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S C O T T I S H I N D U S T R I A L H I S T O R Y

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Contents

THE AYRSHIRE BOOT AND SHOE INDUSTRY 1839 - 1939

by

Brenda White

One of the less familiar and seldom trod byeways of Scottish economic history is that leading to the boot and shoe industry. At one time during the last century there were perhaps 50 firms in Scotland, apart from small bootmakers, engaged in boot and shoe manufacture. At the beginning of the twentieth century, Slater's Directory of Scotland for 1900 lists 47 boot and shoe manufacturers. Of these 14 were in Forfarshire, 10 in Ayrshire, 8 in Aberdeenshire and 3 in Perthshire. In general terms, Scotland has tended mainly to specialise in heavy boots and medium weight footwear. This article aims to bring forward the contrasting fortunes of these products in Ayrshire, taking the respective towns of Maybole and Kilmarnock as illustrations.

Maybole likes to call itself the Capital of Carrick. Carrick is a district of rural Ayrshire. In the early nineteenth century its industrial base had been the traditional domestic based hand-weaving to supplement agricultural incomes, but with the advent of power looms this had fallen away. Maybole began its climb as a major centre for the production of heavy duty footwear during the second quarter of the nineteenth century when in 1838 John Gray & Co. began business producing handsewn footwear, using local outworkers to stitch pre-cut soles to uppers. Production was primitive, for few technical developments were introduced into the industry prior to the patenting of the riveting machine in 1853 by the Leicester master shoe manufacturer Thomas Crick. (1) This relatively simple machine attached the sole to the upper by inside metal rivets; in consequence it allowed for the expansion of relatively unskilled rural labour to operate it. Quite possibly Maybole's boot industry dates from this period when John Gray introduced some form of machine processes into his boot factory and thus provided work for much of Maybole's excess labour previously engaged in the moribund textile industry. Demand for Maybole's footwear products brought rapid expansion in the number and scale of boot and shoe manufacturers operating within the town. By 1883 Maybole had 8 large boot factories employing 1,184 workers producing 12,360 pairs of boots per week, the largest of which were:

Name	Factory	W/Ks	Boots
John Gray	Ladywell	498	4,500
T A Gray	Lorne	283	3,000
C Crawford	Kirkwynd	156	2,000

By 1890 this had risen to 10 boot factories operating at full capacity employing 1,500 workers and producing roughly one million pairs of boots annually at an estimated gross value of £250,000 (2).

Maybole's major boot manufacturers embarked on a process of vertical integration by expanding into the tanning and currying industries to provide some of their basic requirements, and also into the retail trade to dispose of their merchandise. Thus for some of their products they eventually controlled all the processes from raw hides to customer sales. The previous statements require some elaboration. All boots and shoes are produced from varying qualities of leather, and sole leather differs from upper leather. In the nineteenth century leather was tanned by vegetable agents. Scottish upper leathers were traditionally tanned in pits and the subsequent currying processes, which worked oils and fat into the leather and gave it its grain, produced a durable and flexible leather suitable for heavy and medium weight footwear. For extra heavy duty footwear a harder, drum tanned, leather which held the rivets firmly was required and this was obtained from the continent (3). Scottish boot and shoe manufacturers therefore mainly used Scottish sole leathers and a mixture of Scottish and Continental upper leathers, dependent on the weight and type of boots and shoes produced. Maybole's integrated tanneries and boot factories were engaged in this cross pattern of trading, with the flexible domestic leathers being used for producing their own medium weight footwear, which supplies the home trade and probably exported in some quantity. However, they were thrown onto importing continental hard leathers for the speciality of the district, 'Maybole Tacketties'.

'Maybole Tacketties' were heavy duty boots made on truly heroic proportions. These unyielding pedal protectors shod the unsung armies of the extractive, construction and other heavy industries and the agricultural labourers. 'Maybole Tacketties' had great studded soles and heels formed from rows of metal tacketts which provided them with their soubriquet. It was this unique product which gave rise to Maybole's sudden prosperity and, in the final analysis, contributed to its almost equally sudden demise.

Maybole's products were distributed by the local manufacturers through retail and wholesale outlets. In 1890, John Gray & Co. owned the Ladywell Tannery and Factory and in addition had 65 retail shops throughout the UK. With its 400 factory hands and an output of 5,000 pairs of boots and shoes a week the firm ranked amongst the foremost Scottish manufacturies of any description. In the same year John Gray's nephew, Thomas Aitken Gray of the Lorne Tannery and Boot Factory, had 31 retail shops, a Glasgow warehouse and employed almost 500 workers. All the Maybole boot and shoe manufacturers formed a combine 'the Maybole Shoe Shop' chain which itself had numerous branches throughout the UK and even reached out to Manitoba, Canada. Any excess stock was sold to wholesalers or other retail boot and shoe chains such as Bayne and Duckett which operated in Glasgow (4).

The market saturation of a monotype product such as 'Maybole Tacketties' presented met its ceiling in the early 1890s for a variety of reasons. On the demand side there was a gradual decline for the product as a preference for equally strong but lighter weight boots emerged, and a decline in trades where 'Tacketties' were essential footwear. On the supply side a telling factor was the opening of the Scottish Co-operative Wholesale Society's boot and shoe factory at Shieldhall in Glasgow. The Shieldhall factory opened in 1888 producing

a prodigious weekly output of 14,500 pairs of good quality cheap boots and shoes, of which a large proportion consisted of industrial and pit-boots (5). This was a massive blow to the market for Maybole's products. There was also a reluctance amongst Maybole manufacturers themselves to diversify their products to take account of the changing state of the footwear market.

The insularity of Maybole manufacturers which constrained them from installing new machinery and techniques stemmed from the fact that many firms, such as John Gray & Co., had remained in the same hands throughout their lifetime and dynamic new management had failed to appear. John Gray himself, the founder of Maybole's prosperity, died in 1895 at the ripe old age of 87. His place was taken by his younger brothers who in turn died shortly after him. Production slumped and with it the number of persons employed decreased from 500 to 325 in 1897. In 1907, following a severe rundown, the Ladywell tannery and boot factory closed with the loss of all jobs. It was twice offered for auction and failed to reach the upset price of £1,500 (6). It was eventually sold to Millars, the Glasgow tanners, who closed the boot and shoe factory and turned all production over to sole leathers at the Ladywell tannery using a reduced workforce of 45 persons. Millars continued to produce sole leathers at the Ladywell tannery until 1969.

Apart from this managerial stagnation a more spectacular failure came earlier, when T A Gray's Lorne tannery and boot factory closed in 1894. Thomas Aitken Gray was a painful example of enterprise and enthusiasm which went sadly awry for reasons of over extension and dependence on an already saturated market. He was a comparative newcomer to Maybole, arriving there in the late 1860s to work for his uncles John, James and William Gray (7). In 1875, aged 22, he borrowed extensively to set himself up in business by buying the Lorne boot and shoe factory, with a small tannery attached, from the sequestered estate of John Dick. In 1881 on the bouyant state of demand for Maybole's footwear he embarked on a furious round of expansion, extending the tannery by 95 pits and installing electric light to facilitate longer working hours in the winter periods. Two years later, in 1883, he was the second largest employer in Maybole with 283 men producing 3,000 pairs of boots a week; in the following decade he built up his own distributive network and retail chain of 31 shops. In 1893, aged 40, Thomas Aitken Gray presented the acme of Victorian business endeavour. Socially successful he was a married man with 7 children, a personal estate valued at around £36,000 (which included a house valued at £2,000). He was a member of Maybole Town Council, a Police Commissioner in 1890, and was elected as a County Councillor for the Burgh in 1893 under the newly enforced Local Government Act (Scotland) 1889 (8).

But T.A. Gray's outward prosperity was built on very shaky foundations. To maintain his position he needed continued expansion, but the demand for Maybole footwear was static if not actually declining. In addition he had taken on board an order from the Egyptian government to provide its army with boots. This meant extended credit which he could ill afford. His suppliers, already demanding payment for earlier materials refused further credit and consequently his Egyptian order began to incur late delivery penalties. He faced bankruptcy. His debts totalled almost £37,000, and this did not include his private borrowing (9). On 16th April 1894, T A Gray boarded the Glasgow to London train

and, after carefully securing editions of Tit Bits and Today (which in those days carried automatic insurances policies should they be found in the possession of a deceased person), he threw himself from the train as it crossed over Victoria Bridge. If Gray had thought that he was worth more dead than alive then he was mistaken. His sequestered estate yielded far less than its paper value, and in 1895 his greatly improved Lorne tannery and boot factory was sold to John Lees & Co. for a knock-down price of £3,500. Many of the workforce found work with Lees. If Gray had failed a decade later when the trade went into severe decline this would not have been the case. Statistics reveal that Maybole's population and prosperity declined dramatically in the first quarter of the twentieth century. In 1901 out of population of 5,470, the boot and shoe industry employed 1,645 persons, by 1924 this had fallen to a population of 4,210 of which only $12^{1}/_{2}$% or 530 persons were engaged in the industry which had brought so much prosperity to nineteenth century Maybole.

John Lees & Co. was one of the few Maybole manufacturers to ride out the sudden depression in the Maybole boot industry. They began slowly as bootmakers during the prosperous period of the 1870s enjoyed by the whole industry in Maybole. Low overhead costs certainly helped them to expand. But it was controlled expansion; from a small wooden shed, nicknamed the 'Bum-Bee' factory because of its hive-like activity, to new premises consisting of a larger wooden shed. In 1890, with a secure financial base they expanded into the purpose-built Townhead boot and shoe factory. Lees diversified from the 'Maybole Tacketty' into the production of the shepherd's 'Fell Boot' with its distinctive upturned toepiece, designed to cope with the rugged terrain associated with Scottish hill farming. They also began dressing sheepskins for rugs. Their success owed as much to the mechanical inventiveness of John Lees II as to the salesmanship of his co-partner and brother-in-law, William McKellar. Shortly after buying T.A. Gray's Lorne premises John Lees & Co. obtained a vital Admiralty contract for welted rubberised sea boots which became standard naval footwear for many years (10). Sustained by War Office orders during two world wars John Lees & Co. limped into the third quarter of the twentieth century by selling their boots, shoes and other commodities on credit terms to householders through a network of agents; the firm continued in business until a catastrophic fire gutted their Mayole premises in 1962.

As a contrast there was a similar boot and shoe industry in Kilmarnock. It contained one firm which grew to be a major provider of employment throughout the nineteenth century and which, like many of the Maybole firms, though for wildly different reasons, faced financial ruin in the last decade of the century. The firm in question was Clarks of Kilmarnock. For the last three quarters of the nineteenth century the firm built its business on exporting almost its entire production of high quality boots and shoes to Brazil. The Clark's Kilmarnock factory in Titchfield Street faced a bleak prospect when, in the closing years of the century, the Brazilian government erected protective tariff barriers which excluded manufactured goods. Clarks answered this challenge by building a factory within Brazil at Sao Paulo but this did not utilise the Titchfield Street factory's capacity. Clarks were again able to resolve this problem in 1901 by linking up with two English brothers, the Abbotts, who were setting up in the retail footwear trade. Clarks supplied the Abbots with stock, and from this

tentative partnership the fortunes of both families increased to the point where they joined forces in 1908 to found the Kilmarnock based Saxone Shoe Company.

The Clark chronicles are interesting and relevant enough to relate in some detail. However two points are worthy of note before beginning; the Clarks of Kilmarnock are not related to the Clarks of Street; until the formation of the Saxone Shoe Company each generation of the Kilmarnock firm tended to trade under a different style which had changed from Clark Bros. to Clark & Co. to A & L Clark, and finally Clark & Son.

Unlike Maybole, Kilmarnock has a long and illustrious history of skilled shoemaking. Burns certainly knew of Kilmarnock's soutars though his Ayr Soutar Johnnie is better known to posterity. Shoemaking was Kilmarnock's second major industry. At the beginning of the nineteenth century some 58 master shoemakers employed around 400 men producing a gross product total of £21,216 (11). This was exceeded only by carpet manufacture with £21,400. A government survey of 1831 revealed Kilmarnock exported boots and shoes to the value of £32,000 per annum (12). It was this facet of Kilmarnock life which drew the original George Clark to settle there in 1783 after his discharge from the army. George Clark was an efficient and industrious craftsman who together with his two sons, Thomas and James, soon joined the elite band of master shoemakers, employing outworkers to stitch together his pre-cut soles and uppers. They began business in garret premises in Kilmarnock's busy industrial Fore Street which ran by the riverside and contained the town's tanyards and textile weaving sheds. They lived on the premises, and for many years a treasured Clark family heirloom was a stout knotty stick used by the brothers to stun troublesome rats crossing their bed at nights (13). By 1825 the Clark brothers had moved to the newly opened Portland Street where they were neighbours and friends of Johnnie Walker the successful grocer turned whisky blender and exporter. The Clarks continued to increase their output to the point where it exceeded local demand and they looked for new market openings. Johnnie Walker offered them cargo space in one of his chartered ships bound for Rio De Janeiro. The quality of the boots and shoes so impressed the South American customers that they sent for more. In such a manner were the foundations of a flourishing business laid.

The South American market was not as improbably exotic as it appears at first sight. Kilmarnock had a good trade with the continent through the Ayrshire coastal ports and, as already noted, enjoyed a remarkable export trade. More historical evidence for the burgh's interest in risk ventures in or around South America is that a dozen or so prominent citizens invested £1,600 in the ill-fated Darien Scheme on the Panama Ithsmus.

From 1840 to the end of the nineteenth century successive generations of the Clark family made their home, married and raised children in Rio De Janeiro. They operated by exporting boots and bootmaking/repairing equipment from Kilmarnock sent to Rio via Royal Mail Steam Packet from Southampton. A good swift passage took 27 days from Southampton and

each consignment was advertised in Rio's Jornal do Commercio. Market intelligence from Rio dictated the manpower to employ and styles to be produced in Kilmarnock. In 1848 for instance the Clarks in Kilmarnock received a letter carried by the packet Linnet that half of the men were to be paid off because of slow Brazilian sales (14).

In Kilmarnock, Clarks used specially made Iberian lasts to produce men's fine quality boots with the narrow soles, pointed toes and high tapering heels demanded by the Brazilian trade: the soles of each pair being stamped with the legend 'Clark & Ca Escossia'. Clarks main retail outlet was in Rio's fashionable Rua Nova Do Ouvidor. But eventually Clarks had 30 Brazilian retail outlets stretching over vast distances, the most northern being at Manaos 1,000 miles up the river Amazon and the most southern at Rio Grande Do Sul. In addition to this Clarks also carried out a reasonably busy export trade with Europe (15).

Until the early 1870s most of this expansion occurred without mechanised production techniques, which emphasise the considerable reservoir of skilled workers available to Clarks in Kilmarnock. Both masters and men looked on machinery with great suspicion and when trade was brisk more hands were employed to hurry business. In 1871, during the Franco-Prussian war, fully 150 were employed inside and outside the works on hand made goods turning out about 700 pairs per week. This suggests that Clarks had war-time contracts or were filling gaps left by other continental shoemakers who were engaged in that market, and also gives some indication of the slow output rate of skilled labour working on high quality specialised products (16). Following this period Clarks began to introduce machine processes, though little is known about how extensively this was carried out. In 1878 Clarks moved into their purpose built factory in Titchfield Street with new steam powered machinery installed. Almost immediately its weekly production jumped to 2,000 pairs.

The machinery, constantly updated, consisted of steam powered sewing machines from Howe, Jones, Wheeler and Wilson, and Bradbury. Sole cutting machines came from Douglas & Co., Bristol, and Dorman and Walker, Stafford. Sole stitching machines, which in 1881 stitched one sole in 35 seconds, came from Blake and Goodyear, a firm famous for its constantly improving patents. The new factory employed around 250 people, many of them women and girls who worked the stitching machinery and carried out the dexterous processes of fitting insoles and linings, attaching elastic, fixing binding, crimping, sewing and punching eyelets.

A better picture of the firm's products and materials emerges in this period. The factory produced men's boots and shoes from high grade upper leathers supplied from firms such as Andrew Isles & Co., Edinburgh, W & J Martin, Glasgow, and oak tanned sole leather made from Horsham butts supplied by Samuel Barrow Brothers. However, much of their leather came from America, reflecting the strong challenge to domestic leathers coming from America in the last quarter of the century. The factory also produced women's high fashion footwear and slippers made from selected coloured kids. The vast bulk of this extremely varied output still went to satisfy the Brazilian trade but

European and home markets were catered for.

However varied the products, Clarks could not offer markets for the Titchfield Street capacity when the Brazilian government erected tarrifs against manufactured goods during the 1890s. For George Clark, the fourth generation head of the firm, business dislocation coincided with a period of family bereavement when his father and elder brother died within a year of each other in 1898. George Clark was born in Rio and knew the Brazilian markets and way of life. He formed a company, the Companhia Calcado Clark, and opened a large shoe factory in Sao Paulo, the largest of its kind in Brazil. An outlet for the Titchfield Street capacity was found by a chance remark made by George Clark to one of his leather suppliers, John Cable, whose son-in-law George Abbott was straining to enter the retail shoe market. George Abbott and his brother Frank worked for Manfields, but promotion within the firm stayed within family hands and this blocked their progress. In 1901 George Clark and his brother William joined a loose partnership with the Abbott brothers who opened their first shop in Liverpool, trading under the style of F & G Abbott Ltd. The Clarks provided men's shoes from Titchfield Street and the Abbotts, using their knowledge of the retail trade, bought in women's footwear, mainly from America where they eventually obtained the rights of the "Sorosis" brand. In 1908 both businesses combined to form the Saxone Shoe Company which went from strength to strength, benefitting from the dual expertise gained from both family interests (17).

The Kilmarnock factory kept to its production of men's quality footwear, transferring from native born Brazilian and expatriate British tastes to its new markets within the U.K. Clarks now caught the market offered by a growing section of the business community, the office commuter involved in the professional and service sectors of the economy. The demands were similar, quality and style, only the location altered. The major change was from the extended supply lines involved in the Brazilian trade to the immediate UK markets. Another departure was the increased sports shoe market for both men and women, particularly golf; it is significant that women's shoes were not made at Kilmarnock until the 1930s when the brand of women's sports footwear, 'Swaggers', were introduced.

Despite major reorganisation in the 1930s and in the post-war period, Saxone's base remained in Kilmarnock even though its Ayrshire base hardly matched its new international fashion-house image introduced by dynamic management techniques. American and Italian styling arrived in Kilmarnock to be produced by those self-same skills which attracted the first George Clark to settle there in 1783. And the question why Maybole failed and Kilmarnock flourished really answers itself. Traditional skills, innovation and a willingness to undertake risky enterprises were the major factors, 'though they do not provide all the answers. Saxone's success did in reality divorce it from local control when the British Shoe Corporation completed a successful takeover in 1961 (18). Though Saxone still prospers in 1985 it does so as part of the British Shoe Corporation and its headquarters are no longer in Kilmarnock.

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FOOTNOTES

1. R.A. Church, 'The Shoe and Leather Industries', in R.A. Church (ed.), The Dynamics of Victorian Business (London, 1980), pp. 199-211

2. James T. Gray, Maybole - Carrick's Capital (Maybole, 1972)

3. 'Report on the Boot and Shoe Industry and the relative Leather Industry in Scotland' Scottish Economic Committee Bulletin (Edinburgh, 1938).

4. J.M. Reid, The First 100 Years (Glasgow, 1958)

5. J.A. Flanagan, Wholesale Co-operative in Scotland - the Fruits of 50 years efforts 1868-1918, (Glasgow, 1920)

6. Ayr Advertiser, 1894-1909, passim

7. Scottish Leather Trader, 3/5/1894

8. Ayr Advertiser, 19/4/1894 (obituary of T.A. Gray)

9. Scottish Record Office, CS 318/42/92, 318/44/94, 318/44/111; sequestration papers of T A Gray

10. Shoe and Leather Trader, 1900; R. Lawson, Maybole Past and Present, (Maybole, 1885)

11. Sir John Sinclair, Statistical Account of Scotland (Edinburgh, 1792 vol. 2, p. 88

12. Royal Commission on Municipal Corporations in Scotland, PP. 1836 (32) xxiii, Local Report of the Commissioners, pt. 2, pp. 132-34

13. George Clark, 'Life on a Shoestring', in the Clark Family Memorabilia (in possession of the Clark Family)

14. Clark Family Memorabilia

15. Dick Institute, Kilmarnock, Folder 123: Saxone Lilley & Skinner material

16. Scottish Leather Trader, passim

17. Dick Institute, Folder 123

18. Sunday Times, 7/1/1962

Additional Sources:

Archibald McKay, History of Kilmarnock (Kilmarnock, 1909), p. 337

St. Marnock Magazine, 1, 3 (1899), p. 2

'George Clark Snr.', 'George Clark', 'John Abbott', 'John Lees', 'Thomas A. Gray', biographical entries in: A. Slaven & S. Checkland (eds.), Dictionary of Scottish Business Biography, (2 vols, Aberdeen, forthcoming), vol. 1.

THE PROSPECTS FOR WORKERS' CO-OPERATIVES:LESSONS FROM SCOTLAND'S CO-OPERATIVES PAST AND PRESENT

by

Frank Martin

1. Introduction

In recent times there has been a dramatic increase in the rate of formation of workers' co-operatives. There are 910 in Britain at the present time (1) and in the twelve month period to June 1984 approximately 220 new co-operatives were registered; although not all of them trading. This interest has been particularly strong in Scotland, mainly as a reaction to industrial redundancy, but partly out of dissatisfaction with conventional work structures. In 1977 there were only 5 workers' co-operatives in Scotland. By 1983 there were just over 40, employing approximately 350 people with a combined turnover in excess of £4m (2). In terms of numbers employed they are not large. Far too often 300 people can be made redundant by the closure of one factory.

What is important is the revival of the concept of workers' co-operatives and the hopes of the people within them that they will offer not only paid employment, but a chance to take part, to some extent, in the process of 'self realisation', thereby having the means of controlling their own working lives and achieving a dignity that selling their labour to an employer can never realise. Co-operatives tend to be very small businesses, often less than 10 members and in most cases no more than thirty. In general, the survival rate for small businesses is very poor with 75% failing in the first year; co-operatives on the other hand have much lower mortality rates.

Exactly why worker co-operatives succeed or fail as businesses is an important area of research. In his recent paper (3), Chris Cornforth outlined a framework for analysis based on the development of a typology of worker co-operatives. This has an historical underpinning, linked to recent research on new wave co-operatives established since the 1960s (4). In line with Wilson (5), Cornforth (6) details survival as the main criterion for success. In the present economic climate it is difficult to fairly apportion any other measure to co-operatives. Other measures do of course exist. Many co-operatives are formed with very distinct social objectives while others may measure success through levels of membership. In the near future it may be possible to detail the success of worker co-operatives formed in the late 1970s in terms of both their financial and administrative support for new co-operatives. However, at this stage, survival rates remain the basis for judgement.

Currently, in Scotland, there are a large number of co-operatives. For the members they demand a commitment far in excess of that required in a 'normal' business. If that commitment is not to be lost these

enterprises need to be supported. In devising that programme of support the lessons of history can play a part. Almost exactly 100 years ago in Scotland a number of co-operative enterprises, known as producer co-operatives, were established. The 19th century co-operatives have been designated producer co-operatives because they were set up solely to manufacture products rather than provide services, and in almost all cases the co-operatives were not solely owned by the workforce. They failed after a short time because of the lack of capital and managerial skills, and because the workers were not the owners and therefore had even less control over their own destiny.

This article is therefore divided into 7 main sections. Section 2 describes the historical development of the co-operative movement in Scotland. Section 3 outlines a typology of workers' co-operatives. Section 4 presents the results of the research on the 19th century producer co-operatives. Section 5 details the recent Scottish experience and finally, sections 6 and 7 seek to draw together the two periods and present some conclusions.

2. Scottish Worker Co-operation - A History

The growth of the United Kingdom worker co-operative movement in the 19th century has been well documented, in particular the efforts of the Christian Socialists and the Rochdale Pioneers to promote co-operation (7). Also prominent at this time were a number of people who had committed themselves to the ideas of Robert Owen. It was Owen who had set up the great social experiment at New Lanark, in the early half of the century, in an attempt to put his social theory into action. The economic and social circumstances of the time had created a great deal of popular discontent, which expressed itself in riots, machine wrecking and demonstrations. The method by which production was organised was felt by Owen to be by its very nature unfair, leading to exploitation and misery, and ultimately to the final catastrophe in which the working class would rise up in blind fury and destroy everything.

The formation and development of co-operative societies had been hampered by the lack of suitable legislation. A well organised pressure group led by Christian Socialists succeeded in having a series of Industrial and Provident Societies Acts (1852 and 1862), and an Amending Act (1867), passed through Parliament. Essentially these Acts made it possible to establish a federation of societies by enabling any individual society to hold shares in another. As limited liability was given to shareholders, the legal difficulties of raising and investing co-operative capital were largely removed. The Amending Act of 1867 removed the limit to the number of shares a society could hold in another. The passing of these Acts was felt to be a great step forward for the co-operative movement and the vehicle by which the necessary capital for the establishment of co-operative societies could be raised. However, as we shall see, the holding of shares in an individual society by other societies could have, and did have, a detrimental effect.

From these Acts sprang the Co-operative Wholesale Societies of England and Scotland. In August 1863, the rules of the North of England Co-

operative Wholesale Society were submitted to the Registrar. The movement in Scotland had experienced a similar pattern to that of England, decline in the thirties and resurgence in the fifties and sixties. Prominent amongst this Scottish development was an enthusiastic Owenite known throughout Great Britain: Alexander Campbell had been advocating co-operative principles since 1818. In 1822 a co-operative baking society was established in Glasgow for which he advocated division of profits according to purchase. Throughout the intervening period, Campbell advocated the division of profits through purchases within a Co-operative Society. His aim was to raise sufficient funds through retailing to buy land for Owenite communities and invest in producer co-operatives. At a conference held in Glasgow in April 1864 (8), Campbell vigorously promoted the idea of a Scottish Co-operative Wholesale Society. After a number of conferences, the Scottish Co-operative Wholesale Society was registered and commenced business on 8 September 1868. The formation of the SCWS was an important milestone in the 19th century Scottish producer co-operative movement. At this time another strong individual emerged to play his part in the formation of both the SCWS and the producer co-operatives. James Borrowman had been active in the Co-operative movement for some time and was a firm believer in producer co-operation and its role as the 'true elevator of the working classes'. When the SCWS was formed in 1868 Borrowman was appointed its first general manager and cashier, and he remained in that position until 1875. During that time he played an influential role in the promotion of both the SCWS and producer co-operatives. Indeed, he appears to have been involved in practically every major event (9). However, his stewardship of the SCWS was a controversial one, leading to his forced resignation as manager in 1875.

With the SCWS established, it is true to say that co-operation 'was in the air' throughout Scotland where individuals fired by the co-operative ideal were organising meetings with the aim of establishing producer co-operatives. As in the UK experience (10) the records show that the number of producer co-operatives formed in Scotland was modest, in comparison to the number of retail societies (11). Between 1864 and 1920 there were approximately 490 registrations as an Industrial and Provident Society (the vast bulk of these coming between 1864 and 1890). Of these only 15 or so could be considered as producer co-operatives, in that the society's sole activity was to manufacture items for resale outwith the co-operative. The producer co-operatives formed during this period had in almost every case the same composition in terms of membership, share structure and voting rights, distribution of profit and qualification for election as an officer of the society. This form of co-operative structure differs in great detail from that presently recommended by both ICOM (Industrial Common Ownership Movement) and SCDC (Scottish Co-operatives Development Committee). Essentially their model rules are based around the following five principles: (i) ownership and control is confined to those working within the co-operative; (ii) all permanent workers are members; (iii) no outside shareholding; (iv) one member one vote; (v) no selling of the co-operative for personal gain.

The 19th century producer co-operatives were founded on a very different set of principles. Their legal format was that of the Industrial and Provident Societies Acts of 1867 and 1876. Described below are the four main points of interest.

Firstly, share holding: because it was possible for one society to hold shares in another, provided they were incorporated under the Industrial and Provident Acts, most of the producer co-operatives had a very wide membership far outnumbering the workforce. The most common share structure involved shares priced at £1.00 with individual members having to hold a minimum of one share. Societies who wished to join had to apply for at least 5 shares per 100 members of their own company, and a society with more than 100 shares could take up additional blocks of 200 shares, which gave them the entitlement to one more vote per each additional 200 shares. Individuals were limited to 100 shares and in most cases the shares were transferable but not withdrawable. This may have been thought to be a safeguard which in fact, as we shall see, turned out to be nothing of the kind.

Secondly, voting rights: the principle of one member one vote applied. However, as indicated, societies with more than 100 shares subscribed could have additional votes. In practice, however, many societies failed to take up their full share allocation based on their own membership. Again, in most cses, the employees of the co-operative did not have to be members, one of the exceptions to this being the Scottish Co-operative Ironworks Company registered on 5 March 1873. Here all the employees had to be shareholders. More typical of the co-operatives of the time was the Oak Mill Company Limited registered on 13 December 1872. At its peak in 1878, this society had 370 members. Of these, some 16 were societies, with 10 societies having one vote each and 6 societies holding sufficient shares to have 2 votes each. From the records of the society detailing wage bills for 1877 and 1878 and using the statistics given in Bowley (12), there could have only been approximately 25 paid employees in the Oak Mill labour force. With one vote each, if that, they could have had little in the way of voting power. This situation was typical of the voting pattern of almost all of the Scottish producer co-operatives.

Thirdly, the officers of the society: in most societies a committee of management was formed from the members. Usually this meant a president, treasurer, secretary and 5 or 6 committee men. This work could be paid and the committee was often made up of local men of 'some substance or weight' in the community. In many of the rule books, servants of the society, i.e. employees, could not be officers of the society. Their role was to receive instructions from, and report to, the committee. Again, this was the case in the Oak Mill.

Fourthly, distribution of profit: normally, after providing for management expenses, the co-operatives paid 5% interest on loan and share capital. The remaining net profit was divided equally between capital and labour at so much per pound on share capital and a similar amount per pound on wages received by the workers, less $2\frac{1}{2}\%$ of sales retained as reserves. If the employees of a society were not shareholders by compulsion, or by right, then they may not have benefitted from any form of profit distribution, but were simply wage earners in the pay of the society.

From the position as outlined above, it is clear that the 19th century Scottish producer co-operatives were constituted around a very

different set of principles from those developed by ICOM and SCDC in that: (i) ownership and control was not confined to those working within the co-operative; (ii) permanent workers were not necessarily members; (iii) shareholding was widely held outwith the co-operative; (iv) although operating one member one vote, permanent workers were very much a minority voting group; (v) the co-operative could be easily sold or more likely dissolved on a vote by the members.

The differences outlined above were to play an important part in the progress, or lack of it, of the producer co-operatives analysed here.

3. A Typology of Workers Co-operatives

As indicated in Cornforth's paper (13) the new worker co-operatives differ according to the objectives they pursue based on their organisational characteristics and economic circumstances. The typology presented distinguishes 5 types of workers' co-operatives. There are firstly endowed co-operatives; firms that have been given away by their original owners to the employees. Secondly, there are worker buy-out co-operatives, where the workforce are interested in buying out the original owners who are selling for reasons other than imminent collapse.

Defensive Co-operatives are a third type. These are co-operatives that are formed by the employees in order to preserve at least some of the jobs on the closure of the business. The co-operative is usually seen as a last resort to save jobs when all other forms of action have failed. As the threatened closure is usually due to the failure of the business, these co-operatives invariably inherit a difficult commercial situation. In this type of co-perative, the workforce usually purchase all or part of the assets of the business for a nominal sum, or on deferred terms.

Fourthly, there are alternative co-operatives, formed usually by people who are dissatisfied by conventional work structures and are seeking to place political, democratic, or social needs above profit. Common examples are whole-food shops, radical bookshops, magazines and theatre groups. In addition, a number of more professionally orientated groups have developed such as architects, advertising agencies and computer software businesses. Lastley (and fifthly) there are job creation co-operatives formed in order to create new jobs. Often stimulated by Government money they aim to provide work for young people. Other co-operatives of this type are the 'Instant Muscle' co-operatives.

Since its inception in 1977, the experience of the Scottish Co-operatives Development Committee (SCDC) is that the new style workers' co-operatives have in the main been either defensive or alternative co-operatives. The 19th century Scottish producer co-operatives came from a very different set of circumstances.

4. Research on Scottish Producer Co-operatives formed in the 19th Century

Opposition to the formation of producer co-operatives came from many quarters. Beatrice Webb (formerly Beatrice Potter) was one of the most prominent advocates in arguing that producer co-operatives were not a viable form of organisation (14). They were both ideologically unsound and likely to fail as businesses. Her research was based on the many failures experienced amongst producer co-operatives in the latter half of the 19th century. An article in the CWS Annual and Diary for 1883 (15) details the failures in England and Wales of 224 productive societies between 1850 and 1880. The research into the formation of Scottish producer co-operatives, for the purposes of this paper, also falls within this time frame and in particular the period 1864-74, when a large number (by Scottish standards) of producer co-operatives were formed. What then were the reasons behind the establishment of these co-operatives?

The period under review had all the ingredients necessary for the development of producer co-operation. Throughout Scotland a number of retail societies had been formed on co-operative principles and had been successful. Allied to this was the successful formation of the SCWS in 1868 as a possible wholesale outlet for the produce of these co-operatives. Prior to, and on the back of this success, James Borrowman (by now general manager of the SCWS) and Alexander Campbell had been speaking throughout Scotland in favour of producer co-operation. Indeed Borrowman regularly preached producer co-operation to meetings of the Tillicoultry Retail Society. The Co-operative News of the time quotes Borrowman as speaking to 'large and enthusiastic gatherings'.

One of the main bones of contention at the time was the question of labour and wages. A number of strikes had taken place in engineering aimed at reducing the length of the working week (16). In addition, many of the advocates of co-operation saw this as a device to reduce the monopoly power of employers either to hire and fire their employees, or to dictate the level of wages paid to them. It was felt that only by employing themselves could the workers truly raise their standard of living by gaining a fair share of the fruits of their labour. It should, however, be noted that the co-operatives under review did not start as a result of severe unemployment. There were no defensive co-operatives as such amongst these 19th century co-operatives. Indeed, prior to 1874 and afterwards, large scale unemployment was not a major factor even during the period 1873-96 known as the Great Depression (17).

The records indicate that between 1867 and 1873, some 11 or so producer co-operatives were formed (18). A detailed breakdown of 9 of these co-operatives is shown in Figure 1:

FIGURE 1

Scottish Producer Co-operatives registered between 1867-1873

Name	Trading Activities	Registered	Dissolved	Share & Loan Capital
Oak Mill Co Ltd	Textile manufacture	1872	1880	£8,554 (1875)
Scottish Co-operative Ironworks	Engineering	1873	1874	£7,233 (1873)
Caithness Pavement Co Ltd	Pavement manufacturers	1872	1884	£2,473 (1881)
Glasgow Cooperage Co Ltd	Cooper Trade	1867	1879	£1,416 (1875)
Hawick Hosiery Co Ltd	Hosiery Trade	1873	1880	£2,768 (1875)
Fullarton Co-operative Iron Co	Engineering	1873	1881	n/a
Dunfermline Co-operative Manufacturing Society	Textiles	1872	1896	£ 953 (1876)
Scottish Industrial Brick-making Co Ltd	Brick making and building	1870	1878	n/a
Bo'ness Industrial Pottery Co Ltd	Manufacturing potters	1872	1874	n/a

(Source: SRO, FS 5, Records of the Registrar of Industrial and Provident Societies before 1920)

It is difficult to be precise about the numbers of people employed in these societies. However, although the records fail to give any clear information as to numbers information from accounts concerning wage bills can offer some guidance. Again, using the statistics in Bowley (19), the labour force of the Pavement Company in 1880 numbered approximately 25, while in 1877 the Cooperage employed about 20 people. These figures however are by no means certain.

In terms of the capital base of the co-operatives, Figure 1 indicates the combined share and loan capital position at a given moment in time. Due to the nature of the capital structure of the co-operatives their

capital base was continually altering, particularly with respect to share capital. However the figures do provide a useful indication of the backing behind each co-operative. We can now look in turn at the specific reasons for the establishment of these co-operatives.

The Oak Mill Company Limited was established on the basis that with the existence of the wholesale society and a number of retail societies, sympathetic outlets now existed for the products of a co-operative textile mill. The Co-operative News of 15 June 1872 reported on the first general meeting of the society; 'ultimately it was carried that the place of manufacture of the society will be Tillicoultry and that the style of goods made be such as co-operative societies are likely to purchase'. The project was an ambitious one involving the purchase of up to 7.5 acres of land and the building from scratch of a 3 storey mill equipped with machinery from Platt Brothers of Oldham. Between 1872 and 1880 the sum of £10,539 was raised through a mixture of share and loan capital amongst the 3709 or so members, of whom 16 were other societies.

The establishment of the Scottish Co-operative Ironworks came in part from a national engineering strike over shorter hours. When it was resolved in 1872, many of the leading figures on the Clyde were discharged from their jobs. The Co-operative offered them new hope. A similar venture in Newcastle, begun in 1871, the Ouseburn Co-operative Engine Works, also gave encouragement to the idea as did James Borrowman. 'In support of the scheme, a series of meetings were held in Glasgow and Motherwell, addressed chiefly by Mr Borrowman' (20). The Fullarton Co-operative Iron Company limited was set up at this time for similar reasons and both Co-operatives had established yards in Irvine, Ayrshire by 1873. A combination of the above was responsible for the formation of the Hawick Hosiery Company Limited. It started as a means of putting an end to a strike and to supply both retail and wholesale co-operative outlets. The Dunfermline Co-operative Manufacturing Society was established on the collapse of a trade union, whilst the Caithness Pavement (21) and Glasgow Cooperage co-operatives developed out of an attempt by the workers to break the monopoly power of local employers (22). The latter was also the reason for the establishment of the Scottish Industrial Brickmaking Company Limited and for the Bo'ness Industrial Pottery Company Limited.

It is worthwhile returning at this stage to the extent of the involvement of James Borrowman in these co-operatives. As indicated previously, he was the (first) general manager and cashier of the SCWS between 1868 and 1875. During this period and a short time afterwards, Borrowman was the secretary of the Oak Mill Society, as well as being chairman, and then secretary of the Scottish Ironworks. He was in turn an officer, secretary, and later manager of the Cooperage and chairman of the Bo'ness Pottery Company Limited. Making the case for the success of the Oak Mill the Co-operative News of 4 November 1871 wrote, (page 101): 'we had doubts about the Wholesale Society but it succeeded, we have less doubts about the Oak Mill. The name of our good and tried friend Mr Borrowman on the prospectus is a guarantee that it is no mere scheme of adventure'. The situation with respect to the Ironworks was very similar. In order to raise the necessary share capital it was felt necessary to issue a prospectus backed by 'men of considerable weight', one of whom was Borrowman (23). The prospectus

indicates that amongst the directors of the Scottish Ironworks were Provost Bennett of Dumbarton (who was chairman), along with Bailie Buchanan and Councillor Cochrane. The co-operative societies of the time were urged by these men, and others in the community, to become shareholders. Unfortunately very few of the co-operatives traded for any length of time, the gap between registration and dissolution often hiding periods of inactivity prior to, or after, the cessation of trading. The following section looks at the reasons for failure of these co-operatives.

5. Reasons for Failure

The timing of the formation of the producer co-operatives coincided with a period in which wages were fluctuating in line with wholesale and retail prices. The years 1870-73 were peak years for the economy. The terms of trade had moved in Britain's favour, raising living standard. In industry, prices for industrial staples like iron and coal had risen as a result of heavy investment in building railways and other public utilities. Unemployment statistics, such as they were, showed it to be around 2% to 3%, the high average levels of unemployment, $7\frac{1}{2}$% and upwards, arise from events after 1879 (24). The co-operatives started therefore in a period of optimism. However, the trade statistics show deteriorating conditions (Figure 2).

FIGURE 2

Trend in money wages and retail prices during the period 1860-84. (1914 = 100)

	Money Wages	Retail Prices
1860-64	58	114
1865-69	66	114
1870-74	80	116
1875-79	77	107
1880-84	72	102

(Source: A L Bowley, Wages and Income in the United Kingdom since 1860 (Cambridge, 1937), pp. 34, 50)

It is clear from the figures presented that at the time of the formation of the producer co-operatives trading conditions had been favourable. By 1874 the corner had turned and many were faced with falling prices and difficult trading conditions. In textiles the wholesale price index fell by 15% in the five year period after 1874, while coal and metal prices fell in the same period by 33% (25). Further evidence of the rapid fall-off in performance by the UK economy

around the period 1873-75 can be seen in an analysis of home investment behaviour. Indicators such as gross home investment, industrial profits, gross national product and the bank rate all show a marked deterioration at this time, not returning to 1872-73 levels until 1888-90 (26).

The pattern of early 1870's boom, followed by a slump between 1873-82, is also evident in connection with the early Scottish limited companies (27). The figures researched by Payne indicate that in 1869 there were 19 such companies. By 1872 this figure had grown to 85, only to fall to 48 by 1875, exactly the figure for 1871. In turn, the average life of these Scottish companies was affected. In 1869 their life expectancy was 27 years. By 1876 this had fallen to 14 years.

In the early work carried out by Beatrice Potter (28) the failure of producer co-operatives was put down to three factors: 'want of capital, want of custom and absence of administrative discipline'. Later writings by the Webbs tended to place the blame on organisational and ideological deficiencies (29). Thornley (30) concurs with the early Potter analysis adding two more factors: firstly, a top down approach to development: the ideals of worker co-operation were taken up by philanthropic members of the middle class concerned about the evils of capitalism. These people formed the leadership of the movement and in their zeal attempted to establish worker co-operatives from above. These initiatives were often disastrous as the workers did not necessarily share the same commitment. Secondly, lack of political support: a major weakness of the producer co-operative movement was its failure to gain the political backing of the rest of the labour movement and therefore its resources.

Research into the Scottish producer co-operatives supports, in part, the reasons listed above. However, it would appear that many of the co-operatives were affected by a combination of factors rather than any particular one, namely: (i) lack of capital; (ii) poor conditions of trade; (iii) type and quality of items produced; (iv) the committee structure of the co-operatives; (v) external opposition; (vi) the over-ambitious nature of the schemes; (vii) concern within the co-operative movement as to the distribution of profit.

Prior to the establishment of the Oak Mill, a letter in the Co-operative News of 1871 signed 'Oatmeal' warned the promoters to be cautious, and pointed out other industries whose produce could be taken up by the movement, while the produce of the Oak Mill venture would largely have to be sold outside. The editor's note to the writer shows no sympathy with this view and strongly advocates pressing ahead with the proposed mill. The Oak Mill was an ambitious scheme. It was three years into its construction before the first machinery was installed and in 1875 only 2 of the 3 floors had machinery installed. At the half yearly meeting of the society, held in July 1875, one of the delegates expressed regret that the building operations had commenced without having the necessary capital for carrying on the business of the society, which he held would be impossible with the limited machinery at present being laid down; at least another set of spinning machines was necessary to ensure a return on the capital invested.

Each delegate was to urge his respective society to invest more funds. The Royal Bank of Scotland had contributed £4,000 (the vast bulk of the loan capital), while the societies and individual members had contributed approximately the same figure in share capital. The need for capital was acute. However, it was clear by 1879 that two other factors were playing a major part: the state of trade and the type and quality of the goods being produced. In 1879 the directors reported that 'owing to the state of trade only 5% on loan capital would be paid'. This meant nothing for the shareholders. In addition the SCWS was dissatisfied with the management and output of the mill. A special committee recommended in July 1880 that 'we get out of this matter as there seemed to be no-one at the Oak Mill qualified to make proper purchases of wool for yarn spinning'. The SCWS had tried to help by funding raw material purchases but could do little with the output of the mill. The Oak Mill Society at Tillicoultry, which had begun with seemingly well founded hopes of success, was wound up in 1880. 'The want of sufficient capital had much to do with this disaster, which involved many individuals and societies in considerable loss' (31).

A combination of poor trading conditions, lack of funds, and products stocked by the SCWS which failed to sell, also contributed to the collapse of the Hawick Hosiery society in the same year (32).

The lack of capital as a result of an over ambitious scheme, coupled with poor trading conditions and a product which could not be purchased by the societies, was at the root of the problems of very many of the co-operatives including the Scottish Co-operative Ironworks, and to a lesser extent the Fullarton Co-operative Iron Company. In addition to this, the Ironworks, because it was founded in part by engineers sacked as a result of their involvement in the campaign for shorter hours, had another difficulty. At the first general meeting of the Ironworks held in 1872, the chairman, Provost Bennet of Dumbarton, commented 'the scheme has been received indifferently amongst the engineers in Glasgow and the West of Scotland, only 1100 shares had been taken up' (quoted in the Co-operative News of July 13th, 1872). The total of workers employed by the Ironworks was 250, spread over two yards - a yard at Irvine for building new ships and an engine works at St. Rollox. To attempt to set up a major new shipping business on the Clyde was an ambitious venture, particularly given that the capital raised to start the business amounted to no more than £6,000. The whole venture was described by Flanagan as 'almost incredible' (33). James Borrowman was at this time secretary of the Ironworks and deeply committed to its success. In his position as cashier of the SCWS, he advanced, without the knowledge of the committee, the sum of £9,000 to the Ironworks. The official position of the SCWS was quite clear. At the Society's sixteenth quarterly meeting held on 28th September, 1872, the minutes record the passing of the following motion - 'that while we deeply sympathise with the objects of the Scottish Co-operative Ironworks owing to the funds required in the erection of our own Warehouse we cannot in the meantime comply with their request to take up shares in the said company'. When the Ironworks eventually collapsed it owed £10,427 to the SCWS, a sum representing more than the entire amount of the subscribed capital of the Wholesale. It took till 1879 for the SCWS to recover from this loss.

The Caithness Pavement and Glasgow Cooperage Societies, formed in part to break local labour monopolies, suffered from the combination of opposition from local businesses, lack of capital and poor trading conditions. In the end year report of 1877 the committee of the Cooperage outlined the problem: 'we regret that the present prospects of trade do not as yet indicate a return to better times. Owing to long continued dullness, competition is so keen that prices are reduced to the lowest point, the margin being barely sufficient to cover working expenses'. This analysis is further reinforced by Maxwell (34) who concluded 'their business was one that the movement could not assist much as regards trade, the greater portion of which was done with outside firms. They had little sympathy from their customers in their co-operative methods, and they had too little capital to meet any reverse in trade'.

In the pages of the Co-operative News and in the Co-operative Wholesale Annuals of the period another reason for failure was discussed. In 1883 the CWS Annual argued that since the originators of producer co-operatives did not propose to share the profits with the customers they therefore failed to get co-operative stores to buy from them and find them capital (35).

This view was challenged by E O Greening in the Co-operative News of June 1883 (36). His research, amongst the 224 producer co-operatives which failed in England and Wales during the period 1850-80, indicated that 75% of societies offered everything to capital, and of the 44 which divided profits with customers, less than half offered anything to the workforce. Therefore the workforce as originators of the co-operative did not retain, to any great extent, the profits of the business.

In Scotland, as indicated in the various co-operative rule books, it would appear that most of the producer co-operatives offered a division of the profits between labour and capital but not with customers. This, however, did not prevent other Scottish co-operative societies from investing in them. The problem was that few other groups in Scotland were prepared to do so. What is obvious from the records of the societies is that the committee members on the boards of the producer co-operatives represented in part either their own or their individual societies interests. Memberships of the Scottish producer co-operatives often ran into hundreds, the workforce were counted in their tens. The large losses incurred by certain co-operatives meant that the 'men of weight from the community' with votes on the boards of producer societies were keen to protect the interests of their societies. When the situation became difficult, societies holding transferable only shares, with no-one willing to buy them, opted for dissolution as the only way out and the chance thereby to sell the assets of the business to recoup any losses. The domination of these boards by other societies could not have given the workforce a great deal of control within the co-operative and therefore their degree of commitment must have been affected.

6. Research on New Scottish Worker Co-operatives

The development of the new Scottish workers' co-operative movement is due in no small way to the efforts of the Scottish Co-operatives Development Committee (SCDC). Formed in 1977, the SCDC is the only Co-operative Development Agency in Scotland and is now backed (by means of staff funding) by a number of public bodies within Scotland, including Strathclyde Regional Council and the Scottish Development Agency. In terms of the typology of co-operatives discussed in Section 3, the Scottish Co-operatives have either been defensive or alternative co-operatives. Examples of defensive co-operatives have been; Randolph Leisurewear, Beith Woodcraft, Craigton Bakery, Grange Carpets and Inchinnan Engineering. The development of alternative co-operatives has been similar to that of the rest of the United Kingdom with wholefood shops, printers, radical bookshops plus a small number of professionally oriented groups.

In his recent paper Wilson (37) examined the problems faced by new co-operatives. Many of the problems identified are those which the Scottish co-operatives face and in particular the defensive co-operatives. These are: (i) obtaining finance; (ii) finding and keeping sales outlets; (iii) finding and keeping appropriate skills; (iv) maintaining and developing inter-personal relationships particularly in a business, which by its very origins, may be constantly going from one crisis period to another. SCDC assists co-operatives by providing feasibility studies, interim managerial support and assistance in arranging external loans. Of the five defensive co-operatives listed, two have recently closed, Grange Carpets and Inchinnan Engineering.

Grange Carpets had been a long established independent company. The factory at Monifieth produced Axminster carpets and through a takeover by another company became part of Reed International. Due to changing market conditions a decision was taken to rationalise carpet manufacturing within the group and this meant the closure of the Axminster factory with the loss of 40 jobs. The feasibility study conducted by SCDC indicated that Grange Carpets could still have a future as a small specialist producer of Axminsters both for the home and export markets. The co-operative was launched on 5 October 1981, five months after the news of closure had been delivered. The capitalisation of the business was achieved by each of the co-operators providing a £1,000 loan, with a matching overdraft from the Co-operative Bank. In addition, the Industrial and Common Ownership Fund (ICOF) provided additional loan financing of £7,500. The parent company agreed to lease the factory along with its equipment for a rental figure of £1 in the first year. A new appointment was made in that an individual was hired on a full time basis to provide the necessary business and marketing skills which had been identified as missing. After a promising first year the Co-operative suffered the loss of its major customer. It was the subjct of a takeover by another company which had other sources for its Axminster requirements. This caused an immediate cash flow crisis within Grange. The hiring of the new marketing expertise had not been a success and SCDC took on a greater role in trying to establish new sales outlets. Despite strenuous efforts Grange Carpets closed in the second quarter of 1984. The combination of a very difficult market for its products, the lack

of the necessary marketing skills and a shortage of working capital, had all contributed to a situation which was no longer tenable.

Inchinnan Engineering commenced operations in January 1982. This engineering co-operative was formed in the machine shop building of the Dunlop 'India' Tyre factory at Inchinnan which had closed at the end of 1981 with the loss of several hundred jobs. Once again, the parent company provided a large measure of assistance to the new co-operative. Dunlop indicated that they would provide the machine shop buildling free of rent and rates for a year, and at a subsidised level for a further three years. In addition, Dunlop guaranteed work for the co-operative for its first six months. One of the co-operative's main activities was to be the refurbishment of tyre moulds. Demand for tyres, in particular cross-ply tyres, was poor and it became obvious that the co-operative would need to widen its product base once the six months period was over. However, despite strenuous efforts by the workforce and SCDC, the co-operative could not obtain sufficient work in the depressed engineering sub-contract market. Internal strains also surfaced within the co-operative as it became obvious that the level of orders would not sustain the labour force. At this stage, the pressure on the committee members was intense and in attempting to save as many jobs as possible, the cash cushion built up by the co-operative was severely reduced. Despite reducing the workforce from 44 to 35 and then to 15, the co-operative ceased trading towards the latter part of 1983.

The situation at Randolph Leisurewear, formed in February 1981, and now employing over 35 people, is more encouraging. Producing a wide range of protective clothing, Randolph was a satellite cut, make and trim facility which the parent company felt had no future in a highly competitive market. Again, the combination of attractive terms from the parent company and a package of funds from the co-operators, ICOF, the Co-operative Bank and Fife Regional Council, enabled the co-operative to commence trading. As in the other co-operatives, putting together such a package was not easy and has meant many sacrifices on the part of the co-operators. However, the mix of a highly skilled workforce, the right kind of plant and equipment, a production manager who stayed with the co-operative, and a sales manager hired externally, has to this point proved the parent company wrong. Beith Woodcraft, formed in 1983, with a workforce of eight people, has this combination of assets. The marketing and sales experience was initially provided by a development officer, seconded from SCDC, who has since joined the co-operative on a full time basis.

In order to have any chance of survival defensive co-operatives need such a combination of factors and often it might not be enough. The under-capitalisation of the business, when combined with trying to establish a presence in a market which has proved too difficult for the previous owners, is a very difficult set of obstacles to overcome.

In Ashton's paper (38) the survival rate of alternative co-operatives as identified as generally very good. As indicated, this is probably due to a mixture of high commitment, low wages, and the nature of the businesses concerned. Recently a few of the Scottish alternative co-operatives have closed. The continued living on a financial knife-edge

taking its toll on the membership, the operation of the co-operative and on the bank's willingness to continue overdraft facilities.

7. Conclusions

This article has sought to identify a few of the factors affecting the success or failure of a particular grouping of workers' co-operatives. Almost exactly a century apart, they were apparently formed for a very different set of reasons, yet it can be argued that in each case the time was ripe for their formation. In the late 1860s and early 1870s co-operation was 'in the air'. Metings were taking place all over Scotland many of them aimed at the foundation of the Wholesale Society. At the same time, the principal architect behind the Wholesale, James Borrowman, was also preaching producer co-operation as the true elevator of the working classes. The Wholesale was duly established and quickly became successful, thereby encouraging others to attempt to emulate this success. Carried along by the spirit of the times too many co-operatives were formed attempting schemes far beyond their means and at a period when, unknown to them, the economy was moving into a price recession. A further reason for the failure of many of the 19th century producer societies was the industrial structure of Scotland with its emphasis on heavy industry. Too many of the attempts to establish productive societies were in the field of producer, and not consumer goods. They thus could obtain little help from the co-operative movement, at both the wholesale or retail level, and had to compete in a market place unsympathetic to their ideals (39).

It was the shortage of capital which was the great destroyer of co-operative hopes and dreams. All the societies complained of not being able to raise sufficient funds, particularly when some of the more notable attempts to establish producer's societies failed within a short time of their inception. This was very much the case with the Scottish Ironworks and the Oak Mill. The massive loss incurred by the Wholesale in the Ironworks disaster soured the air and made the raising of fresh funds very difficult. Allied to this, the Wholesale was embarking on productive activities of its own and these had first claim on its resources.

In the history of the SCWS (40) this era is discussed in a chapter entitled 'The Co-operative Dream'. It was certainly James Borrowman's dream. He was apparently the driving force behind many of the producer co-operatives. While his motives are not criticised, he was to blame, in part, for many of the failures for he persuaded others to take part in the formation of producer co-operatives, which in hindsight, had too little chance of survival.

In the 19th century co-operatives under review, membershsip was not restricted to employees only. It was possible for societies to hold shares in other societies and to nominate individuals to represent their interests. In addition, individual members of the public could hold shares in the co-operative. By this method the membership of the producer societies was often in the hundreds, far in excess of the numbers employed in the actual workforce of the co-operative. This relegation of employees to a minor role was continued through the exclusion, by rule, of employees from becoming serving officers of

their society. The people who invested in the societies were undoubtedly interested in co-operation. They were, however, also interested in protecting their investment and in the late 1870s they were running scared. Indeed, on their dissolution many of the producer societies made virtue through the officers of the society of the fact that few of the shareholders, if any, had lost money when the society was dissolved. The wishes of the employees took second place to their desire for proper business conduct. It can also be argued that the failure of these societies meant that the opportunity to develop a base on which to build a viable producer co-operative sector had gone.

Almost exactly 100 years were to pass before the right conditions existed again for a major attempt at reviving this form of business organisation involving worker ownership and control. The passing of the Industrial and Common Ownership Act of 1976 with the subsequent availability of funds under ICOF, the establishment of SCDC in 1977 and the national Co-operative Development Agency in 1978, created once again the basis of a producer co-operative movement. This, at a time of rising unemployment gave the conditions which produced the many defensive co-operatives of today. However, the workers' co-operative movement, both at a national level and within Scotland, is still a small one. Unless it is given strong support it is likely to remain so, with the example of a viable producer co-operative the exception rather than the rule. The Labour Party discussion document on workers' co-operatives offers the basis of such a structure, particularly wih respect to a Co-operative Investment Bank and the development of a supportive infrastructure. The inability to raise sufficient funds to help a co-operative to survive its formative years has once again proved a major problem, as has the finding of appropriate sales outlets. The efforts of the Co-operative Bank, in terms of the rates and conditions it can offer is limited, given that it is operating within the clearing bank system. In Scotland, the output of many of the producer co-operatives is of the kind which might be purchased by the SCWS. However, it has either been unable or unwilling to do so.

It is clear that the majority of workers do not readily identify with the co-operative ideal. Why should they? Setting up a co-operative involves major risks for them, risks wihich the existing management are often unwilling to take. The provision of management services, either on secondment, or on a case load basis, by a co-operative development officer, cannot be an effective substitute for competent internal management. Where is this management to come from if not from within? Managers could be seconded from large organisations. But then are they firstly co-operators, and more importantly are they good enough? The answer may only come from co-operative businesses who have actually survived being able to afford to recruit the right individual who wants to be part of a co-operative. It may be that the successful co-operative, in looking for finance and the right kind of management, could be advised externally that it is in their best interests to become a 'normal' limited company with external shareholding. By so doing the argument is that access to funds is thereby secure and the co-operators investment protected. Is this, however, not the negation of the idea of a co-operative?

Without the establishment of the right kind of infrastructure, the hope, expressed by Mellor and Stirling (41), that co-operatives will

show working people what they are capable of through mutual self help, will only find limited expression, and workers' co-operatives in Scotland will disappear for a second time.

BRISTOL POLYTECHNIC

FOOTNOTES

1. 1984 Directory of Co-operatives, (London, 1984). I gratefully acknowledge the financial and other help given by the SCDC in the research of this paper.

2. SCDC News, (Glasgow, 1983)

3. C. Cornforth, 'Some factors affecting the success or failure of Workers Co-operatives: A review of empirical research in the United Kingdom', Economic and Industrial Democracy, 4 (1983), pp. 163-90.

4. N. Wilson, 'Economic aspects of Worker Co-operatives in Britain: Recent development and some evidence', Proceedings of the seventh Co-operative Seminar, (Oxford, 1982)

5. ibid. p. 72

6. Cornforth, op.cit. p. 164

7. J. Thornley, Workers' Co-operatives: Jobs and Dreams (London, 1981), pp. 18-22

8. J.A. Flanagan, Wholesale Co-operation in Scotland 1868-1918 (Glasgow, 1920), pp. 87-99.

9. W. Maxwell, History of Co-operation in Scotland, (Glasgow, 1910), pp. 249-52.

10. Thornley, op.cit. p. 20

11. Scottish Record Office (SRO), FS 5/1-388: Records of Industrial and Provident Societies removed from the Register before 1920.

12. A.L. Bowley, Wages and Income in the United Kingdom since 1860 (Cambridge, 1937), pp. 42-46.

13. Cornforth, op.cit. pp. 168-69

14. B. Potter, The Co-operative Movement in Great Britain (London, 1930), pp. 149-53.

15. Co-operative Wholesale Society Ltd, Annual and Diary for 1883 (London, 1882), pp. 168-73.

16. Flanagan, op.cit. p. 89

17. S.B. Saul, The Myth of the Great Depression: 1873-1896 (London, 1969), pp. 30-33

18. SRO, FS 5 series

19. Bowley, op.cit. pp. 42-46

20. B. Jones, Co-operative Production (Oxford, 1894), vol. II, pp. 461-63.

21. Jones, op.cit. pp. 566-67

22. Flanagan, op.cit. p. 85

23. ibid. p. 88

24. Saul, op.cit. p. 31

25. ibid. p. 14

26. R. Flood & D. McCloskey, The Economic History of Britain since 1700 (Cambridge, 1981), p. 41

27. P.L. Payne, The Early Scottish Limited Companies 1856-1895 (Edinburgh, 1980), pp. 19., 32-34, 52-54

28. Potter, op.cit. pp. 150-53

29. S. & B. Webb, A Constitution for the Socialist Commonwealth of Great Britain, (London, 1920), p. 155

30. Thornley, op.cit. pp. 10-11

31. Maxwell, op.cit. p. 250

32. J. Kinloch & J. Butt, History of the Scottish Co-operative Wholesale Society (Manchester, 1981), pp. 25, 78, 230

33. Flanagan, op.cit. p. 89

34. Maxwell, op.cit. p. 259

35. Annual and Diary, pp. 168-73

36. Co-operative News, 30/6/1883, p. 584

37. Wilson, op.cit. p. 72

38. B. Ashton, 'The New Workers Co-operatives - a Survey', (Univesity of Warwick, MA dissertation, 1982), pp. 21-30

39. T. Johnston, A History of the Working Classes in Scotland, (Glasgow, 1929), p. 316

40. Kinloch & Butt, op.cit. pp. 67, 78, 85, 105; Thornley, op.cit. p. 169

41. M. Mellor & J. Stirling, 'Workers Co-operatives - self-exploitation or self realisation?', (Paper presented to the BSA Conference, April, 1984), pp. 17-18

A SHORT HISTORY OF ROBERT MEIKLEJOHN & SONS, THE BASS CREST BREWERY, ALLOA

by

Charles McMaster

In September 1767 John Blaw travelled the seven miles from his home in Dunimarle to Clackmannan to visit the annual St. Bartholomew's Fair. Once in Clackmannan, Blaw, a noted Jacobite who had been imprisoned for several years following the 1745 Rebellion, adjourned after a while to the alehouse of John Henderson, situated in the main street. Into the same alehouse came a little later William Cairns and his son, also called William, who hailed from nearby Nether Kinedder. Blaw and the Cairns had previously been in dispute over some corn, and an argument ensued, which culminated in Blaw drawing a knife and stabbing both father and son. Blaw was restrained and disarmed by the patrons of the alehouse, but William Cairns Snr. had suffered a grievous wound, and a doctor was immediately summoned from Alloa, along with a constable. However, William Cairns' wound proved fatal, and he died before the doctor could attend to him. Consequently, on his arrival the constable formally arrested Blaw. This in fact was no ordinary constable, but a special constable appointed by the local magistrates under an Act of 1661, and paid out of the fines of convicted felons. His name was Robert Meiklejohn, and he was a 'brewer of Alloa, and a feuar in Clackmannan ....' (1). Blaw was charged with murder, tried at Stirling, found guilty and sentenced to death.

It is likely that although described as a 'brewer', Robert Meiklejohn was in fact a domestic rather than a 'publick' brewer for sale, brewing only sufficient for his immediate family and perhaps neighbours, but in 1774 he established his first public brewery in Alloa, which was situated by the Auld Brig, where the (then) main road from Stirling to Dunfermline crossed the River Kennet (2). This first brewery was small enough for Robert Meiklejohn to carry all the malt required from the mill to the brewery on his own back (3), but at an early stage he was able to recruit the services of a female brewer (or 'brewster'), a Mrs McKillop, and after a while was able to move to new premises at Mill Street, Alloa, and here his brewer was one Alex. Shaw (4).

In 1787 a further move was made, to Candleriggs in the centre of Alloa, where the maltings of Charles Tower and the adjoining property of James Young were purchased, and it was here that Robert Meiklejohn established his Candleriggs Brewery (5). An indication that the brewery was still small, however, exists in the insurance valuation of the Sun Fire Office, for in 1795 the brewery was valued at only £720, of which only £300 was fixed capital, the balance of £420 being in stock (6). Nevertheless, by the turn of the 19th century the brewery was prospering, and was reputed to be the first Alloa brewery to make its beer available in London. Shortly thereafter he took on a partner, a Mr Connel, and the firm became known as Connel, Meiklejohn & Co. Also, a brewer was acquired from London, one Robert Ferguson, who 'instilled fresh life into the concern, and taught him (Meiklejohn)

something that he did not know before' (7). This probably refers to the art of porter brewing, for a number of Scottish breweries were engaging London porter brewers at about this time.

By now a number of other breweries had been established in Alloa, aimed no doubt at emulating Meiklejohn's relative success. Chief amongst these was Andrew Roy's Alloa Brewery, George Younger's Meadow Brewery, John Syme's Hutton Park Brewery (where a young James Maclay learnt the trade), Thomas Paterson's Forth Bank Brewery, and John McDermid at the Mills Brewery. Added impetus was given to Robert Meiklejohn's brewery by the return from London of his son James, whereupon the firm assumed the title of Robert Meiklejohn & Son. By the 1820s 'Scotch Ale' had acquired a wide reputation in England, and in 1821 the Edinburgh brewer William Berwick told a parliamentary select committee that the principal (Scottish) brewers for England were 'Dudgeon of Dunbar, (Wm.) Younger of Edinburgh, and Meiklejohn's of Alloa' (8). The Candleriggs Brewery's reputation was further enhanced in 1822 when George IV partook of Meiklejohn's ale on his visit to Scotland of that year, and continued to place a regular order for it until his death in 1830 (9).

Robert Meiklejohn died in 1828 and was succeeded by his son James. On the latter's death in 1837 the firm passed to Hugh Kennedy, who, after a few years, finding the restricted Candleriggs site unable to keep up with demand for Meiklejohn's beer, made the move to the Grange Brewery on the western outskirts of Alloa. This had started life in about 1795 as the lowland malt whisky distillery of Alexander Glen. It later passed into the hands of the Stein and Philp families respectively, and in 1834 became the first distillery in Scotland to be fitted with a coffey still, enabling grain whisky to be produced (10). This was not a success however, and by 1837 the distillery had been converted into a brewery under the proprietorship of Towers & Co. Thereafter it was both a brewery and a distillery again before being acquired by Meiklejohn's in about 1852. Here the premises were much more commodious, covering more than an acre of ground, with their own maltings and a good water supply from a well 154 ft. deep which produced about one thousand barrels per day, pumped by a Watt steam engine (11). Subsequently what was reputed to be the biggest open-fired copper in Scotland, of some 300 barrels capacity, was installed at the Grange Brewery. Meanwhile the old Candleriggs brewery was leased in 1852 to George Younger & Co. and was sold to them outright for £1,500 in 1871 (12).

After a short time at the Grange Brewery Hugh Kennedy retired from the firm due to ill health. The brewery, still trading as Robert Meiklejohn & Son, was successively in the ownership of Morrison & Co., and Kidd & Blair, before passing in 1856 to the partnership of Maitland, Gorrie and Moyes. Charles Maitland, the senior partner and managing director of the brewery, was related to the Meiklejohn family by marriage, and had lately returned from a sojourn in Canada. He came from a long established East Lothian family, and adopted for the brewery the family crest of the Bass Rock and the motto 'Non Fluctuo Fluctu', both of which had originally been granted to the family by Charles II (13). Maitland took into partnership William Gorrie of Leith and Robert Moyes of Edinburgh, the latter soon replaced by James Peebles of Alloa. Under this latter partnership, the brewery, which continued to trade under the name of Robert Meiklejohn & Son, prospered

greatly. Over the next few years agencies were established in all the leading towns in Scotland, as well as in London, Newcastle, Middlesbrough, Hull, Dublin, Cork, Belfast, and Londonderry. By 1874, the year of the firm's centenary celebrations, Mair, the Glasgow agent with the assitance of three travellers was sending £40,000's worth of business to Alloa in a year, a tidy sum for those days. The Glasgow offices and stores were situated at 108 Argyle Street (14).

Beer was shipped to these destinations directly from Alloa, which was a sizeable port in the 19th century, with those deliveries to west coast and Irish destinations going via the Forth and Clyde Canal. The coming of the railway to Alloa, (the Stirling & Dunfermline Railway in 1850) had initially little impact except for fairly local deliveries because until the Forth Bridge opened there was no direct route to the South. On the opening of the Caledonian Railway's Alloa Branch in 1885, (which bridged the Forth to the South of Alloa) a siding was, however, laid directly into the brewery itself (15).

However, as early as July 1862, the use of the name Bass Crest Brewery had brought the firm to the attention of the Burton brewing giants Bass, Ratcliff & Gretton, who objected to an oval label issued by P.C. Ross, London agent for Meiklejohn's, which depicted the Bass Rock in the form of a rough triangle, with the word 'Bass' prominently displayed. Charles Maitland, on behalf of Meiklejohn's Brewery protested the firm's innocence, and sent a brewery label, which was markedly dissimilar in design from that complained of, being circular. Proceedings were therefore initiated by Bass against Ross, but he absconded before the case could be brought and it fell through, although an injunction was obtained against a retailer named Colley, restraining him from selling beer under the label in question (16). Trouble flaired again in October 1872, and this time Bass petitioned against Meiklejohn's directly. The petition stated that '.... the Respondents (Meiklejohn's) have recently commenced to use and issue .... labels made in imitation of, and only colorably different, from the Petitioner's (i.e. Bass, Ratcliff & Gretton's) labels', and have thereon an irregularly formed triangle or pyramid of a red color upon a pink centre .... with a border similar to the border of the principal Petitioner's labels and made oval in shape, and have printed thereon in large characters the word Bass ....'. An interdict was issued against Meiklejohn's forbidding the use of the label complained of: the latter firm were also found liable for the expenses of the case (17).

In an attempt to obviate future problems in March 1876 R. Meiklejohn & Sons registered the trade mark of the Bass Rock and a label design incorporating the former with the inscription "Bass Crest Brewery" (18). In April 1889 however, trouble broke out once more over a new oval label issued by Meiklejohn's, with a markedly different 'Bass Rock' the central feature. Bass, Ratcliff & Gretton insisted that Meiklejohn's must use the label as depicted in the original registration, but Bass also resurrected the 1872 decision in an attempt to force Meiklejohn's to drop the word 'Bass' altogether. In September 1891 an injunction was obtained against Meiklejohn's, but following an undertaking from the latter firm not to use the labels in question, and revert to the original design, the case was closed and expenses were awarded against the complainants' (Bass, Ratcliff & Gretton) (19).

William Gorrie had already passed away when James Peebles died in 1889, leaving Charles Maitland as the sole surviving partner, and the following year, on 12th March 1890, the business and goodwill of the firm of Robert Meiklejohn & Son was purchased for £35,000 and registered as a limited liability company under the title Meiklejohn's Brewery Ltd. The subscribers to the new company were Charles Maitland (brewer), William Gorrie Maitland (brewer), Chas. Pearson (cooper), James McDonald (cooper), Archd. Carmichael (hotel keeper) and Angus Maule (commercial traveller) all of Alloa, and Robert Paterson (brewer), of nearby Cambus (20). The sale was to take effect as from 1st February 1890 (i.e. backdated). Not included in the sale, for unspecified reasons, was public house property in North Shields, Northumberland, valued at £886, which was retained by the former firm of Robert Meiklejohn & Son. The property situated at the Bass Crest Brewery, Grange, Alloa, that was to be transferred to the new firm, covered almost five acres, and included '.... Land, Buildings, Wells, Machinery, Fixed Plant, Book Debts, Goodwill of Business, Trademarks .... Stocks of Ales, Barley, Malt, Hops, Casks, Cases, Bottles, Corks, Wire, Capsules, Labels, Stationery, Hoop Iron, Horse Lorries, Counting, House Furniture, Cash in Hand, and in Bank' (21).

Of the purchase price of £35,000, £17,500 was to be paid in cash, and the remainder in ordinary shares in the new company, which, under the terms of the sale, were to be allotted to the sellers of their nominees. These (3,500 ordinary £5 shares) were in fact initially all held by Charles Maitland himself, who became Managing Director of the concern. The other Directors were William Gorrie Maitland, his son, William Bailey, (former Chief Magistrate of Alloa), and Thomas Graham, of Broomhouse, Glasgow (22). The nominal capital of the firm was £40,000, with 2,000 preference and 6,000 ordinary shares. For the first year or so after registration the business of the new company prospered, but 'subsequently sustained serious losses through the brewing of bad ales and mismanagement of its commercial department' (23). Coupled with the problems caused by the trade depression of 1893, this caused a reduction of capital to £36,500, but the firm recovered sufficiently well to increase its capital again to £51,500 by 1897 (24). The following year, in 1898, Charles Maitland died after a brief illness, aged 80 years, and with his death some of the vigour which had sustained the firm for many years passed away.

In June 1899, following Maitland's death, it was announced that the Bass Crest Brewery had been sold to a Newcastle-based consortium of hotel owners and publicans, for £13,000 (25). Meiklejohn's had always sold a good deal of beer in the North East of England: the partners in this consortium were John Fitzgerald, J. Mackay & Co., Taylor & Bell, and Henderson & Sons (26). The former firm of Meiklejohn's Brewery Ltd was voluntarily wound up in April 1900, but a new company was formed that continued to trade under the name of the Bass Crest Brewery Co.: as far as is known this never became a registered limited company.

Despite the change of ownership, the old problems with Bass of Burton arose once again, in 1903, over a handbill circulated in public houses in the North East of England advertising 'Bass Crest 90/- Bitter, $1\frac{1}{2}$

per Glass'. This again upset Bass, Ratcliff and Gretton, as did an accompanying label of a new design: litigation smouldered on over the succeeding few years (27). Although as far as can be ascertained the litigation proved inconclusive, it was obviously a severe drain on the resources of a relatively small company such as the Bass Crest Brewery Co., while on the other hand, the very existence of the latter firm was a constant irritation to Bass, Ratcliff and Gretton.

The coming of the First World War, with its severe restrictions on raw materials and its dislocation of transport and commerce dealt a severe blow to the Bass Crest Brewery Co., which had trouble serving its markets in the North East of England. To rid themselves for once and for all from the situation of continual watchfulness and attendant litigation, Bass, Ratcliff and Gretton arranged in late 1918 to purchase the Bass Crest Brewery Co., along with its goodwill and, more importantly, its trademarks (28). By this move, Bass, Ratcliff & Gretton achieved their long sought-after aim of neutralising their troublesome rivals, as they now became owners of the registered trademarks of the Alloa-based brewery, and as they had no intention to continuing brewing at Alloa in anything other than the short term, they almost immediately advertised the brewery buildings for sale, exclusive of course of the brewing licence, goodwill, and trademarks. As a result, when in August 1919 the buildings were sold to the Alloa brewers George Younger & Sons Ltd., they perforce operated it as a de-licenced brewery, brewing only non-intoxicating 'black beers' and temperance stouts, in order to meet the threat imposed by the Temperance Movement and the 1920 Local Veto Option Polls. Under Younger's ownership the brewery was re-christened the Grange Brewery, its original name (29).

At the time of the cessation of beer brewing in 1919 the Bass Crest Brewery employed only some thirteen persons in all, and produced only bulk beer, there no longer being a bottling plant at the brewery. The chief output was Pale Ales, for which the hard water from the Ochils was eminently suitable, but Table Beer was also produced. All bottling was carried out by outside bottlers, the bulk beer going out by rail, with raw materials coming in the same way, although there was a horse lorry for local deliveries. All malting was done on the premises, where there was also a cooperage, and only well water was used in the brewing process. Although the Temperance threat receded somewhat after a few years, Younger's continued to brew non-intoxicating 'Black Beers' and Temperance Stouts ('Pony Brand') for general sale, and for sale to unlicenced premises and particularly for those areas that had gone 'dry' as a result of the local veto polls. These beers were, in strict point of fact, not so much non-alcoholic as low alcoholic, the Black Beer having an original gravity of in the region of 1014o (30).

The coming of the Second World War and the restrictions imposed by it, in particular sugar rationing, brought about the final closure of the Grange Brewery. Brewing ceased in 1941, and subsequently the brewery was used for storing coal and grain, and for stabling horses and garaging dray wagons. From 1943 it was also used to house Polish prisoners of war, who were employed in the Craigward and Ward Street maltings of George Younger's. Following the end of the war, it was used for general storage purposes for many years, until in 1960 George Younger & Sons were taken over by Northern Breweries Ltd, and at the

time of the take-over the Grange Brewery was valued at £10,000 (31). Latterly part of the brewery buildings were leased to a firm of caterers, but on May 20th 1964, most of the site including the Grange Brewery, was sold to R.G. Abercrombie & Co. Ltd., brassfounders and engineers, who promptly demolished the Brewery to build the Caledonian Foundry on the site. Of the remainder of the site, part was sold in March 1965 to the National Benzole Co. Ltd., for a petrol filling station, (32) but Bass Crest House, the former head brewer's residence, still survives to this day.

SCOTTISH BREWING ARCHIVE

NOTES

1. T. Crouther Gordon, The History of Clackmannan (Edinburgh, 1936), pp. 156-60

2. Anon, Report of Meiklejohn's Centenary Nov. 1874 (Newcastle, 1875), p. 7

3. ibid. p. 20

4. Alloa Journal, 23/11/1874

5. Anon, A Short History of Geo. Younger & Sons Ltd, (Alloa, 1925), p. 8

6. Ian Donnachie, A History of the Brewing Industry in Scotland (Edinburgh, 1979), p. 274

7. Meiklejohn's Centenary, op. cit. p. 7

8. Donnachie, op. cit. p. 135

9. Alloa Journal, 11/9/1869

10. M. Moss & J. Hume, The Making of Scotch Whisky (Edinburgh, 1981), p. 81

11. Scottish Standard, 28/11/1874

12. A History of Geo. Younger & Sons Ltd, op. cit. p. 8

13. Bass, Ratcliff & Gretton Ltd : Fraudulent Imitations & Forgeries, Book 1, p. 186

14. Meiklejohn's Centenary, op. cit. p. 11

15. A. Ure, Local Railways - The Early Days 1850-85 (Clackmannan Libraries, 1981)

16. Bass Ltd. : Fraudulent Imitations and Infringements, Book 3, pp. 169-72

17. Bass Ltd. : Fraudulent Imitations & Forgeries, Book 1, pp. 192-3

18. ibid p. 185

19. ibid p. 194

20. Scottish Record Office (SRO), Dissolved Companies Register BT2/1981

21. ibid.

22. ibid.

23. Donnachie, op. cit. p. 176

24. S.R.O.: BT2/1981

25. Bass Ltd., Fraudulent Imitations & Forgeries, Book 1, p. 194

26. Bass Ltd., Fraudulent Imitations & Infringements, Book 3, p. 170

27. ibid. p. 170

28. ibid. p. 172

29. History of Geo. Younger & Sons Ltd., op. cit. p. 16

30. Letters from the late A.H.R. Christian, Head Brewer, Archibald Arrol & Son Ltd, Alloa

31. Scottish Brewing Archive (SBA), General Correspondence 1954-65, GY17

32. SBA, Valuation Certificates for Brewery Plant, Geo. Younger & Sons Ltd. (1959), GY19

HOLM WOOLEN MILLS 1798 - 1984

by

E.H.L. MacAskill

Several years ago, I compiled illustrated notes on the use of water as a source of power in the area round Inverness. I had intended to concentrate on the use of water power for milling grain, but then I discovered that a water wheel had been used to pump river water up to the first reservoir in Inverness in 1829 and I also discovered that there were woollen mills, also powered by water wheels. I gave an illustrated talk to Inverness Field Club in 1980 on the subject and this was published in 1983 (1).

One of the woollen mills was Holm Mills. I was able to say very little about the history of the mill because few people knew anything about it and very little has been written down, possibly because the mill has changed hands frequently. As I teach Local Studies and as the mill is probably the oldest woollen mill in the north of Scotland, I set myself the task of gathering together as much information as I could. What follows is the result of my labours. Since I compiled this information, parts of the mill have been demolished, indeed, at times when I was taking slides, I was only one step ahead of the bulldozers.

Information about the very earliest days at the mill was very difficult to find, but the Statistical Accounts were helpful and also the Title Deeds of the mill, though these appear to have been compiled during the ownership of Dr. John Inglis Nicol after 1818, and the mill appears to be quite a bit older than that. The local papers were also very helpful. The Inverness Journal was printed from 1807 and the Inverness Courier from 1817. Mr. William Pringle of Holm Woollen Mills till the 1970s and later of the Skye Woollen Mill in Portree was a mine of information. He himself had once intended to publish a history of the mill but had never found the time. I am indebted to him for all his help.

One of the problems of tracing the history of any mill is that machinery is modernised from time to time and old buildings have to be demolished or drastically altered. The plan of Holm Mill shown on the 25 Inch Ordnance Survey of 1868 is quite different from the plan of 1925 which is kept with the Title Deeds. Since then, alterations have changed the ground plan again. In its time, the mill has been powered by water, steam, gas, diesel and electricity, so it is hardly surprising that buildings have had to be altered.

The first mill appears to date from 1798. Mr Pringle thought it could be as early as 1771, but I have found no evidence for this early date (2). There is certainly no mention of a woollen mill in the Statistical Account of 1793 (3). It seems likely that the first mill was built by the local land owner, the Mackintosh of Holm. The very

earliest mill would have been very small, serving the needs of the local community. Carding, possibly spinning and the various finishing processes were probably done. Weaving would have been outwork, done on handlooms in the homes of specialist weavers. Even if a small Highland mill could have produced goods of the quality being produced in the south, transport problems would have caused difficulties with distribution. The 1793 Statistical Account tells us that there were 57 handloom weavers in Inverness.

No information is available about when the processes at the mill were first mechanised. The following information, supplied by F.M. Wood (4) is of interest:

> The first carding machinery was introduced to Galashiels, principal centre of the woollen industry, in 1790 and the first three water powered mills were in operation by 1800. Other processes benefitted from the mechanical improvements wrought during the Industrial Revolution. By 1814, when the first 500-spindle mule was built in Galashiels, spinning was already almost fully mechanised; the cloth-finishing process of cropping, until then performed with the traditional hand-operated shears, was invaded by machinery five years later. In weaving, the first flying shuttle was brought to the Borders in 1788, but it supplemented rather than displaced the hand-weavers' skills. It was not until 1829 that the power loom swept the handloom weaver into virtual redundancy.

As Inverness is unlikely to have been ahead of Galashiels, it does seem likely that for the first few years, the work was not mechanised. In his Reminiscences Joseph Mitchell, the great Civil Engineer in the Highlands, tells us about his childhood in Inverness. Writing about the year 1810, he says:

> At this time, the common people manufactured much of their own clothing. Every well-to-do housewife, however, spun the linen, blankets and some of the clothing for her own family.

It would appear, therefore, that the mill catered for a very limited local market, though Mitchell's work on the Caledonian Canal and the new roads may have helped the growth of the industry (5).

When the mill began, the ground was owned by the local land owner, the Mackintosh of Holm. I have no information available about whether the Mackintosh family built the mill or leased the ground to someone. One of the owner/editors of the Inverness Courier compiled three volumes of snippets from the Inverness Journal and Inverness Courier between 1808 and 1856. From this source, in Volume One, we find the following:

> 1808: Advertisement of a woollen factory formed at Inverness, under the firm of Mackenzie, Gordon and Company. It had already manufactured broadcloth and other fabrics (6).

The company must have been quite successful, because from the same source, we find that in 1810 they were given the task of manufacturing blue waistcoats for the nobility appearing at the Northern Meeting,

held annually in Inverness since 1788, during the second week of October. The Meeting included races, hunts and games and culminated in a grand ball held in the Northern Meeting Hall, built in the centre of Inverness in 1790. An entry in 1815 tells us of the failure of the mill and an entry for 1818 gives the following information:

> The Woollen Manufactory belonging to Messrs Mackenzie, Gordon and Company is advertised for sale. The houses are in the Haugh, the carding and waulk mills on the bank of the river (7).

A further entry for 1824 tells us that a Woollen Manufactory had been established at the Haugh and was being conducted with success, so clearly the site had great potential.

The new owner of the mill was Dr. John Inglis Nicol. His interests were many and varied. In his obituary in the Inverness Courier of 1849 we read that he was an eminent physician, a woollen manufacturer, a Provost of Inverness from 1840 till 1843 and a scientific agriculturalist. On his farm, also in the Burgh Haugh, he experimented with cereals and manure. He was 61 when he died of cholera, caught while attending to patients in the epidemic of that year, when there were 225 cases in Inverness, 112 of whom died. One could feel sorry for Dr. Nicol, but while I was researching public health conditions in Inverness in the past, I came upon a most interesting snippet about Dr. Nicol as an owner of rented property in the Haugh, possibly mill workers' housing. In the 1840s, reports on the sanitary conditions of most towns in Britain were collected and published by Edwin Chadwick, the great social reformer. The report for Inverness was compiled by George Anderson in 1841 (8). A copy of this report, which once belonged to Charles Fraser Mackintosh MP, the well-known historian of the Inverness area, can be found in Inverness Library, among the books of the Fraser Mackintosh collection. A description of some dreadfully unsanitary properties in Inverness is given. According to Fraser Mackintosh's pencilled note, one of these, Inglis Court in the Haugh, belonged to Dr. John Inglis Nicol.

When Dr. Nicol took over the mill, carding, spinning and the finishing processes were the main tasks, with weaving still being done on handlooms. The Statistical Account of 1835 gives the following information:

> In the Woollen Manufactory for the weaving of coarse clothing and Highland plaids and tartans, there are employed from 20 to 25 persons, of different ages, from 10 years and upwards, who can earn from 3s to 15s a week. The proprietor of it also has a carding mill for the preparation and spinning of wool (9).

We are not told whether weaving was done on looms in the mill or whether it was still being done as outwork in the homes of specialist weavers. We are given no information about the source of power for the rest of the machinery. It was probably water, though it could have been steam as Boulton and Watt's steam engines were being used for milling as early as 1800 elsewhere.

Dr. Nicol made a success of the mill. His will is included with the Title Deeds. It was written in 1836, and states that he hoped his son, at that time in training as a woollen manufacturer, would eventually take over the mill at Holm. Dr. Nicol was granted a Feu Charter by Angus Mackintosh of Drummond, the owner of the land where the mill stood, in 1847. The document refers to a lease previously granted but gives no date. He was also granted permission to extend the mill lade, provided no damage was caused to the fishing in the River Ness. Donald Angus Nicol did inherit after his father's death from cholera in 1849.

A series of articles on the industries of Scotland was published in the Scotsman every Saturday throughout 1868. The articles were published in a book in 1869. In the chapter entitled 'Woollen Manufacture', David Bremner tells us:

> There are three woollen manufactories near Inverness. The first, carried on by Messrs Nicol and Company, has been in existence for seventy years and is the oldest in the north. The goods produced are tweeds, mauds, plaiding and blanketing, the greater part of which is made from wools grown in the Northern Counties. A considerable quantity of colonial wool is also used in the manufacture of tweeds. The number of operatives employed at Holm is 100. At Holm, both water and steam power are used. There are three sets of carding engines, and spinning and twisting machines (10).

We are given no details of when steam power was introduced to back up the power from the water wheel. The Ordnance Survey of 1868 shows the lade and sluices, chimneys and also a gasometer. Probably this was for lighting. No gasworks is marked, 'though one is marked on the plan of 1925. One of the by-products of gas making is tar. The roof of the mill was covered with canvas wool sacks. These were tarred every year to make the roof water-tight. Bremner does not mention that Donald Angus Nicol went bankrupt in 1867 and the mill was taken over by the Commercial Bank. A skilled manager must have been found, because Bremner described a successful business.

At a public roup in 1875, Mr James Sime gained possession of the mill, but by 1879, the Chisholms were the owners. They also owned a tannery in Gilbert Street, not very far from Inverness Harbour. Holm Mill's water power was put to work for the tannery. A new lade was built at right angles to the main lade and there was a ten feet high water wheel to power a scutch mill, a sawmill and a sheepskin de-fleshing machine. Prior to curing, all the flesh has to be removed from the skins. A wooden wheel with granite grit glued to it was used for this purpose. At the sawmill, logs were sawed into planks with a nine feet long saw. The scutch mill was used to crush bark. Powdered bark, called 'scutch', was added to water to preserve and darken fishing nets. These were made in Elgin from 1860 onwards. Crushed bark, especially oak bark, yields tannic acid. This would have been used for curing leather in the Chisholm's tannery. All this machinery was in place when the Pringles, the present owners, took control in 1925, but it had not been used for some time.

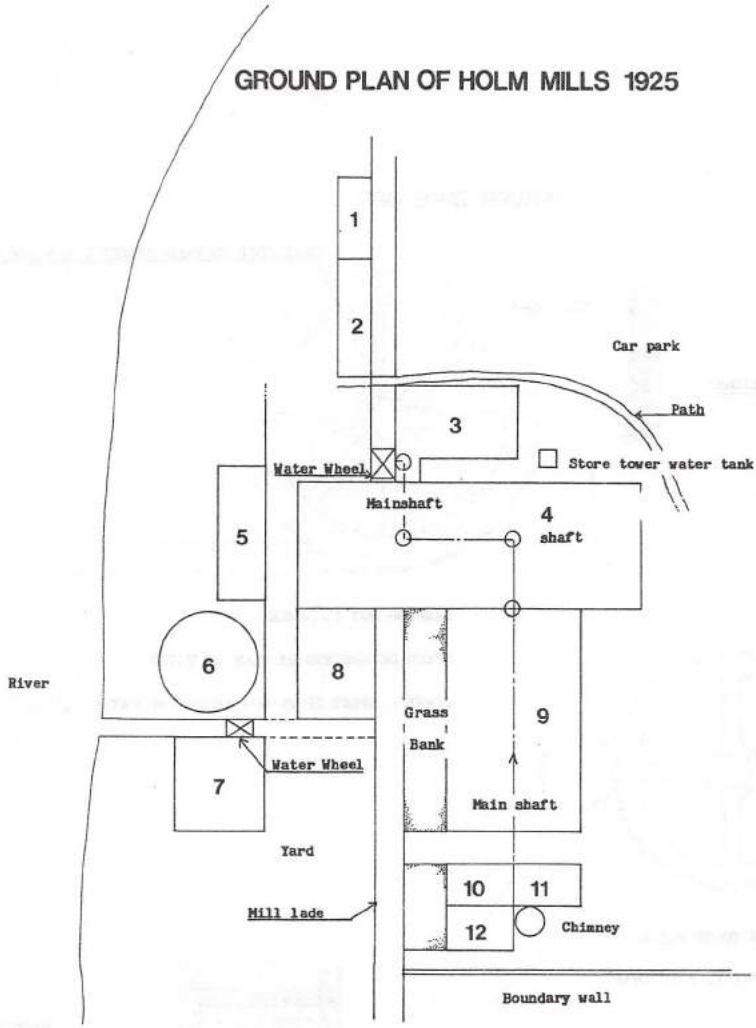
In 1899, Colin Chisholm was in charge. He lived beside the mill in a house known as Branxholm, the name by which the house is still known. The mill was still a fairly small concern with not many employees. By now it was having to compete with a new mill built in 1889 in Telford Street, near the Muirtown Basin of the Caledonian Canal. This was known as the Inverness Wool Mill. Carding, spinning and weaving were done there. When Colin Chisholm died in 1920, the mill at Holm passed to his daugher, who sold it to a consortium managed by Thomas Young Cleghorn. Under the ownership of the Chisholms, the mill was powered partly by water and partly by a beam engine. When Mr Cleghorn took charge, new machinery was installed and the wheel and beam engine ceased to be used. Instead a suction gas plant (retort and engine) was used. This needed high quality Welsh anthracite which became difficult to obtain in the period of unrest leading up to the General Strike. Cleghorn's consortium went bankrupt and the mill lay derelict till it was bought in 1925 by Mr James Pringle, wool mill manager, Brora. He ran it with the help of his young son William. The original mill was known as the Inverness Wool Manufactory. Later it became known as Holm Mills Tweed Company. From 1925 it was known as James Pringle Ltd., Holm Woollen Mils. This is the name by which it is still known.

When the Pringles took over the derelict mill in 1925, the water wheel was in two pieces, one half lying on the bottom of the lade. Clearly it had not been used for some time, as the castings were also broken. With anthracite unavailable during the General Strike, water was the only source of power and Mr. Pringle and his son had to attempt to repair the wheel. Plates had to be made and the parts of the wheel bolted together. It took a while to get the wheel turning again. It was unreliable and unable to produce much power. It could not work properly when the river was low and flood water also caused stoppages. Very high tides raised the level of the River Ness, and this caused the water to build up behind the wheel in the tail race, making it impossible for the wheel to turn. With a very small staff it was difficult to keep the wheel in good order and the weir and lade also needed regular attention. In earlier times, when the level of the river was too low to operate the wheel, the workers, men, women and children were put to work mending the weir and lade with small stones. As soon as the Pringles were able to obtain anthractie again, they used the suction gas plant, but the wheel was maintained for emergency use. Though it ceased to be used in the 1930s, it was in position till the 1960s, when it was badly damaged by floodwater and had to be removed.

The site of the wheel is clearly visible as huge marks were scored on the sides of the lade. Varios sluices can still be seen and also the remains of the wheelhouse, but without the help of Mr William Pringle, the following could not have been written and a valuable amount of knowledge about the mill would have been lost. He is the only man alive who could have provided the information and I am indebted to him.

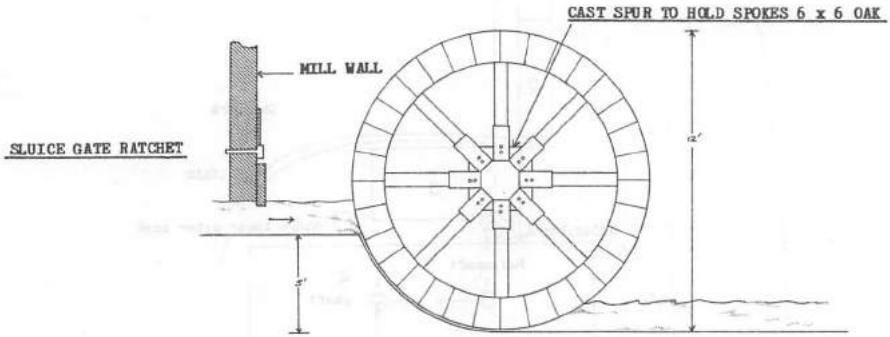
The wheel and machinery for Holm Mills were made in Clifton-on-Avon and brought to Inverness by sea. As the mill is a long way from the harbour, it must have caused many problems. The name Clifton was stamped on some of the castings, but unfortunately no date was given. A huge weir goes right across the River Ness just above Holm Mills.

GROUND PLAN OF HOLM MILLS 1925



1. GAS WORKS
2. TENTER HOUSE
3. OLD MILLING HOUSE
4. THREE STOREY OLD MILL (TWO CARDING MACHINES)
5. TEAZER OR BLENDING SHED
6. GAS HOLDER
7. GENERAL WORK SHED, SCUTCH MILL, SHEEPSKIN DEFLESHER
8. WOOL SORTING STORE
9. SPINNING AND WEAVING SHED
10. ENGINE ROOM
11. BOILER HOUSE
12. DYE HOUSE

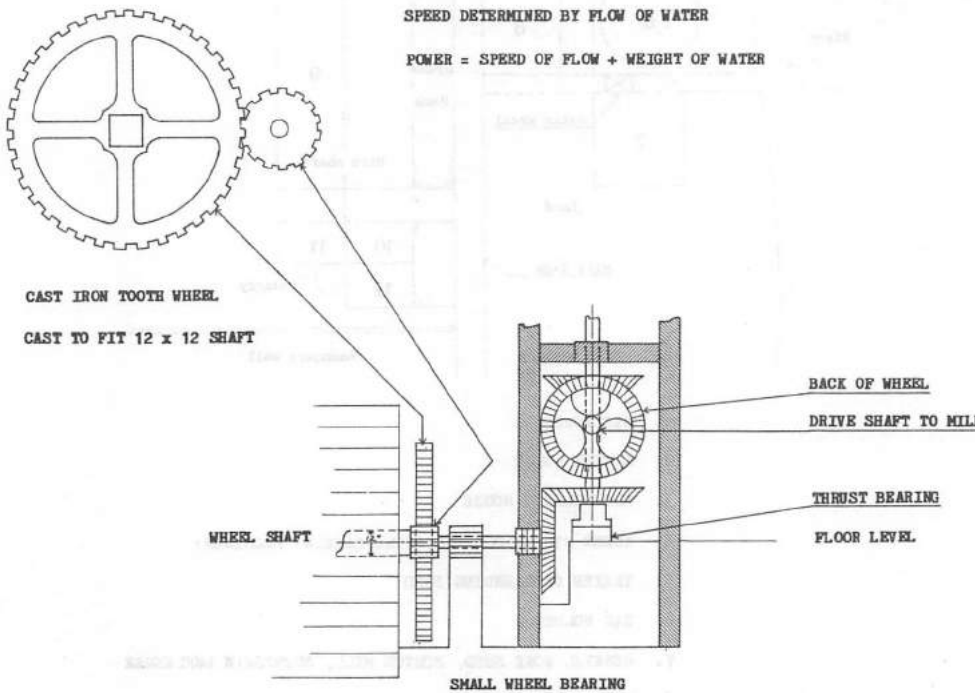
POWER TAKE OFF



DRAWING NOT TO SCALE

SPEED DETERMINED BY FLOW OF WATER

POWER = SPEED OF FLOW + WEIGHT OF WATER



Originally this provided a head of water for the old Mill of Bught, a corn mill dating back to 1232 or earlier. It was one of the King's Mills of Inverness (11). It would have been a fairly simple task to extend the weir to provide a head of water for the Holm Mills lade. The sluice gate is still in position, with a broken ratchet fixed to the top. The lade is more or less intact from this sluice till the mill is reached, but there the lade wall has been breached and the water pours back into the river. At one time, the lade took water under the mill to re-appear under building 3 on the plan. There was an inspection hatch in the mill yard and it is still there, but there is no longer any water in the lade beneath. After going under the Old Mill, the lade re-appeared from an archway, still visible. Above this archay there can still be seen the remains of the sluice gate ratchet which controlled the flow of water on to the wheel. The wheel was undershot and turned in an anti-clockwise direction. A short tail race took the water from the lade back to the River Ness. This has now been filled in, but the line of it is clearly visible.

Although the wheelhouse remains are there and the site of the wheel is clearly visible, thanks to marks left on the walls of the lade, it is difficult to visualise how power from the wheel was transferred to the mill, because the drive shaft lay parallel to the mill building and power had to be transferred from the wheel to the looms and carding machinery at right angles by a series of intermeshed cog wheels. The shaft was cast iron, 12 inches square, turned at the ends to 6 inches to fit the bearings. The arms of the wheel were 6 feet 6 inches long and made of oak. These were set into a cast sleeve and bolted. These arms were bound by three rings at the outer ends and bolted. These were the huge rings which left the three semi-circular grooves in the sandstone sides of the lade. This was caused by a slight imbalance in the wheel which had to be corrected. The paddles which were turned by the water were 36 inches wide and were bolted to the rings. They were curved to meet the flowing water, turn the wheel and quickly lose water again.

It is very likely that the whole power plant was designed specifically for Holm Mills. Power from the wheel was transferred by a large cast iron toothed wheel intermeshed to a 12 inch wheel. This increased the revs to 90 r.p.m. On the end of this shaft was a 2 feet 6 inches toothed spur wheel at right angles to which was a similar wheel with a perpendicular shaft to a matching wheel about 6 feet high. Power was then transferred at right angles by a similar wheel on a shaft which went through the mill wall to connect to a shaft. This shaft ran the length of the mill, turning the carding machines by belts and also powering the mules on the floor above. All of this can be followed on Mr Pringle's drawing. It is not to scale.

All these right angled turns were ingenious, but must have put quite a strain on the machinery, which is probably why steam had become a second source of power by 1868. The steam engine was housed in buildings marked 10 and 11 on Mr Pringle's plan. Part of this engine room remains and it is possible to see the gap in the wall which allowed the drive shaft to cross the lane and enter the weaving shed marked 9 on the plan. This shaft has also been marked. Mr Pringle remembers that a boiler came from Lancashire and was dated in the 1880s. Buildings 10 and 11 continued to be used as the engine room

after diesel power was installed by the Pringles. Nowadays the mill is powered by electricity installed between 1954 and 1955. No evidence remains of the gas holder and gas works. It is not possible to establish where the gas engine was, though probably it was also housed in buildings 10 and 11.

The scutch mill, sawmill and de-fleshing machinery have gone and a small electricity sub-station covers part of the site, but you can still see where the little lade entered the river. The teaser house, marked 5 on the plan has also gone, no longer needed since carding and spinning at the mill ceased in 1980. The tenter house, marked 2, was demolished recently, though it had not been used for many years. This was a very long building, because after material had been soaked and milled, it used to be hung in long lines from tenter hooks to stretch it to shape. This is now done by machinery housed in the weaving shed built about 1962. Before this weaving shed was built, weaving was done in the building marked 9 on the plan. Spinning was also done here, while carding was done in the Old Mill, marked 4 on the plan. Buildings 4 and 9 are now used as the mill shop and since 1978, part of the spinning and weaving shed have been converted into a restaurant to cater for up to 30 bus loads of tourists a day at the height of the season. The new weaving shed was built at the corner of the yard next to the river, near to where the scutch mill and sheepskin de-fleshing machinery were. The looms in this building are very modern and work at an incredible speed, so fast that it is impossible to see the shuttle.

In the 1970s, new carding and spinning machinery were installed in the building marked 12, the dye house. This machinery was all removed in 1980 and now no carding or spinning are done at all. Old looms can be seen at work there now as this is where new designs are created. It was uneconomical to continue carding and spinning, but tourists enjoyed watching the process.

The old milling house, marked 3 on the plan is there, but is very dilapidated and clearly has not been used for many years. You can see the cobbles on the floor and the masonry is obviously very old. After cloth has been woven, it still has many processes to go through. One of these is milling, the process by which the cloth is soaked and pounded to shrink the cloth and tighten the weave. As this building is beside the wheel, it is possible that originally milling was done by water-powered fulling stocks, but rotary milling machines had been invented by 1833 so probably these were installed. Mountings for a drive shaft can be seen in the building and pulleys which once turned belts are still in position on the roof. After the Pringles took over the mill, milling was done in a building beside the dye house, number 12 on the plan. This was burned down in a serious fire in 1962 and the milling machinery is now housed in the weaving shed along with all the rest of the machinery needed for the finishing processes.

When visitors go to the mill nowadays, they can visit a very large mill shop and relax with a coffee after making their purchases. They can go over to the weaving shed and watch warping machinery put threads on to huge spools ready for the modern looms. They can see a rotary milling machine shrink the cloth to size then watch tentering machinery stretch it to shape. They can see the machinery which raises the nap, a job

once done by machinery fitted with plant heads called teasels. They can then see the cloth being cropped to an even depth of pile on a machine rather like a hugh lawn mower and finally they can see the rugs being checked carefully before they are ready for sale.

Mr Euan Pringle provided me with some interesting figures culled from pay-rolls dating to 1925. When the Pringles re-started the mill after 1925 there were three employees. By the mid 1930s, this had risen to 20 and by 1938 there were 40 employees. The Telford Street Wool Mill, built in 1889, was bought by the Pringles in 1937 and all the machinery was transferred to Holm Mills along with a hugh stock of yarn. This meant that when the War began, Holm Mills were given the task of producing blankets and clothing for the Forces and the number of employees during the war was 97. There was less work available after the war and the number of employees fell to 45 by 1950. By 1960, however, the number of employees had risen to 260 because a great deal of carding and spinning was being done. The fire of 1962 caused the mill to be re-organised and by 1970, the number of employees had dropped to 57. With the stopping of the carding and spinning processes in 1980, the number of employees fell again to 29. In 1984, there are only 17 employees. Production of cloth has not fallen much as one person can now operate several machines.

Pringle's war blankets were said to be very cosy and I certainly find their travelling rugs very useful in the cold Inverness winters. The wool seems to be very durable indeed. A serious leak in the banks of the Caledonian Canal caused extensive flooding in Inverness in 1849 and the stone bridge across the River Ness in the town centre was washed away. Mr Pringle can remember one of the canal managers telling him that during dredging in the canal, a portion of cloth had appeared. It seems that the major leak in the canal banks was mended in a very novel way in 1849. Lengths of wool were woven at Holm Mills and laid on the canal banks. These were covered with clay and planted with whins. It seems that wool does not rot even with long immersion in water and this has kept the canal water-tight ever since. This is surely an excellent advertisment for the mill.

NOTES

1. 'An Inverness Miscellany', Inverness Field Club, 1983

2. During the Second World War, there were Italian prisoners of war held in Inverness. They lived in huts erected near to Drumdevan House, which is on the high ground above the mills. The remains of these huts can still be seen. The Italians were mainly skilled engineers and the Camp Commander asked Mr William Pringle if he could find employment of some kind for them at the Woollen Mills. The old mill at that time had three floors and had a mansard roof. The top floor was filled with looms and the lower floors had spinning and carding equipment. The floors were supported by wooden beams, 35 feet long and 18 inches square. No nails had been used, only wooden pegs. The Italians were given the job of replacing these wooden beams with steel beams. When the beams were removed, they were in perfect condition and were

identified as having come from the original Scottish forest of Speyside. When all the old lime wash was cleared from the beams, the date 1771 could be seen and also the names of the workmen. Unfortunately there is no way now of ascertaining whether this was the date when the beams were prepared, or whether this is the date when they were installed in the mills. Nowadays, the mill is a two storey building and the steel beams are clearly visible. At the back of the mill, beside the river, it is quite obvious that it was once a three storey building as the remains of bricked up windows are there, high up near to the present roof.

3. First Statistical Account of Scotland, vol 9

4. Information supplied by F.M. Wood, Director of the Scottish Woollen Industry

5. Joseph Mitchell, Reminiscences of My Life in the Highlands (1883) (Newton Abbot, 1971), vol 1

6. James Barron, The Northern Highlands in the Nineteenth Century (Inverness, 1903), vol 1, 1800-1824

7. Mr Lawson, Keeper of the Records for Inverness and District, told me that Mr Gordon owned the Drakies Estate in Inverness and also had the plantation of Huntly in Demerara plus a half share of the plantation of Borlum in Berbice. Gordon died in 1809.

8. George Anderson, 'Report on the sanitary condition of the labouring class in the town of Inverness' (H.M.S.O., 1841)

9. New Statistical Account of Scotland, vol 14 Inverness, Ross and Cromarty

10. David Bremner, The Industries of Scotland - Their Rise, Progress and Present Condition, (Newton Abbot, 1969)

11. 'An Inverness Miscellany', Inverness Field Club, 1983

SUMMARY LISTS OF ARCHIVE SURVEYS AND DEPOSITS

National Register of Archives (Scotland)

Full details of the surveys are available from the National Register of Archives (Scotland); all enquiries and requests for access should be addressed to The Secretary, The National Register of Archives (Scotland), H.M. General Register House, Edinburgh, EH1 3YY.

Agriculture, Estates, Forestry, and Fishing

1698 A.K. Campbell Esq., Inverkeithing. Titles to Lands in Fife and Angus, 1522-1782. Petition concerning grazing on Meigle glebe, 1752.

1998 Peter MacDonald Esq., Aberlour. MacDonald family papers, 1824-1977, including diaries with notes on weather, farm work, and sowing dates, 1890-1977; farming and household accounts, 1853-1970; plan of Ruthrie farm, 1840.

2238 Mrs A. Francis, Lady Ironside, and Mrs C. Aliaga-Kelly. Langton Estate papers, 1761-1845, including report on ditching and dyking, 1760; inventories of farm implements and stock, 1821.

2314 S. Arbuthnot-Leslie of Warthill Esq., Aberdeenshire. Titles legal financial and estate papers and correspondence relating to Warthill and associated lands in Aberdeenshire, 1482-1879, including memorial by Garrioch farmers about corn and distillation laws and low price of grain, 1758; specifications of water wheel and saw milling and threshing machinery, 1875.

2351 Southern Evans Ltd. (formerly Robt. Melville & Co. Ltd.) timber merchants, Falkirk. Minutes, 1898-1953; accounting records, 1881-1903; letterbooks, 1845-54; photographs of buildings and plant, c. 1927-current.

2352 Timber Growers Scotland Ltd., Edinburgh. Landowners Co-operative Forestry Society Ltd.: minutes, 1913-47. Co-operative Forestry Society (Scotland) Ltd.; minutes, 1947-59. Scottish Woodland Owners Association Ltd.: minutes, 1959-80, accounting records, 1960-80. Timber Growers Scotland Ltd.: minutes, 1980-current, accounting records, 1980-current.

2353 National Farmers' Union of Scotland: West Fife and Kinross Branch, Dunfermline. Thornton Branch: minutes, 1914-31; cash books, 1921-64. Dunfermline Branch: minutes, 1917-80; cash books, 1952-71. Kinross-shire Branch: minutes, 1938-71.

2356 National Farmers' Union of Scotland, Nithsdale Group, Dumfries. Minutes of Dunscore branch, 1922-current; Upper Nithsdale branch, 1937-current, Dumfries branch, 1953-current; Dumfries Area

Committee minutes, 1949-current.

2359 Stirling University Library. William Drummond & Sons Ltd., seed merchants. Minutes, 1895-1919; financial records, 1818-1973; wage records, 1856-1934; subscription books, Stirling Horticultural Society Library, 1929-31, Stirling Agricultural Museum, 1836; correspondence on company's incorporation, 1894-5; catalogues, 1814-1976; photographs of directors, Drummond family, shop, warehouse and seed beds, n.d.

2368 J. Rogerson Esq., Galashiels. Correspondence concerning fishing rights on Gala Water, 1743.

2376 Berwick Auction Mart Co. Ltd. livestock auctioneers, Berwick. Accounting records, 1861-1980; letter books, 1907-35; wage records, 1942-6. Northumberland and Berwickshire Auction Mart Co. Ltd.: minutes, 1899-1923; register of members, 1899-1920; annual lists and summaries, 1912-29; sales books, 1916-20. Berwick and Cornhill Auction Co.: cash books, 1920-6.

2378 Border Union Agricultural Society Ltd., Kelso. Minutes, 1813-1970; accounting records, 1826-1974; subscription and membership books, 1844-1974; letter books, 1877-1966; sederunt book of George Gordon, W.S., 1849-60. Melrose Agricultural Society: minutes, 1840-66. Border Association for the Encouragement of Agriculture: minutes, 1834-6.

2381 National Farmers' Union of Scotland, Lothian Area, Dalkeith. Minutes, 1962-78; membership records, 1956-65; photographs of speakers at East Lothian annual dinners, c. 1958-62; accounting records of National Farmers' Union Mutual Insurance Society Ltd., 1972-9.

2390 Gilmour & Aitken Ltd., timber merchants, Jamestown, Dumbartonshire. Minutes, 1919-74; balance sheets, profit and loss accounts, 1907-77; monthly reports, 1973-7; insurance valuations, 1898-1975; share records, 1919-80; superannuation scheme trust deeds, 1946-64; papers on centenary, 1952; newscuttings, 1958; photographs of plant, n.d.

2391 Brander & Cruickshank, advocates, Aberdeen. A. Duthie & Co. Ltd., fish salesmen; minutes, 1937-64. Macrae, Duggie, McPherson Ltd., fish salesmen; minutes, 1937-71. Forty Fathom Fishing Co. Ltd.: minutes, 1960-1. Macrae, Duthie, Walker Ltd.: minutes, 1961-80.

2392 Ayrshire Cattle Society of Great Britain and Ireland, Ayr. Minutes, 1877-1981; herdbooks, 1877-1953; reports on milk records, 1917-49; Ayrshire Agriculturalist or Farmers' Monthly Magazine of Rural Economy, 1843-4; Ayrshire Cattle Society Journal, 1929-74.

2404 Captain N.E.F. Dalrymple-Hamilton of Bargany, Girvan. Estate papers, 1801-1941, including Bargany Estate rental, 1901.

2408 G.A. Moore-Nisbett of the Drum Esq. Accounting records and factoral correspondence relating to Cairnhill Estate, Lanarkshire, and Drum Estate, Midlothian, c. 1843-1900.

2412 Caledonia Estate, Bishopbriggs. Lennox Estate. Accounting records, 1760-1956; wages book, 1924-5; correspondence, 1924-43; vermin register, 1916-69; game register, 1922-50. Dugalston Estate: titles, 1864-1931; valuations, 1911-44; accounting records, 1928-64; correspondence, 1947-64; game figures, 1916-21; plans of estate buildings, 1847-1931. Balfunning Estate: accounting records, 1883-1949. Unsworth and Princethorpe Estates: accounting records, 1927-33.

2414 Dumfries and Lockerbie Agricultural Society, Dumfries. Minutes, 1930-79; show catalogues, 1950-current.

2440 Aberdeen University Library. Estate and personal papers of Setons of Mounie, 1542-1903, including titles, 1542-1847; rentals, 1763-1901; factors accounts, 1714-1832; household accounts, 1769-93; maps, surveys and valuations of Mounie Estate, 1771-1859. Correspondence and papers of Dr. James Anderson on agricultural litary and scientific matters, 1772-90, including papers relating to report on fisheries in Western Isles.

2463 Ms. Maria St. Denys, Edinburgh. Part of factors' account book relating to [Largie Castle, Kintyre.], 1865.

2466 Shetland Library, Lerwick. Morton muniments relating to Shetland. Correspondence, accounts, estate and legal papers, 1614-1802, including rentals, 1652-1765; papers realting to Whales, 1713-34.

2489 Glasgow University Archives. Robert Allan's farm, Howwell, Kirkcudbright. Accounting records, 1885-1921; farm diaries and estate statistics, 1884-1920; stud books, 1911-17.

2446 Lady Dick-Lauder, Edinburgh. Papers of Sir Thomas Dick-Lauder, 1817-46, including personal journals compiled while secretary to Commissioners of Board of British Fisheries, during official voyage of inspection of British fishing stations, describing scenery, local inhabitants, folklore, and local economy especially fishing industry, 1841-6.

Building Trade and Civil Engineering

2364 Royal Commission on Ancient and Historical Monuments of Scotland. Architectural drawings by Robert Lorimer of castles, houses, churches and war memorials in Scotland, France, England and USA. 1896-1929, including Scottish National War Memorial, 1923, church at Treport, France, n.d., naval memorial, Portsmouth, 1922.

2363 John Watherston & Sons, builders and house carpenters, Edinburgh. Architectural drawings of Mount Stuart House, Bute, by James Craig, 1769; architectural drawings and fencing plans by David Bryce, R and R Dickson, Robert Lorimer, F T Pilkington, David Rhind and others of tenements, mansion houses, and commercial premises, 1826-1928. deposited National Monuments Record of Scotland.

2366 Royal Commission on Ancient and Historical Monuments of Scotland. Papers of Robert G Sutherland, painter and decorator, Edinburgh, c. 1900-30.

2379 Royal Incorporation of Architects in Scotland, Edinburgh. Minutes, 1916-current.

2389 Alexander Hall & Son (Builders) Ltd., manufacturing joiners and building contractors, Aberdeen. Minutes, 1938-current; reports and accounts, 1958-79; papers and photographs, 1958-79; papers and photographs concerning publication A Centry of Craftsmanship, 1979-80; pamphlet on firm, c. 1958; prospectus on property development, n.d.

2408 G A More-Nisbett of the Drum Esq. Personal, household and family papers, 1834-1954 including financial papers and correspondence concerning Hamilton More-Nisbett's architectural practice, 1911-27.

2462 Federation of Civil Engineering Contractors, Scottish Section, Glasgow. Minutes, 1921-current; annual reports and abstracts of accounts, 1942-current.

2497 Glasgow University Archives. P & W MacLellan Ltd., engineers, Glasgow. Directors' reports, 1890-1953; accounting records, 1834-1960; wage book, 1864-70; letter books, 1861-1911; contract books, 1851-1962; specifications and tenders, 1882-c.1897; patents, 1939-45; plans of property in Glasgow, 1868-1933; photographs of bridges and railway wagons, 1880-1902; drawings of suspension bridge at Singapore, 1838.

2508 Mrs Lavina Smiley, Castle Fraser. Correspondence of Mackenzie Fraser, 1799-1809; subjects discussed including building of Inverness infirmary, and Telford's plans for Caledonian Canal and Highland roads.

Engineering and Ironfounding

2400 Fullerton Hodgart & Barclay Ltd. engineers, Paisley. Minutes, 1896-1969; accounting records, 1850-1977; wage and salary records, 1919-77; order books, 1865-1975; specifications and patents, 1871-1977; correspondence, 1888-1977; drawings of machinery and plant, 1866-c.1967; photographs of mining and other machinery, c. 1910-61; catalogues, 1961-4, n.d.; printed material and notes, 1884-1962. Full survey (292 pages) available in SRO.

2422 Carron Co., Carron Iron Works, Falkirk. Minutes of standing and monthly committees, 1874-1963; minutes of general court, 1940-63; committee books, 1768-1813; accounting records, 1920-70; investment register, c. 1930-53; documents relating to shareholdings, 1816-1965; lands, property and mineral register, c. 1911-44; letter books, 1793-1863, 1951-60; reports and correspondence concerning management of works and property owned by company, 1935-67; photographs of royal visit to works, n.d. Reports and accounts relating to subsiduary companies, c. 1946-69 including Scaw Carron Ltd., 1950, London Scottish Lines Ltd., 1948-52, Carron Plastics Ltd., 1967-8. Plans of minerals and

other properties owned by Carron Co., 1882-1963.

2425 Lion Foundry, Kirkintilloch. Minutes, 1893-current, accounting records, 1880-1970; salary book, 1926-35; letterbook, 1881-99; register of debentures, 1906; share register, 1925; order books, 1942-71; illustrated catalogue of castings, 1967; plans of cast iron covers, kiosks, etc, c. 1945-current.

2427 Singer Manufacturing Co. Ltd, sewing-machine manufacturers, Guildford. Directors' minutes, 1917-73; accounting records, 1871-1973; annual totals of machines shipped from Clydebank factory, 1867-1943; inventory of tools and fixtures, 1881; architectural drawings of factory and workmen's tenements, c. 1890-c.1900; notes on war-work production and buildings destroyed in air raids, 1945; illustrated lists of sewing machine parts, c. 1893-1970; catalogues, 1887-1929.

2460 Dundee City District Archive and Record Centre. McGregor & Balfour Ltd., shuttlemakers and mill furnishers, Dundee. Letterbooks, 1902-23; correspondence and order files, 1902-16; Calcutta order books, 1909-25; journals, 1925-32; plan of North Tay Works, c. 1900.

2473 Glasgow University Archives. William Baird & Co. Ltd., coal and ironmasters, Glasgow & Coatbridge. Agendas, minutes and reports relating to board meetings, 1893-1971; accounting records, 1883-1943; shareholding records, 1893-1949; correspondence files, 1910-31; wage and salary records, 1914-19; diaries and notebooks of Robert Baird, 1824-53. Bairds & Scottish Steel Ltd.; board agendas and minutes, 1939-55; reports and correspondence concerning Gartsherrie Ironworks modernisation programme, 1931-51; correspondence relating to nationalisation of iron and coal industries, 1945-51. Bairds & Dalmellington Ltd: coalfield reports, 1894-1952; colliery output and cost analysis files, 1908-47; ledgers, 1932-45; reports and correspondence concerning compensation for mines nationalised, 1946-54; plans of mines and mining plant in Sierra Leone, 1927-63.

2482 Glasgow University Archives. James Mowat Collection. Reports of metallurgical and research department of William Beardmore & Co. Ltd., Glasgow, 1944-66, including report on examination of broken tooth from main gear wheel rim in Empress of Britain, 1961. Photographs of staff and plant at Parkhead Forge, 1899-1932. Publications relating to metallurgy, 1907-75.

2483 Glasgow University Archives. William Baird & Son Ltd., Temple Ironworks, Glasgow. Minutes, 1925-51; accounting records, 1910-50; wage records, 1910-75; order books, 1884-1935; letter books, 1907-63; letters patent and related papers, 1881-1912; contracts and tenders, 1910-65; plans of works and machinery, 1910-72; photographs of steel bridges, c. 1894-1946.

2496 Glasgow University Archives. Butters Bros. & Co. Ltd, cranebuilders, Glasgow. Board meeting papers, 1968-74; accounting records, 1926-72; correspondence files, 1942-68; order books, 1898-1955; crane registers, 1911-36; hire books, 1929-56; wage records, 1937-64; specifications, 1919-80; print books, 1890-1946; trade catalogues n.d.; newscuttings, 1956-69. Abbott Engineering Ltd.: board papers, 1967-74; accounting

records, 1964-72; progress reports, 1970-71; Thomas W. Ward Ltd., Sheffield: correspondence, 1965-71; quarterly returns, 1965-72; progress reports, 1970-71. Forth & Clyde Steel Foundry (1932) Ltd.: purchase daybooks, 1957-64. Herbert & Morris Ltd., Loughborough: accounts and correspondence, 1966.

2497 Glasgow University Archives. P & W MacLellan Ltd., engineers, Glasgow. Directors' reports, 1890-1953; accounting records, 1834-1960; wage book, 1864-70; letter books, 1861-1911; contract books, 1851-1962; specifications and tenders, 1882-c.1897; patents, 1909-45; plans of property in Glasgow, 1863-1933; photographs of bridges and railway wagons, 1880-1902; drawings of suspension bridge at Singapore, 1868. Miscellaneous correspondence and papers, 1822-1967, including accounting records of Donald MacLellan, hardware merchant, 1822-32; diary of visits to India and Japan, 1876.

2498 Glasgow University Archives. Papers of Alexander C. McGregor, draughtsman. Job notebooks, 1925-77. Photographs and drawings of machinery, c. 1939-60. Technical publications and trade catalogues, 1938-73.

2505 Glasgow University Archives. Papers of Miss M. Service. Photograph album of tests on Beardmore cemented armour-plate, 1901-4; catalogue of works of William Beardmore & Co., 1910; photographs of armour-plating of H.M.S. Malaya, damaged by enemy action, 1916.

2488 Glasgow University Archives. The Linen Thread Co. Ltd., Glasgow, London and Belfast. New Process Welders Ltd., electric welding-machine manufacturers, London: register of directors, 1903-70; share record, 1932-58. Torpen Engineering Co. Ltd., electric tool manufacturers, London: minutes, 1936-65.

Finance

2377 Turner, Hutton & Lawson, chartered accountants, Glasgow. Abstracts of factors intromissions, (47 volumes), 1898-1950.

2391 Brander & Cruickshank, advocates, Aberdeen. The North of Scotland Canadian Mortgage Co. Ltd.: directors minutes, 1875-1953; share registers, 1875-1956. Aberdeen Trust Co. Ltd.: directors minutes, 1911-current; accounting records, 1912-60. Aberdeen and Canadian Investment Trust Ltd.: directors minutes, 1958-62; private journal, 1953-7. Aberdeen, Ceylon and Eastern Trust Co. Ltd.: directors minutes, 1929-65; register of directors, 1952-63; accounting and shareholders' records, 1941-58; share register, 1929. Aberdeen, Edinburgh and London Trust: directors minutes, 1928-80; accounting records, 1947-56; share registers, 1928-56. East of Scotland Trust Ltd: directors and shareholders' minutes, 1932-72. Harrot & Co. Ltd.: share ledger, 1912-30.

2408 G.A. More-Nisbett of the Drum, Esq. Papers relating to minerals, canals, railways, and banking, 1830-93 including correspondence

concerning the affairs of the Western Bank, 1859.

2451 Dundee University Library. Dundee Stock Exchange Association. Daily Ledger sheets, 1879-1962. Stock Exchange Year Books, 1876-1964; circulars and publications relating to Stock Exchange and Dundee Stockbrokers, 1909-37.

2477 Glasgow University Archives. Papers of Charles Gairdner. Personal and financial papers, 1836-91, subjects include money supply and bi-metallism, 1844-92, social and business correspondence, 1883-92, including references to Glasgow Exhibition, 1887.

2478 Glasgow University Archives. Royal Mail Shipping Group. Photocopies of memoranda and correspondence relating to reconstruction of group, 1932-3.

2506 Glasgow University Archives. Bank of Scotland. Extracts from minutes of court of directors, 1896-1918; balance sheets and related papers, 1866-1978. British Linen Bank: extracts from minutes of court of directors, 1746-1920; balance sheets and related papers, 1865-1971. Banking Co. of Aberdeen: extracts from letter books, agenda books, minutes of court of directors, 1767-99. Central Bank of Scotland (Perth): balance sheets and realted papers, 1865-8. Caledonian Bank: balance sheets and related papers, 1865-1907. Union Bank of Scotland: extracts from minutes of court of directors, 1830-1919; balance sheets and related papers, 1867-1907. Royal Bank of Scotland: extracts from minutes of court of directors, 1727-1918; balance sheets and related papers, 1817-1972. Commercial Bank of Scotland: extracts from minutes of board of directors, 1810-1922; balance sheets and related papers, 1864-1968. National Bank of Scotland: extracts from minutes of board of directors, 1825-1920; balance sheets and related papers, 1865-1907. Dundee New Bank: extracts from partners' minutes and related papers, 1802-28. Clydesdale Bank: extracts from minutes of board of directors and related papers, 1838-1973. Town and Country Bank (Aberdeen): extracts from sederunt books and related papers, 1825-1908. North of Scotland Bank: balance sheets and related papers, 1865-1910. City of Glasgow Bank: balance sheets and related papers, 1872-9. Restricted Access.

General Manufacturing

2238 Mrs A. Francis, Lady Ironside, and Mrs C. Aliaga-Kelly. Accounts relating to Windmill Snuff Manufactory at Campvere, 1755-67.

2359 John Ferguson & Sons (Glasgow) Ltd., brush manufacturers, Glasgow. Minutes, 1920-55; financial records, 1920-49; wage records, 1934-46; photographs of premises and delivery van, c. 1930, c. 1966.

2375 Nobel's Explosives Company Ltd, Ardeer, Ayrshire. Notebook concerning gunpowder manufacture, 1811; letters from Alfred Nobel to Colonel Majendie, H.M. Inspector of Explosives, 1833;

agreements and production licences, 1886-1900; ledger, 1892-7; correspondence, 1902-59; laboratory reports, c. 1905-current; accident reports, 1908-20; photographs of plant, c. 1872-1965; publications concernign explosives, 1879-1976; labels and leaflets, 1899-1943. Hall & Co.: accounting records, 1841-99. British Dynamite Co. Ltd.: letterbooks, 1874-6; accounting records, 1875-60. Novel Dynamite Trust Co. Ltd.: balance sheets, 1886-96.

2380 Barker & Rennie Ltd., brush manufacturers, Glasgow. Private ledgers, 1869-1956; wage books, 1873-1936; photographs of plant and office staff, c. 1900-20. Industries of Glasgow, c. 1888; illustrated catalogue, n.d.

2382 Central Regional Archives. Papers of Miss W Towers, J & A Towers (formerly Grahamston Firebrick Co.), Falkirk: accounting records, 1870-94; wage records, 1878-97; catalogue and price list of brick fireplaces, 1933; photographs of staff and brickmaking process, c. 1890.

2388 A McCowan & Sons Ltd., confectionery manufacturers, Stenhousemuir. Accounting records, 1922-70; wage and salary records, 1924-61; photographs and correspondence concerning factory builings, 1964-79; titles of English sites belonging to the Nestles group, n.d.

2397 Michael J. Mepham Esq. Edinburgh. Edinburgh Wire Works. Accounting records, 1854-1924; wage book, 1894-1910; letterbook, 1853-7.

2417 J. Lizars Ltd., optical instrument manufacturers, photographic dealers and retailers, Glasgow. Accounting records, 1945-69; wage and salary records, 1958-66; lecture on photographic lens construction with slides, n.d.; photographs of premises, 1974.

2418 Glasgow University Archives. W & J Martin Ltd., leather tanners, curers, merchants and footwear manufacturers, Bridge of Weir. Minutes, 1946-52; accounting records, 1936-80; wage, salary and employment records, 1930-51, 1961-79; process records, 1897-1913, 1922-40, 1954-69; trademarks and agreements, 1929-81.

2423 James Buchanan & Co. Ltd., scotch whisky distillers, Glasgow. W.P. Lowrie & Co Ltd. whisky producers, Glasgow: directors; minutes, 1926-49; blending committee minutes, 1913-17; coopers' weekly wage records, 1893-5; whisky blending records, 1912-65; share records, 1914-21; papers and correspondence on re-organisaation of company, 1947-9; legal and publicity papers, 1890-1974; photographs of premises and workforce, 1887-1922.

2464 Strathkelvin District Museum, Kirkintilloch. Sister Laura's Infant and Invalid Food Co. Ltd.: directors' reports, 1921-59; minutes, 1948; accounting records, 1911-56; papers and correspondence concerning purchase of Teddylax and H.J. Wade & Co Ltd, 1923-51; scrapbook of advertising material, 1948-66. R.S. Watson Products Ltd.: articles of association, 1931; accounting records, 1931-50. H.J. Wade & Co. Ltd.: articles of association, 1946; scrapbook of advertising material, 1948-67.

2475 Robert H.S. Robertson Esq. Pitlochry. Letter book of British

Diatomite Co., Skye, 1899-1901.

2487 Glasgow University Archives. Photocopies of documents in SRO and papers and company histories relating to scotch whisky industry, 1782-1977.

Publishing and Printing

2354 Hawick News, publishers and printers, Hawick. Bound copies of Hawick News, 1882-current; ledgers, 1951-9; wage book, 1951-4; apprintice register, 1902-47; photographs, c. 1960-current.

2492 Glasgow University Archives. James Reid & Son Ltd., manufacturing stationers and printers, Glasgow. Sales contract books, 1931-62. Photographs of hotels and related material, n.d.

2501 Glasgow University Archives. Blackie & Son, publishers, Glasgow. Architectural and site plans of firm's property in Glasgow and London, 1838-1912.

Shipbuilding

2315 Hall, Russel & Co. Ltd., shipbuilders and shiprepairers, Aberdeen. Directors minutes, 1865-1964; minutes of annual general meetings of shareholders, 1915-54; accounting records, 1872-1951; wage registers, 1880-1941; order books, 1817-1938; letterbook, 1880-1937; register of shareholders, 1871-1956; apprentice registers, 1869-1922; register of boilers and engines, 1871-1956; list of vessels built, 1811-1969; photographs of clippers, trawlers, and other vessels, 1859-1970; ship plans, c. 18837-94.

2409 Yarrow (Shipbuilders) Ltd., Glasgow. Minutes, 1966-current; accounting records, 1967-current; list of contracts, 1869-1979; technical data and correspondence, 1877-1976; photographs of vessels, 1869-1980; works newsletters, 1954-75; press-cuttings, 1958-62.

2416 Major R. Sinclair Scott, Symington. Legal papers and family correspondence, 1813-77; letter books and accounting records relating to trust of John Scott of Hawkhill, shipbuilder and Scott & Co., shipbuilders, Greenock, 1886-1954; specifications for engines and scoop wheel, 1844; photographis album of Scott's yards, c. 1880-1920.

2453 Dundee University Library. Photocopies of notes compiled by John P. Ingram on ships built in Dundee, Arbroath, Perth and Fife from 1767-1978.

2479 J.S. Meighan Esq., Glasgow. General arrangement drawings and photographs of ships, 1890-1935, including steam yacht Carola,

1892.

2480 William Lind Esq. Kilbarchan. Bow Mclachlan & Co. Ltd., shipbuilders, Paisley. Photocopy of catalogue of passenger and cargo steamers, launches and other vessels, [c.1900].

2481 Glasgow University Archives. Barclay Curle & Co. Ltd., shipbuilders, Glasgow. Drawings and photographs of ships, engines and machinery, 1915-23, n.d.

2485 Glasgow University Archives. James Lamont & Co. Ltd., shipbuilders, Port Glasgow. Dock dues ledgers, 1933-66; wage abstracts, 1948-78; material cost books, 1947-51; correspondence, specifications, launch particulars, ship drawings, 1947-78; plans of yard and buildings, 1907-74; trade catalogues, c. 1947-75; photographs of ships parts, n.d.

2486 Glasgow University Archives. Caird & co. Ltd., shipbuilders, Greenock. Particulars of steamers and machinery, 1840-78.

2494 Glasgow University Archives. Alexander Stephen & Sons, shipbuilders, Linthouse. Photographs of ships and engines built by firm, c. 1900-60.

2499 Glasgow University Archives. Publication by Robert MacFarlane on centenary of launch of Comet, 1912, with related newspaper articles.

2504 Glasgow University Archives. William Simons & Co., shipbuilders, Renfrew. Minutes, 1895-1958; ship drawings, 1814-1926.

2507 Glasgow University Archives. Fleming & Ferguson & Co. Ltd. Plans of ships built by Fleming & Ferguson, William Simons & Co., Lobnitz & Co., Simons-Lobnitz & Co. Ltd., 1886-1961.

Shipping and Transport

2387 William Runciman & Co. Ltd., shipowners and managers, Glasgow and London. Minutes, 1915-73: accounting records, 1892-1970; letter books, 1886-96; agreements, 1895-1937; correspondence, 1908-29. Moor Line Ltd.: minutes, 1889-1939; accounting records, 1890-1964; ship drawings, specifications and contracts, 1893-1939; photographs of vessels, c. 1892-1964; photographs and correspondence concerning war memorial, 1924-5; news cuttings, 1890-1901. Anchor Line Ltd.: minutes, 1935-68; accounting records, 1964-70; officer's service records, 1862-1959; joint service agreements with Cunard, 1959-68; photographs of vessels and masters, c. 1880-current; news cuttings, 1876-current. Currie Line: accounting records, 1967-70; masters' and officers' service records, 1866-1942; minutes of masters' deck and engineer officers' fund, 1912-73. Novocastrian Shipping Co. Ltd.: accounting records, 1904-11. Papers of 2nd Viscount Runciman concerning Indian shipping conferences, 1955-72.

2393 Irvine Harbour Co., Irvine, Ayrshire. Harbour Trust minutes,

1907-20; revenue acounts, 1957-63; cash books, 1909-51; ledgers, 1915-51; private cash books, 1920-35; private journal, 1920-70; purchase day book, 1954-65; monthly expenditure ledger, 1957-67; vessel charges ledger, 1920-45; correspondence, 1892-1914; letter books, 1913-43; pilots records, 1942-6; stevedores' timebooks, 1939-47; register of vessels, 1916-44; register of arrivals and sailings, 1940-52; harbour masters' log books, 1938-40; dredger Irvine, log book, 1918-19; harbour soundings books, 1910-14; clearance books, 1939-75; harbour plans, 1861-1926; photographs of tugs Garnock and Fencer, n.d.

2404 Captain N.E.F. Dalrymple-Hamilton of Bargany, Girvan. Material relating to turnpike roads in Ayrshire, 1801-31. Memoranda and reports concerning Girvan harbour, 1860-9.

2408 G.A. More Nisbett of the Drum, Esq. Reports of Slamannan Railway, Garnkirk and Glasgow Railway, Paisley and Renfew Railway, 1832-46; half-yearly reports of Forth and Cart Junction Canal, 1839-45.

2466 Shetland Library, Lerwick. Morton Muniments. Papers relating to wrecks, 1664-1744.

2476 Glasgow University Archives. The Ellerman Lines. Conference minutes, 1892-1903; accounting records, 1879-1938; trade agreements, 1885-1970; Indian trade freight books, 1901-25; correspondence files, 1912-60; sailings books, 1918-52; registers of certificated officers, 1836-1906, apprentices, 1854-1965, engineers, 1874-1918, ships' personnel lost through enemy action, 1939-45; specifications and historical notes concerning ships, 1839-1970; papers on Dundee jute imports, 1861-1966; insurance policies and guarantees, 1885-1948; agency agreements, 1906-52; conference minimum rates books, 1934-44; reports and correspondence relating to war losses, 1940-8; prints and photographs of ships, 1839-1970.

2478 Glasgow University Archives. Royal Mail Shipping Group. Photocopies of memoranda and correspondence relating to reconstruction of group, 1932-3.

2495 Glasgow University Archives. Andersons (Newton Mearns) Ltd., garage proprietors. Minutes, 1930-79; accounting records, 1910-76; wage records, 1942-69; correspondence, 1899-1973; agreements, 1935-67; car deliveries books, 1958-64; car books, 1919-58; plans of company property, 1951-71; news cuttings, 1959-75.

Textiles

2386 A. Hall & Sons Ltd., woolspinners and carders, Newton St. Boswells. Minutes, 1924-63; accounting records, 1892-1964; wages books, 1912-44; business diaries, 1929-36; order book, 1932; engine and machinery plans, n.d. Now deposited in S.R.O. (GD 395).

2448 Dundee University Library. Sidlaw Industries, Dundee. Thomas

Bell & Sons (Dundee) Ltd., jute spinners, Dundee: minutes, 1890-1933; accounting records, 1891-1932; shareholding records, 1890-1926; letter books, 1914-23; tradesmen's time books, 1939-42. Cox Brothers Ltd., jute spinners, Dundee: minutes, 1893-1932; accounting records, 1814-1921; letter books, 1869-1923; shareholding records, 1892-1932; wage records, 1893-1921; miscellaneous correspondence and papers, 1832-1964, including press-cuttings concerning labour disputes, 1906-15. Gilroy Sons & Co. Ltd., jute spinners, Dundee: minutes, 1890-1924; accounting records, 1879-1933; shareholding records, 1890-1932; register of directors and managers, 1901-29. J. & A.D. Grimmond Ltd., jute spinners, Dundee: minutes, 1892-1934; accounting records, 1892-1948; shareholding records, 1893-1932; register of accidents, 1896-1935; letter books, 1898-1919; inventories and valuations of plant, 1892-1920; miscellaneous correspondence and papers, 1840-1924; including photograph of employees at Bowbridge Works, 1863. John N. Kyd & Co. Ltd., jute spinners, Dundee: minutes, 1920-33; accounting records, 1892-1932; shareholding records, 1921-31; time books, 1897-1931; register of young persons employed fulltime, 1901-2. Harry Walker & Sons Ltd., jute spinners, Dundee: minutes, 1892-1933; accounting records, 1892-1932; shareholding records, 1892-1931; order books, 1847-51; costing books, 1851-1910; letterbooks, 1885-1926; wage records, 1911-12; miscellaneous correspondence and papers, 1856-c. 1960, including photographs of calendering department of Caldrum Works, Dundee, 1875. P. Stewart Sandeman & Sons Ltd., cotton and jute spinners, Dundee: accounting records, 1912-24; shareholdng records, 1929-32; directors' attendance book, 1912-36; miscellaneous correspondence and papers, 1883-1932, including illuminated address presented by employees to Colonel Frank Stewart Sandeman, 1883. John Lowson Junr & Co. Ltd., jute manufacturer, Forfar: minutes, 1898-1950; accounting records, 1874-1952; shareholding records, 1903-55. Boase Spinning Co. Ltd., flax hemp and jute spinners, Dundee: minutes, 1886-1920; accounting records, 1876-99; order book, 1870; production book, 1906-50; miscellaneous correspondence and papers, 1866, 1968, including list of flax manufacturers in Scotland with number of power looms owned by each, n.d. Sidlaw Industries Ltd: minutes, 1922-47; accounting records, 1921-58; wage and salary records, 1919-63; shareholding records, 1920-54; jute delivery books, 1939-40; jute stock books, 1941-51; jute buyer's books, 1944-53; print design book, 1895-1939; accidents book, 1940-44; miscellaneous correspondence and papers, 1884-1962, including correspondence relating to Colliers' detachable chair and patent deck chair canvas, 1923-5; pamphlet concerning growing and harvesting of flax and hemp in Russia, c. 1950.

2452 Dundee University Library. Buist Spinning Co. Ltd. Minute books, 1900-78; accounting records, 1874-1979; shareholding records, 1900-78; wage records, 1957-68; newscuttings relating to British jute industry, 1900-32.

2452 Dundee University Library. Craiks Ltd., linen and jute merchants and manufacturers, Forfar. Minute books, 1908-65; accounting records, 1877-1980; shareholding records, 1908-80; letter books, 1909-25; production and technical records, 1911-67; order books, 1920-44.

2459 Dundee City District Archive and Record Store. Halket & Adam,

Dundee Ropeworks. Work order books, 1926-66; paybooks, 1942-54; accounts of purchasers, 1951-68; receipted order forms, 1967; details of ropes ordered, 1933-60.

2461 J & P Coats (UK) Ltd., thread makers, Paisley. Minutes, 1890-1922; accounting records, 1808-1947; wage records, 1833-1951; employment registers, c. 1843-1934; half-time school admissions log-book, 1887-1908; half-time school admissions register, 1888-1908; specifications and tenders for new dyeworks, 1900; record of dye and experiments, 1938-45; register of property, 1949-71. English Sewing Cotton Co.: sales journal, 1896-9. Baxter, Steedman & Coats, Liverpool: accounting records, 1869-89. United Thread Mills Ltd.: accounting records, 1932-41. Clark & Co. Ltd.: minutes, 1896-1937; accounting records, 1896-1908; letter books, 1880-1931; registers of members, 1896-1947. Kerr & Co.: accounting records, 1889-1901. Photographs of premises of Covant Thread Co. USA, and Ferguslie Mill, Paisley, 1878-1950.

Other records of J & P Coats and Coats-Patons are deposited with GUA UGD 199.

2476 Glasgow University Archives. The Ellerman Lines. Papers on Dundee jute imports, 1861-1966.

2488 Glasgow University Archives. The Linen Thread Co. Ltd., Glasgow, London and Belfast. Minutes, 1897-1959. Ainsworth & Sons Ltd., Manchester: annual returns, 1914-66. William Barbour & Sons Ltd., textile manufactures, Belfast; memoranda and articles of association, 1883-1900. Beltico Ltd., London: minutes, 1959-67. Black Staff Ltd., Belfast: annual returns, 1964-6. British Braids Ltd., Peterborough: annual returns, 1950-66. C.D.S. Developments Ltd., London: minutes, 1954-61; share certificate book, 1954-8. Coloured Sails Ltd., London: annual returns, share certificate book, 1965-7. Crawford Brothers Ltd., Glasgow and Manchester: annual returns, 1914-66. Elliot Equipment Ltd., London: minutes, 1958-66. Eltico Mills Ltd., Lisburn: minutes, 1898-1961; share certificate book, 1908-69; annual returns, 1958-66. Lindustries Ltd.: minutes, 1961-4; register of charges, 1964-70. Linen Thread International Corporation: minutes, 1957-9; stockholders' register, c. 1959. Rowbottom & Booth Ltd., cord and twine manufacturers, Manchester: directors' minutes, 1952-71. J & W Charley & Co. Ltd.: annual returns, 1964-66. The Lurgan Weaving Co. Ltd.: annual returns, 1964-66. Walfhill Spinning Co. Ltd.: annual returns, 1964-66. Wilson & Wood Ltd.: annual returns, 1964-6.

Trade and Employers Associations

2355 South East of Scotland Licensed Trade Association, Edinburgh. Minutes, 1975-current. East Lothian Licensed Trade Defence Association: minutes, 1894-current. Edinburgh Wine, Spirit and Beer Trade Association: minutes, 1953-current. Leith Wine, Spirit and Beer Trade Association: minutes, 1972-current.

2360 Scottish Motor Trade Association, Edinburgh. Committee and

council minutes, 1919-75. Local centre minutes: Aberdeen, Dumfries, Dundee, Glasgow and Inverness, 1931-69; Edinburgh, 1931-75; Moray, 1939-69; Borders, 1951-66.

2374 Scottish House Furnishers' Association, Glasgow. Minutes, 1926-cuirrent. Scottish Retail Drapers' Association, East Fife Branch: minutes, 1943-78; cash book, secretary's expenses, 1950-81; bank books, 1962-75, 1979-80.

2391 Brander & Cruickshank, advocates, Aberdeen. Fishing Boat Builders' Association: minutes, 1938-77. Scottish Herring Producers' Association: minutes, 1932-71; cash books, 1932-49. Scottish Inshore White Fish Producers' Association Ltd.: minutes, 1948-79. Scottish Ship Chandlers' Association: minutes, 1955-current. Scottish Fishermen's Federation: minutes, 1973-7.

2411 Glasgow University Archives. Scottish Typographical Association, Dumfries Area. Members' weekly payment ledgers, 1909-22, 1925-9.

2418 Glasgow University Archives. W & J Martin Ltd.: annual programmes of Footwear Leather and Fur Skin Industry Training Board Grant Scheme, 1969-74; trade publications including Journal of Society of Leather Trades Chemists, 1969-72.

2423 James Buchanan & Co. Ltd., Scotch whisky distillers, Glasgow. Fine Tea Supply Association Ltd.: minutes, 1916-74.

2424 Glasgow University Archives. Institution of Engineers and Shipbuilders in Scotland. General minutes, 1857-1955; council minutes, 1857-1943; committee minutes, 1862-1959; students section general minutes, 1893-1952; student council minutes, 1893-1939; cash books, 1857-76; roll book, 1902-45; annual returns, 1930-52. West of Scotland Association of Foremen Engineers: minutes, 1950-2; annual dinner attendance book, 1866-87.

2433 Aberdeen University Library. Aberdeen Fish Curers and Merchants Association Ltd., minutes, 1888-1947; cash books, 1889-1942; letter books, 1936-42; constitution and standing orders, 1936.

2467 Glasgow University Archives. General Committee of the Coalmasters of Scotland, minutes, 1894-5.

2468 Glasgow University Archives. Lanarkshire Coal Masters' Association. Minutes, 1886-1954; annual reports, 1887-1953.

2469 Glasgow University Archives. Board of Conciliation for the Regulation of Wages in the Coal Trade in Scotland. Minutes, 1900-45.

2470 Glasgow University Archives. Committee of the Coal Owners Members of the Conciliation Board. Minutes 1899-1942.

2471 Glasgow University Archives. Ayrshire Employers' Mutual Insurance Association Ltd. Minutes, 1898-1957; memoranda and articles of association, 1895-1944; financial records, 1941-57.

2472 Glasgow University Archives. Ayrshire Coal Owners' Association. List of members, 1946; financial records, 1946-55.

2490 Glasgow University Archives. Copies of employers' organisation reports, 1919-44, including report by Federation of British Industries submitted to Board of Trade, 1942.

2491 Glasgow University Archives. City Business Club, Glasgow, Ltd. Minutes, 1912-58; circulars, 1912-23; reports, correspondence, balance sheets, 1955-64.

2500 Glasgow University Archives. Institution of Production Engineers, Glasgow section. Minutes, 1938-67; correspondence and reports, 1959-70; printed notes on history and activities of Institution, 1961.

A.S. Bell (ed.). The Scottish Antiquarian Tradition: Essays to mark the bicentenary of the Society of Antiquaries of Scotland and its Museum, 1780-1980. (Edinburgh: John Donald. 1981. Pp. xx + 286. £15.)

In 1980 the Society of Antiquaries of Scotland celebrated the 200th anniversary of its foundation and a year later The Scottish Antiquarian Tradition marked the vicissitudes of the Society, of Scottish archaeology and of the museum collections which from 1851 became the responsibility of the state and are now the National Museum of Antiquities of Scotland. The book is as full a record as any interested layman or busy archaeologist is likely to want, and sometimes, as on the matter of the Keeper's salary, somewhat fuller. It was written in time to catch the recollections of men who were young in 1930-40 and knew well those who had ruled cosily (or not cosily, as in the case of V.G. Childe) from 1890 to 1939. These memoirs are the most entertaining part of the book and prompt the reflection that lack of staff and money such as prevailed before 1945 are excellent soil for the cultivation of complacency and condescension. Dr. Stevenson's account of his museum is as careful and scholarly as we should expect from so dedicated an insider, but there is little reflection on the narrow concept of a museum and its functions during that period. For the future we should look at the Williams report. This book suggests that those concerned with the past two centuries expect an infinite extension of the antiquarian tradition.

UNIVERSITY OF GLASGOW A.A.M. DUNCAN

T.M. Devine and David Dickson (eds.). Ireland and Scotland 1660-1850: Parallels and Contrasts in Economic and Social Development. (Edinburgh: John Donald. 1983. Pp. 283. £16.)

In September 1976 a small group of scholars who were working on the economic history of Ireland and Scotland met at Dublin under the auspices of the then Social Science Research Council. The chief aim of the conference was to explore themes common to the two economies since 'even on the most superficial examination it was clear that both countries have been profoundly affected by a similar geography, by a Celtic heritage, and by a history of close political and economic links with England'. The papers were published a year later by John Donald with a wide-ranging introduction by Professors Cullen and Smout (L.M. Cullen and T.C. Smout (eds.), Comparative Aspects of Scottish and Irish Economic and Social History, 1600-1900, Edinburgh, 1977). In all respects this first conference was very successful not least in stimulating many participants to develop more fully the comparative

dimension in their future researches. Indeed, at the second conference, held at the University of Strathclyde in September 1981, nearly half of the papers presented dealt with both economies compared with only three or four comparative papers out of sixteen at the first conference. The second volume of papers, here under review, follows the same format as the first. There is a very useful summary article by the editors, incorporating many of the verbal contributions at the conference, which, together with a thought-provoking 'long view' by Professor Cullen, rounds off the volume. These concluding pieces are preceded by eighteen papers in six sections: Ireland and Scotland, 1600-1800; Rural Themes; Migration; Markets and Trade; Urban and Financial Comparisons; the Question of Religion.

The underlying theme at both conferences was the desire to explain the divergent paths taken by the two economies in the nineteenth century. A concensus emerged that divergence could not have been predicted from the performance of the two economies during the seventeenth century, although the historians of each country were inclined to believe that their country was the poorer at that early stage: here is one obvious area of future research. During the eighteenth century both economies had their successes and both made industrial progress albeit along a rather narrower front in Ireland. As the editors put it:

> Scotland and Ireland by the 1780s had both enjoyed some three generations of peace, economic expansion and demographic growth... the land area under cultivation had never been greater and the leading cities were reaching a new order or magnitude: both societies were on the move.

Thereafter, it was generally agreed, divergence was the order of the day, especially from the 1820s. Convincing explanations remain hard to find. Religion was not to blame nor, according to Charles Munn, was the banking system, since by 1845 it had been transformed in both countries and was 'appropriate to a maturing industrial economy'.

In a short review it is impossible to do justice to the richness of the contents of this volume. The Irish-Scottish debate is now well established and should yield an abundant harvest in the future. The next meeting is to be at Magee College in Ulster in 1985; if its proceedings produce a volume as good as the two already published it will be well worth having.

UNIVERSITY OF HULL DONALD WOODWARD

Anthony Slaven and Derek H. Aldcroft (eds.). Business, Banking and Urban History. Essays in honour of S.G. Checkland. (Edinburgh: John Donald. 1982. Pp. xiv + 235. £15.)

For a quarter of a century, Sydney Checkland and Economic History at the University of Glasgow were synonymous. Appointed in 1957 as the first holder of the Chair, Checkland quickly built up a strong department which not only furthered the empirical tradition of Scottish economic history but taught and researched over an extremely wide range. His own written contributions encompassed the parameters of the subject. And, as an affectionate memoir by Alec Cairncross reminds us, he was extremely fortunate in his wife Olive who, with 'a personality quite as colourful as Sydney's and with perhaps a little extra thrust', not only supported her husband's researches but proved to be a social historian in her own right.

Many modern festschrifts have been criticised for being a patchy, random collection of chapters hastily assembled by scholars, many of them with but a faint connection with the person who has been so honoured. This is certainly not the case here. Most of the eleven contributions were written by past or present members of Checkland's department. Moreover, Checkland is an eclectic historian who demands an eclectic response. The authors do him less than justice by concentrating upon only three of his interests, business, banking, and urban history. He is also well known for contributions in the fields of social history, the history of economic and political thought, and historical method.

In Part 1, Peter Payne writes on the busines history of a colliery and saltworks in Fife in the late eighteenth century, and A.J. Robertson critically evaluates Beaverbrook's contribution to aircraft supply in 1940-1. There are also two useful pieces on shipbuilding by Anthony Slaven and R.H. Campbell, the first dealing with 'strategy and structure' on the Clyde before 1939, the second being a characteristically thorough examination of costs and contracts in the same period, although, disappointingly, 'few firm conclusions can be drawn'. Most of the authors pay tribute to Checkland's encouragement of the subject through the establishment of the Colquhoun Lectureship in Business History in 1959.

Part 2 contains three chapters on Banking. The first is a short, pungent piece from Rondo Cameron on the links between banking and industrialisation in the 19th century, where the author's long and fruitful contact with Checkland does not prevent him from taking an independent line, emphasising the essential differences between Scottish and English banking before the middle of the century. C.W. Munn writes on the development of Joint-Stock banking in Scotland, 1810-45, and P.L. Cottrell's 'London, Paris and Silver, 1848-1867' examines the effects of an outward flow of the precious metal from Europe to the East. Both are based on primary research.

The final section is devoted to urban history. Glasgow's major exponent of the art has been John Kellett. In 'The Social Costs of

Mortality in the Victorian City' he takes up the idea of 'placing a money value upon a person' and applying it, as contemporaries did, to the 19th century mortality statistics. However, this does not appear to be a very fruitful line of inquiry, and it is abandoned for another look at the meaning of the statistics themselves. Here the author contends that the stabilisation in mortality rates in the mid 19th century actually amounted to an improvement given the increase in urban densities. In W. Forsyth's 'Urban Economic Morphology in Nineteenth-Century Glasgow', the skills of both the geographer and the statistician are ably demonstrated, but it is sometimes hard to see what is being added to our understanding of the city's development. Tom Hart examines Glasgow's local government before the First World War, contrasting the images of urban squalor and municipal enterprise. Finally, Derek Aldcroft contributes a rather insubstantial piece on 'Urban Transport Problems in Historical Perspective'.

Checkland's festschrift is a competent and wide-ranging effort. It fully demonstrates the value of empirical research. If there is a failing, then it lies in a general lack of excitement. Checkland frequently provoked his colleagues into taking up new hypotheses, and it is a pity that some of the more provocative scholars to pass through the 'Glasgow School' - Mark Elvin, Malcolm Reed, Keith Burgess, and Roy Hay - are not represented here.

UNIVERSITY OF EAST ANGLIA T.R. GOURVISH

Sydney and Olive Checkland. Industry and Ethos Scotland 1832-1914. (London: Edward Arnold. 1984. Pp. vi + 218. £5.95.)

This volume is devoted to an exposition of the authors' central claim that 'two themes interacted in the formation of Victorian and Edwardian Scotland, namely the material one of industry and empire and the impalpable one of ethos'. It is with an exploration of the first of these issues that the early chapters of this book are concerned. According to the Checklands, the progressive maturing of the Scottish economy produced significant structural and organisational shifts in its industrial sector, an expansion of tertiary employment and a drive towards greater efficiency in agriculture. But the very scale of this economic transformation was bound to be accompanied by a series of parallel changes in the social life of the nation. One initial consequence of industrial development was to reinforce the urban-rural and Lowland-Highland divisions in Scottish society as the pull of the labour market led to both a redistribution of population and its increasing concentration in urban settlement. But what was of equal importance, urbanisation and industrialisation were two of the most potent forces that helped to shape the salient contours of Scottish social history during these decades. At one level urbanisation generated a heterogeneous range of welfare problems that neither the market nor the inherited social institutions of the 'old society' were

capable of resolving. At another level, however, the visibility and dimensions of these issues led over time to an intellectual debate about their causes and, in the closing years of this period, to piecemeal attempts at containing some of their worst manifestations. This kind of ad hoc interventionism was prompted by a variety of influences among them philanthropic altruism, the rise of the civic gospel and the tentative welfare programme of the post-1905 Liberal government; but it also owed something to middle-class concern about the growing gulf between the classes in an urban setting. For, as the authors demonstrate, the politics of class were a distinctive feature of the Victorian and Edwardian scene, shaped in part by conflicting social and economic interests, and in part by the distinctive role of the Church of Scotland in civil society, a role that was weakened rather than obliterated by the impact of the Disruption, the emergence of an urban Catholic community and the evolution of more secular values in the post-1870 era. While, therefore, it is possible to point to 'the Scottish sense of distinctiveness by 1914', it is important, as the Checklands argue, not to lose sight of these more divisive forces that were at work in the Scottish nation.

The timespan covered by this volume is, of course, narrow. But in this case restricted chronological boundaries do not by themselves facilitate the authors' labours since they are confronted with the formidable task of handling a substantial corpus of published work that covers almost all branches of the historical discipline. Given the additional constraints upon length - the text itself is under two hundred pages - the Checklands are, therefore, undoubtedly correct in singling out certain major themes for analysis rather than opting for a more eclectic approach to Scottish history. Yet within this framework of reference certain critical observations must be made. In the first place not every social historian will be satisfied with their analysis of the key issue of class. In relation, for example, to the growth of class consciousness relatively little attention is given to the influence of broader cultural influences at work in Scottish society. In addition, while the authors are correct to emphasise that a skilled - unskilled dichotomy within the labour force led to the growth of a particular craft mentality in certain industries, they do not sufficiently explore the question, raised by Gray's work on the Edinburgh artisan, of whether craft particularism was eroded over time by an awareness of shared class experiences. Secondly, the social and economic contexts of working class urban life are dealt with too perfunctorily. At the material level there is no systematic exploration of working-class living standards, although one important feature of the Scottish experience which ought to have merited some discussion was the existence of sizeable differentials in money wages between skilled and unskilled in different parts of the country. But what is an equally significant omission, the rich subject of working-class leisure is not effectively probed. Particularly towards the end of this period the rise of professional football, gambling, working-class self help in the entertainment field and the exodus of Border textile workers to Edinburgh and elsewhere for the holiday week illustrate facets of working class life that are totally concealed by concentration upon the work ethic. Thirdly the institutional framework within which the social gospel was debated is too narrowly defined. The Christian Social Union under Watson was certainly one strand of this movement although it was sometimes content simply to repeat harsh middle class judgements of working-class mores; but to obtain a more balanced appraisal of the contents of the social gospel some mention

also ought to be made of various Christian Socialist groups that tried to promote understanding between the classes. Finally there are minor factual points which need to be corrected. Thus, the 1872 Scottish Education Act, far from creating a 'unified system' (p. 112), permitted the growth of a dualistic structure consisting on the one hand of the School Boards and on the other of a voluntary sector, dominated by the Catholic Church; the city of Glasgow absorbed the burghs of Govan and Partick not in 1891 (p. 183) but in 1912; and the establishment of Glasgow's Distress Committee and the acquisition of Palacerigg Farm Colony occurred only after the Unemployed Workmen Act had been placed upon the statute book in 1905 (p. 186).

Notwithstanding these criticisms, however, the Checklands have written a useful and eminently readable account of Scottish society in the Victorian and Edwardian eras that will commend itself to a general audience and to students who are embarking upon a serious study of Scotland's past.

UNIVERSITY OF STRATHCLYDE JAMES H. TREBLE

Norio Tamaki. The Life Cycle of the Union Bank of Scotland, 1830-1954. (Aberdeen: Aberdeen University Press. 1983. Pp. xx + 242. £19.50.)

Over the last hundred years, a great deal has been written on the theme of Scottish banking. General accounts have been produced by Kerr (1926) and Checkland (1975), specific themes and/or periods have been explored by Cambell (1955), Gourvish (1969) and Munn (1981), while individual histories of all the major banks have been written by such people as Munro (1928), Rait (1930), Keith (1936), Reid (1938), and Malcolm (1945 and 1950). Consequently, it was with some wonder, about whether there was any more to say, that I approached this book. However, I am happy to report that there is, for Professor Tamaki has produced both a business history, which reflects the enormous advances that discipline has made, and an important contribution to financial history.

Despite the title the book is not a history of the life cycle of the Union Bank of Scotland. Tamaki confines his research and analysis to the period 1830-1885, relegating the remaining years of the bank (until 1954) to a mere nine page postcript, despite the fact that this period covered two world wars, an international economic collapse, and the absorption of the Union Bank by the Bank of Scotland. Consequently, the contribution made by the book rests not on the retelling of an already told tale, as that has already been done by Rait, but by presenting a detailed examination of the foundation, growth, operation, and performance of one bank during its formative and most important years.

After an introduction in which Professor Tamaki sets the scene and defines his approach, there follow five chapters divided chronologically (1830-44, 1844-58, 1858-65, 1865-79, 1879-85). Though this division into distinct periods is based on events within the history of the Union Bank, the result is to disrupt the analysis and, possibly, over-emphasise change rather than continuity, especially in the later years. A more thematic approach, once the bank had been set in being, might have made the book more useful to the financial or business historian. Nevertheless, in the 13 page conclusion (which comes before the postscript) Professor Tamaki does address himself to the entire 55 year period and manages, successfully, to highlight the significance of the separate issues that he has been concentrating upon in the chronological chapters.

The themes that interest Professor Tamaki fall into a number of headings. Firstly, he is intrigued by the challenge from Glasgow to the banking establishment of Edinburgh, the early success of the western concerns as they extended their operations and formed stronger units, and their eventual eclipse, particularly with the collapse of the City of Glasgow Bank in 1878. This the author chronicles very well. Secondly, he is interested in the Union Bank as a business, investigating the way it managed its assets, the lending policy it adopted, the organistion and remuneration of its staff, and the leadership displayed by its management. In this he shows a firm grasp of detail as well as casting interesting sidelights on the importance of cash credits and the consequences of the ultra-conservative policies followed by the bank's long-serving and well-regarded general manager, Charles Gardiner.

Finally, Professor Tamaki displays an avid curiousity about money rlows, documenting the flow of funds into Glasgow and West Central Scotland from the North and East of the country and, then, the increasing flow of funds from Glasgow to London later in the nineteenth century. Not only is the growing integration of the Scottish money market plainly visible through Professor Tamaki's work on the Union Bank, but so is the integration of that market into the wider international forum, and the great influence exerted by London on Scottish financial institutions.

On all these themes, Professor Tamaki has produced an informative, confident analysis, throwing not only new light on old questions but also posing new questions and trying to answer them to the best of the historical material's ability. The one area of weakness, however, in this study is that it is very much concentrated on the supply side of the equation - the gathering of deposits and the lending policy adopted - with very little on the demand for funds, whether in Scotland or outside. Clearly, this is a fault of the material at Professor Tamaki's disposal, because he does try to investigate borrowers, but his aspect of the study seems incomplete in comparison to the rest, and remains a criticism of the book, though <u>not</u> the author's scholarship.

Therefore, within the confines of the information and analysis that could be squeezed from the surviving records of the Union Bank of Scotland, Professor Tamaki has produced an admirable book, that is a

worthy and valuable complement to the recent work produced on Scottish banking.

UNIVERSITY OF DURHAM RANALD C. MICHIE

M. Reid. The Secondary Banking Crisis 1973-75. (London: Macmillan. 1982. Pp. 219. £7.95.)

This book is one of those rare events in publishing history - a study which provides more than it promises. Ms Reid's declared intention is to give a sketch of the whole banking crisis in its historical context. This is achieved in an admirably direct style which carries the reader, whether student, banker or general interest, through the City of London and its corridors of financial power to expose its shortcomings and reveal its strengths. All this is done in a way which conveys to the reader both the complexities of the events and personalities involved, together with an understanding of some of the more technical aspects of the London money markets.

Like most good financial crashes the secondary banking crisis of 1973-75 had several causes, only some of which were recognised at the time. The real strength of the book lies in the fact that the author looks back in history for the underlying causes of the crisis and finds them in Government economic policies of the 1950s when bank lending was constrained by stop-go and related controls. The effect of this was to give rise to a whole series of parallel or secondary money markets which provided the finance which the commercial banks were not allowed to offer to their customers. Into this very fluid situation entered a new range of financial institutions - the secondary banks.

It is clear from the narrative that the Bank of England, in its role as overseer of the banking system, was keen to see a more flexible and more competitive financial market by the late 1960s and these new banks were given recognition under the companies acts without, it would seem, any parallel increase in the Bank of England's supervisory staff. The real danger, however, came in 1971 with Competition and Credit Control which was designed to do two things which, in the end, proved to be mutually exclusive, i.e. this policy was supposed to improve competition amongst the banks, which it did, and to improve the authorities' oversight and control of the system, which it didn't.

With controls on lending reviewed and reserve ratios reduced, all financial institutions had a lot of money to lend. The Government hoped that it would be lent to industry but industry did not want to borrow it so the institutions lent it to one another in a wholesale fashion and, increasingly, to property developers. The quality of much of the lending was rash but profits were to be made and there were no

real controls to prevent this kind of banking. When property values at last peaked, and then began to fall, it was clear that lending on certain properties exceeded the market value of the properties and auditors began to question the stability of various institutions.

And when financial institutions began to fail, the Bank of England launched the 'lifeboat' which is probably the most remarkable and successful rescue operation ever launched by a central bank. The Bank of England, together with the Clearing Banks and Scottish Banks, put up sufficient funds to ensure that there would be no panic and these funds were used to support the institutions which needed them. Some secondary banks and finance houses were taken over but others continued to depend upon the lifeboat for many years and the threat of a domino effect series of collapses was averted. This is the story which is told so clearly in the book. Details of other events in the economy and other economic policies are skilfully woven into the text where they have a bearing on the story.

If a criticism is to be made of this book it is that it contains no theory. There is no real consideration given as to how a central bank might have been expected to act, given the circumstances, and the author does not really separate in her mind or in her writing those firms which were illiquid from those which were insolvent. Reference to C.P. Kindleberger, Manias, Panics and Crashes, would have provided the rigour which is missing from this book. Nevertheless as it stands this volume is an extremely useful description of the crisis, its causes and its aftermath. It also has the virtue of being quite humorous.

UNIVERSITY OF GLASGOW CHARLES W. MUNN

O.M. Westall (ed.). The Historian and the Business of Insurance. (Manchester: Manchester University Press. 1984. Pp. ix + 196. £19.50.)

Question: When is the sum less than the parts?

Answer : This Book.

What should a reader expect from a book with this title? If it had been called 'Essays on the History of Insurance' or 'The Business of Insurance - Historial Essays', then its objective would be clear. However, a title such as 'The Historian and the Business of Insurance' implies some discussion of the role played by the historian and the material at his disposal, as well as an account of the development of the insurance industry. Apart from the brief contribution by B. Supple, entitled 'Insurance in British History' only the chapter by D.T. Jenkins on 'The practise of insurance against fire, 1750-1840, and

historial research', actually addresses the twin themes that the book's title would suggest. The other chapters are straight accounts of particular episodes in the business history of insurance, with, at most, only passing references to the problems of sources, the value and uses of material, the methodology available, etc., etc.

Of the eight substantive chapters, four are concerned with Fire Insurance, two with Life, one with Marine, and one with the growth of a Lloyd's broker. Each, by themselves, makes an interesting contribution to their chosen field and period of study. Taken together, however, no common theme, period, questions, or method of approach emerges. Jenkins describes the growth and organistion of the fire insurance business between 1750 and 1840, particularly in Yorkshire. R. Ryan, in a chapter on 'The Norwich Union and the British fire insurance market in the early nineteenth century' gives us a detailed view of the establishment of that firm, especially the role played by Thomas Bignold, and its contribution to domestic fire insurance before 1830. In contrast, the other two chapters on fire insurance explore completely different aspects of that activity. C.A. Jones examines 'Competition and structural change in the Buenos Aires fire insurance market: the local board of agents, 1875-1921' and stresses the complexities of doing business there for British firms and their agents. These difficulties resulted in the need to establish branches or to acquire local concerns if their business was to be successfully expanded. In a chapter entitled 'David and Goliath: the Fire Offices Committee and non-tariff competition, 1898-1907' by O.M. Westall, the domestic side of competition, and the attempts to regulate it, are studied. The conclusion that emerges is that it was very difficult to maintin tariff rates in the face of changes in the market and the ease of entry.

There is a coherence in the two chapters on life insurance as both are based on the archives of the Standard Life Assurance Company of Edinburgh, and reflect the collaborative work of J.H. Treble and J. Butt. Treble contributes a piece on 'The record of the Standard Life Assurance Company in the life insurance market of the United Kingdom, 1850-64', while Butt provides us with an insight into inter-war conditions with 'Life assurance in war and depression: the Standard Life Assurance Company and its environment, 1914-39'. Both chapters examine the Standard Assurance Company's response to changing market conditions through developing new policies, techniques and markets. It is interesting to contrast the expansion into new markets in the nineteenth century, such as England and then, abroad, with the retreat from many foreign countries after World War One, in the face of legislative and nationalist impediments.

Of the two remaining chapters, S. Palmer gives us an account of the foundation and operation of the Indemnity Marine Insurance Company of London between 1824 and 1850. This provides a useful insight into the organisation of marine insurance in the first half of the nineteenth century. The other chapter, by S. Chapman, provides short historical sketches on the origin and development of the seven different insurance broking firms from which grew the present day firm of Hogg Robinson. However, due to an almost complete absence of business records it is impossible for him to do more than this.

Consequently, the problem of this book is not its contents but the fact that there is very little rationale in presenting its components together. It would have been much better if they had appeared as journal articles or in edited volumes with a more coherent objective. It is a pity that the Chartered Insurance Institute and the British Insurance Association supported this book rather than something on more specific themes such as Fire Insurance or Marine Insurance or Life Insurance or additional business histories of which the insurance industry has, already, two of the best in the works by Supple and Dickson.

UNIVERSITY OF DURHAM RANALD C. MICHIE

Clifford Gulvin. The Scottish Hosiery and Knitwear Industry 1680-1980. (Edinburgh: John Donald. 1984. Pp. v + 163. £16.)

In this study of the highly successful Scottish knitwear industry Dr. Gulvin charts and analyses the performance of a 'specialist' sector of Scottish industrial history which, to a large extent, redresses the lack of attention previously focussed upon it by economic and social historians. It is a compact, richly textured work and its content, whether by design or accident, mirrors the looping intricacies of the knitted garments produced by the industry Dr. Gulvin investigates.

In an introductory chapter for the unitiated, Dr. Gulvin provides a careful exposition of the methodology/technology of handframe knitting which essentially provides the framework for the rest of the book. The highly mechanised Border based knitwear industry of 1980 is far removed from the domestic pattern of frameknitted hosiery introduced into Scotland three centuries earlier. The study follows the development of handframe knitting from the simple production of hosiery in the period 1680-1850 to the gradual transition into woollen underwear and powered knitting in the last half of the nineteenth century and the equally gradual growth of knitted fashioned outerwear in the twentieth century.

The influence of demographic, geographic and economic factors involved in centralising the knitwear industry in the Border town of Hawick are thoroughly investigated: as also are the factors which captured the high quality, high cost market which both Hawick and its knitwear industry have maintained to the present. The detailed attention given to these factors provides the basis for further studies or provides corroborative evidence for such theses as the graduality of industrial change; the role of capital, entrepreneurship, migration, agricultural improvements, transport, labour relations and their inter-relationship and effect on a small specialised industrial sector. Dr. Gulvin's study reveals the often constant dynamics of these factors throughout

the three centuries covered. But, though the study is Scottish based, the exogenous factors of English and German technology, personnel and market competition are integrated into the text with such deft assurance that they fit naturally to the contours of the discussion.

The rise of the great border knitwear firms and their later twentieth century acquisition by a major international combine provides the business historian with sharp evidence of the pros and cons of large scale business concerns and the resultant long term management decisions taken outwith the context of the local economy, whilst the social historian will be more interested in the effect of those decision making policies which take little account of their effects on local communities.

Econometrically minded historians will find little to excite them in the content of this book. But, as Dr. Gulvin explains in his preface, he has 'endeavoured to explain developments over time as well as to record them, in a manner which, it is hoped, will interest and stimulate the intelligent layman without insulting the specialist student of economic and social history'. Dr. Gulvin is to be congratulated on providing such a work which enriches the knowledge of his intended readership.

UNIVERSITY OF GLASGOW BRENDA M. WHITE

Jonathan S. Boswell. Business Policies in the Making: Three Steel Companies Compared. (London: George Allen and Unwin. 1983. Pp. 241. £15.)

Within the general field of British business history there are few studies which have attempted rigorous analyses of the process of managerial decision-making. It is to Dr. Boswell's credit, therefore, that his pioneering work on three of Britain's major steel companies in the period from the First World War to 1939 has done so much to advance the state of the art of business history in this country by highlighting new areas of inquiry and techniques of analysis.

His study begins with an appeal for a 'middle way' in analysing business behaviour, one which rejects the assumption of an all-embracing single objective (usually profit maximisation), and also its extreme 'behavioural' counterpart of pluralism and variability. At the forefront of his analysis, therefore, is the notion of degrees of rationality in the decision-making process as it relates to the three broadly-defined objectives of growth, efficiency and social action. None of these objectives are self-contained or necessarily inconsistent. In particular, growth and efficiency can be mutually reinforcing in the long run, but even in the case of social action

(defined by Boswell as 'the voluntary managerial pursuit of any activities, apart from the firm's own growth and efficiency, sectionally conceived, which are approved by public opinion and government', p. 10) certain strategies, such as merger and investment programmes sanctioned by the state, need not conflict with growth and efficiency considerations.

Within this framework the managements of the three firms chosen for study - Dorman Long, Stewarts and Lloyds and the United Steel Company - displayed strikingly different strategies in a period of greatly fluctuating economic fortunes. In the case of Stewarts and Lloyds growth and efficiency together were of paramount importance throughout the whole of the interwar period. At USC, however, a strategy of growth ended as early as 1920, and at Dorman Long in 1931, although in both companies efficiency had come to be the major preoccupation of management in the second interwar decade, tempered in the former by an unusual degree of sensitivity to the high social costs of curtailing its barely profitable activities in the depressed area of west Cumberland. In all three firms Boswell demonstrates that these varying responses were the product not just of their changing managerial regimes (eight in all in the period in question), but more especially the backgrounds and personalities of the leading actors in the boardroom. Thus, Allan Macdiarmid, the rational and unemotional accountant, chairman of Stewarts and Lloyds from 1926 to 1945, stands in marked contrast to his contemporary, Walter Benton Jones of USC, a social idealist who detested unemployment as an affront to human dignity. This is, indeed, the most significant feature of Boswell's work, namely the critical importance of personal foibles in determining the tone and content of business policies, even in very large firms. Whist this perspective effectively undermines the concept of 'rationalism' it does seem that on the evidence presented Boswell has rather more in common with the 'behavioural' school than he cares to admit. All three firms displayed a tendency to 'muddle through' at various points - even Stewarts and Lloyds in the planning and financing of its new Corby works. Nevertheless, this is a first rate study, impressive in exposition, rich in primary documentation, and a valuable pointer to future areas of research.

UNIVERSITY OF STIRLING M.W. KIRBY

John Turner (ed.). Businessmen and Politics. Studies of Business Activity in British Politics 1900-1945. (London: Heinemann. 1984. Pp. 200. £18.50.)

Explanations of the nature of business activity in politics have led to generalisations ranging from Marx's view that 'the executive of the modern state is but a committee for managing the common affairs of the whole bourgeoisie' to Middlemass's theory of the corporate bias in the politics of industrial society. Generalisations provide valuable

insights but can suffer from the simplification of complex issues. This collection of nine essays is a valuable corrective to any such tendency. They show the complexity of the links through detailed, careful and dispassionate examination of original sources, chiefly in the public records, and to a lesser extent in business records, most of which have become available only in recent years. As a result some confident generalisations will need modification.

Several of the essays show the strong opposition of many businessmen to any government intervention in their affairs and so warn against any interpretations which do not recognise the strength of this simple, and now largely outmoded, barrier to any intervention. The contribution by Richard Roberts of Sussex on municipal enterprise - in which failure to deal with the activities of the City of Glasgow is a disappointing omission - shows the opposition at local level; in an essay in which he demonstrates that neither the Federation of British Industries (FBI) nor the National Confederation of Employers' Organisations (NCEO) changed British politics in a corporatist direction after the First World War, John Turner points out how the opposition of the FBI in particular at the national level restricted its ability to influence government; in his study of talks betwen the FBI, the TUC and the NCEO between 1929 and 1933 Michael Distenfass shows that these organisations were allowed only occasionally and grudgingly to influence government policy and generally only for reasons of political expediency. Taken together these three essays alone point to the need to qualify some of Middlemass's conclusions.

In these circumstances it is not surprising that the essays reveal how the Bank of England and the financial world generally linked politicians and businessmen, especially in the depressed conditions of the inter-war years, when aid from financial institutions was often the only way of avoiding the bankruptcy of many concerns. Two essays in particular show the nature of the Bank's influence and its decline and so qualify some of the more sweeping interpretations of a bankers' ramp. Steven Tolliday's discussion of tariffs and steel suggests that Norman's efforts to rationalise declining industries was as much an attempt to ensure that government was kept out of industry as to try to enable industry to have its own way. Philip Williamson's essay on the politics of the gold standard between 1925 and 1931 concludes that the departure from the gold standard marked the final act of independence of the Bank of England from government policy.

With formal links between government and the business community slight and with the Bank usually a reluctant and restricted go-between, the basis of business activity in politics was often a network of personal contacts, with Norman and his associates playing leading roles. All contributors illuminate these contacts which, perhaps because of their intangible and often poorly recorded nature, have been little examined by historians. As three contributors show, the contacts remained limited until 1939. In a pioneering study Richard Roberts of Oxford advances the view that civil servants helped establish effective business activity in politics by prompting businessmen on what they should seek from government, though always in the context of a limited role for government to deal with short-term emergencies. Geoffrey Jones' examination of the oil industry also shows the same short-term and specific nature of government intervention. George Peden's

discussion of rearmament in the decade after 1935 indicates that the relationship between businessmen and politics was not all one way and that government could sometimes use businessmen for its own non-economic ends with each group influencing the other in consequence.

The informal contacts were especially influential given the position of the Bank of England in the 1930s, and perhaps especially given the character of its Governor. Within the informal framework the vital contributions of such businessmen as Duncan and Weir come across clearly. Yet one of the few disappointing features of the essays is the way in which - in some more than in others - personalities remain relatively obscure, even in John Turner's good introductory survey. Though all contributors support the place of personal contact and influence in laying the foundations for the open and formal contact of more recent times, the essays will not help detailed biographical study. They will be helped by it. Their virtues more than counterbalance such criticism in a field where many investigators have been more interested in seeking evidence of social scandal and corruption, often to prove a pre-determined conclusion. The essays have also one major lesson for industrial historians. They show how industrial history of the twentieth century should never be separated from political history. Yet many industrial historians write in a political vacuum. They should read these essays and do so no longer.

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