C.. The provision of adult education in Wales had a specific cultural emphasis. In the 1944/45 financial year there were 117 music groups in the mining areas of South Wales, involving 32,597 individual attendances.

A number of D.W.C.s utilised the services of the Industrial Health Education Society to deliver lectures and first aid demonstrations in miners' institutes and halls. Two unusual projects which reflected on the economic decline in the industry included grants from the Northumberland D.W.C. from 1928 to 1931 to the Newcastle Migration Training Hostel which prepared unemployed miners for employment abroad. The other project was an initiative by the Young Men's Christian Association supported by four D.W.C.s to provide agricultural training to secure farm work for unemployed boys between the ages of 14 and 17. The Fife and Clackmannan D.W.C. provided the most significant support, namely £240 for 12 boys.

Non-vocational adult education expenditure from D.W.C.s by the 31 December, 1945 was £59,752, although dominated by the priorities of four D.W.C.s. The number of individuals who benefitted is unknown, but they would have enjoyed a range of provision from lectures in local venues to university day release courses and departments of adult education. Such departments have long since disappeared as adult education has undergone a raft of

³⁸⁵ Turner, Robert, 'Workers Educational Association Tutorial Classes and Citizenship in Scotland 1907-1939' *History of Education*, Vol. 38 No. 3 May 2009.

delivery changes. Jarvis credits the Open University as a significant advance in liberal education, whereas further education colleges offered training deemed skills development. The subsequent concept of lifelong learning embraced the original W.E.A. objectives of personal fulfilment and active citizenship together with more commercially oriented themes of employability. Denise Thurnsfield and Roger Henderson emphasised that lifelong learning in the context of colliery closures had become a narrow, job-related form of training associated with economic rationality.³⁸⁶ Paradoxically, the decline of the industry witnessed regeneration programmes for former mining communities that fostered different strategies for developing adult education opportunities. Although the Learning and Skills Council was not supportive of community based adult education programmes as they did not lead to recognised qualifications, other grant funders encouraged these developments. Bob Britton and Phil Denning asserted that, 'to meet those needs and demands, learning in the coalfield communities resuscitated the earlier model of coalfield based learning that had been embodied in miners' welfares, libraries and reading rooms.'³⁸⁷ Recognition that the community based focus of miners' welfare funding of adult education had made a significant contribution.

Conclusion

Statham attributed the second quarter of the twentieth century as having made enormous strides in mining education, which he incorrectly attributed to far-sighted employers, a view contradicted by the 1938 Royal Commission on Safety in Mines. Foreman-Peck, Dintenfass, Turnheim and Geels, and Penn and Simpson provide a variety of reasons why the industry was unenthusiastic about enhancing facilities for mining education. Partial control of the industry during World War I greatly enhanced the government's understanding of the industry's shortcomings, especially in relation to their maintenance of traditional production methods compared to greater productivity achievements by European and United States coal producers. Despite the government's reluctance to invest in mining education, the socio-economic necessity of improved educational standards was understood by civil servants who devised a clever strategy through the Mining Industry Act 1920 to apply the

³⁸⁶ Denise Thursfield & Roger Henderson, 'Participation in Lifelong Learning: Reality or Myth? Issues arising from a United Kingdom Coalfield Closure', *Journal of Vocational Education and Training*, Vol. 56:1 2004, pp. 117-136.

³⁸⁷ Bob Britton and Phil Denning, 'Globalisation, Community Regeneration and Building Social Capital Through Adult Learning: The Example of the British Coalfield Communities', *Pascalobservatory.org*, p. 4.

coal industry's own resources for the Mines Department of the Board of Trade and the Board of Education to establish a framework of university departments, mining colleges, technical schools, improved syllabi and revised examinations. The resulting ladder structure of educational standards was adapted to meet the requirements of each coalfield and drew in education authorities and universities as funding and delivery partners. This coalfield educational framework enabled the National Coal Board to embrace education and training as an integral element of employment to develop a safer and more technically advanced industry requiring a continuous reassessment of skills. The technical schools and colleges increased opportunities which could be accessed by the local population for broader personal, commercial and public benefit.

Significant support for non-vocational education was promoted through individual mechanisms of financial assistance together with coalfield programmes of adult education. Although John Holford's history of adult education at University College Nottingham describes the relationship with the W.E.A. as meritorious, he ignores the extensive financial support of two D.W.C.s. Harrison, however, recognised the contribution of D.W.C. funding for the Yorkshire programmes, and Neville attributed the application of M.W.F. funding stimulating adult education in Yorkshire. The Endowed Scholarship Scheme, which owed its creation and longevity to Chelmsford, extended opportunities for university education and the demand demonstrated that those from mining families were capable of achieving significant academic success. The individual financial support from D.W.C.s for a range of courses evidenced growing scholarly ambitions, such external assistance being a prerequisite for working class access to further and higher education.

The industry and many individuals owe a debt of gratitude to the far-sighted strategy of applying industry generated resources for educational purposes. The successful outcomes of the M.W.F. owe much to Chelmsford's determination to expand individual non-vocational opportunities and Winstanley's drive, energy and determination to develop a mining education framework capable of meeting the technical needs of an industry required to operate in a safe, productive and internationally competitive environment.

In conclusion, it can be said that the M.W.F. made a remarkable contribution to the educational requirements of an industry facing the inter-war challenges of a changing world

coal market and introduced opportunities which enabled miners and their dependent children to access further and higher education.

CHAPTER 4 – Research

Introduction

The government originally invested in research and development for industry through the Department of Scientific and Industrial Research (hereafter D.S.I.R.) in 1916, which Sabine Clarke emphasised was to support and supply scientific researchers; and to facilitate the activity and growth of trade research associations.³⁸⁸ D.E.H. Edgerton and Sally Horrocks regarded broad generalisations of industries' neglect of research as inaccurate.³⁸⁹ However, the coal owners' reluctance to invest in research led to funding by the D.S.I.R. of the Fuel Research Board which surveyed the characteristics of the nation's coal. Such funding resulted in commercial benefits for the coal owners.

Significant resources of the M.W.F. were applied by the Mines Department which controlled the scientific and engineering research framework. This chapter explores the progression from the government's opportunistic application of the industry's own resources to improve health and safety standards to a position where health and safety became a statutory responsibility of the Ministry of Fuel and Power and underpinned a major revision of mining legislation. Despite success in the field of medical research which resulted in reducing the incidence of Nystagmus and the Beat diseases, improvements driven by the costs of compensation, the chapter explores contested medical research spanning three decades before coal dust was identified as a cause of respiratory disability requiring both compensatory and preventative arrangements. However, a compensatory scheme for pneumoconiosis was not the end of the debate as it required a further forty years of research and lobbying before another respiratory disease suffered by coal miners became eligible for compensation.

Science and Engineering - An Explosive Beginning

The Royal Commission on Mines appointed in 1906 established a Committee on Coal Dust Experiments in response to the number of fatalities arising from colliery explosions.

³⁸⁸ Sabine Clarke, 'Pure Science with a Practical Aim: The Meaning of Fundamental Research in Britain circa 1916-1950', *History of Science Society*, Vol. 101 No. 2 June 2010, pp. 285-311.

³⁸⁹ D.E.H. Edgerton, & S.M.Horrocks, 'T.S. Ashton Prize Essay for 1991-1992. British Industrial Research and Development Before 1945', *The Economic History Review*, Vol. 47 (2) 1 May 1994, pp. 213-238.

Between the Coal Mines Act of 1872 and the Royal Commission, Britain experienced 71 mining disasters categorised as colliery explosions, which resulted in 4,120 fatalities.³⁹⁰ Thirteen disasters resulted in the loss over 100 men per explosion.³⁹¹ During the three year life of the Royal Commission, a further 12 disasters resulted in 328 deaths, which included the loss of 168 men at the West Stanley Colliery in Durham on the 17 February, 1909.³⁹² The need for enhanced safety legislation based upon research was reinforced by the Courrieres mining disaster in Northern France on 10 March, 1906, when a coal dust explosion resulted in 1,099 fatalities.

A Research Station

The Commission endorsed the Committee's recommendation that a large-scale experimental station should be established to examine ways of preventing or limiting coal dust explosions.³⁹³ The three representatives of the Mining Federation of Great Britain upon the Royal Commission criticised, in a memorandum to the second report, the government's refusal to fund an experimental station³⁹⁴. The M.A.G.B. funded a small experimental gallery at Altofts Colliery initiated by W. Garforth of Pope and Pearson Ltd. Upon the expiry of the employers' grant, the government agreed to transfer and extend the gallery to a site at Eskmeals in Cumberland, adjacent to a gun range owned by Vickers. The establishment by the Home Office of the Explosions in Mines Committee to oversee the research was the first direct government involvement in safety in mines research.

The Safety in Mines Research Board

The Mines Disaster Research Board established to administer the Eskmeals Research Station became the Safety in Mines Research Board in 1921. The terms of reference were, 'to direct generally the work of the research of the Mines Department into the causes of mining dangers and the means of preventing such dangers and to undertake the reorganisation of the existing arrangements for carrying out such work at the Mines Department

³⁹⁰ A disaster was defined as when 10 or more men lost their lives.

³⁹¹ Statistics extracted from the Royal Commission on Mines Report. July 1909, Appendix V, Coal Dust Explosions, 1911 Cd 5642 XXXVI. 487, pp. 241-243.

³⁹² *Ibid.* p. 85.

³⁹³ The rationale for this recommendation was further evidenced by Britain's worst mining disaster when an explosion at the Universal Colliery on 14 October, 1913, caused the deaths of 440 men and boys.

³⁹⁴ *Ibid.* pp. 215-216.

Experimental Station.³⁹⁵ The Board Secretary, Edward Fudge, was a mining engineer employed by the Department who was also Secretary of the Miners' Lamp Committee³⁹⁶.

Securing Resources

A departmental committee appointed in December 1919 to advise on the operation of the research station reported on the 31 July, 1920. An interesting recommendation included that research into the safety of industrial operations should come under the direction of a central body, distinct from a purely economic activity, and that the research work should be transferred to a more accessible place. However, the recommendation that the provision of funds for mining safety research should come from a levy on the industry further evidences the strategy to enhance non-governmental funded research over which they retained strategic direction. The Board of Trade would have been aware of this recommendation prior to the Report's publication and the 8th print of the Mining Industry Bill, dated the 18 June, 1920, included an amendment to clause 17 introduced by Robert Horne MP, the President of the Board of Trade, which added research to the objectives of the Fund. Section 20 of the Mining Industry Act 1920 permitted the industrial levy to be used for the purposes of research.

The intention of the Government to control research in the health and safety matters of the mining industry was publicly confirmed in the House of Commons by Colonel Lane-Fox, M.P., Secretary for Mines:

There is a Safety in Mines Research Board which, as the House knows, is financed by the Welfare Fund, but which is controlled by and works hand in hand with the Mines Department and under their supervision.³⁹⁷

³⁹⁵ First Annual Report of the Safety in Mines Research Board 1921-1922, H.M.S.O., London 1922; An additional duty was advising on applications for grants to the M.W.F.. The membership comprised Sir William Walker the Director of the Health and Safety Division of the Mines Department and former Mines Inspector; T. H. Mottram the Chief Inspector of Mines; Sir Richard Redmayne former Chief Inspector of Mines; Thomas Richards P.C. General Secretary of S.W.M.F. and Professor R.V. Wheeler, who had worked with Garforth at Altofts. Wheeler was professor of fuel technology at Sheffield University and director of the Eskmeals Station. Sir Edward Troupe, a former Under-Secretary in the Home Office, was appointed Chair in 1923 and remained in office until 1939.

³⁹⁶ Edward Fudge subsequently became Principle Assistant Secretary in the Ministry of Fuel and Power.

³⁹⁷ Hansard, 27^t April, 1927, Vol. 205, cc 937/987 (1).

The Central Committee of the M.W.F.

Lord Chelmsford was appointed Chair of the Central Committee of the M.W.F. in September 1921 to replace Lord Gorell and two of the other four appointments by the Secretary for Mines were Sir William Walker, the Chief Inspector of Mines and Professor Edgar Leigh Collis MD who had been a medical inspector of factories, and subsequently the Director of Welfare and Health in the Ministry of Munitions. He became one of the first members of the Industrial Fatigue Board, established in 1918 to continue the work pioneered in the munitions industry. In 1919 he was appointed Professor of Preventative Medicine at the Welsh National School of Medicine, where he continued his studies on pneumoconiosis. These three government appointees outnumbered the industry's nominees. The assessors included Dr George S. Buchanan, Professor T. Hudson Beare, and George H. Winstanley replaced W.R. Davis in 1923; Dr Frederick Dittmar was appointed an additional assessor in the same year. The government's ability to influence the scope and direction of research was further reinforced by the appointment of a senior civil servant from the Mines Department to service the committee as secretary.

Early Influential Figures

The operation and direction of research was heavily influenced by a limited number of academics and mining engineers. Sir Richard Redmayne was a member of the Safety and Mines Research Board and had previously been Professor of Mining at Birmingham University and the Chief Inspector of Mines from 1908 to 1919.³⁹⁸ Redmayne's influence was matched by Professor John Scott Haldane who, as a physiologist, researched in the technical and health domains of the mining industry. His speciality was respiration, although his research subsequently involved underground explosions, ventilation and mine gases. Specific research on asphyxia in coal mines, attributed to carbon monoxide poisoning, enhanced his reputation as did the development of a gas mask for use in the

³⁹⁸ During the First World War he was technical advisor to the Controller of Mines. He had been a witness to the Royal Commission on Mines (1906/7) and the Sankey Commission (1919). He was a leading member of the Institution of Mining Engineers and was credited with significant input into the 1911 Coal Mines Act, which was a major advance in the enhancement of safety standards.

trenches in World War 1. However, the scientific validity of his dominant views on dust inhalation in the mining industry were subsequently questioned.³⁹⁹

A Strategy Evolves

Viscount Bridgeman, the Secretary for Mines, attended the first meeting of the M.W.C. on 3 February, 1921 and emphasised the importance of central research and determined that the M.W.F. could provide an endowment for the Board responsible for the Research Station. The M.W.C. confirmed that research had to be confined to issues of safety and health, rather than economic considerations. The relocation of the research centre was delayed as the English and Welsh members of the M.A.G.B. objected to the proposed site at Gretna, preferring a more central location to the main coalfields. Initially universities submitted optimistic bids arguing that they were best placed to undertake research, but the S.M.R.B. in rejecting such approaches clearly wanted to co-ordinate, control and direct mining research.⁴⁰⁰ However, the universities were placated through the possibility of an involvement in education provision and funding being available for independent researchers although grants were to be paid to the supervisors rather than the universities. A bid of £2,000 submitted by the South Yorkshire Coal Trade Association to investigate the causes of accidents was the subject of an interview with the Secretary, Robert Clive, who stated that the Association were making no additional contribution to the project as they had already contributed through the levy. The submission implied that the Association was trying to determine how they could apply their own contributed resources. Their rejection of the bid affected attitudes between the South Yorkshire Coal Owners and the M.W.F., which were less than cordial upon many subsequent issues of policy.

³⁹⁹ Haldane served upon the Royal Commission on Mines (1906-7), the Royal Commission on Metalliferous Mines and Quarries (1912-13); and was director of the Coal Owners' Research Laboratory in Doncaster, which was subsequently transferred to Birmingham University, for which he received an annual honorarium of £500 up to his death in 1936. He chaired the Mines Department Health Advisory Committee and served on the Miners' Nystagmus and Explosions in Mines Committees of the Medical Research Committee (subsequently re-named Medical Research Council in 1920). He was also a member of the Executive Committee of the government's Science and Industrial Research Department, which was supervising the Institute of Mining Engineers Deep and Hot Mines Research Committee, which the Department funded from 1916 to 1919. He became a member of the S.M.R.B. in 1924.

⁴⁰⁰ Sheffield University submitted a bid for £52,000 for 4 specific areas of research to be undertaken in new buildings which was described as vague.

Engineering and Scientific Research

The M.W.F.'s initial expenditure involved a limited refurbishment of Eskmeals and the continuation of major research on the safe use of explosives. A grant was also approved, as it was in subsequent years up to 1939, for Haldane's research on atmospheric control in deep and hot mines. The M.W.F.'s annual report for 1922 failed to mention that this was a long-standing project, originally funded by the M.A.G.B., overseen by the Institute of Mining Engineers and transferred to Birmingham University from the Coal Owners' Research Station at Bentley Colliery in Doncaster. Although never questioned as a health project, the requirement to ventilate and improve air quality was inextricably linked to improvements in human performance. Despite his role in the M.R.C. and Health Advisory Committee (hereafter H.A.C.) to the Ministry, Sir Walter Fletcher did not challenge the cost effectiveness of Haldane's research despite his obvious criticisms which were reflected in correspondence to Dr William Ewart Gye.⁴⁰¹ 'We have been spending money on Haldane's work for a long time, but it has gone on in a half-hearted, halting way.... a good deal of half-baked work by his assistants has been the result, and probably a lot of money has been wasted.'⁴⁰²

Although the project was not subsequently questioned, Sir Thomas Mottram wanted to discontinue the grant in 1929.

Progress and Relocation

The General Fund in the first five years financed research to the value of £499,900. £71,000 was spent on equipment and the provision of a research station at Buxton, which was opened in June 1927. £259,500 was provided on an endowment basis for the research centre and £169,400 had been spent on research in progress. £28,000 was provided for a laboratory, on a site leased from Sheffield University, which was opened on 11 October, 1928 by the Prime Minister, the Right Honourable Stanley Baldwin. He referred to the M.W.F., 'as a great institution.'⁴⁰³ Baldwin shared a platform with Lord Chelmsford, the

⁴⁰¹ A member of staff at the National Institute for Medical Research, whose interest in silicosis stemmed from when he worked as a stonemason's labourer.

⁴⁰² National Archive file FD1/4937 Health Advisory Committee (Mines Department) - Letter dated 24 October, 1923.

⁴⁰³ 'Mr Baldwin Opens New Laboratory', *Sheffield Daily Telegraph*, 12 October, 1928, p. 11;

Chair of the M.W.C., Evan Williams, President of the M.A.G.B., and Herbert Smith, President of the M.F.G.B. and member of the M.W.C.. Having been Prime Minister during the 1926 dispute, and also been opposed to compulsory amalgamations of mining companies, he may well have had different views on the coal industry compared to those in his scripted address.

The S.M.R.B. had developed a research framework of eleven topics, namely coal dust explosions, fire damp explosions, the spontaneous combustion of coal, flameproof electrical mining machinery, the use of electricity, explosives, electrical shot firing apparatus, mechanical appliances, the support of underground workings and wire ropes. Estimates of S.M.R.B. expenditure and that for independent researchers were to be submitted to the Mines Department for approval and then forwarded by the Department to the M.W.F. for payment. These topics were expanded in 1926 to include safety lamps and dust trapping devices.

The Expansion of Research Subjects

In March 1925 Herbert Smith was critical of the value of work in progress and resources spent, urging that researchers should detail immediate practical results. Subsequently, the M.F.G.B. representatives on the M.W.F. criticised the S.M.R.B. for having disproportionately concentrated resources on the emotional issues associated with loss of life caused by explosions, rather than the causes of most fatal and serious accidents which the tables below detail.

Part of the building was to be used by the Fuel Research Board by arrangement with the Department of Scientific and Industrial Research. One of the functions was the testing of equipment to qualify as intrinsically safe for which certificates were issued. The University had been cooperating with the S.M.R.B. on testing equipment and had issued their first certificate on the 14 August, 1922.

Table 4:1: *Fatal and Non-fatal Accidents by Cause*

	Fatal Accidents					
	Explosions of Fire Damp or Coal Dust	Falls of Ground	Shaft Accidents	Haulage Accidents	Other Accidents	Total Underground
1920	26	559	42	237	126	900
1921*	19	368	27	170	88	690
1922	73	553	40	212	128	1006
1923	60	590	60	314	165	1189
1924	35	614	63	262	128	1102
1925	29	559	37	260	164	1049
1926*	5	336	32	132	84	589
1927	72	572	55	232	115	1046
1928	36	508	31	232	106	913
1929	34	584	42	221	130	1011
1930	70	521	34	241	84	950

*National Dispute

	Non-Fatal Accidents

	Explosions of Fire Damp or Coal Dust	Falls of Ground	Shaft Accidents	Haulage Accidents	Other Accidents	Total Underground
1920- 1930	1063	598,651	8,779	428,710	575,448	1,612,851

Source: All these statistics were extracted from the 1932 Colliery Yearbook and Coal Trades Directory, p. 664 and p.669.⁴⁰⁴

The S.M.R.B. submitted estimates in 1929 for traditional research projects together with new work on falls of ground and haulage accidents.⁴⁰⁵ The M.W.F.'s requirement that new research on falls of ground and haulage should be contained within existing budgetary limitations set medics against engineers.⁴⁰⁶

A Board of Trade Departmental Review

The Departmental review upon the future of the M.W.F., initiated by Emanuel Shinwell in 1931, contained criticisms of the S.M.R.B. submitted by the M.A.G.B.. They contested that very little had been produced in the way of results to justify the expenditure of £400,000 excluding the endowment and capital costs of a research station and laboratory. In a minority report by H.E. Allen, the legal advisor to the M.A.G.B., he acknowledged that the S.M.R.B. were now engaged on research of a valuable nature, namely falls of ground and

⁴⁰⁴ The number of persons killed per 1,000 employees above and below ground increased from 89 in 1920 to 107.1 in 1930.

⁴⁰⁵ A fall of ground is a term used to describe the collapse of roof material in underground roadways or coal faces;

The budgetary estimates included the employment of a mining engineer to work with a number of colliery companies on practical research. The M.W.F. refused to increase the S.M.R.B.'s budget over the £50,000 ceiling previously determined. The Under-secretary of Mines Sir Alfred Faulkner attended the M.W.F. meeting on the 16 April, 1929 to urge reconsideration, but the M.W.F. declined, stating that warnings had previously been given that the new areas of research should be accommodated within the budgetary limitation.

⁴⁰⁶ Fletcher, the M.R.C.'s secretary wrote to Troup, the Chair of the S.M.R.B., on the 7 March, 1929 stating that the H.A.C. supported the M.W.F.'s requirement to reduce research expenditure, particularly from large engineering projects, rather than trim medical costs. The file contains a vitriolic note of meeting when Fletcher met Troup at a club and referred in a letter to the S.M.R.B. comprising engineers and businessmen; National Archives FD1/4949 Miners' Welfare Fund Committee.

haulage, but could now save money by abandoning work of little value.⁴⁰⁷ The S.M.R.B. was very critical of the M.A.G.B.'s position and stated that to abandon research stations and all research except for falls of ground and haulage issues was, 'to fall to a lower grade of civilisation than any other mining country.'⁴⁰⁸

The 1934 Mining Industry (Welfare Fund) Act reduced the output levy to ½d per ton with effect from 1932, but determined that before the four fifths allocation to Divisional Welfare Committees and the Pithead Bath provision, £20,000 should be allocated for research into methods of improving health and safety.⁴⁰⁹

Another Disaster and Another Royal Commission

A week before the Gresford Colliery disaster on 22 September, 1934 when 266 men and boys died, the Secretary of Mines had written an article in the Liberal National Review saying that the day of the big explosion was over.⁴¹⁰ The issue at Gresford was not due to a lack of research, but non-compliance with statutory requirements and best practice combined with, because of the economic situation, a heavily non-unionised workforce willing to accept appalling working conditions for fear of losing their jobs. Of the deceased only 78 were union members and 255 bodies were never recovered. Sir Stafford Cripps offered damaging evidence against the company to the Inquiry, including the falsification of gas readings, but the subsequent fines levied against the manager and the company only totalled £140. The disaster was the impetus for the Royal Commission on Safety in Mines, appointed in 1936 and which reported in 1938.⁴¹¹

The new focus on falls of ground and haulage involved a change of emphasis on independent researchers. In 1935 four regional Institutes of Mining Engineers and the Lancashire and Cheshire Coal Owners' Research Association were granted a total of £4,955

⁴⁰⁷ These views had not been voiced upon the M.W.C. from the representative members of the M.A.G.B., but such a comment was presumably to reinforce the M.A.G.B.'s view that the value of the levy should be reduced and reflected the evidence of their chairman, Evan Williams.

⁴⁰⁸ Safety in Mines Research Board, Minutes of a meeting 12 May, 1932.

⁴⁰⁹ The 1934 S.M.R.B. allocation comprised £12,416 from the endowment, £1,750 from the Exchequer (for statutory testing), £3,217 of unexpended balances and £44,210 from the General Fund (inclusive of the £20,000).

⁴¹⁰ Hansard, 25 July 1938, Vol. 338-2784, Statement by T. Smith, MP.

⁴¹¹ One of the commissioners, Judge Allsebrook, had been a mining engineer who worked in the East Midlands coalfield from 1896-1903.

for related projects. The Royal Commission on Safety in Mines recognised that much had been gained from research but also had specific criticisms. The relationship between the Mines Department and the S.M.R.B. was described as vague and undefined with research subjects not open to scientific criteria as cost estimates were just passed to the M.W.F.. They emphasised the historic bias in favour of explosions research in that the expenditure on falls of ground and haulage was ¼ that of expenditure on combustion and explosives, but should have been six times higher given the accident rates. The Commission acknowledged that the main emphasis of the British Coal Owners' Research Association was on economic issues. This was indicative of the negligible membership of colliery companies in the British Industrial Safety First Association.

There were criticisms of the S.M.R.B. from the Royal Commission on Safety in Mines.⁴¹² These did not relate to the quality of research, but that some of the roles undertaken by the Board should have been the responsibility of the Department of Mines.⁴¹³ The educational activities through visits, lectures, and lantern slides were criticised by the Commission, not because these measures were ineffective, but because this was not the role of a research organisation. However, at the request of the M.W.F., the S.M.R.B. had launched a plain language set of information pamphlets for widespread circulation entitled 'What Every Miner Should Know'. The Commission read a considerable number of S.M.R.B. papers and visited the Buxton Research Centre and the Sheffield Laboratory. They concluded that a great volume of useful and important work was in progress.

Professor J.W. Whitaker reviewed nine research papers and was very complimentary about the advances achieved. Credit was also given to the S.M.R.B. by the M.W.F. for the advances they achieved in respect of protective clothing. The advances and an accompanying leaflet were referred to in regional newspapers.⁴¹⁴

⁴¹² The terms of reference of the Commission were, 'whether the safety and health of mineworkers can be better ensured by extending or modifying the principle or general provisions of the Coal Mines Act, or the arrangements for its administration, having regard to changes that have taken place in organisation, method of work, and equipment since it became law, and the experience gained, and to make recommendations.'; Royal Commission on Safety in Coal Mines Report, H.M.S.O. 1938, CMD 5890, p. 1.

⁴¹³ The criticism was really of the Department because the Commission did not take into account that the dissemination of information, termed propaganda, was an additional term of reference requested by the M.W.F. in 1924.

⁴¹⁴ 'Safety in Mines Research Board Protective Equipment for Mineworkers', *Motherwell Times*, 15 January 1937, p. 8.

From 1921 to 1945 £1,273,365 was granted by the M.W.F. for research, which included an endowment of £259,528 which generated an average annual income of £12,460. Despite the expenditure on scientific research and advances made, the Royal commission concluded: ‘Whatever the causes, the failure of the accident rates to improve, notwithstanding all the efforts that have been made to raise the standards of safety through stricter regulation, greatly increased inspection and research, is the outstanding feature of the situation.’⁴¹⁵ The M.F.G.B.’s representative on the Commission produced a memorandum which regretted that the Commission had not accepted that the speeding up and intensification of production was responsible for counterbalancing the work that had been done by scientific research.⁴¹⁶

Table 4:2: *Number of Persons Killed or Seriously Injured per 100,000 Manshifts*

	Explosions of Fire Damp or Coal Dust	Falls of Ground	Shaft Accidents	Haulage Accidents	Other Causes	All Causes
1922	0.1	29.1	0.4	21.5	27.1	78.2
1935	0.1	31.7	0.1	23	27.6	82.5
Range	0.1-0.3	29.1-32.7	0.1-0.4	20.2-23.7	25.1-30.9	74-86.3

Source: His Majesty’s Inspectors of Mines Report 1935, Table 43, p. 172.

The Commission recognised that new methods of mining involved new sources of danger, but legislation on its own was insufficient because real improvement had to come from within the industry through a change of attitude by owners, officials and workmen. The S.M.R.B. could not be held accountable for the non-compliance with safety regulations, good practice, or for a failure to comprehend potential dangers.

⁴¹⁵ Royal Commission on Safety in Coal Mines Report, p. 66.

⁴¹⁶ Royal Commission on Safety in Coal Mines Report, p. 520.

Successful Outcomes

Professor J.W. Whitaker reviewed a number of research papers and was very complimentary about the advances achieved.⁴¹⁷ Credit was also given to the S.M.R.B. by the M.W.C. for the progress they achieved in respect of protective clothing. Prior to these advances, 56 out of every 100 accidents resulted in injury to head, hand, foot or eye which could have easily been protected. Regional newspapers reported these improvements.⁴¹⁸ By 1937, hard hats were being bought at the rate of 12,000 per month. The Secretary of State introduced a number of general regulations on subjects researched by the S.M.R.B. which included lighting, rescue, first aid, explosives, wire ropes and safety lamps. Technical papers were circulated to professional associations and contributions were submitted to committees of the Department of Mines. The Second World War interrupted the revision of legislation, but the 1954 Mines and Quarries Act contained many technical requirements that owed their establishment to the work undertaken by the S.M.R.B.. The value of research was evident in the Commission's recommendation that the research centre should be an integral part of the Mines Department.

Health Research (Medical) - Broader Funding Opportunities

While the government was prepared to promote, but not fund, technical research the position was a little different in relation to health which explains the relatively modest contribution by the M.W.F.. Although modest, the resources applied for the research on the causation of respiratory disease had significant outcomes. A distinct stream of finance arose for medical research from the National Insurance Act (1911) which enabled 1d per insured person being contributed to a fund for sanatorium treatment. However, as the Insurance Commissioners could retain all or part of the fund for the purposes of research, the government subsequently established the Medical Research Committee (hereafter

⁴¹⁷ J.W. Whitaker, 'The Prevention of Mine Explosions with Special Reference to the Work of the Safety in Mines Research Board', *Science Progress*, Vol. 29 No. 115 1935, pp. 438-455; J.W. Whitaker, 'Some Recent Safety in Mines Research Publications', *Science Progress*, Vol. 31 No. 121 1936, pp. 137-140.

⁴¹⁸ 'Safety in Mines Research Board Protective Equipment for Mineworkers', *Motherwell Times*, 15 January 1937, p. 5.

M.R.C.) in 1913.⁴¹⁹ Prior to 1913, the state had very little involvement in medical research, but a decade later grant expenditure totalled £65,944.⁴²⁰ The Lloyd-George/Addison axis was also reflected in the establishment of the Healthy Munitions Workers' Committee, led by Dr Collis, with Dr Charles M. Fletcher and Dr Leonard Hill, all of whom were to feature in subsequent mining health research. This committee was disbanded in 1918, replaced by the Industrial Fatigue Research Board, which was re-named the Industrial Health Research Board. The Committee for Science and Industrial Research subsequently became a Department, accountable to the Privy Council, which provided grant funding to the I.H.R.B. administered by the M.R.C..

Limited Medical Issues

The Mines Department's emphasis on research for safety and health revolved around the importance of measures to reduce accidents rather than medical issues curtailing life expectancy or resulting in disabling illnesses. At a meeting held on 11 March, 1922, a discussion took place on the most urgent problems relating to the health of miners and how the Mines Department should respond. Sir Kenneth Goadby emphasised the importance of appointing a medical inspector for the mining industry, although his suggestion was not enacted until 1927, when Dr Sydney Walter Fisher, who shared Haldane's views, was appointed. Such tardiness may have related to Haldane's stated views that miners were relatively healthy and respiratory issues were not attributable to the inhalation of non-silica dust. The main results of this process were that nystagmus research would be dealt with by the M.R.C., the effects of stone dusting to reduce coal dust in underground locations in which Haldane and the M.R.C. were engaged would be prioritised, and Sir Walter Fletcher committed the M.R.C. to pursue issues of Beat Hand, Beat Elbow and Beat Knee. The M.R.C. would also continue to examine the statistics of occupational diseases, previously referred by the Mines Department. First Aid was regarded primarily as a training issue rather than a health matter.

⁴¹⁹ Sir A. Landsborough Thomson credited the founding fathers of the M.R.C. as David Lloyd-George, Lord Haldane (brother of Professor J.S. Haldane) and Dr Christopher Addison who was one of the initial M.R.C. Board members. Prior to entering politics, Dr Addison was Professor of Anatomy at Sheffield University.

⁴²⁰ Thomson, A. Landsborough, *Half a Century of Medical Research. Origins and Policy of the Medical Research Council (UK)*, (London, H.M.S.O., 1973) Vol. 1, p. 153.

Respiratory Diseases

An important impact upon respiratory issues was the establishment of a Health Advisory Committee (hereafter H.A.C.) to the Mines Department which comprised Haldane, Fletcher, Goadby and Collis, who all initially supported Haldane's silica philosophy. The interaction of funding and medical research by the M.W.F. and M.R.C. dominated the development of research into miners' health. Haldane's appointment to this committee reinforced his dominance. Haldane's orthodox view on the inhalation of coal dust was that 'there is no real statistical evidence of harm resulting from the inhalation of coal dust or shale dust in the quantities ordinarily breathed by miners, and a strong presumption that the dust they breathe protects them against serious dangers.'⁴²¹

A Healthy View

The belief that mining was a healthy occupation was reflected in evidence to the Sankey Commission. Ralph Richardson, the general manager and mining agent for the collieries of the Barrow Haematite Steel Company said, 'I have always understood that the miner was as healthy as any other class of labourer and that the breathing of coal dust was rather an advantage than otherwise because it prevented certain illnesses.'⁴²² Wallace Thorneycroft on behalf of the Scottish Coalmasters said, 'The standard of health in the mining industry is high and there is little room for improvement.'⁴²³ Such comments reflected Haldane's view evidenced in his submission, 'owing to the exceptionally healthy conditions the death rate from disease is much below the average.'⁴²⁴ Under questioning, Haldane acknowledged that death from tuberculosis in mining was modest, but deaths from respiratory diseases were high and should be offset from the figures for phthisis. Richard Tawney emphasised that deaths from respiratory diseases amongst miners were 140 per 1,000 deaths compared to 78 for the general population⁴²⁵.

⁴²¹ Haldane, J.S., 'The Health of Old Colliers', *Transactions of the Institution of Mining Engineers*, 8 June 1916, p. 477.

⁴²² Coal Industry Commission – Reports and Minutes of Evidence Vol. 1 (H.M.S.O. 1919) CMD 359 p.261 para. 6581.

⁴²³ *Ibid.* p. 268 para. 6810.

⁴²⁴ *Ibid.* p. 738 statement of evidence (no paragraph number).

⁴²⁵ *Ibid.* p. 740 para18248.

Haldane had a justifiable reputation for his research on the combustibility of mine gases and coal dust and that silica bearing rock strata was the cause of silicosis in Cornish tin miners. His conclusion that only silica bearing rock was harmful became the dominant medical view. Andrew Perchard and Keith Gildart included the T.U.C.'s medical advisor Sir Thomas Legge as an early advocate of the position that coal dust had no harmful effects on the lungs.⁴²⁶ At the inception of the M.W.F. an issue was whether respiratory problems were the direct result of colliery employment, complicated by the rationale for compensation and scientific orthodoxy, particularly in the labelling of respiratory issues as silicosis or tuberculosis, the latter being non-industrially related. However, this was not reflected in the health issues to be addressed by research. The decision that medical research should be funded through the S.M.R.B. from the M.W.F.'s financial support, based on approved recommendations by the H.A.C., initially led to modest projects within a pre-determined framework of health priorities. In the first annual report of the S.M.R.B. for the financial years 1921/22 there was no reference to coal dust in the context of respiratory issues.

Prevention and Compensation

Mark W. Bufton and Joseph Melling criticised the contention that Trade Unions were more concerned with compensation than the prevention of hazards, but the political emphasis only switched to prevention when the cost of compensation became disproportionate. The M.F.G.B. made representations on numerous occasions for improved preventative measures. At their conference in 1930, the President urged that the Mines Department and Inspectorate should ensure appropriate ventilation at the coal face which would reduce problems of fire damp.⁴²⁷ The Royal Commission on Safety in Mines reported that, 'The Mineworkers' Federation suggested that compulsory preventative measures should be based on 'a recognition of the fact that the basic problem to be dealt with is the suppression of dust which gives rise to the disease and that such dust may exist throughout the mine workings'.⁴²⁸ Oliver Harris, at a conference of the S.W.M.F., welcomed the M.R.C.'s

⁴²⁶ Andrew Perchard, & Keith Gildart, 'Buying Brains and Experts: British Coal Owners, Scientific Knowledge and Miners' Health 1918-1946', *Labour History*, Vol. 56 No. 4 2015, pp. 459-480.

⁴²⁷ 'Protective of Fire Damp', *Yorkshire Post and Leeds Intelligentsia*, 12 August 1930, p. 10.

⁴²⁸ Royal Commission on Safety in Mines Report, Cmd 5890, 1938, p. 462.

research project as he was anxious that the causes of the disease could be ascertained, 'not only for purposes of compensation, but also that preventative measures can be adopted.'⁴²⁹

A Change of Emphasis

The 1924 grant of £50 for the radiographs of Somerset miners who exhibited the respiratory problems of silicosis, but who had not worked in silica bearing rock, was the result of a campaign by the Somerset Miners' Association that would subsequently lead to the questioning of Haldane's orthodoxy. The M.W.F.'s willingness to finance respiratory research was reflected in grants in 1925 to Dr Pirow, a visiting South African expert, to investigate conditions of miners' phthisis and devices for trapping dust. Herbert Smith had earlier secured a grant of £10 for the X-ray of a Yorkshire miner who allegedly suffered from silicosis, although this was not proven.

Coal owners sought to limit or resist compensation by emphasising Haldane's position that rock cutting, rather than coal getting, was the crucial respiratory issue. Bufton and Melling regarded the national insurance scheme for silicosis as evidence of the government's policy that compensation should be commercially and not publicly financed. The view of Collis and Haldane that silica was the archetypal dangerous dust was reflected in changing compensation legislation.⁴³⁰ The M.W.F.'s funding of the X-rays of Somerset miners which demonstrated a risk of silicosis for men working in sandstone and quartzite helped shape the Various Industries (Silicosis) Scheme 1928 which permitted claims where sandstone was 50 percent free from silica. At the thirteenth meeting of the H.A.C. on the 25 March, 1925 it was agreed that phthisis existed as a disease for coal miners. Reginald Guthrie of the M.A.G.B. dismissed the adequacy of the evidence.⁴³¹ The relaxation of criteria necessary for compensation extended the scheme to mineworkers. Fisher was alarmed at the number of deaths certified at inquest due to silicosis.⁴³² An M.W.F. funded project involving the radiological examinations of the lungs of healthy miners working in coal dust and those in

⁴²⁹ 'Health of South Wales Miners', *Western Mail*, 7 July 1937, p. 13

⁴³⁰ The Refractors Industry (Silicosis) Scheme 1919 was followed by the Workmen's Compensation (Silicosis) Act 1924, whereby claimants were to be examined by two officers from regional medical boards.

⁴³¹ The Home Secretary facilitated a deputation from the M.A.G.B. to examine the X-rays, but they only brought Dr Pollard, a general practitioner, not a respiratory expert. However, the M.A.G.B. continued to insist that there was insufficient evidence to support compensation.

⁴³² Health Advisory Committee Minutes, 18 March 1929.

stone headings who were affected by silicosis resulted in Goadby concluding that there was a difficulty of diagnosing silicosis and distinguishing symptoms from other chest diseases such as tuberculosis. Fletcher's immediate reaction was to establish a committee of the M.R.C. to make a comprehensive inquiry into the problems of dust diseases. The problem, however, was one of compensation, rather than the health of miners, as the Treasury provided £750 towards the S.M.R.B. funded research on the basis that a large number of claims for silicosis was probably not justified.

Haldane's Influence Wanes

Michael Bloor, Bufton and Melling referred to the observations of David Rosner and Gerald Markowitz who emphasised that technical and scientific progress was enhanced by social, political and economic forces.⁴³³ However, Bloor, Bufton and Melling suggested that these latter conditions were insufficient in themselves to facilitate medical advances. Although Bufton and Melling credited the South Wales Miners' Federation (hereafter S.W.M.F.) with successful lobbying, they thought that the M.F.G.B.'s leadership displayed a limited understanding of silicosis and compensatory awards.

As a consequence of high rates of respiratory illness in the anthracite coalfield, The South Wales Miners' Federation commissioned geological research which supported views that were beginning to challenge medical orthodoxy. Haldane rejected the International Labour Organisation's 1930 conclusions on silica and criticised the reliance on X-rays and the issuing of certificates by the Silicosis Medical Board to miners in South Wales where fibrosis could be rarely attributable to silica. The government declined the Organisation's request for Collis to attend the conference which Arthur Mclvor attributes to his growing scepticism about the innocuous effects of coal dust. Professor Edgar M. Kettle, a professor of pathology, emphasised the wide knowledge gaps about the pathology of silicosis and the opinion of Cummins on the inadequacy of previous scientific views was reflected in an article in 1933 when he stated, 'It may well be that the importance given in the past to the

⁴³³ M.W. Bufton & J. Melling, "'A Mere Matter of Rock': Organised Labour, Scientific Evidence and British Government Schemes for Compensation of Silicosis and Pneumoconiosis Among Coal Miners 1926-1940', *Medical History*, Vol. 49 (2) April 2005, pp. 155-178; Michael Bloor, 'No Longer Dying for a Living: Collective Responses to Injury Risks in South Wales Mining Communities 1900-47', *Sociology*, Vol. 36 No. 1 February 2002, pp. 89-105.

presence or absence of free silica may have blinded us to the existence of other dangerous elements capable equally with or greater degree, that free silica, of producing silicosis.⁴³⁴

Haldane maintained his views and, according to Andrew Meikeljohn, was obsessed by bronchitis as a specific disabling and mortal disease. In 1934 Haldane argued that bronchitis in the anthracite area was twice as prevalent due to riding men in and out of the slant and that bronchitis paralysed the means by which men get dust out of their lungs. He argued that the inhalation of coal dust stimulated the phagocytic activities of the lungs conferring relative immunity from phthisis. Collis, together with Dr J.C Gilchrist, in 1928 identified that coal trimmers at exporting docks, who had never worked underground, revealed characteristics of silicosis. In 1930 Collis and Arthur F. Sladden defined anthracosis as fibrosis of the lungs accompanied by the heavy integration of coal dust. As a consequence of medical evidence and political representations, Emanuel Shinwell, the Minister for Mines in 1930, encouraged the M.R.C. to re-establish the Industrial Pulmonary Diseases Committee, chaired by Professor A.J. Hall of Sheffield University. It excluded Haldane who had been a member in previous years. The other members were Cummins, Kettle and Dr Edward Middleton – all of whom rejected the validity of Haldane’s position. That he was not involved may have reflected what *The Lancet* referred to as the need for better knowledge and advice required on further investigations necessary.⁴³⁵ In 1931 Collis concluded that the comparative mortality from bronchitis in the Registrar General’s statistics for the industry from 1921 to 1923 did not support Haldane’s muscular exertion theory. Cummins, with Dr C. Weatherall, emphasised that in the absence of a post-mortem, death may be wrongly certified as uncomplicated silicosis. Bloor identified the 1930s with a vigorous scientific debate as to whether coal dust was hazardous.⁴³⁶ The M.W.F. contributed to this debate, through their funding of the S.M.R.B..

A change of approach and challenge to medical orthodoxy was evident through general practitioner links, local tuberculosis officers, researchers and campaigning bodies. X-rays were given a more strategic role challenging traditional methods of investigation. The

⁴³⁴ S. Lyle Cummins, ‘Pneumoconiosis with Special Reference to the Silico-anthrocosis of Coal Miners’, *British Medical Journal*, 17 August 1935, Vol. 2 (3893) p. 290.

⁴³⁵ Editorial, ‘Advisory Committee on Industrial Pulmonary Disease’, *The Lancet*, 1 March 1930, Vol. 215 (5557), p. 474.

⁴³⁶ Michael Bloor, ‘The South Wales Miners’ Federation, Miners’ Lung and the Instrumental Use of Expertise 1900-1950’, *Social Studies of Science*, Vol. 30 No. 1 February 2000, pp. 125-140.

Welsh National Memorial Association, (hereafter W.N.M.A.) which administered tuberculosis sanatoria funded research in the field of miners' lungs.⁴³⁷ Philip Hugh-Jones and Charles Fletcher identified in the early 1930s, a gradual increase in the number of miners disabled by chronic pulmonary disease which did not conform to the accepted definition of silicosis.⁴³⁸

Mclvor, Perchard and Gildart argued that the silica orthodoxy had been maintained by government preference, scientific expertise and business attitudes whereby employers resisted the extension of compensatory arrangements for silicosis in the mining industry.⁴³⁹ In 1934 Haldane expressed his dissatisfaction with the way medical boards were awarding disabling certificates for silicosis, but at the same meeting Air Vice-Marshal Sir David Munroe⁴⁴⁰, stated that 'it should be possible to determine what clinical symptoms of fibrosis, whether silicotic or not, amounted to a disabling disease, in the sense that workmen should be entitled to compensation.'⁴⁴¹ Andrew Meikeljohn argued, 'It is difficult to avoid the impression that Haldane regarded the new outlook on miners' lung disease as heretical and a challenge to his own work and conclusions.'⁴⁴²

A Wind of Change

Perhaps it is no coincidence that Haldane's death in 1936 marked a renewed vigour into respiratory research. In their 1937-38 annual report, the S.M.R.B. stated: 'In recent years it has become apparent that coal miners are subject to chronic pulmonary disease of a disabling notion which does not come within the accepted definition of silicosis.'⁴⁴³

⁴³⁷ Ironically, the W.N.M.A. was initiated when the coal owner David Davis donated half of the initial costs, namely £150,000.

⁴³⁸ Dr Fletcher was the M.R.C.'s Director of the Pneumoconiosis Research Unit in South Wales – an interesting appointment as he was a member of the Socialist Medical Association. His presentation skills were acknowledged in the 1950s when he became the presenter of the BBC television series 'Your Life in Their Hands'.

⁴³⁹ Arthur Mclvor, 'Mines, Silica and Disability: The Bi-National Interplay Between South Africa and the United Kingdom c. 1900-1930s', *American Journal of Industrial Medicine*, 58 (S1) 2015, pp. 23-30; Andrew Perchard, & Keith Gildart, 'Buying Brains and Experts: British Coal Owners, Scientific Knowledge and Miners' Health 1918-1946', *Labour History*, Vol. 56 No. 4 2015, pp. 459-480.

⁴⁴⁰ Air Vice-Marshal Sir David Munroe was the Director of the Air Force's Medical Service who had been appointed a member of the S.M.R.B..

⁴⁴¹ David Munroe, Heath Advisory Committee Minutes, 17 October 1934.

⁴⁴² Meikeljohn, Andrew, 'History of Lung Diseases of Coal Miners in Great Britain Part Three 1920-1952', *British Journal of Industrial Medicine*, 1952 (9), p. 211.

⁴⁴³ Annual Report of the S.M.R.B. 1937/38 (London, H.M.S.O., 1938) p. 182.

Following a joint meeting between the S.M.R.B. and M.R.C. it was agreed that an examination of all men employed in eight South Wales collieries would be undertaken, supervised by a His Majesty's Inspector (hereafter H.M.I.) and the S.M.R.B. would contribute through the purchase of equipment, travelling expenses for the participating junior H.M.I.s and reimbursement for the men for the days lost while being examined.

The project actually involved 2,000 miners from 16 collieries, although the primary one was Ammanford in west Wales, and 500 coal trimmers working at export docks. They were subjected to radiological and clinical examinations, tuberculin tests and lung function determinants. In addition, 42 autopsies were undertaken. The generic term pneumoconiosis was substituted for silicosis and the subsequent environmental study produced specific recommendations on dust suppression measures.

Additional Compensation Measures

The research, led by Dr Phillip D'Arcy Hart, assisted by Dr Edward Aslett of the W.N.M.A., led to the Workmen's Compensation Act 1943, which determined that compensation was payable for pneumoconiosis meaning fibrosis of the lungs due to silica dust, asbestos dust, or other dust and include the condition known as dust reticulation. The Coal Mining Industry Pneumoconiosis (Compensation) Scheme came into effect on the 21 May, 1943. McIvor credits the M.F.G.B. as a major contributor to the scheme, although he does not recognise the contribution of the M.W.F. which provided some of the resources which facilitated the aforementioned policy changes. The identification of coal dust having an adverse effect on respiration led to an expansion of research into dust suppression, which hitherto had been primarily concerned with the combustibility of such dust, whether airborne or stationary.⁴⁴⁴ While research into dust prevention followed conclusive medical evidence of the harmful effects of coal dust, there was a time delay between compensation and preventative measures.⁴⁴⁵ In 1952 an M.R.C memorandum by Hugh-Jones and Fletcher records that between 1931 and 1948, 22,000 men left the industry due to pneumoconiosis,

⁴⁴⁴ The evidence of Captain P.S. Hay, an Inspector of Mines and former engineer to the S.M.R.B., to the Royal Commission in 1937 criticised the lack of coordination for methods of dust suppression and control and contrasted the position with Germany where research was conducted at one central station. He argued that medical experts needed to tell engineers the degree of protection required.

⁴⁴⁵ The 1942-43 M.R.C. Report states that the research they funded provided a stimulus to dust suppression and led to the statutory recognition of coal workers' pneumoconiosis.

of whom 85 percent were in South Wales. *The Lancet*, in an article on pneumoconiosis, described that major problems of preventative medicine and engineering should have been conjoined because if dust suppression had been adequate men would not need to be periodically examined.⁴⁴⁶

Full Circle

Following the diagnosis of silicosis and pneumoconiosis being compensatable industrial diseases, very little attention was given to the original identification in the early 1920s that there was a higher incidence of bronchitis amongst miners. In 1992 chronic bronchitis and emphysema were scheduled as prescribed diseases for which industrial injuries disablement benefit was payable. A number of lead cases for personal injury damages against the British Coal Corporation resulted in the most expensive common law settlements in history.⁴⁴⁷ On the 23 January, 1998 the judge, Mr Justice Turner, determined that the initial trial cases could be awarded damages for these occupational respiratory diseases which the Department of Trade and Industry had to settle as the successor body to the British Coal Corporation following privatisation of the industry.⁴⁴⁸

The damages for tortious exposure could only apply from 1954 due to the law of limitations. Claimants required 20 years mining service with a minimum of 5 years spent underground. For claims submitted by widows, and estate claims, full medical records were examined by consultants and for live claimants they were required to attend for spirometry tests in addition to their medical records being reviewed. There was a total of 575,000 claims dealt with under a Handling Agreement approved by the Court, but the number of men who suffered from this disease prior to 1954 is inestimable.

⁴⁴⁶ Editorial, *The Lancet*, Vol. 257 Issue 6606 2 June 1951, pp. 1215-1216.

⁴⁴⁷ A number of lead cases involved individual claims funded through legal aid, but the majority were taken by the South Wales National Association of Colliery Overmen, Deputies and Shotfirers, for which the Secretary Bledwyn Hancock remortgaged his home to help fund the claims.

⁴⁴⁸ The transcript of evidence totalled 15,000 pages and over 500 published medical papers were considered. The key medical issue was whether exposure to coal dust could cause chronic bronchitis, therefore potentially a disabling loss of function because of emphysema and small airways disease, medically different from a loss of function from pneumoconiotic progressive massive fibrosis. The core issue for the employer was to what extent had the British Coal Corporation taken steps to monitor and control dust exposure.

Nystagmus⁴⁴⁹

The Miners' Lamp Committee, established by the Home Office, had encouraged the development of safety lamps, but they were associated with an increase in the incidence of miners' nystagmus. The Committee subsequently advised the M.R.C. to establish the Miners' Nystagmus Committee (hereafter M.N.C.) a recommendation driven by the escalating number of compensation claims since nystagmus was established as an occupational illness in May 1907. 460 claims in 1908 incurred expenditure of £1,300, which by 1920 had risen to £343,000 for 7,028 claimants.⁴⁵⁰ The Royal Commission on Mines established in 1906 had identified a relationship between the safety lamp which projected poor illumination and nystagmus. The correlation between the onset of nystagmus and the use of the Davy Lamp was emphasised by Sir Josiah Court. He referred to Sir Arthur Markham having purchased in 1906 1,5000 electric lamps for Bullcroft Colliery, since when no miners at that pit had been diagnosed with the disease. Llewellyn, a member of the M.N.C., applied in 1922 to the M.W.F. for a grant to continue his research on effective lamps, a grant which was repeated in the following year. The commercial drive to resolve nystagmus was reflected in *The Lancet*, which reported that of all occupational diseases it accounted for 90 percent of all disease compensation costs. The economic drain of lost wages, lost output, and compensation costs was estimated to be £1,000,000.⁴⁵¹ The conclusions of the M.N.C. blaming poor illumination for nystagmus were not universally accepted.

After criticisms in the *British Medical Journal*, the M.R.C. reconstituted the M.N.C., which again included Haldane, Collis and Llewellyn, and it issued a final report in 1932.⁴⁵² Dr Fisher, the Medical Inspector of Mines, quoted the main conclusion of the report: 'The present committee, however, have seen no evidence or criticism which would entitle them to

⁴⁴⁹ Miners' Nystagmus is characterised by the rapid, involuntary oscillation of the eyeballs which prevents the miner from accurately focussing on anything towards which his vision is directed. The effects include light sensitive eyes, headaches, severe giddiness, night blindness and depression.

⁴⁵⁰ W. Inman, 'Psychoneurotic Symptoms in Miners' Nystagmus', *The Lancet*, Vol. 202 Issue 229 17 November 1923, p. 1110;

The M.N.C. comprised four members, two of whom were Haldane and Collis, which further extended their influence over the direction and funding of mining related research. The Secretary, Dr T. Lister Llewellyn, had suggested that the M.A.G.B. and M.F.G.B. should each subscribe £50,000 to a Nystagmus Research Fund; 'Nystagmus Perils', *Sheffield Evening Telegraph*, 13 January 1920, p. 2.

⁴⁵¹ 'Miners' Nystagmus', Editorial, *The Lancet*, 29 April 1922, Vol. 199 Issue 5148, pp. 854-855.

⁴⁵² W.S. Inman, 'Miners' Nystagmus', *British Medical Journal*, Vol.1 (3468) 25 June 1927, p. 1164.

withdraw from the conclusion arrived at by the first committee, viz, that the fundamental cause of miners' nystagmus in the narrow sense of the term (oscillation of the eyes) is the low illumination under which miners in general work.⁴⁵³ Haldane and Llewlyn credited the S.M.R.B. with developing new forms of oil safety lamps which produced 4 to 12 times as much light as hand held electric lights. They also credited Collis's research which demonstrated that cap lamps were far more effective for illumination than hand held lamps. The research into nystagmus led to the 1934 Coal Mines General Regulations (Lighting) which required lamps to contain a minimum power output after 9 hours operation. The 1938 Report of the Royal Commission on Safety in Mines revealed the effectiveness of the research as the application of more sophisticated lighting reduced the number of new compensation claims by 50 percent between 1930 and 1936. The funding of nystagmus research including the causation of poor lighting implied that compensation costs, as well as health improvements, heralded activity by the S.M.R.B. and approved independent investigations, into improved illumination through safety and cap lamps.

Nutrition

The M.R.C. had a Nutrition Committee and at their request the M.W.F. provided in 1922 £500 for a research project to inquire into the state of nutrition of miners' families as a consequence of the industry's economic difficulties. 140 families in 5 counties were interviewed. Haldane and K.N. Moss thought that the report underestimated the energy requirement of miners.⁴⁵⁴ Moss detailed his criticism in a letter in the *Iron and Coal Trades Review*.⁴⁵⁵ Professor Paton of Edinburgh University, who had assisted the project, complained in May 1924 that the Mines Department had held back the report for two months and it was implied that the Department did not want publication until after the completion of the industry's wage negotiations, even though the research did not imply that miners suffered from a poor diet. However, there were no details about the calorific value of meals consumed by miners' wives or their children.

⁴⁵³ S.W. Fisher, 'Health Hazards of Coal Mining', *British Journal of Industrial Medicine*, Vol. 1 (3) 1 July 1944, p. 155.

⁴⁵⁴ 'Nutrition of Miners and their Families – Special Report Series of the Medical Research Council', Number 87.

⁴⁵⁵ Moss, 'The Food Requirements of Coal Miners', *Iron and Coal Trade Review*, 3 October 1924, p. 556.

Morbidity and Mortality Statistics

Following doubts expressed by Collis about the reliability of statistics for different collieries recording death by disease, the M.R.C. established a committee, which included Collis and Goadby, to enquire into the mortality and morbidity statistics of miners, which the M.W.F. funded. Collis concluded that the mortality experienced by different groups of miners and amounts of invalidity in different forms could not be determined accurately due to the lack of reliable data. However, the data did reveal that the highest death rates from all causes had occurred in the deepest mines which were located in South Wales and Lancashire. In addition, liver and stomach cancer rates for miners were higher than the national average.⁴⁵⁶ He also confirmed that while the incidence of phthisis was low for miners, other respiratory diseases, as a cause of death, was high.

Beat Knee, Beat Hand and Beat Elbow

Escalating compensation costs resulted in a request from the Mines Department to the M.R.C. to research causation and suggested remedies to reduce the incidence of all three conditions. In 1922, there were 9,459 new cases for compensation. Collis and Llewellyn in their subsequent report identified the cause as repeated trauma and an ingress of infection. They recommended that proper equipment should be held by colliery first aid stations which led to A.J. Cronin's review of first aid facilities and the subsequent revision of first aid regulations.⁴⁵⁷ The development of pithead baths was deemed important in this context as well as helping to minimise infections such as dermatitis and septicaemia. First aid rooms became an integral part of the design of pithead bath facilities. A leaflet on the report's recommendations was issued to all collieries.

⁴⁵⁶ Edgar Leigh Collis, 'An Inquiry into the Mortality of Coal and Metalliferous Miners in England and Wales', *Proceedings of the Royal Society of Medicine*, 1923, Vol. 16, pp. 85-101.

⁴⁵⁷ A.J. Cronin, 'First Aid Organisations at Collieries in Great Britain', *Colliery Guardian*, 7 October 1927, pp. 527-529.

Conclusion

The addition of Research as an objective in later drafts of The Coal Industry Bill was a positive commitment to enhance safety and health standards within the mining industry, but not an element of a longer term strategic plan given the initial five year statutory life of the M.W.F.. The Mines Inspectorate had witnessed the political power of the M.A.G.B. during the passage of the Coal Mines Bill 1911 when Home Office proposals for employers to provide Pithead Baths were amended to a level of impractical implementation, and proposals for a Ministry of Mines diluted to a Department within the Board of Trade. The Department influenced this element of the M.W.F. by delivering committed expenditure of £499,000 within the five year statutory operation of the levy to establish a new research centre and testing laboratory, an endowment fund, and annual contributions to ongoing research. Such governmental influence was reinforced by interlocking appointments of key individuals upon related organisations.⁴⁵⁸

The Department's direction of the Research budget continued and managed to retain, through statutory requirements, a specific amount for research when the levy was halved in 1932. This continued role for Health and Safety reflects Kirby's contention that the Mines Department acted as a partial, but significant, counterweight to the lobby of the M.A.G.B., although Mowat viewed the Department's overseeing of the entire industry as enfeebled.⁴⁵⁹ The Department achieved, through a shrewd application of the industry's own resources, which obviated the need for Treasury support, an ongoing extension of the Government's role in safety and health. Sir Edward Troup, at the opening of the new research centre, said, 'but for the Miners' Welfare Fund, the research would have starved. They could not have hoped that the Treasury would provide £50,000 a year in addition to a grant of £250,000 for endowments.'⁴⁶⁰

⁴⁵⁸ Sir William Walker, the Chief Inspector of Mines, was a member of the S.M.R.B. and M.W.C., positions he continued to hold after his retirement. Professor E.L. Collis was a member of the M.W.C., M.R.C. and the Department's H.A.C.. Sir Edward Troup, former Permanent Secretary of State in the Home Office, chaired the S.M.R.B and the H.A.C..

⁴⁵⁹ M.W. Kirby, 'The Politics of State Coercion in Inter-War Britain: The Mines Department of the Board of Trade 1920-1942', *Historical Journal*, Vol. 22 2 1979, pp. 373-396.

Clartles Mowat, *Britain Between the Wars 1918-1940*, (London, 1955).

⁴⁶⁰ 'Safety in Mines Research', *Aberdeen Press and Journal*, 15 June 1927, p. 7.

Although the research centre's emphasis on explosions reflected an original recommendation of the Royal Commission in its 1909 report, the M.W.C. successfully argued that the research emphasis should concentrate on the major causes of fatal and serious accidents. This position was also advocated by the M.A.G.B. during the Chelmsford Committee of Inquiry, but was in support of reducing the industry's levy as opposed to a projected, positive, future research role.

The M.F.G.B.'s support for research was evidenced in their criticism of part of the Royal Commission's report in 1938, because they argued that scientific research was having to keep pace with changing technology and therefore could not have delivered immediate improvements in accident rates.⁴⁶¹ Their support was further evidenced by the M.W.C.'s additional expenditure on the dissemination of research results through pamphlets entitled 'What Every Miner Should Know' and financing visits by miners to the research centre to witness colliery explosions.⁴⁶² The Royal Commission concluded that a great volume of useful and important work was in progress and this subsequently underpinned many of the requirements and regulations embraced within the Mines and Quarries Act 1954.

In contrast to expenditure on technical research, that for health in medical terms was modest. Research into the Beat diseases and Nystagmus was driven by the desire to reduce compensation expenditure, rather than the desire to lessen disability amongst miners. Improvements in mine lighting reduced the incidence of Nystagmus and first aid regulations that led to the reduction of the Beat diseases were designed.

The M.W.F. contributed to what Bloor described as a vigorous scientific debate as to whether coal dust was hazardous through a willingness to question the medical orthodoxy of Haldane. Perchard and Gildhart concluded that the polemical medical arguments had been between, on the one hand, the B.C.O.R.A. and Haldane, and on the other the M.R.C. and Cummins. They concluded that Haldane's opposition to any criticism of his silica based causation of respiratory issues significantly delayed recognition that coal dust was a cause of

⁴⁶¹ The terms of reference of the Commission were 'whether the safety and health of mineworkers can be better ensured by extending or modifying the principle or general provisions of the Coal Mines Act, or the arrangements for its administration, having regard to changes that had taken place in organisation, method of work, and equipment since it became law, and the experience gained, and to make recommendations'; Royal Commission on Safety in Coal Mines Report, H.M.S.O. 1938, cmd 5890, p. 1.

⁴⁶² In 1937 6,150 miners, of whom 3,500 were boys, attended these demonstrations.

serious disability. This is a position which was exacerbated by increased mechanisation which expanded volumes of underground airborne dust which were not accompanied by appropriate levels of dust suppression or the development of respirators. Professor Anthony Seaton, a former director of the Institute of Occupational Medicine, was more forthright when he declared that the views of Haldane had been shown to be wrong.⁴⁶³

Although Collis had initially shared Haldane's views, his own research and that of other medical experts identified a more accurate understanding of respiratory issues and he identified with the H.A.C.'s questioning of Haldane's position. Such positive change also required political direction, which was initially given by Emanuel Shinwell M.P., and supported by the lobby of mining M.P.s.⁴⁶⁴

The scheduling of pneumoconiosis and a subsequent compensation scheme resolved three decades of medical argument involving extensive research. Regrettably, this significant advance halted any further medical investigations into respiratory illness which was not categorised as pneumoconiosis despite evidence of higher rates of bronchitis amongst miners. It was another forty years before Chronic Obstructive Pulmonary Disease, also referred to as Chronic Bronchitis and Emphysema, was scheduled as an industrial disease. When Mr Justice Turner gave his judgement on the lead claims on the 23 January 1998, he said, 'There exists abundant evidence that officials interpreted their duties as requiring the production of coal first and the taking of precautions in respect of health second.'⁴⁶⁵ This is a statement that would also have been accurate in 1920.

The Mines Department, through their application of the M.W.F.'s expenditure on research, contributed to what Julia Moses has identified as the redistribution of risk from an individual to a collective assessment whereby risk can be governed by scientific and social knowledge.⁴⁶⁶ This process led to the Ministry of Fuel and Power being statutorily

⁴⁶³ Anthony Seaton, 'Farewell King Coal', *Thorax*, Vol.71 Issue 4, 8 February 2016, pp.365

⁴⁶⁴ David Grenfell who started work in the Anthracite coalfield was M.P. for the Gower constituency from 1922 to 1959 and was particularly active in arguing for the expansion of silicosis compensation arrangements. He was well-respected as he qualified with a first class Manager's Ticket before becoming an official of the S.W.M.F.. He was accompanied in his representations by Thomas Richards the former President of the S.W.M.F. following his election as M.P. for the Llanelli constituency in 1936.

⁴⁶⁵ Dr Robin Rudd, 'Coal Mines Respiratory Disease Litigation', *Thorax*, 1998 (53), p. 337.

⁴⁶⁶ Julia Moses, 'The First Modern Risk: Workplace Accidents and the Origin of the European Social State' (Cambridge University Press, 21/6/2018) E book.

responsible for health and safety within the mining industry, which included the direct responsibility for the Research Centre.

The opportunistic inclusion of research into the objectives of the M.W.F. led to significant advances in standards of mine safety and health, which would not have been achieved if the resources had remained with the Coal Owners. Although primarily a payment vehicle, the M.W.F. had a voice in the application of resources which gave the N.F.G.B. a formal role and environment in which to represent their members.

CHAPTER 5 - Pithead Baths

Introduction

'The provision of Pithead Baths represented the outstanding achievement of the Commission,' is an observation made by Henry Townshend-Rose, a solicitor appointed to the National Coal Board's legal department who, in 1950, reviewed the statutory requirements for welfare in the coal mining industry.⁴⁶⁷ He offers no objective reasoning for this statement and neither does Clinton Jencks when he refers to the Miners' Welfare Fund and its greatest achievement being the gradual construction of Pithead Baths.⁴⁶⁸

Catherine Mills, in the context of the prioritisation of statutory hygiene precautions, argues that critical factors such as occupational risk, the extent and strength of labour organisations and reforming interests, especially in the wider economic and political arena, all influenced the timing, nature and development of the law.⁴⁶⁹ The requirements for colliery owners to provide Pithead Baths had a statutory basis beginning with the Mining Industry Act 1911, but as their provision was not completed for 44 years, it does not constitute prioritisation. George Orwell expressed concern that by the early 1930s two thirds of mining families had not yet benefitted from the provision of Pithead Baths.⁴⁷⁰

The Monkswell Commission and The Coal Mines Act 1911

The first statutory requirement relating to Pithead Baths arose from the Royal Commission on Mines, under the chairmanship of Lord Monkswell, which commenced in 1906 and sat for several years.⁴⁷¹ Although primarily intended to produce consolidating legislation, several additional issues were examined, one of which was washing and drying accommodation.

⁴⁶⁷ Henry Townshend-Rose, *The British Coal Industry* (London, 1951) p. 24.

⁴⁶⁸ Clinton E. Jencks, 'Social Status of Coal Miners in Britain since Nationalisation', *American Journal of Economics and Sociology*, Vol. 26 (3) 1967, pp. 301-312.

⁴⁶⁹ Catherine Mills, 'The Emergence of Statutory Hygiene Precautions in the British Mining Industry 1890-1914', *Historical Journal*, Vol. 51 No.1 2008, pp. 145-168.

⁴⁷⁰ George Orwell, *The Road to Wigan Pier*, (Harmondsworth, 1962) p. 33.

⁴⁷¹ The Royal Commission on Mines produced three reports: Royal Commission on Mines First Report, 1907, CD. 3548, xiv. 1; Royal Commission on Mines Second Report, 1909. CD.4820, xxiv. 599; Royal Commission on Mines Third Report Vol. V, 1911. CD. 5642, xxxvi; These reports contained five volumes of minutes of evidence.

English Heritage credits Fletcher Burrows and Co Ltd with providing the first purpose built Pithead Bath at Gibfield Colliery (Lancashire) in 1911,⁴⁷² but evidence of earlier provision was submitted to this Royal Commission. One hundred witnesses who gave evidence were asked about the need to provide Pithead Baths and the likely use of the facilities. While trade union representatives were in favour, they deferred on the issue of usage. Many owners and managers offered negative reasons why the men would not use them. It was submitted that they would be delayed, miss transport arrangements, not spend the time, not be compelled to use them, and prefer to wash at home. Representatives of the Scottish Colliery Owners' Association were particularly negative.⁴⁷³ Evan Williams of the South Wales Coal Owners' Association, who would subsequently become president of the Mining Association of Great Britain, was adamant that men would not avail themselves of the facility.⁴⁷⁴ The owners from South Yorkshire were more positive about the need and particularly impressive was the evidence of George Blake Walker, Managing Director of the Wharnccliffe Silkstone Colliery Company, who had introduced a provision, which was well used by a limited number of men.⁴⁷⁵ His analysis would become prophetic in subsequent years, because he argued that a pithead bath should be convenient and quick, comfortable and a matter of course, which would require an educational programme to favourably change public opinion and miners' wives would be critical in this process.⁴⁷⁶ One member of the Royal Commission, Dr J.S. Haldane F.R.S. led a deputation to Westphalia and reported on the continental process and design of Pithead Baths. Their recommendation to the Commission was, 'we heartily commend the more clearly and comfortable German arrangement to the attention of colliery owners at home.'⁴⁷⁷

⁴⁷² Shane Gould and David Cranstone, *English Heritage – Monuments Protection Programme – The Coal Industry* (The Cranstone Consultancy, 1992) p. 6.

⁴⁷³ In evidence to The Royal Commission on Mines, James Bain, General Manager of the Alloa Coal Company Ltd, in response to a question of the provision of Pithead Baths stated, 'I do not think there would be any benefit from that,' and also subsequently, when asked if Pithead Baths should be a legislative requirement, stated, 'I cannot see that to put it into legislation would be a good thing.' Royal Commission on Mines. Minutes of Evidence with Appendices Vol. III 1908 CD. 4349 xx425 pp. 181-183. J.T. Forgie, a director of Mssrs William Baird and Co Ltd, who admitted that a rate of consumption amongst miners was caused by travelling in damp clothes stated, 'Why not make it compulsory for the workman to pay a share of it: it is for his benefit? It is part of the home life for all. I do not see why the trade should be burdened with the whole thing.' Royal Commission on Mines. Minutes of Evidence with Appendices Vol. III 1908 CD. 4349 xx 425 p. 203.

⁴⁷⁴ Royal Commission on Mines Third Report Vol. V, 1911. CD. 5642, xxxvi. 487, p. 415.

⁴⁷⁵ Royal Commission on Mines Third Report Vol. V, 1911. CD. 5642, xxxvi. 487, pp. 485-493.

⁴⁷⁶ *Ibid.*

⁴⁷⁷ Royal Commission on Mines First Report, 1907, CD. 3548, xiv. 1, p. 411.

The Monkswell Commission's subsequent recommendation was:

The practice of changing and washing at the colliery should be encouraged, but the provision of facilities must depend mainly on the attitude and feelings of the workmen themselves. When the majority of the workmen employed at a colliery desire to avail themselves of such facilities, and are prepared to contribute an adequate proportion of the cost, the owners should take steps to provide them.⁴⁷⁸

The Coal Industry Bill 1911 was introduced by Winston Churchill and could be viewed as legislation that might help halt the declining level of support for Liberal MPs in mining constituencies. In December 1910 there were 42 Labour MPs and the party had a membership of 1,431,000.⁴⁷⁹ By 1910, the M.F.G.B. had affiliated to the Labour Party and, according to Keith Leybourn and Jack Reynolds, who also cite Peter F. Clarke in support, the strength of the Labour Party was at local level.⁴⁸⁰ Churchill would have been aware of the political changes taking place and elements of legislation, supportive of the miners with no exchequer liability, would have been politically advantageous.

The Campaign Against Prejudice and For Provision

Of the prejudices against Pithead Baths, it was claimed in evidence to the 1919 Royal Commission, chaired by Mr Justice Sankey, that miners' wives objected because the bathing of a mineworker was part of a woman's role.⁴⁸¹ Valerie Hall concludes that in mining, women defined and valued their own skills and ability to improvise in managing a household. Women were primarily involved in the home with housework and raising

⁴⁷⁸ Royal Commission on Mines Second Report, 1909. CD.4820, xxiv. 599, p.210; Royal Commission on Mines Second Report, 1909. CD.4820, xxiv. 599, pp. 215-216; A memorandum attached to the Royal Commission's recommendations by William Abraham, M.P., Enoch Edwards, M.P. and Robert Smillie, the national officials of the M.F.G.B., who had served on the Commission, stated that it should be made compulsory for every colliery to have a pithead bath and use should be compulsory on the men.

⁴⁷⁹ David Butler and Gareth Butler, *Twentieth Century British Political Facts 1900-2000* (Basingstoke, 8th Edn, 2005), pp. 234, 158.

⁴⁸⁰ Keith Leybourn and Jack Reynolds, *Liberalism and the Rise of Labour 1890-1918* (London, 1986); Peter F. Clarke, *Lancashire and the New Liberalism*, (Cambridge, 2007)

⁴⁸¹ Report of the Royal Commission on the Coal Industry Vol. 2 First Stage, Reports and Minutes of Evidence 1919. CMD. 360 xiv. 1, pp. 1016-1025.

children.⁴⁸² While some women may have felt threatened by the concept of Pithead Baths, Katherine Bruce Glasier highlights the positive impact of the Women's Labour League in their crusade 'Baths for Miners', emphasising that pit dirt ought to be left at the colliery gate. Miners' wives were viewed as unpaid employees of mining companies given the amount of time and effort associated with the bathing of men and the washing and drying of clothes.⁴⁸³

As predicted by George Walker in his evidence to the Monkswell Commission, an educational campaign was required to strengthen the argument for Pithead Baths provision. In South Wales this involved enlightened trade union representatives, miners' wives and professionals in the field of mining education and public health.⁴⁸⁴ The primary driver was Henry Davis, Glamorgan County Director of Mining Education, who gave evening lantern lectures in mining communities and made application to the Education Committee to have the advantages of Pithead Baths, as part of hygiene and home-making lessons in schools.⁴⁸⁵ The *Western Mail* reported that Mrs Hartshorn and Mrs Hodges, wives of officials of the South Wales Miners' Federation (hereafter S.W.M.F.), formed a committee with Mr Davis and sent invitations to miners' wives, colliery doctors, and ministers with the primary aim of establishing women's committees to progress the campaign.⁴⁸⁶

Although campaigns had a positive impact, results were not sufficient to meet the requirements of the 1911 Act, evidenced, for example, by the miners resident in Abersychan who worked at two collieries and voted 1007 for to 548 against the installation of baths.⁴⁸⁷ The antagonism of employers to the provision is reflected in challenges to a vote taken in Barnburgh, South Yorkshire, when over two thirds of those who voted were in favour, but the employers argued that the law required two thirds of all those employed to vote in

⁴⁸² Valerie G. Hall, 'Women in Coal Mining Communities in Northumberland, England 1900-1939', *Journal of Women's History*, Vol. 13 No. 2 Summer 2011, pp. 107-13.

⁴⁸³ Katherine Bruce Glasier, 'The Women's Battle with Dirt', in *Women and the Labour Party*, ed. Marion Phillips (New York, MCMXVIII) pp. 88-93.

⁴⁸⁴ Royal Commission on Mines Third Report Vol. V, 1911. CD. 5642, xxxvi. 487, pp. 485-493; At a public meeting in Porth on the 8th June 1914, David Watts Morgan, a Miners' Agent, emphasised the importance of miners and wives understanding what was meant by the Pithead Baths movement which was the first indication of an organised campaign; 'Position of the Banksmen, Attitudes of South Wales Miners, Undecided State, Campaign for Pithead Baths', *Western Mail*, 9 June 1914, p.6.

⁴⁸⁵ 'Women's Campaign in South Wales', *Western Mail*, 29 April 1914, p. 6.

⁴⁸⁶ *Ibid.*

⁴⁸⁷ 'Pithead Baths: Abersychan Miners Majority in Favour', *Western Mail*, 22 April 1914, p. 7.

favour.⁴⁸⁸ A significant development was announced by David Davies, M.P. of the Ocean Coal Company, after a deputation reported favourably on the continental system, that he intended to introduce an experimental Pithead Bath at Treharris.⁴⁸⁹

The Press reported the support of the South Wales Housing and Town Planning Association⁴⁹⁰ and medical professionals such as Dr T.W. Thomas of Caerphilly Urban District Council.⁴⁹¹ The Press in coalfields played a very significant part in publicising the pressure for Pithead Baths. The *Nottingham Journal* referred to a growing demand within the Nottinghamshire Miners' Association for their installation. Demand for reform was more emphatic from collier's wives and the article criticised the argument some found for obstructing long desired reforms.⁴⁹² The *Sheffield Daily Telegraph* reported investigations in Denaby Main when most men spoken to favoured the provision, but all miners' wives believed their work would be greatly reduced. However, it was predicted that a great deal of apathy would be present.⁴⁹³ Local newspapers in both non-mining and mining areas reported extensively on mining matters, but not just in their own localities. In 1911 the proxy vote of Northumberland on Pithead Baths which produced 75 in favour and 469 against was extensively reported.⁴⁹⁴

When Churchill introduced the Coal Mines Bill in 1911, which required compulsory bathing, this was welcomed by the M.F.G.B. officials, but a ballot rejected the concept of compulsory bathing. The *Sheffield Daily Telegraph* stated that, 'Working miners all over the country unite in their dislike of the idea.'⁴⁹⁵ Clause 77 of the Coal Industry Act 1911, required owners to construct a Pithead Bath, unless the estimated cost was to be excessive, if two thirds of the men voted in favour and agreed to pay 50 percent of the maintenance costs, providing these costs were not to exceed 3d per week.⁴⁹⁶ The financial constraints of the 1911 Act, combined with the voting requirements, rendered a potentially significant social development stagnant. Supple in commenting upon the mortality rates of infants and

⁴⁸⁸ 'What Pithead Baths Will Cost at Barnburgh', *Sheffield Daily Telegraph*, 23 February 1920, p. 5.

⁴⁸⁹ 'The Collectors Tub Condemned. Efforts for Healthier Homes. Pithead Bath System. Mr David Davies M.P. and Rhondda Movement', *Western Mail*, 16 June 1914, p. 5.

⁴⁹⁰ '25,000 Houses Short', *Western Mail*, 16 February 1914, p. 6.

⁴⁹¹ 'Unscrupulous Owners. Caerphilly Doctor and Over-rented Houses', *Western Mail*, 19 May 1914, p. 7.

⁴⁹² 'From Day to Day. Pithead Baths a Source of Trouble', *Nottingham Journal*, 21 June 1920, p. 4.

⁴⁹³ 'Clean Colliers. Pit Baths Favoured at Denaby', *Sheffield Daily Telegraph*, 25 May 1913, p. 6.

⁴⁹⁴ 'Northumberland Miners on Three Shift System' *Sheffield Daily Telegraph*, 24 July 1911, p. 9.

⁴⁹⁵ 'Miners' Baths' *Sheffield Daily Telegraph*, 15 June 1911, p.6.

⁴⁹⁶ Coal Mines Act 1911. 1 and 2 Geo. 5. c. 50.

miners' wives, stated that the Pre-World War 1 legislation to establish Pithead Baths was virtually nullified by the maintenance requirements.⁴⁹⁷ The *Walsall Advertiser* decried this inactivity because the health improvements were self-evident and they concluded that men should be demanding the facilities.⁴⁹⁸

The *Western Mail* printed a letter from a coroner in Monmouthshire, in favour of Pithead Baths, who had held more inquests upon children scalded in domestic bathing arrangements than for miners who had died in industrial accidents.⁴⁹⁹ The *British Medical Journal* lent their professional weight to the provision of baths because an editorial headed 'Baths for Miners' stated, 'The provision of baths at all pitheads would, there can be no doubt, be of great benefit to the miners, and would have an excellent effect on the amenities of life in colliery districts.'⁵⁰⁰

The Sankey Commission – Evidence and Outcome

Evidence to the Sankey Commission in 1919, although specifically focussed on hours, remuneration and nationalisation, did embrace Pithead Baths within the context of poor quality housing. The considerable volume of evidence produced for the Sankey Commission on poor quality colliery housing resulted in the report's damning statement that, 'There are houses in some districts which are a reproach to our civilisation. No judicial language is sufficiently severe to apply to their condemnation.'⁵⁰¹ The housing situation was the main justification for the suggested levy, but paradoxically the Mining Industry Act (1920) prohibited any expenditure being applied for the building or repairing of dwelling houses.⁵⁰² The subsequent Housing and Town Planning Act (1919) became the main strand in the development of housing policy for which local authorities were to become the main delivery agents. Therefore, the government wished to separate housing issues from the operation of the M.W.F..

Richard Redmayne, the Chief Mining Inspector, when questioned as to whether Pithead Baths should be established replied, 'Yes, Certainly. That has been the Home Office policy

⁴⁹⁷ B. Supple, *The History of the British Coal Industry Vol. 4*, p. 475.

⁴⁹⁸ 'Mining. Pithead Baths', *Walsall Advertiser*, 11 July 1914, p. 11.

⁴⁹⁹ 'Children Scalded. The Tub More Deadly than the Mine', *Western Mail*, 27 June 1914, p. 6.

⁵⁰⁰ 'Baths for Miners', *British Medical Journal*, 19 August 1911, p. 403.

⁵⁰¹ Coal Industry Commission Vol. I. Reports and Minutes of Evidence CMD 359. p. ix

⁵⁰² Mining Industry Act 1920 CMD 3087 10 & 11 Geo. 5 Section 20 para. 4

of which I am a humble member but parliament was too much for us.⁵⁰³ This is a reference to the Pithead Bath provision in the Coal Mines Act 1911 which was unworkable as a consequence of political amendments to the original Bill. The coal industry employers lobby in parliament was significant. Some MPs with coal interests were extremely influential in both the industry and the Liberal Party.⁵⁰⁴ The real political influence however, was in the Lords where a number of peers benefitted from the substantial income generated from mining royalties and wayleave agreements. Nottinghamshire was referred to as the Dukeries where five major land owners benefitted from such financial considerations.⁵⁰⁵ The dominant land owners in the north-east were the Duke of Northumberland and Lord Londonderry. The Duke of Devonshire received £8,000 a year in rent and wayleaves from Sir Arthur Markham.⁵⁰⁶ The Bishops protected the interests of the Church of England as mining leases on glebe land often supported the revenue requirements of local churches. The political influence of the industry was able to resist what the owners regarded as inappropriate legislation.

Although World War I had interrupted the Pithead Baths campaign, it was only a temporary lull. In South Wales Elizabeth Andrews, one of the three miners' wives to present evidence to the Sankey Commission had, according to June Hannam worked with three supportive S.M.W.F. officials and had written articles in support of Pithead Baths in their trade union journal *Colliery Workers' Magazine*. Glasier, who had written a chapter on Pithead Baths in *Women and the Labour Party*, had sometimes been greeted with hostility by many trade unionists, rank and file members and also miners' wives, which was reflective of a reluctance to change old customs. Hannam concluded that Elizabeth Andrews renewed her enthusiasm for the campaign after the war and credits her with being responsible for making it one of the central issues of social reform of the day.⁵⁰⁷ While this may be credible in a political perspective, according to Sue Bruley it would appear to have had little impact

⁵⁰³ Coal Industry Commission Vol. II. Reports and Minutes of Evidence CMD 360. p. 1164.

⁵⁰⁴ Sir Arthur Markham, the Liberal MP for Mansfield, had significant colliery interests and his brother Charles was chairman of the Stavely Coal and Iron Company. James Joicey, the chairman of the Mining Company James Joicey and Co. Ltd, was Liberal MP for Chester-le-Street from 1885 until created a peer in 1906.

⁵⁰⁵ The Dukes of Portland, Newcastle, and Rutland together with Earl Manners and Lord Saville owned estates which were collectively known as the Dukeries.

⁵⁰⁶ Roy Gregory p. 152.

⁵⁰⁷ June Hannam, 'Women as Paid Organisers and Propagandists for the British Labour Party between the Wars', *International Journal and Working Class History*, No. 77 Spring 2010. pp. 69-88.

within South Wales as she states that Pithead Baths were not generally introduced in South Wales until the 1930s.⁵⁰⁸

The evidence of three miners' wives to the Sankey Commission was extensively reported in coalfield newspapers and women from the coalfields became part of a perceived pressure group. The *Mansfield Reporter* carried an article headed 'Pithead Baths: Women the Leading Champions of a Change' with an editorial that referred to years of propaganda, agitation and education.⁵⁰⁹ Organised women of the coalfields were credited with being the most active advocates, particularly through the Women's Trade Union League, the Women's Cooperative Guild and the Labour Party. The *Nottingham Journal* reported on the National Conference for Labour Women, held in the Memorial Hall, London, where Mrs Hart of Wigan, who had given evidence to the Sankey Commission, moved a resolution urging all women to work for the adoption of Pithead Baths.⁵¹⁰ As most of those who spoke in favour were miners' wives this adds credibility to the arguments of the increasing politicisation of women in the coalfields. Pat Thane emphasised that after getting an extension of the franchise many women campaigned vigorously at both local and national levels for improved health care, housing, education and much else.⁵¹¹ While it is questionable whether Elizabeth Andrews was the main campaigner for Pithead Baths, it is certain that the campaign of miners' wives helped fuel the enthusiasm of supportive trade union leaders as the 1920 and 1921 M.F.G.B. conferences adopted resolutions requiring employers to provide bathing and drying facilities.⁵¹² Their campaigning also helped to repudiate the unsubstantiated male claims of miners' wives being opposed to Pithead Baths.

The Mining Industry Act 1920 permitted D.W.C.s to apply resources for the construction of Pithead Baths, but in accordance with the provisions of the 1911 legislation.

⁵⁰⁸ Sue Bruley, 'The Politics of Food: Gender, Family, Community and Collective Feeding in South Wales in the General Strike and Miners' Lockout of 1926', *Twentieth Century History*, Vol. 18 No. 1 2007, pp. 54-77; An analysis of the Miners' Welfare Fund Annual Report reveals that, by December 1932, of the 120 Baths in operation at collieries only 10 were located in South Wales, whereas in South Yorkshire there were 24 and Scotland 28. Of the total Pithead Bath accommodation (142,434) 22.8 percent were in South Yorkshire, compared to 7.08 percent in South Wales. Whereas, 20 colliery companies in South Yorkshire were credited with a total of 24 Pithead Baths, the 10 in South Wales were provided by three colliery companies.

⁵⁰⁹ 'Pithead Baths. Women the Leading Champions of a Change', *Mansfield Reporter*, 25 November 1921. p. 7.

⁵¹⁰ 'Europe's Problems Labour Women's Breezy Views', *Nottingham Journal*, 23 April 1920, p. 5.

⁵¹¹ Pat Thane, 'What Difference did the Vote Make? Women in Public and Private Life in Britain since 1918', *Historical Research*, Vol. 76 Issue 192 May 2003, pp. 268-285.

⁵¹² M.F.G.B. Minutes and Conference Report, Annual Conference 6 July 1920, p. 695 and Annual Conference 7 August 1921, p. 447.

The Samuel Commission and Subsequent Progress

The practical experience of Pithead Baths and the medical evidence considered by the 1925 Royal Commission helped to assuage many of the prejudices against the provision.⁵¹³ While the main focus of the Royal Commission was, as in 1919, to diminish threatened industrial difficulties, Pithead Baths did achieve prominence. Whereas the campaign for Pithead Baths had previously focussed on the workload of miners' wives, evidence in 1925 dealt more specifically with the health issues of miners and family members.

The Commission received reports of the practical benefits of using Pithead Baths on the health of colliery workers by local medical practitioners, organised by the Ministry of Health. Evidence showed usage was increasing and no injurious effects were identified, which was an enormous benefit and one positive outcome was the decrease of infant and female patient demand.

The poor quality of company provided housing had featured in evidence to the Sankey Commission with some colliery owners knowing little about overcrowding and insanitary conditions. Emphasis was placed upon high rates of infant mortality, although Dr Marie Stopes had little sympathy. In a letter to the *Colliery Guardian*, she stated that the miners cost the country proportionately more in infant coffins and the miners wasted the substance of the country bringing to birth children doomed to death.⁵¹⁴

In a Ministry of Health report on maternal mortality in 1924, quoted in Samuel's report, the author, Eleanor Rathbone, stated:

Miners' wives, besides giving birth to an unusually large number of children have exceptionally difficult home conditions to contend with. The constant struggle with the dirt inseparable from the occupation and the arrangements for the work in shifts, which often multiplies the labours of the housewife, added to the cheerless and frequently insanitary conditions

⁵¹³ Report on The Royal Commission on The Coal Industry, Vol. 1 Report 1926, CMD 2600 xxv. 1. There were two additional volumes containing minutes of evidence, the appendices and general index under the same reference.

⁵¹⁴ 'The Miner's Standard of Life', *Colliery Guardian*, 28 March 1919, p. 716.

of the dwellings, would seem to explain some, at least, of the high maternal death rate often associated with the mining communities.⁵¹⁵

To emphasise the scale of the problem the Report said that of 1 million miners, 1.3 percent died as a result of accidents per year, but in England and Wales of 700,000 mothers who give birth in any one year, approximately 3,000 died in childbirth. Maternal mortality rates were considerably higher in rural and mining areas and during the previous 20 years maternal mortality, unlike mining accidents, had scarcely decreased.⁵¹⁶

The Samuel Commission concluded: 'We are convinced that the effect upon the health and comfort of the miners, upon the wellbeing of their wives and families, and thereupon the general contentedness of the population, would be so considerable as to make this a subject that should enjoy immediate and effective attention.'⁵¹⁷ Although Samuel implied the obligation to provide Pithead Baths should rest with the owners, the economic position was such that the Commission determined that the Miners' Welfare Fund should bear the cost, but with an additional income stream, namely 5 percent of royalty receipts, yielding £250,000 per annum. The Mining Industry (Welfare Fund) Act 1925 extended Section 20 of the Mining Industry Act 1920 by five years and increased the Committee membership with two additional nominees.⁵¹⁸ This was followed a year later by the Mining Industry Act 1926.⁵¹⁹ Part Three gave effect to the recommendation of the Royal Commission by legislating for a royalty levy of 1 shilling in the pound to be paid to the Miners' Welfare Fund to secure, as far as reasonably practical, the provision of accommodation to facilitate workmen taking baths and drying clothes. The *Western Daily Press* reported that the Duke of Northumberland described the levy as ridiculous and a gross injustice to small royalty owners.⁵²⁰ However, he received £240 per day from the royalties upon his mining leases, whereas miners earned 6s 8d per day on average.⁵²¹ The legislation also enabled two

⁵¹⁵ Eleanor Rathbone, *Ministry of Health Report on Maternal Mortality 1924*, quoted in *The Samuel Report* Vol. 2 p. 867

⁵¹⁶ Rathbone, *Ministry of Health Report on Maternal Mortality 1924*, quoted in *The Samuel Report* Vol. 2 p. 867

⁵¹⁷ *Report on The Royal Commission on The Coal Industry (1925)*, Vol. 1 p. 208.

⁵¹⁸ Mining Industry Act 1920, 10 and 11 Geo. 5. C. 50;

Mining Industry (Welfare Fund) Act 1925, 15 and 16 Geo. 5. C. 80.

⁵¹⁹ Mining Industry Act 1926, 16 and 17 Geo. 5. C. 28.

⁵²⁰ 'Mine Royalties Levy: Duke Takes a Gloomy View', *Western Daily Press*, 3 August 1926, p. 4.

⁵²¹ *Ibid.*

additional nominees to the Committee, one from the royalty owners and the other from the M.F.G.B..

The Programme Accelerates

Practical evidence continued to address prejudices which had been held by both employers and mineworkers. Dr H.M. Vernon and Dr T. Bedford in a report prepared on behalf of the Industrial Health Research Board, having examined the medical records of 10,000 underground and 2,700 surface workers employed at collieries with Pithead Baths, evidenced a diminished time lost from sickness and a reduction from voluntary causes of absenteeism.⁵²² Despite well-publicised responses to the prejudices, the demand for Pithead Baths was not universal and some prejudices continued to be cited. The *Western Daily Press* reported a visit to Radstock Colliery (Somerset) by students from the University of London who were told that miners preferred to wash at home and Pithead Baths were not thought much of by the mining community.⁵²³ Five years later that newspaper reported that Pensford colliers (Somerset) had voted unanimously in favour of a Pithead Bath.⁵²⁴ Variation of demand and usage within and between coalfields was evidenced at Glapwell when 2,365 of the 2,740 workforce had used the baths and usage at Clay Cross was 95 percent.⁵²⁵ Enthusiasm also arose from internal visits to operational Pithead Baths. After a ballot by colliers at Llay Main, men rejected the concept, arising from which the Managing Director sent a deputation of 30 men to the Pooley Experimental Baths in Warwickshire, after which the men voted in favour and an M.W.F. grant of £22,697 was approved; the colliery company also provided a canteen.⁵²⁶

The Samuel Commission was, like the Sankey Commission, designed to enhance relationships within the industry to try and resolve deep-seated industrial relations problems. Ellen Wilkinson M.P., at a rally in Weston Super Mare, sarcastically referred to Baldwin's solution for the 1926 lockout as the provision of Pithead Baths and longer working

⁵²² 'When Miners Bath at Pithead', *Western Daily Press*, 18 May 1931, p. 5.

⁵²³ 'Among Somerset Miners', *Western Daily Press*, 6 April 1926, p. 9.

⁵²⁴ 'First in South West England. Pithead Baths at Pensford', *Western Daily Press*, 7 August 1931, p. 3.

⁵²⁵ 'Holmewood, Glapwell and Doe Lea Topics', *Derbyshire Times and Chesterfield Herald*, 18 June 1932, p. 16; 'Holmewood Welfare Extension', *Derbyshire Times and Chesterfield Herald*, 3 March 1939, p. 15.

⁵²⁶ 'Miners' Objection to Pithead Baths', *Dover Express*, 31 August 1928, p. 1;

Miners' Welfare Fund, *Eighth Report of the Committee Appointed by The Board of Trade to Allocate the Fund 1929*, (H.M.S.O. 1930), p. 21 & p. 55.

hours.⁵²⁷ The injection of finance plus the M.W.F.'s decision to apply one fifth of the General Fund to the royalties levy each year, together with the interest earned on the monthly balances of District and General Funds produced £400,000 for Pithead Bath expenditure.⁵²⁸ This proved a major stimulus to the provision of Pithead Baths.

In 1924, the Labour Government's Coal Mines (Washing and Drying Accommodation) Bill, was read for the first time in July; this was intended to make the provision of Pithead Baths at all collieries compulsory at the expense of the owners.⁵²⁹ Although the Government fell, the Bill was a reflection of the growing influence of mining M.P.s within the Labour party who had campaigned for such a provision.

Technical Experimentation

Consequent upon the statutory commitment to progress the provision through the royalty levy, the Committee earmarked £4million from the General Fund, rather than wait for the royalties to be collected, for the construction and operation of four experimental facilities. The proposed new design, by separating out clean and dirty areas using lockers, was a fundamental advance upon the continental system of baskets on pulleys for clothing in one large internal space. Credit was due to the I.W.S. who had submitted a new design for a proposed facility in Durham. The new design contained three main sections – one for pit clothes with lockers – one for bathing – and one for clean clothes with lockers, together with lavatory accommodation, a first aid room, a boot cleaning and greasing facility, and supply of drinking water. Experimental installations were developed at Pooley Hall (Warwickshire), Parc (South Wales), Mainsforth (Durham) and Dalzell and Broomside (Scotland).

The externally funded investment in the Pithead Baths experimental project was designed to reduce capital and revenue costs for such issues as water supply, heating ventilation, composition of floor covering, size and design of lockers and technically efficient fixtures and fittings. The projects, when operational, were to be visited by representatives of

⁵²⁷ 'Lady M.P. on the Sands', *Western Daily Press*, 24 June 1926, p. 5.

⁵²⁸ *Miners' Welfare Fund, Fifth Report of the Committee Appointed by the Board of Trade to Allocate the Fund 1926*, (H.M.S.O. 1927), p. 45.

⁵²⁹ Bill to Render Compulsory the Provision of Washing and Drying Accommodation at Coal Mines 1924 (223) i. 501

Divisional Welfare Committees and collieries to emphasise the practical advantages of the Pithead Bath process.

The desire to experiment with design, processes, materials and obtain the feedback of users, contrasted with an industry where the owners, despite fuelling the Industrial Revolution, failed to invest in their own industry. They preferred attempting to cope with international competitors who had invested in enhanced mechanisation through longer working hours and lower rates of remuneration.

The requirement to safeguard capital expenditure for recreational activities by operating as charitable trusts for which model conveyances, leases and trust deeds were designed, also applied to Pithead Baths. To facilitate compliance and good management, advice was issued on the role of Trustees and the formation and duties of a Management Committee.⁵³⁰ These were further refined in 1930 to include a whole range of specific issues such as financial arrangements, the duties of staff, the allocation of lockers and model forms of accounts.⁵³¹ The Pithead Baths did not come within those mining functions for which colliery managers were statutorily responsible. Therefore, management committees upon which owners and workers were equally represented were responsible for the entire operation of a commercial entity upon charitable trusts.

Health and Housing Initiatives – No Broader Perspective

The evidence of the three miners' wives to the Sankey Commission is indexed under the heading 'Hygienic Conditions of Miners' Homes', but the subject of Pithead Baths embraced a complex array of interrelated health and hygiene issues. The paradox between high infant mortality rates in mining families and the level of fitness amongst miners recorded by Jay Winter is explained by those miners who were examined having survived the post-natal period.⁵³² Their fitness levels were due to the nature of their work and the family environment, in that miners' wives would prioritise food for their husbands and working sons to the detriment of their own dietary needs. Laura Ora criticised social surveys which

⁵³⁰ Miners' Welfare Fund, *Fifth Report of the Committee Appointed by The Board of Trade to Allocate the Fund 1926*, (H.M.S.O. 1927), p.p. 79-80.

⁵³¹ Miners' Welfare Fund, *Ninth Report of the Committee Appointed by The Board of Trade to Allocate the Fund 1930*, (H.M.S.O. 1931), p.p. 50-52.

⁵³² Jay Winter, 'Military Fitness and Civilian Health in Britain During the First World War', *Journal of Contemporary History*, Vol. 15 No. 2 April 1980, pp. 211-244.

focussed on household incomes rather than the distribution of resources, such as food, within the family.⁵³³

In 1921 Dr Mary Scott reported that women attending the New Tredegar Infant Welfare Centre were unable to feed their babies because their breast milk was failing due for insufficient nourishment.⁵³⁴ Valerie Gordon Hall's research identified that in Northumberland the death rate of miners' wives was higher than that of miners. Their rate of contracting diseases exceeded their husbands and was twice the national female average.⁵³⁵

Organisations to promote health and fitness, such as the N.P.F.A. and the New Health Society, were formed in 1925. Major John B. Paget, a wealthy director of the Sherwood Colliery Company, was also a member of the New Health Society and facilitated the installation of artificial ultra-violet lights in the Pithead Baths, but few companies followed this example as scientific evidence was neutral on the alleged benefit.⁵³⁶

The Pithead Bath programme had no immediate or significant impact upon reducing infant mortality rates, because they remained the highest in mining families throughout the inter-war years as a consequence of complicated inter-related biological and social factors.⁵³⁷ Sally Sheard regards the quarter century to 1915 as a sea change in the public perception of personal hygiene, particularly as a means of restricting infectious diseases, but despite enabling legislation which allowed municipal authorities to borrow finance for public baths

⁵³³ Laura Ora, 'The Welfare of Women in Labouring Families: England 1860-1950', *Feminist Studies*, 1, Vol. 1 (3/4) 1 January – April 1973, pp. 107-125, (p. 124).

⁵³⁴ Pamela Michael, 'Public Health in Wales' published by the Welsh Assembly Government 2008, pp.1-31 (p.14).

⁵³⁵ Valerie Gordon Hall, 'Contrasting Female Identities: Women in Coal Mining Communities in Northumberland. England. 1900-1939', *Journal of Women's History*, Vol. 13 No.2, Summer 2001, pp.107-131 (p. 115).

⁵³⁶ John B. Paget, 'The Health of the Nation', *The English Review*, 38, March 1924, pp. 377-385. John B. Paget, 'Coal' *The English Review*, June 1924, pp. 893-898.

⁵³⁷ J.N. Morris and J.A. Healey, 'The Social and Biological Factors in Infant Mortality', *The Lancet*, 1955 Vol. 1 Jan-June, pp. 343-349, pp. 395-397, pp. 445-448, pp. 499-502. J.N. Morris and J.A. Healey, 'Mortality in Relation to the Father's Occupation 1911-1950', *The Lancet*, 1955 Vol. 1 Jan-June, pp. 554-560.

for which charges could be made, the mining town of Barnsley had only one public bath by 1913.⁵³⁸

Architectural Innovation

The Central Welfare Committee of the M.W.F. was keen to ensure that the design of Baths placed some importance on architectural values. The *Modernist Tourists* website displays a photograph of the Clock Face facility opened in 1938 and describes Pithead Baths as elegant and the best examples in the 1930s of Modernist architecture, being technologically advanced and progressive.⁵³⁹ Cheryl Buckley comments upon the establishment of an Architects' Department which had recruited young architects who were unconstrained by rigid guidelines of style or approach.⁵⁴⁰ The Senior Northern Architect, John A. Dempster pursued the style of Willem Dudok, the Dutch architect, who exploited vertical and horizontal values, flat roofs, the use of bricks, with limited decoration. The designs were very popular with rationally planned interiors. The *Coal and Brick Journal*, in an editorial, praised the use of brick in Pithead Bath design, giving credit to the Chief Architect, J.H. Forshaw.⁵⁴¹

The Architects' Department of the M.W.C. was also cited by Justin Blanco-White of the Association of Architectural Surveyors and Technical Assistants, as an organisation of value as they assigned an assistant for a recognised duty in order to enhance their training.⁵⁴² The freedom of the architects can be identified in the design of the ventilation grill for the Sherwood Baths with figures resembling miners carrying picks.⁵⁴³ Georgina Allison refers to eighty Pithead Baths built in Scotland between 1919 and 1939, most of which were executed in the International Style of the 1930s, being design efficient in time, materials and

⁵³⁸ Sally Sheard, 'Profit is a Dirty Word: The Development of Public Baths and Wash-houses in Britain 1847-1915', *Social History of Medicine*, Vol. 13 No. 1 2000, pp. 63-85 (p.82).

⁵³⁹ Modernist Tourists, *The Pithead Baths of Great Britain*, 1 January 2017, <https://moderntourists.com/2017/01/01> - [accessed 3 May 2018].

⁵⁴⁰ Cheryl Buckley, 'Going Modern but Staying British: Design and Modernisms, 1930-1950(1)' in *Designing Modern Britain*, ed. by Cheryl Buckley, (London: Reaktion Books Ltd, 2007), pp. 83-123.

⁵⁴¹ David H. Kennett, 'A Vanishing Heritage', *Coal and Brick*, Information 75, October 1998, pp. 2-4.

⁵⁴² Justin Blanco-White, 'What is your Future?' *The Association of Architects, Surveyors and Technical Assistants Focus One*, Summer 1958, p. 50.

⁵⁴³ Buckley, 'Going Modern but Staying British' p. 102;

The Architecture of Europe exhibition was a collection of photographs illustrating British architecture, which included pictures of Pithead Baths within the health section, and was sponsored by the Royal Institute of British Architects with a year-long tour, ending at the Derby Museum and Gallery.

cost. She implies that the creativity witnessed was not professional indulgence, but the creation of unique buildings within mass production elements when the principle objective was to resolve the financial constraints of construction and operation.⁵⁴⁴

Provision Triumphs over Prejudice

The architectural historiography of Pithead Baths is extensive for their design and function as buildings, however there has to be a reliance on regional newspapers to appreciate the positive impact that Pithead Baths had on the quality of life in mining communities. The limited regional newspaper coverage pre-1921 reflects the impracticalities surrounding the 1911 Act's promotion of Pithead Baths. The coverage between 1921 and 1925 reflects the limited progress with expenditure from District Welfare Committees. The resources available from the royalties levy from 1926 mark the tipping point for increased activity and associated press interest. Openings of Pithead Baths were extensively covered, often giving detailed information on technical specifications and costs, while many openings facilitated the inspection by miners and their wives. The openings of Pithead Baths were significant events within their communities and sizeable crowds were often reported. The *Derbyshire Times and Chesterfield Herald* reported a crowd of 200 plus at the opening of Bolsover where relays of men and women inspected the baths.⁵⁴⁵ *Pathe News* covered the opening of the experimental facility at Pooley Hall in April 1928⁵⁴⁶ and the Pithead Bath at Vane Tempest Colliery in 1937.⁵⁴⁷ The volume of reporting by regional newspapers indicated the significance of Pithead Baths for mining communities.

Regional newspapers also evidenced the variation in demand by miners and how the owners and those performing opening ceremonies were keen to advocate the benefits, despite earlier reservations to the contrary. W.H. Telfer, the managing director of the Warwickshire Coal Company, at the opening at Coventry Colliery, said, 'There was no doubt that the provision of Pithead Baths was one of the best factors among the activities of the

⁵⁴⁴ Georgina Allison, 'The Miners' Welfare Commission and Pithead Baths in Scotland', *Twentieth Century Architecture, No 1 Industrial Architecture*, Summer 1994, pp. 55-64.

⁵⁴⁵ '£20,000 Pithead Baths Opened at Bolsover', *Derbyshire Times and Chesterfield Herald*, 3 May 1935, p. 19.

⁵⁴⁶ British Pathe News, 16 April 1928 – www.britishpathe.com/video/lord-chelmsford/query/baths [accessed 20 April, 2018].

⁵⁴⁷ British Pathe News, 16 December 1937- www.britishpathe.com/new-pitheadbaths-opened-aka-seahamharbour [accessed 20 April, 2018].

Miners' Welfare Fund.⁵⁴⁸ Sir David Llewellyn, on the opening of Deep Duffryn in South Wales, stated, 'I do not understand why we have been so long before putting such schemes into operation.'⁵⁴⁹ The Duke of Portland, who was a royalty owner, stated at the Whitwell opening, 'The opening of baths was perhaps the greatest and most beneficial social development in Whitwell since the pit was sunk'⁵⁵⁰ Lady Balniel, at the opening ceremony of the Clock Face Women's Baths said, 'They revolutionise the life of the miner and his family.'⁵⁵¹ Mr J Spencer of the Derbyshire Miners' Welfare Committee stated that the old prejudices against Pithead Baths had completely disappeared.⁵⁵² Although attitudes were changing, the pace did not evidence Mr Spencer's statement. At South Kirkby Colliery in West Yorkshire, 307 men voted against the provision.⁵⁵³ Only four years before Nottinghamshire's East Kirkby Colliery opening, 1,364 men voted in favour, but 547 had voted against.⁵⁵⁴

At a conference of Divisional Welfare Committees, they were informed that where baths were installed usage was between 89 percent and 100 percent, implying that even when there were significant minorities of men who had voted against; practical experience had positively affected their views.⁵⁵⁵

To emphasise the significance of Pithead Baths, reference can be made to visits by royalty. The Duchess of York visited the Deep Duffryn Pithead Baths⁵⁵⁶ and the Duke of York, who was President of the I.W.S., visited Ashington and witnessed men leaving the baths.⁵⁵⁷

Although historians have paid only modest attention to the impact which Pithead Baths had within mining communities, regional newspapers evidenced their increasing provision, especially after 1925 and, notwithstanding the grave recession in the industry in the 1930s, a demand that despite colliery closures and manpower reductions could not be met.

⁵⁴⁸ 'New Pithead Baths – Opening Ceremony at Coventry Colliery', *Coventry Herald*, 26 April 1935, p. 3.

⁵⁴⁹ 'Pithead Baths', *Science and Art of Mining*, 18 February 1933, p. 248.

⁵⁵⁰ '£16,000 Baths at Whitwell Opened by Duke of Portland', *Nottingham Journal*, 27 June 1935, pp. 6-7.

⁵⁵¹ 'New £33,618 Pithead Baths Opened', *Prescot Reporter and St Helen's General Advertiser*, 4 August 1939, p. 11.

⁵⁵² 'Pithead Baths an Asset', *Science and Art of Mining*, 18 August 1934, p. 33.

⁵⁵³ 'South Kirkby Pit Baths', *Leeds Mercury*, 8 August 1935, p. 7.

⁵⁵⁴ 'Pithead Baths', *Science and Art of Mining*, 9 March 1940, p. 280.

⁵⁵⁵ 'Value of Pithead Baths', *Western Daily Press*, 22 January 1936, p.8.

⁵⁵⁶ 'Private Visit to Duke of Beaufort', *Western Daily Press*, 19 December 1931, p. 7.

⁵⁵⁷ 'Visit to Newcastle Pits', *Western Daily Press*, 17 July 1928, p.7.

Nationally demand soon outstripped resource availability and although old prejudices had been reduced, many mining communities waited a long time to reap the benefits of a Pithead Bath. The *Gloucester Journal* reported that, 'Many wives in the Bream district are looking forward to relief from drudgery through the installation of Pithead Baths at the Princess Royal Colliery.'⁵⁵⁸ While the Miners' Welfare Fund publicised, with justifiable pride, through its annual reports the amount expended, number of baths provided and miners positively affected, this did not mask the frustration of demand outstripping supply. The pace of development due to the limited annual resource made available resulted in a Bill, virtually identical to the one submitted by Shinwell in 1924, presented by coalfield Members of Parliament - William Jenkins, Aneurin Bevan, Richard Wallhead, Vernon Hartshorn and Thomas Mardy Jones.⁵⁵⁹ The *Dundee Courier* reported William Gallagher's comment in the House of Commons on 16 December, 1936 that some Fife collieries had Pithead Bath applications for funding outstanding since 1930.⁵⁶⁰

Although World War 2 interrupted the programme, the issue of additional resources was partially addressed by the Mining Industry (Welfare Fund) Act of 1939 which increased the ½d output levy to 1d per ton specifying that the additional ½d had to be applied exclusively for Pithead Baths.⁵⁶¹ This was to accommodate the loss of the royalty levy through the nationalisation of coal reserves. The legislation also amended The Mining Industry (Welfare Fund) Act 1934⁵⁶² which had reduced the tonnage levy by half to ½d, and required a total of £375,000 to be applied for Pithead Bath provision constituted by the royalties levy with the balance contributed from the tonnage levy. Legislation in 1943⁵⁶³ extended the period of the operation of the tonnage levy. By the 31st December 1947, 369 operational Pithead Baths, accommodating 450,575 men had been completed. This left 277,168 men in 548 collieries, each employing more than 50 colliers, to be accommodated.⁵⁶⁴

⁵⁵⁸ 'Boon to Forest Miners. Pithead Baths at Princess Royal Colliery', *Gloucester Journal*, 11 September 1937, p. 6.

⁵⁵⁹ Bill to Render Compulsory the Provision of Washing and Drying Accommodation at Coal Mines, 1929 (38) i 493.

⁵⁶⁰ 'Pithead Baths Speed Up', *Dundee Courier*, 17 December 1936, p. 5.

⁵⁶¹ Mining Industry (Welfare Fund) Act 1939, CMD. 2 and 3 Geo. 6. C.9.

⁵⁶² Mining Industry (Welfare Fund) Act 1934, CMD. 24 and 25 Geo. 5 C.9.

⁵⁶³ Mining Industry (Welfare Fund) Act 1943, CMD. 7 and 8, Geo. 6. C. 3.

⁵⁶⁴ Miners Welfare Fund 1948, *First Annual Report of the National Miners' Welfare Joint Council* (London, 1949) p. 7.

By 31 December 1945 £6,590,798 had been applied for Pithead Baths. Running expenses had primarily been met by mineworkers' subscriptions, although often this was supplemented by employer contributions. Twenty eight percent of installations had no employer contributions, but at 2% of the facilities, the employers met all of the revenue costs. At the request of the Ministry of Fuel and Power, revenue costs were reconsidered and the employers and the N.U.M. agreed that apart from the purchase of soap and towels revenue costs should be equitable divided as originally determined by the Coal Mines Act 1911.

Canteens

Prior to 1934 a limited number of canteens had been provided through D.W.C. allocations. Following the 1934 Mining Industry (Welfare Fund) Act the Pithead Bath Fund could be used to include the cost of a canteen. During World War II the government permitted the Pithead Bath Fund to develop colliery canteens which enabled miners to enjoy larger food rations at work than were available to households. By 31 December 1945 £2,529,083 had been applied from the Baths Fund and, together with earlier D.W.C. expenditure, 912 canteens were provided, serving 98% of those employed.

The Completed Task

The demand for Pithead Baths was finally delivered by the National Coal Board through the application of resources budgeted to complete the programme by 1954.⁵⁶⁵ When the Miners' Welfare Bill (1952) came before Parliament the Conservative Minister of Fuel and Power, Geoffrey Lloyd, said: 'As many honorary Members know, the Pithead Bath movement has made a kind of revolution in the mining industry in this country.' He also stated that, 'The women had a great deal to do with the matter (the demand) appreciating what a difference Pithead Baths could make to a miner's home.' During the debate Harold Neal, the M.P. for Bolsover, stated that, 'The provision of Pithead Baths is the greatest social advantage that miners have secured in my lifetime.'⁵⁶⁶ The *Derby Daily Telegraph* in an editorial stated, 'One of the most beneficial features of the Miners' Welfare Movement

⁵⁶⁵ W.H. Sales, 'Human Relations and Welfare' in *National Coal Board The First 10 Years* (London, 1958) pp. 101-106 (p. 102).

⁵⁶⁶ Hansard 19 February 1952, Vol. 496 cc 145-157.

supported by a levy of ½d on coal is the provision of Pithead Baths,' and after reporting on the facilities at Woodside Colliery, 'experience has shown that few of the amenities provided by the Miners' Welfare Fund are more appreciated than this.'⁵⁶⁷

Pithead Baths had a significant impact upon the quality of life within mining communities. It lessened the domestic drudgery of a miner's wife and produced a healthier home environment although there is no evidence that it was singularly responsible for a reduction in the rates of infant mortality. Medical commentary indicated a lessening of the physical deterioration of miners' wives and decrease in ailments experienced by miners as a result of travelling in wet clothing. The capital expenditure benefitted local construction companies and equipment suppliers. Architects were afforded the opportunity to be imaginative and innovative within budgetary restrictions. The status of mining was elevated through the ability to confine the effects of the working environment to the colliery curtilage. A remarkable feature of Pithead Bath provision is that the capital costs were not paid for by the colliery companies, and miners had to financially contribute for the privilege of leaving at the colliery evidence of their working environment. The B.B.C.'s *A History of the World (objects)*, focussing on the Pithead Baths at the Big Pit Mining Museum, state: 'Walking through the Pithead Bath today it is difficult to imagine the huge impact such buildings had on the lives of the miner and his family.'⁵⁶⁸

Conclusion

The Pithead Bath programme expanded the industry's political profile whereby the government directed a policy requirement for the industry which contributed to the debate on improving public health standards, a policy achieved through affecting the vested interests of royalty owners, most of whom were represented in the House of Lords. The economic opposition of the employers, reflected in the provisions of the 1911 Act, was removed by the availability of an external income stream. The prejudices of the men were reduced through a campaign by miners' wives, an educational process dependent upon positive trade union leadership and publicised practical examples of mass washing facilities.

⁵⁶⁷ 'Baths for Miners' *Derby Daily Telegraph*, 31 December 1938, p. 4.

⁵⁶⁸ (<http://www.bbc.co.uk/ahistoryoftheworld/objects/eiOB7qi4RuaT7LVmHkkvxA>) [accessed 20 April 2018]

A change process which resulted in complaints about the time taken to deliver such facilities at all collieries.

The role of D.W.C.s in the Pithead Bath programme was limited to identifying a priority list of collieries in each coalfield, which provides further evidence of the ability and willingness of both sides of industry to co-operate in resolving potentially contentious welfare issues. Greater co-operation was required at colliery level when representatives of the owners and the mineworkers were equitably responsible as trustees and members of management committees for charitable facilities which had to operate on a commercial basis.

Thirty four years after presenting evidence to the Sankey Commission, Elizabeth Andrews expressed satisfaction at reading of the opening of Pithead Baths and referred to their positive impact on health, cleanliness and comfort for miners' wives and their families. She referred to the years of campaigning necessary to convince many miners of the need for the facilities.⁵⁶⁹

The Pithead Bath programme was of industrial, political and social significance which supports the views of Townshend-Rose and Jencks quoted in the introduction to this chapter.

⁵⁶⁹ 'Reader's View: Pithead Baths', *Western Mail*, 1 May 1953, p. 6.

CHAPTER 6

To Conclude

The formation of the M.W.F. enabled the government, on two separate occasions, to utilise the industry's own resources through a third party to improve safety and health standards. They established a national scheme of mining and technical education in the coalfields involving partnership funding with education authorities and universities. Resources were also applied for research designed to reduce the incidence of fatal and serious accidents. Health research was promoted, but often stimulated by a perceived need to reduce compensation costs. Respiratory disease research, however, was the consequence of a trade union, political and medical lobby. The main culmination of the resources applied for technical education and health research was a major review of mining legislation, including the determination of qualifications for specific colliery positions based upon examinations or proven training. The 1954 Mines and Quarries Act was the outcome of the aforementioned programmes, which enabled a newly nationalised industry to embrace the demands of a modern economy within a revised health and safety framework.

The delivery of a Pithead Bath programme, utilising the industry's own resources, was the second example of the government's intervention when they applied income from the royalty owners to secure this. On two occasions the government used Royal Commissions, established to remove the threat of a national stoppage, which resulted in measures to improve health and safety standards. These were opportunistic solutions to specific events as the government was not going to seriously confront the country's dominant economic industry which had demonstrated its inertia to a change process.

The range of health services facilitated by the M.W.F. reflected significantly different priorities within and between coalfields. Convalescence was a dominant feature, but in general terms M.W.F. funding enabled easier access to hospitals and community medicine, convalescent care, and specific assistance to facilitate certain individual circumstances.

A further intervention by the government was their requirement during World War II that the Pithead Bath Fund, moribund due to construction restrictions, should be used to develop a miners' rehabilitation service to facilitate a speedier return to work following

industrial accidents. The intervention was as a result of the War Effort, rather than the medical needs of injured mineworkers. This successfully established service was the subject of an initially contentious arrangement involving its transfer to the newly established N.H.S..

The democratically determined decision-making process resulted in an extensive provision of indoor and outdoor recreational facilities, which greatly enhanced the opportunity for the participation in a range of recreational and cultural activities.

The successful outcomes of the M.W.F. were delivered through a network of divisional and local committees, based on equitable representation, which demonstrated a conciliatory and collegiate approach. This process endured through two national stoppages, economic decline and high levels of unemployment. This was an element of the industry unobserved by historians, who tended to concentrate on more hostile relationships. The unique decision-making process associated with the M.W.F. was publicly acknowledged by Thomas Richards, the President of the M.F.G.B.:

The miners and the mine owners had been criticised as being the most combative people in this country, but they were a united family in the matter of welfare schemes.⁵⁷⁰

The decision-making process at community level of how resources were to be applied and maintained strengthened the role of mining union branches/lodges as it extended their activities outside the colliery gates, further reinforcing the relationship between work, family and community. The requirement that all capital grants from recreation facilities, pithead baths, canteens, and a range of health services had to be settled on charitable trusts with equality of representation between owners and mineworkers, extended the influence and responsibilities of trade union nominees. A range of positions across a number of charities within a village location extended the opportunity for community leaders to develop.

The acquisition and application of resources, particularly those for recreational facilities which comprised green lungs and dominant community buildings, engendered a sense of

⁵⁷⁰ 'Llanbradach's Distinction. Model Playground for Children', *Western Mail*, 2 June 1930, p. 9. Thomas Richards was President of the M.F.G.B. 1929-1931, Vice-President 1924-1929, Secretary of the S.W.M.F. 1898-1931, and had served as an M.P. from 1904-1920.

place. The process was an early example of community development involving the active participation of a previously marginalised population. The facilities established fostered a sense of 'ownership' in that mineworkers were financially responsible for the revenue costs and had an equitable voice in the range and quality of services provided. Although mining villages were physically isolated, the M.W.F. extended their cultural boundaries and expectations.

Applying Thane's view that historical events must be judged over time, the impact of facilities funded by the M.W.F. can be demonstrated by the example of a fourteen year old school leaver commencing colliery employment at Horden Colliery in Durham in 1918. Within the first 20 years of his employment, he would have experienced a significant change in his working environment through improved lighting and technical developments arising from research to reduce underground accidents and dust inhalation. He and his family would have benefitted through his access to a pithead bath, colliery canteen, community nursing services and ambulance provision, their opportunities to pursue further education, to participate in cricket, football, rugby, bowling, tennis and other recreational facilities, access to a park, playground and community hall offering a range of social activities.

The facilities delivered through the M.W.F. were a positive return from the world of work, a contrast with an environment of low pay, long working hours and ill health. However, quality of life improvements for miners' wives were modest. Mari Williams quotes a miner's wife who contrasts her husband's seven hour shift with her own eighteen hour domestic day.⁵⁷¹ Marginal benefits accrued for recreational activities and a lessening of domestic toil depended on the pace and location of Pithead Baths development. As Bingham concluded, the role of women post World War I was not fundamentally transformed.⁵⁷²

The contribution by individuals often has a disproportionate impact on historical events, a perspective identified within the M.W.F..

⁵⁷¹ Mari Williams, 'Aspects of Women's Working Lives in the Mining Communities of South Wales c. 1891-1939', *Folk Life*, Vol. 38 (1) 1 Jan 1999, pp. 56-70.

⁵⁷² Adrian Bingham, 'An Era of Domesticity? Histories of Women and Gender in Inter-war Britain', *Culture and Social History*, Vol. 1 (2) 1 May 2004, pp. 225-233.

The input into the establishment of a national system of mining education incorporating a number of universities, the development of technical schools, improvements in teaching, syllabi and examination standards were driven by George Winstanley, a mining engineer and inspector of technical education, who served the M.W.C. as an Assessor appointed by the Board of Education. His commitment to improving mining techniques and the safety of mineworkers drove the energy he brought to the role.

Professor Edgar Collis M.D. served as a full committee member of the M.W.C. throughout its lifetime and was subsequently a member of the Selection Committee of the Scholarship Fund. His support for expenditure by D.W.C.s on health issues secured the approval of the Ministry of Health. He also served as a member of the Mines Department Health Advisory Committee and ensured that resources were directed by both the Medical Research Council and the M.W.C. for research into issues impacting upon the health of mineworkers. His acceptance of scientific advances altered his original views concerning the effect of coal dust upon the respiratory system and he subsequently promoted pneumoconiosis as an industrial disease.

Lord Chelmsford, as Chair of the M.W.C. during the Fund's first decade, demonstrated skill chairing a committee comprising representatives of an industry which exhibited a degree of unanimity not evidenced in other aspects of the coal industry. His commitment to non-vocational education was reflected in the establishment of the scholarship and exhibition schemes and the encouragement given to District Welfare Committees to invest in adult education programmes and offer individual educational grants for a variety of academic courses.

Commander Coote, an employee who headed the Advisory Committee of the M.W.C. was the dominant influence upon recreational expenditure, in terms of policy, land utilisation, design and value for money. He advocated facilities for participation, particularly by children, and his role required diplomatic skills to diffuse disagreements with D.W.C.s.

An unstated and unrecognised contribution to the success of the M.W.F. are the thousands of volunteer mineworkers who fulfilled positions of responsibility for the governance and

range of charitable facilities, and those who organised individual sporting, cultural and recreational pursuits available to those who resided in mining communities.

The Fund's outcomes have often attracted complimentary remarks, although without supporting evidence. The M.F.G.B. said, 'The Miners' Welfare Fund has been of great value to the men and women of the coalfields and its discontinuance or curtailment would be a hefty blow to our people.'⁵⁷³ The President of the Board of Trade, in a memorandum to the Cabinet requesting authority to extend the Fund's statutory life concluded, 'The scheme has been a signal success and both owners and miners are agreed that the period of the levy should be extended for an additional five years.'⁵⁷⁴ The Ministry of Health, in their review of the activities of the M.W.F., stated in relation to hospitals that the M.W.F. 'has produced a marked improvement of hospitals for the mining population.'⁵⁷⁵ Sir Guy Nott-Bower was the Under-Secretary of State in the Ministry of Fuel and Power, and he initially served as the first Secretary of the M.W.C. and, upon nationalisation, he was appointed the Public Relations Director of the N.C.B.. In describing the winding up of the M.W.F. by the 1952 Miners' Welfare Act, he stated that it, 'brings to an end the most remarkable chapter in the history of industrial welfare.' He further stated that the M.W.F. had been the birth of a national conscience in regard to deplorable social conditions.⁵⁷⁶

This dissertation has provided evidence which justifies the sentiments contained in the above quotations and provided the first detailed perspective upon the role of the M.W.F., which will contribute to the historiography of the coal industry. Having been associated with the successor body to the M.W.F. for thirty years, I am very aware of the contribution delivered, because some of the facilities and services provided have survived the demise of the coal industry. A considerable number of recreational facilities continue to function as charitable trusts with either individual trustees or local authorities in a trustee role. Many of these facilities will reach their centenary this decade. Five convalescent homes still provide recuperative care and nationally and regionally funded benevolent services deliver measures of personal intervention based on social work recommendations.

⁵⁷³ M.F.G.B. Annual Report 1932, p. 275.

⁵⁷⁴ T.N.A. File CAB24/172/90, Folder CP190 (25).

⁵⁷⁵ T.N.A. File MH77/32, NHS Report on Future Programme – Draft Miners' Welfare Fund.

⁵⁷⁶ 'Thirty Years Work of the Miners' Welfare Federation. Sir Guy Nott-Bower'. *The Times*, 1 July 1952, p. 7

The contribution of the M.W.F. has been explained through this dissertation and its wide reaching effects noted - an overdue response to an editorial comment in the *Morpeth Herald*, 'This Fund, which is a unique feature of the life of this country and one of which we may justifiably be proud, has remained too little known to the general public.'⁵⁷⁷

⁵⁷⁷ 'Miners' Welfare Fund Unique Feature of Life in this Country', *Morpeth Herald*, 1 September 1931, p. 6.

Appendix 1

The Miners' Welfare Fund – Origins and Legislative Structure

The Mining Industry Act 1920 emerged from the Royal Commission appointed by the Coal Industry Commission Act 1919, chaired by the Honourable Mr Justice Sankey, and known as the Sankey Commission. This was a mechanism used by David Lloyd George to resolve a potential national stoppage in an industry whose performance was crucial to the recovery of post-war Britain. In 1913 the coal industry employed 1,106,126 persons in 3,300 collieries operated by 1,452 owners/companies, producing 287,430,473 tons of coal. In the five years prior to the outbreak of World War One, 7,723 miners died in colliery accidents and there were 815,002 reportable injuries. Coal accounted, in 1913, for 10 percent of the country's total exports.

The contribution of the industry to the war effort included miners who volunteered for military service. During the first ten months of the war 40 percent of miners between the ages of 19 and 38 volunteered. The government, under the terms of the Defence of the Realm Act, introduced control measures that reinforced the M.F.G.B.'s views of the need to nationalise the coal industry. In 1918 the M.F.G.B. pursued a wage increase, a reduction in working hours and nationalisation. A substantial vote in favour of strike action resulted in the appointment of the Sankey Commission with a remit to examine the industry in the context of wage rates, hours of work, royalties and nationalisation.

The appointment of the Commission forestalled a dispute and its hearings were divided into two specific themes. The first dealt with remuneration and working hours and heard emotional evidence on substandard housing conditions for miners, a high rate of infant mortality and accident rates (both fatal and non-fatal) all of which aroused public sympathy. A positive recommendation on a wage increase and reduction of working hours was subsequently agreed by the government which still had control of the industry under wartime regulations.

One of the Sankey recommendations was described as a matter for careful consideration: whether 1d per ton of coal production should be collected from the colliery owners and applied to improve the housing and meanities (sic.) of each particular colliery district. The Second Report of the Sankey Commission recommended nationalisation which Lloyd George rejected, despite the government having indicated in response to the First Report that they were supportive of the principle. The M.F.G.B.'s reaction was the often quoted comment of Vernon Hartshorn M.P., the President of the South Wales Miners' Federation (hereafter S.W.M.F.), 'We have been deceived, betrayed, duped.'

The Bill's passage through parliament drew little debate in respect of Clause 20, the M.W.F. references, but both the M.F.G.B. and Mining Association of Great Britain (hereafter M.A.G.B.) were opposed to Part Two which required the Board of Trade to establish a committee structure at colliery, district, regional and national levels. The M.A.G.B. and M.F.G.B. refused to participate in these committees and the requirement was subsequently removed from the legislation. A committee structure at regional level for processing applications to the M.W.F. was by invitation of the President of the Board of Trade. The M.A.G.B. successfully used their parliamentary lobby to amend one of the Sankey recommendations, namely the appointment of a Secretary of State for Mines. The legislation determined the appointment of a Mines Department in the Board of Trade for which a minister as Secretary for Mines, was to be responsible. The M.A.G.B. had been keen to dilute the influence of the government over the coal industry, but the Mines Department subsequently determined a considerable authority over how one fifth of the Fund was to be applied. While four fifths were to be available for local purposes, referred to as the District Fund, one fifth was specifically for mining education and research, referred to as the General Fund. The Act specified that the Fund was to be administered by a committee appointed by the President of the Board of Trade, comprising five persons of whom one was to be appointed after consultation with the M.A.G.B. and one after consultation with the M.F.G.B.. In addition, the committee was to have the assistance of three assessors appointed by the Ministry of Health, the Board of Education and the Secretary of State for Scotland.

The Fund had a statutory life of five years, having been described as an experiment, which affected the type of grants to be applied. It was determined that they could only be for capital purposes. The statutory life of the Fund was renewed in 1925 for a further five years and the committee was expanded to include additional nominees, one from the M.A.G.B. and one from the M.F.G.B.. Another Royal Commission, known as the Samuel Commission, was appointed to consider the economic position of the industry given the pending cessation of a wage subsidy. Its recommendations included an increase in working hours, an extension of the wage subsidy, and the need for pithead baths. The Mining Industry Act 1926 gave the Miners' Welfare Committee (hereafter M.W.C.) an additional role as it was to receive 1s in every 20s of the rental value of the right to work coal. The Treasury was to collect the levy from the royalty owners. The income was to be used explicitly for the construction of pithead baths and the M.W.C. was expanded to include a representative of the royalty owners and an additional nominee from the M.F.G.B..

The renewal of the five year statutory life of the Fund was achieved by the Mining Industry (Welfare Fund) Act 1931, but was accompanied with a requirement that a departmental inquiry be undertaken to review the future operation of the Fund. This condition was a result of the owners' political lobby to reduce the amount of the levy as they argued that it was unaffordable due to the depressed state of the industry. The levy was reduced by fifty percent by the Mining Industry (Welfare Fund) Act 1934. The reduction in the levy was backdated to 1932, but the life of the Fund was to continue for a further 18 years after 1934. The Coal Act 1938 restored the production levy to 1d per ton, but the additional income had to be used exclusively for the construction of pithead baths. Further legislation, Mining Industry (Welfare Fund) Act 1939, reconstituted the M.W.C. as a commission so that it could hold legal title.

The operation of the Baths Fund was altered in that no new construction was allowed from July 1940, but this Fund could be used to establish canteens in order to provide the additional food required by industrial workers as part of the war effort. An Emergency Works Order had permitted the use of District Funds for the purposes of providing colliery canteens and a further

order under the Defence of the Realm legislation permitted the Baths Fund to be applied for any purpose allowed by virtue of the 1920 Act. By December 1941, a total of 650 collieries were registered as catering establishments. As a consequence of the need to enhance colliery production that could be assisted by the speedier return of men to work following accidents, the Baths Fund was used to establish, by the direction of the government, a miners' rehabilitation service which involved the development of eight specialist centres and five grant-aided major hospitals.

The nationalisation of the coal industry terminated the M.W.C. but its members, together with representatives of the National Coal Board (hereafter N.C.B.) established the Miners' Welfare National Joint Council (hereafter M.W.N.J.C.). The statutory obligation to provide funds for social welfare transferred to the M.W.N.J.C. which determined a structural arrangement for the continuation of social welfare under a company, known as the Coal Industry Social Welfare Organisation (hereafter C.I.S.W.O.) with a shareholding held on an equitable basis by the N.C.B. and the mining unions. This enabled the Miners' Welfare Act 1952 to transfer the industrial welfare provision of the M.W.F. to the N.C.B. and social welfare to C.I.S.W.O.. The establishment of the National Health Service (hereafter N.H.S.) involved the termination of those ambulance and nursing services to which the M.W.F. had contributed. Voluntary hospitals to which the Fund had made capital grants were transferred to the N.H.S. by legislation, whereas the miners' rehabilitation service was conveyed by agreement.

Appendix 2: List of Social Welfare and Recreational Facilities – Indoor

Division	Games Room	Billiards (no of tables)	Library	Reading Room	Women's Section	Nursery	Boys' Youth Club	Girls' Youth Club	Boys/Girls Club Rooms	Gymnasium	Band Room	Bowling Hall	Skittle Alley	Workshop	Dark Room	Smoke Room	OAP's Room	Rest Room	Committee Room	Hall (no of seats)	Cinema (no of seats)	Swimming Pool	Slipper Baths	Changing Rooms	Cafe	Bar (Licensed)	Milk Bar	Officials' Club	Leaders' Quarters	Caretaker's House		
Scottish	143	444	91	134	25		33	6					1						2	156/ 4830 5		2			1							
Northern (N&C)	54	102	34	44	13	1	15	2	2					1	1			1		33/ 8780	7/ 1759	1			1	1						
Durham	77	176	50	74	8		19			3	1									61/ 1584 5	1/ 800	1			4	6						
North Eastern	84	134	29	58	15		13	6		5						1			2	66/ 1728 0		5	13		7	46	1					
North Western	22	59	6	12	7		4	4												13/ 3390	1/ 950	1				11		1				
East Midlands	92	133	17	62	31		22	6		4			1							80/ 2004 0		8		13	2	67			2	28		
West Midlands	28	42	9	15	2		3	1												23/ 4350				5	2	27				5		
South Western	164	537	144	163	54		41	11		4		2	2				1		5	147/ 4822 0	46/ 27944	2		1	23						9	
South Eastern	4	4	1	1						3	3									3/ 3050						2						
NATIONAL TOTAL	668	1631	381	563	155	1	150	36	2	19	4	2	4	1	1	1	1	1	9	582/ 1692 60	55/ 31453	20	13	19	40	160	1	1	2	42		

Appendix 2: List of Social Welfare and Recreational Facilities – Outdoor

Division	Cricket Pitch	Football Pitch - soccer	Football Pitch - Rugger	Hockey Pitch	Bowling Green	Tennis Court	Quoit Pitch	Golf Course	Min. Golf Course	Putting Course	Cycle Track	Running Track	Swimming Pool	Children's Playground	Paddling Pool	Recreation Ground	Park	Camp Site	Shrubbery	Aviary	Fish Pond	Bandstand	Pavilion	Shelter	Football Stand	Canteen	Bus Shelter	Caretaker's House	Groundsman's House
Scottish	2	18			53	37				3				46		1	12						56	6		5			
Northern (N&C)	22	52	9		38	118		1		9				38			11					1	42						
Durham	45	69	2		62	161		1		15			2	45			24						76						
North Eastern	69	83	6		107	240			1	9	5		4	89	2		24	1	3			11	115	6				7	2
North Western	6	14	1		23	22				1		1		17			5					1	10						
East Midlands	58	111	2	1	109	250		4		8		3	1	74	2	3	22			1		9	119	22	1	1	2		5
West Midlands	34	35	1	2	40	82				6	1	1	2	44		2	8					5	36	4					
South Western	72	128	37	7	101	335	1	2		20	1	2	14	146	6		64				1		137	1	1			2	2
South Eastern	4	6	3		3	11				1				5									4						
NATIONAL TOTAL	312	516	61	10	536	1256	1	8	1	72	7	7	23	504	10	6	170	1	3	1	1	27	585	39	2	6	2	9	9

Source: Directory of Coal Industry Welfare Facilities.

This was undertaken in 1952 to identify those social welfare facilities for which the Coal Industry Social Welfare Organisation had a structured involvement as a consequence of the 1952 Miners' Welfare Act, which transferred the responsibility for industrial welfare to the National Coal Board.

Appendix 3: Number of Disputes, Workpeople Affected By, and the Aggregate Number of Working Days Lost Through Disputes in the Coal Mining Industry 1921-1930

Year	Number of Disputes Commencing in Each Year	Number of Workpeople Directly and Indirectly Affected	Aggregate Duration in Working Days of All Disputes in Progress Each Year
1921	147	1,251,000	72,693,000
1922	155	116,000	1,246,000
1923	186	187,000	1,183,000
1924	190	134,000	1,563,000
1925	164	130,000	3,435,000
1926	58	1,098,400	146,992,000
1927	110	72,700	693,000
1928	97	82,200	452,000
1929	153	78,500	576,000
1930	150	148,600	663,000

Source: Colliery Yearbook and Coal Trades Directory 1932, (London, The Louis Cassier Co. Ltd, 1933), p. 661.

There is no correlation between the number of days lost and size of coalfield. In 1925 168,000 working days were lost in North Wales when 2,251 miners were involved in a dispute from 15 June to 29 October. During this decade colliery employment fell from 1,131,596 to 931,376.

Appendix 4: Expenditure on Convalescent Provision by District Welfare Committees 1921-1945

District Welfare Committees	Fife & Clackmannanshire	The Lothians	Lanarkshire	Ayrshire	Northumberland	Durham	Cumberland	Lancashire & Cheshire	North Wales	South Yorkshire	West Yorkshire	Nottinghamshire	
Convalescent Expenditure (£)	24000	0	16202	131867	50000	478956	6574	510790	5000	438864	271099	164373	
Convalescent Expenditure as a % of Health Expenditure	48.89	0	89.75	99.75	56.5	80.41	100	86.98	67.29	74.32	80.65	69.17	
Total Health Expenditure (£)	49092	5030	18052	132201	88475	595630	6574	587266	7431	590502	336156	237619	
Health Expenditure as a % of Total District Expenditure	13.29	3.11	2.32	68.62	14.95	38.67	7.34	73.94	5.03	41.12	53.24	36.86	
District Welfare Committees	Derbyshire	South Derbyshire	North Staffordshire	Cannock Chase	South Staffordshire	Leicestershire	Warwickshire	Shropshire*	Forest of Dean	Somerset	Bristol	South Wales	Kent
Convalescent Expenditure (£)	157838	0	100164	110000	6077	10500	20188	0	11460	0	0	435645	0
Convalescent Expenditure as a % of Health Expenditure	88.81	0	99.34	97.35	84	51	37.57	0	47.27	0	0	72.35	0
Total Health Expenditure (£)	177718	66880	100831	113000	7229	20525	53738	0	24246	13125	2291	560662	1085
Health Expenditure as a % of Total District Expenditure	28.46	78.28	36.18	48.31	8.91	21.06	23.75	0	40.16	34.7	25.01	28.4	2.5

Source: Annual Report of the Miners' Welfare Committee in War Time – for 6½ years ended 30 June 1946 - *Of their total expenditure of £33,213 nothing was applied for health provision.

Appendix 5: Grants from the General Fund for Buildings and Equipment for Senior, Advanced and University Mining Education to 31st December 1938

GRANTS TO LOCAL EDUCATION AUTHORITIES (£629,972)	
Northumberland	£
Northumberland - Ashington Welfare Educational Evening Institute and Day Continuation School	10,715
Northumberland - Seaton Delaval, Astley Senior Course Mining Centre	6,805
Total	17,520
Durham	
Durham - Blaydon (projected)	7,750
Durham - Consett (projected)	10,250
Durham - Durham (projected)	10,250
Durham - Easington (projected)	7,750
Sunderland CB - Technical College	16,912
Total	52,912
Cumberland	
Cumberland - Workington County Technical School	8,725
Total	8,725
Lancashire & Cheshire	
Lancashire - Leigh Municipal College	5,044
Burnley CB - Municipal College	4,314
St Helens CB - Municipal Technical School	7,500
Wigan CB - Wigan & District Mining & Technical College	37,000
Total	53,858
South Yorkshire	
Yorkshire WR - Dinnington, The Chelmsford Mining & Technical Institute	17,486
Yorkshire WR - Mexborough Technical Evening Institute	1,877
Barnsley CB - Mining & Technical College	15,515
Doncaster CB - Technical College	14,700
Rotherham CB - Technical College	9,000
Total	58,578
West Yorkshire	
Yorkshire WR - Batley Technical College	1,192
Yorkshire WR - Hemsworth Mining & Technical Institute	6,020

Yorkshire WR - Whitwood (Castleford, Normanton & District) Mining & Technical Institute	21,189
Huddersfield CB - Technical College	3,059
Wakefield CB - Technical College	6,650
Total	38,110
Nottinghamshire	
Nottinghamshire - Mansfield, The County Technical College	12,700
Nottinghamshire - Worksop, The County Technical College	14,113
Total	26,813
Derbyshire	
Derbyshire - Chesterfield Technical College	16,818
Derbyshire - Clowne Mining & Technical Evening Institute	6,142
Derbyshire - Heanor Mining & Technical Evening Institute	13,096
Total	36,056
South Derbyshire	
Derbyshire – Swadlincote, South Derbyshire Mining School	2,328
North Staffordshire	
Staffordshire – Newcastle under Lyme, Knutton Mining Evening Institute	5,996
Stoke on Trent CB – North Staffordshire Technical College	12,000
Stoke on Trent CB – Tunstall, Victoria Evening Institute	350
Total	18,346
Cannock Chase	
Staffordshire – Cannock Chase Mining College	28,000
South Staffordshire & Worcestershire	
Dudley CB – Dudley & Staffordshire Technical College	6,500
Leicestershire	
Leicestershire – Coalville Mining and Technical Evening Institute	11,140
Warwickshire	
Warwickshire – Nuneaton County Mining and Technical School Evening institute	18,353
Shropshire	
Shropshire – Oakengates, Walker Technical College	1,588
Shropshire – Oswestry Technical Institute	750
Total	2,338
Forest of Dean	
Gloucestershire – Cinderford, Forest of Dean Mining School Evening institute	10,618
Kent	

Kent – Dover Technical Institute	1,000
Kent – Dover New Technical Institute (projected)	5,129
Kent – Deal Technical Institute (projected)	1,000
Kent – equipment for mining classes	421
Total	7,550
Total for England	398,543
North Wales	
Flintshire – Hawarden, Shotton, Deeside Central Evening Institute	1,971
Denbighshire – Wrexham, Denbighshire Technical Institute	10,000
South Wales	
Breconshire – Ystradgynlais Mining Institute	2,661
Carmarthenshire – Ammanford Mining & Technical Institute	6,400
Carmarthenshire – Llanelly Mining Centre	7,000
Glamorganshire – Bargoed Mining & Technical Institute	5,500
Glamorganshire – Bridgend Mining & Technical Institute	6,500
Glamorganshire - Caerphilly Mining & technical Institute	5,286
Glamorganshire – Neath Mining & Technical Institute	6,749
Glamorganshire – Pontardawe Mining & technical Institute	6,401
Glamorganshire – Rhondda, Ton Pentre Senior Mining Centre Evening Institute	5,287
Glamorganshire – Rhondda, Trealaw, Clydach Court Senior Mining Centre Evening Institute	5,743
Glamorganshire – Treforest School of Mines	22,595
Merthyr Tydfil CB – Quakers’ Yard Mining & Technical Institute	10,465
Swansea CB – Technical College	10,147
Monmouthshire – Abersychan Mining & Technical Institute	6,166
Monmouthshire – Abertillery Mining & Technical Institute	7,708
Monmouthshire – Bedwellty, New Tredegar Mining & Technical Institute	6,775
Monmouthshire – Crumlin Mining & technical College	4,670
Monmouthshire – Ebbw Vale Mining & Technical Institute	5,965
Monmouthshire – Pontllanfraith Technical Institute	3,000
Monmouthshire – Tredegar, The Thomas Richards Mining & Technical Institute	7,225
Total for Wales	154,214
Fife & Clackmannan	
Fife – Buckhaven Mining & Technical School	4,848

Fife – Cowdenbeath, Fife Mining School	16,721
Fife – Kirkcaldy Technical School	4,415
Clackmannan – Alloa Academy	2,250
The Lothians	
East Lothian – Prestonpans, Preston Lodge	5,000
Lanarkshire	
West Lothian – Bathgate, The Lindsay High School	6,333
Lanark – Coatbridge, The Technical College	19,985
Lanark – Hamilton Academy & Technical School	1,031
Stirling – Falkirk, County Technical Institute for Mining	6,503
Dumbarton – Kirkintilloch, Townhead	814
Dumbarton – Twechar Public School	1,186
Ayrshire	
Ayr – Kilmarnock Technical School	7,450
Ayr – Provision of optical lantern for lectures throughout Authority's area	30
Dumfries – Sanquhar Academy	649
Total for Scotland	77,215

Grants to Universities	
Edinburgh (Heriot-Watt College)	13,000
Glasgow (Royal Technical College)	7,507
Durham (Kings College)	20,000
Manchester (College of Technology)	1,500
Sheffield	19,210
Leeds	11,670
Nottingham (University College)	8,128
Birmingham	19,850
Total for Universities	100,865

Source: Annual Report of the Miners' Welfare Committee 1938.

Appendix 6: Applications to the Miners' Welfare National Scholarship Scheme 1927-1937

AREA	1927			1928			1929			1930			1931			1932		
	A	B (m)	B (f)	A	B (m)	B (f)	A	B (m)	B (f)	A	B (m)	B (f)	A	B (m)	B (f)	A	B (m)	B (f)
South Wales & Monmouthshire	363	283	112	79	142	42	72	174	52	56	144	34	70	172	41	80	177	57
Durham	190	101	22	29	49	6	15	49	9	20	28	9	14	38	8	22	46	8
Northumberland	113	46	12	4	10	2	5	12	4	4	12	4	9	17	6	2	10	7
South Yorkshire	94	41	22	25	14	6	19	25	8	18	29	11	25	35	5	10	37	5
Lanarkshire	91	78	38	12	11	3	6	18	7	10	29	5	4	35	2	2	32	8
Lancashire & Cheshire	62	35	18	11	13	10	10	18	7	3	30	4	9	17	5	8	26	8
West Yorkshire	48	32	2	10	16	4	7	17	4	6	20	5	5	18	2	2	13	1
North Staffordshire	32	14	4	3	6	2	0	8	3	2	7	1	1	3	1	3	9	0
Nottinghamshire	30	10	6	4	9	0	6	9	0	4	10	2	4	15	1	9	12	5
Fife & Clackmananshire	27	15	10	4	8	2	7	6	2	5	5	2	2	12	0	3	10	3
South Derbyshire & Leicestershire	23	7	2	2	3	0	5	2	2	4	4	0	2	5	1	1	7	1
North Wales	21	25	3	9	7	2	8	4	1	3	7	1	4	3	0	2	6	0
Cumberland	19	12	0	0	9	1	1	3	0	1	5	1	0	0	0	4	7	0
Derbyshire	19	17	2	7	9	2	16	12	5	7	13	4	8	9	4	2	14	5
Cannock Chase	18	4	3	3	4	0	2	4	4	1	2	1	5	7	0	2	4	0
Ayrshire	11	15	7	3	9	0	5	6	0	5	6	4	3	13	2	4	8	4
Somerset & Bristol	10	5	4	1	1	0	0	1	1	0	1	0	0	2	0	0	3	3
Lothians	9	5	5	1	1	0	6	3	3	5	5	3	1	7	0	2	5	1
South Staffordshire & Worcestershire	9	5	1	1	0	0	2	0	0	4	3	2	0	1	0	0	2	0
Shropshire	7	2	0	0	2	0	0	0	0	0	1	0	0	0	0	0	3	0
Warwickshire	6	6	4	2	1	2	3	4	1	1	2	0	0	1	0	1	2	2
Kent	4	1	0	2	0	0	0	1	1	0	0	0	2	1	1	2	4	2
Forest of Dean	3	7	5	1	3	1	1	1	2	0	1	1	2	3	0	0	5	0
Total:	1209	766	282	213	327	85	196	377	116	159	364	94	170	414	79	161	442	120

AREA	1933			1934			1935			1936			1937			Total A (exc '27)	Total B (m) (exc '27)	Total B (f) (exc'27)
	A	B (m)	B (f)	A	B (m)	B (f)	A	B (m)	B (f)	A	B (m)	B (f)	A	B (m)	B (f)			
South Wales & Monmouthshire	64	169	41	63	212	27	53	202	43	35	159	42	31	131	23	603	1682	402
Durham	8	42	4	9	55	4	10	39	10	7	20	8	4	24	3	138	390	69
Northumberland	2	6	4	4	18	2	4	14	3	5	9	1	6	1	2	45	109	35
South Yorkshire	17	38	9	11	36	8	16	26	7	8	18	2	8	16	4	157	274	65
Lanarkshire	5	23	4	8	25	4	1	24	4	4	17	3	0	11	1	52	225	41
Lancashire & Cheshire	7	24	9	3	25	10	2	22	8	2	13	5	4	18	4	59	206	70
West Yorkshire	4	17	1	4	15	5	1	12	4	3	16	0	3	11	1	45	155	27
North Staffordshire	1	11	4	3	6	2	1	6	1	0	5	0	1	1	1	15	62	15
Nottinghamshire	3	17	4	3	19	3	1	9	2	4	11	0	3	10	0	41	121	17
Fife & Clackmananshire	0	13	2	1	15	1	1	11	3	1	12	2	1	3	0	25	95	17
South Derbyshire & Leicestershire	1	7	2	3	5	0	1	6	1	2	2	0	2	4	0	23	45	7
North Wales	2	7	0	0	6	0	0	6	0	0	8	1	1	4	0	29	58	5
Cumberland	2	3	2	0	3	1	1	4	2	2	3	0	1	3	0	12	40	7
Derbyshire	1	12	0	6	13	0	5	8	1	6	6	2	3	10	1	61	106	24
Cannock Chase	1	10	0	6	8	0	4	4	0	3	3	0	1	0	1	28	46	6
Ayrshire	0	7	0	1	10	2	1	9	2	1	10	1	1	13	2	24	91	17
Somerset & Bristol	0	6	2	1	2	1	1	1	0	0	0	0	0	0	0	3	17	7
Lothians	2	7	1	0	4	3	3	3	2	2	2	0	4	4	0	26	41	13
South Staffordshire & Worcestershire	0	3	0	0	0	0	1	2	0	1	3	0	0	1	0	9	15	2
Shropshire	0	3	0	0	1	1	0	2	1	0	3	0	0	1	0	0	16	2
Warwickshire	1	4	1	0	6	1	1	7	0	0	0	0	0	0	2	9	27	9
Kent	0	3	0	0	4	0	3	3	0	0	3	0	0	0	0	9	19	4
Forest of Dean	0	2	0	0	2	1	1	3	1	1	6	4	0	1	0	6	27	10
Total:	121	434	90	126	490	76	112	423	95	87	329	71	74	267	45	1419	3867	871

Source: Annual Reports of the Miners' Welfare National Scholarship Scheme Selection Committee 1927-1937 inclusive.

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