

**SCOTTISH  
BUSINESS  
AND  
INDUSTRIAL  
HISTORY**



BUSINESS ARCHIVES COUNCIL OF SCOTLAND

*Scottish Business and Industrial History*, formerly *Scottish Industrial History*, is a journal published by the Business Archives Council of Scotland, and has, since 1977, been devoted to the dissemination of original historical research into all periods and facets of Scotland's industrial and commercial past. It publishes articles on business, economic, financial, management or technological aspects, and is also interested in any relevant debates and discussions. Related disciplinary or interdisciplinary studies are also welcome, and both empirical and theoretical approaches are acceptable. Contributions should be sent to the Editor, Professor Sam McKinstry, Business School, University of the West of Scotland, High Street, PAISLEY, PA1 2BE, or to [sam.mckinstry@uws.ac.uk](mailto:sam.mckinstry@uws.ac.uk)

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## **Editorial**

The present Edition of the Journal contains a spread of articles which range from the late- seventeenth century to the mid-twentieth century in chronological coverage, and which are presented in this order.

The first article is the late Dr David AR Forrester's final published paper. David died in 2009, aged 81, and had submitted his study of 'Three Scots Traders of the Seventeenth Century' to SBIH some months before. He was a remarkable and eccentric figure, the last of the absent-minded professors, although he never held that title, being a lecturer at Strathclyde University until his retirement date in the early-1990s. David's doctoral thesis and his professional and academic qualifications were in accounting, with his research specialism in accounting history.

Over his academic career, he researched and published on a range of historical subjects of European scope which included 'the Lad o' Pairs' in Scottish education and the finances of the Forth and Clyde Canal. He was a purist, driven by love of subject, plus phenomenal bursts of energy. He was a much-loved family man with strong ties to his church and community, the latter in Maryhill. As an academic, his lecturing style was eccentric and occasionally hilarious and he retained a ready and self-deprecatory sense of humour throughout his life. He was gifted in the area of inspiring others, and gave the Editor of this journal much encouragement many years ago in starting accounting and business history after a career in industry.

David could be an editor's nightmare, with an elliptical turn of phrase that often defied interpretation, even on a fifth or sixth reading. His communication technique involved a generous but often wholly unjustified assumption of wide contextual knowledge

on the part of his readers. A second feature was the use of jokes and puns, sometimes involving the Scots language, with lashings of exclamation marks, and the third, most serious, obstacle was the tendency to write in the passive voice, perhaps from an attempt to give his writing objectivity. These, added together, presented a formidable mix!

When his paper was received, the two referees felt it had potential, but was both underdeveloped and contained a heavy dose of David's mannerisms. Referees' reports were sent to him, but after a delay of some months, we heard, sadly, that David had suddenly passed away. His family asked us to continue with the paper's publication, and to make such editorial interventions as seemed fit. This we were delighted to do, and we bring readers the results. We feel that the original DARF, as he liked to be known, is still there, in his interests and in some of his mannerisms. We are conscious that the referencing is less precise than it otherwise would have been, but the main sources are clear enough and the key facts indisputable. We present it as a memorial to a remarkable man who loved the study of Scotland and its commercial history.

The second study, by the Editor, responds to a persistent, negative view of Sir Walter Scott's interactions with, and attitude to, money. Drawing on recent studies into Scott's finances and the financial management of Robert Cadell at Constable, his publishers, the paper at some length paints a picture of Scott as financially knowledgeable and experienced, if given to an expensive lifestyle of the type enjoyed by his social peers and superiors. It attempts, with brief reference to the recent financial crash of 2007-onwards, to portray his behaviour at the time of the 1825/6 crash as more responsible than has often been made out, locating it within the world of bill finance.

The third paper, by Professor Emeritus Alan Crocker, is a study of a small mid-Victorian gunpowder factory situated on the west coast of Scotland, at Melfort, near Oban. Drawing on the archaeological evidence still remaining and a single extant letter book, the paper reconstructs an impression of the business out of what appears initially to be next to nothing. A clear picture of the volumes and types of gunpowder produced and even the chemical processes emerges, with details of business and transport connections and the effects of external events on sales and profitability. The paper is a study in historical methodology as well as of the business concerned, proving that apparently sparse documentary resources can be invaluable to the careful seeker.

The final study, by Dr. Miles Oglethorpe, is a summary of the Scottish Coal Industry from its post-World War 2 nationalisation until its recent decline. The paper provides details of the numbers of collieries, outputs and manpower figures from nationalisation onwards, discussing the effects of the decline of Scottish heavy industry and the decline of steam on the railways, plus other setbacks, on coal production in Scotland. We are grateful for a study which emphasises the industry's more recent history, as opposed to examining earlier periods, which have been well researched.

The journal concludes with the Surveying Officer's Report.



# THREE SCOTS TRADERS OF THE LATE SEVENTEENTH CENTURY

**DAR Forrester**

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## **Abstract**

*The study which follows provides short business biographies of three approximately contemporaneous Scots men of commerce: Andrew Russell, George Watson and Robert Colinson, who shared common trading backgrounds as well as accounting and commercial skills. It compares and contrasts, for the first time, the training, business activity and political and religious affiliations of the three men, setting these in the context of the troubled history of Scotland in the second half of the seventeenth century. The paper provides rich evidence of the nature, international connections and financial networks involved in Scots trade with the continent at this period, including some insights into the effects of political factors on the activities of participants. While the three individuals studied had much in common in terms of Reformed faith, and in terms of their accountancy and commercial skills, the paper makes it clear that these were expressed in disparate activities that reflected the polarised, divisive nature of peculiarly Scots politico-religious positions, affiliations and developments during the period.*

## **Introduction**

The trading of Scots seventeenth century businessmen, and the tensions of those times too - may be presented by means of three accounts of notable individuals. Least known, although featuring centrally in the doctoral researches and ensuing works of Smout (1963) - must be Andrew Russell who originated from Stirling,

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traded for a life-time from Rotterdam, and died in Stirling in 1697. Best known in Edinburgh is George Watson (1654-1723). He was a leading member of the Edinburgh Merchants who were incorporated under Charles II, and acted as book-keeper in the early days of the Bank of Scotland. His Tory political stance was clear as he acted as a factor to Sir James Dick of Prestonfield; but it was chiefly by international bill negotiation and trade that his wealth was won. On his death in 1723, he left great wealth to raise a 'hospital', or school, which is now George Watson's College.

Robert Colinson acquired his literacy and some trading acumen in Aberdeenshire, but he, and many others, went to the Netherlands for book-keeping skills. These he also applied in international trade, but, significantly, made them available to others through his authorship of an early and remarkable accounting text which was published in Edinburgh in 1683. Biographical evidence is to be found in this book, but there are documents of his actions as steward of the Midlothian Tory family, the Setons. The *Idea Rationara* was authored by 'Captain Robert Colinson' who must thus have served in the militia which was active against the Covenanters until the Revolution of 1688. Colinson's will is dated four years later.

These traders and financiers were invaluable to governing 'perties', and to political plotters at home and abroad. The Calvinist Russell, called 'worthie' by his trading partners, in denial of terrorist accusations made against him by Watson (see Note 1), was a paragon of virtue compared with the mob who burnt the Catholic Sir James Dick's house at Prestonfield in 1687. Character, plus religious and political loyalties, all affected trading and financial links.

### **Andrew Russell**

Andrew was born, at unknown date, to John and Helen Russell in Stirling. This Royal Burgh lost rank only when Edinburgh was favoured as Scots capital. Early in the seventeenth century, it was still of first rank for its guilds, for its wide trading out from the

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Forth estuary, and also for the schooling it provided (Smout, 1963).

Schools and churches were the responsibility of town Councils. The Grammar School was reconstructed in 1633; and from the same year we read of quarterly visitations and checks on educational standards by councillors. The teaching was carried on by 'Doctors', of whom the most renowned was Maister Will. He taught at Stirling from 1625-1653, with one intermission.

Curricula at the Grammar School included Good Citizenship and the Catechism as well as classical texts and verse-composition. Increasingly in that century, standard English was learnt in contrast to the Scots spellings used by so many of Russell's correspondents. Thus schooled and at uncertain age, Andrew progressed to a commercial apprenticeship, possibly under his father as 'Master' (Smout, 1963).

His first international trading was undertaken from Stirling, but from 1668, Tory control of church and state prompted his life-long exile to Rotterdam, a residence only broken for some months in 1673. Rotterdam offered a trading base independent of the nearby Stapleport at Veere. Veere, also known as Campveere, in Middelburg, had for a very long time been the official port of entry and exit to and from Holland of Scottish exports and imports, but by this time was dwindling in importance as Scots traders bypassed it to use other ports. Scots Calvinists found an offshore congregation at Rotterdam, while reading correspondence of persecution at home. Russell himself was charged of complicity with the assassins of Archbishop Sharp in 1679<sup>1</sup>. His trading partners and creditors pleaded successfully for the case to be dropped, which eventually happened (Smout, 1963).

Russell operated continuously from Rotterdam until 1697, supported by a large and internationally connected congregation of Calvinists. As between scattered Huguenots, successful collaboration could be based on shared exile and creed. Where faith

was held in common, linguistic and geographical barriers were transcended and trust and credit flowed (Smout, 1963).

### **International Trade from Rotterdam**

Russell's extensive and diverse affairs have been studied and analysed in detail by Smout, drawing on the Russell Manuscripts in the National Archives of Scotland (1963). He distinguishes activities in:- merchant banking; importing; factoring; joint-stock ventures; and other partnerships. These can only be sketched here, but extended to the financing of armies. He acted for instance as banker-paymaster for the Earl of Angus' troop at Maastricht: he was banker and travel agent for Scots as well known as Lord Stair, the Earl of Leven and Fletcher of Saltoun. Many parents concerned with the education, welfare and finance of their sons relied on Russell as a banker-tutor, as Rotterdam was a preferred port for a training in business, as by the Dunlop brothers, and by George Watson. But Russell's letters seldom refer to apprenticeships (which profited masters). He was busied otherwise, continuing an exporting and importing trade initiated before he left Scotland. He continued to handle chiefly coarse Scots cloth, of which 45,000 ells were processed in 1675; and all the cloth available at Scots fairs was bought and exported to Veere in 1683. Trading was sometimes on his own account; but most was on orders from others. In 1674 alone, Russell acted on behalf of thirty Edinburgh merchants, eighteen Glasgow merchants and forty two from other burghs. The diversity of mutual accommodation is suggested by an order to Russell from Perth in 1683, which also shows rich details of goods traded and Scots spellings (See Exhibit 1 at end).

Joint stock arrangements facilitated a long and productive partnership between Patrick Thomson in Stockholm, Russell in Rotterdam and an 'R.Turnbull' in Stirling. They had been friends, possibly apprentices together in the 1660s. Then in 1685, each paid in £1,000 for joint-stock to facilitate triangular trade. Coarse cloth was to come from Scotland to Rotterdam, with diverse items to Sweden. Thomson was to provide copper and iron to Amsterdam or

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Bo'ness. Modifications of these arrangements were soon advised through market information and by letter. Tobacco moved from Rotterdam to Sweden while an order for 36,000 ells of blue cloth for the Swedish army prompted enlarged demand for Scots raw wool. Such partnerships might be successful, but were never 'perpetual'. Turnbull died in 1688, and a final transaction was carried out in 1696 (Smout, 1963).

The most important of Russell's ventures was bill-broking. Voyages though many ports and with diverse cargoes required movements of credit as well as of currency. Goods factoring of the complexity illustrated was given up in 1685, but Russell dealt in bills until his death. Smout writes:-

*'Bill business demanded much correspondence with fellow merchants hovering on the uncertain border between commerce and banking. His regular contacts stretched from Paris and Bordeaux to London, Edinburgh, Amsterdam, Hamburg, Dantzic, and Stockholm: with these he exchanged bills and financial information, occasionally receiving a letter full of comment on the state of the English funds in which he had invested some capital.'* (Smout, 1963, p109)

Despite his life-long busyness, Russell's estate on his death at Christmas 1697 was valued at about £90,000 Scots (£11,250 Sterling). His wealth was chiefly in debts owing to him. An 'eik', an additional inventory of property, was required before final valuation in 1709. Thus from his correspondence, chiefly, an overview has been offered of a worthy, Presbyterian off-shore trader. Somewhat different relationships, for a stay-at-home operator, now follow!

### **George Watson**

Younger than the other two, George Watson has been known chiefly as member and benefactor of the Company of Edinburgh Merchants which was incorporated by Charles II in 1681. There are sundry secondary sources for his life; one of the most recent of

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these is Saville's weighty *History of the Bank of Scotland* (1996). Still unresearched is the correspondence filed in the National Archives of Scotland (GD277); and the copious Books of Account kept by Watson from 1679 on, held by the Merchants' Company in Edinburgh (Heron, 1903).

Watson was born into an Edinburgh commercial family in 1654 and died in 1723. His education had to be assured after his father's death by his mother and aunt, but he was not apprenticed until the late age of 24. His training then included a two-year initiation into book-keeping. Saville (1996, p.9) concludes that the Edinburgh merchants had brought in by then at least one teacher of the subject.

Further training was sought in Holland, where, going beyond commercial and accounting technicalities, apprentices became conversant with legal systems, with political and military events and with the power of timely advice, received through one's correspondents, to generate a quick response to the changing fortunes of parties to trade. Watson shared his temporary exile with Scots at the great Schools of medicine and law, and with political expellees. What he learnt there is shown in extant recordings, first as exercises and entries in Dutch and then showing the financings which enriched him.

There survives from his Dutch education an early book of Questions and Answers, together with letter-books for 1679-83 & 1683-6, kept at George Watson's School headquarters in Edinburgh. Currency conversion exercises have been preserved, as well as a cash-book from 1680 to 1705. There are also meticulously kept interlocking records, spread through a Memorial, Journal and Ledger for 1674 kept in Dutch, with Memoranda from 1680 to 1700. His ledgers record transactions with named clients, and final balances 'cleared and carried forward'. Financing activities were found to be especially profitable for 1697-1701. Relationships with over eighty merchant-bankers in Scotland and over twenty in London had to be appropriately recorded, with the location of each Account established by an Index or Alphabet.

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Of interest is the fact that Watson's Ledger of 1684, as well as being headed up 'Laus Deo in Edinburgh', gives details of cash transactions with Sir James Dick of Prestonfield, for whom he acted as factor.

### **Public and Private Service**

Further evidence helps us present George Watson in his age and location and to contrast him with our other Traders. His mercantile training complemented rather than inhibited his factoring for a Midlothian laird, Sir James Dick, already noted above. He collaborated with the partners in the Haddington New Mills who so often were Members of the Edinburgh Merchant Company. And both he (and they) survived the end of the Stuart, Tory dynasty which had seen the burning down of Sir James Dick's house at Prestonfield.

His competences and acceptability to the post-1688-regime together led to employment first as accountant and then as auditor of the Bank of Scotland, which was incorporated in 1695. But the financing services which he personally offered to so many were found incompatible with those provided by the new Bank. In many transactions he worked through London correspondents and was a key intermediary. In collusion with Pitcairn and Kincaid and in secrecy from English rivals, slaves were shipped to the Barbadoes. This, as well as his bequests and benefactions, warrants remembrance!

### **Captain Robert Colinson**

This author has been ignored by historians of the period. Historians of accountancy find in his text evidence of a Scots 'Proto-Enlightenment'. Biographical details now obtained show that his mercantile experience resembled that of our two previous traders, while thereafter he was identified with the Tory support for Charles II. The king's brother, James, Duke of York resided in Edinburgh

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from 1679-82, and gave the professions and learning there an important and enduring recognition. One year later, Colinson was to claim for accounting a place among the learned professions through the form, content and Latin title – *Idea Rationara* - of his book on the subject.

At Shethine, close to Pitmedden in Aberdeenshire, Robert might have shared schooling with the laird's family, and with Alexander Seton (later Lord Pitmedden). A Robert Colinson is recorded as entering Marischal College, Aberdeen in 1653. There or otherwise, he obtained a grounding in the classics which helped in his florid style. There was also time for a brief apprenticeship and an initiation into Burgess status, where other Colinsons are named. His status with regard to Aberdeen merchants is imprecise. Similarly his text, dedicated to the 'Merchants of Edinburgh' earned him the title of 'merchant burgess' only in 1688. As author and factor, he was hailed as 'Honourable', and in militia rank as 'Captain'. The dedication of his text, not to the Scottish trading community of offshore Calvinists at Rotterdam, but to the Conservator of the Privileges at nearby Campveere, perhaps relates to his political and religious inclinations. Colinson was an Episcopalian.

Colinson claimed to have been 'both a Student and Practitioner [of commerce] now these twenty five years'. He both praises and belittles the training which he received, largely in the Netherlands: On page 1 of *Idea Rationaria*, he quotes the typical annual rewards for an accountant there as four to five hundred crowns. But he also asked whether two or three month's study was necessary for a merchant of ordinary capacity to learn company accounting. For other clues, we must turn to the technicalities and examples of his text (Colinson, 1683).

### **Happy Trading**

In the pages and specimen ledger entries of the *Idea Rationaria*, one may find a reproduction of Colinson's own books and relationships.

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Thus for 1680, one may find his trading as 'James Chamberlayne at Dunbar'. Trading partners were indexed familiarly under Christian names and their trade was wittily suggested with surnames. In Aberdeen there was a Charles Packer and a David Millar. With a David Denier he traded from Rouen; and closer to home there was a taverer, a dyer, a banker, a vintner and a sailor. Such a circle was a happy, didactic family, with, at its epicentre, our author and his bookings (Colinson, 1683).

An example of Colinson's real negotiations is found in an agreement for the lease of a ship to convey salt from the Forth to Lochryan. It is also known that Colinson acted as a real chamberlain on behalf of George, Earl of Winton in important matters. The collection of rents and the disposal of grain were entrusted to him, especially when the Earl went overseas (on delicate missions?) in 1686 and 1687.

In 1683 the *Idea Rationaria* appeared in superfine edition. Prefixed were poems commendatory of accounting technique, of the Crown and of Stuart mercantilist policies, and also of the author. He appears as an experienced trader, as one anxious to pass on that experience, but also had other credentials. His service of the Setons and in the militia made him less than acceptable after the Revolution of 1688.

He died before June, 1692. His testament (NAS,CC8/8/79) shows final 'Rests of free gear, the debts deduced', at £591 Scots (or £49 sterling). If an estimate of his birth year as 1642 was at all accurate, he died some fifty years old only.

### **Three Traders in Times of Tension**

The three traders here studied were approximately contemporaries. They shared the Scots education available in parish or burgh grammar schools, which provided a broad base on which was added their commercial and accounting training in the Netherlands. It gave

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entry to international operations (where, probably, an early capitalism was learnt). Our evidence was found in the correspondence of Russell, also in remarkable bookings for Watson and in a glossy text with examples from Colinson's experience. His presentation of accounting was eulogised in Edinburgh under Stuart kings, but scarcely since.

Wider reference was made to the politics, sectarianism and terrorism which accompanied much of their trading, financial dealing and recording, and, indeed, the religious affiliations and sympathies of these three merchant/accountants were diverse. Watson was Jacobitically inclined, working as he did for a Catholic aristocrat, Sir James Dick, and for a Bank with covert Jacobite sympathies, the Bank of Scotland. Colinson was overtly Tory and with Jacobite sympathies. Russell was at the opposite end of the spectrum, in favour of covenanting, presbyterian politics and churchmanship, plus associated adventures.

What is of interest, finally, is that the three can be assumed to have shared the Reformed Christian world view which underpinned both Presbyterianism and Episcopalianism, the faiths they espoused, and which probably saw them approach their work as a vocation and divine duty (Marshall, 1980; Weber, 1930). This was exemplified in Watson's heading up his account book pages with the words 'Laus Deo in Rotterdam', and later, 'Laus Deo in Edinburgh'. Their common spiritual inspiration allowed them to channel their efforts in generically similar but circumstantially disparate, even paradoxical, directions: a microcosm of contemporary Scottish life itself.

## Notes

### Exhibit 1

*Letter From Alexander Whyt, Merchant in Perth, 11<sup>th</sup> Sept. 1683*

*To Mr Andrew Russell,*

*Sir*

*Be pleased to receive from my friend John Cunningham, Twenty-eight pounds sterling of Inglich money, 80 dukadouns sealed with my own Seal in a bag; and three hogsheads of Scots linseed on my accompt of provision, and bestow the money for me on the particulars following:*

*Imprimis: 20 hogsheads of lintseed, 6 hundredweight of good bleu-head lint; 6 barrels of soap half firkins; eightine dealls; ane barrel of black spcies; ane hundredweight of black shuagre; ane hundredweight of midlen pans from ane musken to six peints; ane hundredwight of jonkear pounther; ane hundredweight of steel hempt; 25 pund weight of saven seed; 50 pund weight of whalebone and ane thousand weight of pots from 8 peints to sixtine.*

*And intreats you to buy them good gouds, and what money I want if my goods that ye buy to me, send ane bill on me to Robert Trumble and on eight days sight I shall pay it to him. No more at present*

*But remains Your Humble Friend and servant.*

*Alexander Whyt (Smout, 1963; p. 296 and NAS, Russell MSS, GD308/01)*

## References

Brown R, Ed., *A History of Accounting & Accountants*, T.C. & E.C. Jack, Edinburgh, 1905

Colinson, R., *Idea Rationara, or the Perfect Accomptant*, Lindsay, Niblo, Van Solingen & Colmar, Edinburgh, 1683

Donaldson, J. & Gray A., *The Scottish Staple at Veere*, London, 1909

Heron, A., *The Rise & Progress of the Company of Merchants of the City of Edinburgh, 1681-1902*, T. & T. Clark, Edinburgh, 1903

Marshall, G., *Presbyteries & Profits - Calvinism and the Development of Capitalism in Scotland, 1560-1707*, University Press, Oxford, 1980

Parker R.H., '*Robert Colinson's "Idea Rationaria"*' in *Accounting in Scotland*, ICAS, Edinburgh, 1974

Saville, R., *History of the Bank of Scotland*, University Press, Edinburgh, 1996

Smout, T.C., *Scottish Trade on the Eve of the Union, 1660-1707*, Oliver and Boyd, Edinburgh, 1963

Weber, M., *The Protestant Ethic and the Spirit of Capitalism*, George Allen and Unwin Ltd., London, 1985

*Company of Merchants of the City of Edinburgh*, Edinburgh, Book-keeping Exercise Books of George Watson

*National Archives of Scotland (GD277)*, George Watson's Correspondence.

*National Archives of Scotland, (GD308/1)*, Russell MSS

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*National Archives of Scotland*, (CC8/8/79), Testament of Robert Colinson

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<sup>1</sup> Russell was ordered to send to Scotland a pair of good holster pistols, in such a way that 'the skipper of the ship need not know' on 6 December 1679 (Smout, 1963).

But Sharp was shot earlier, in May, 1679.

# SIR WALTER SCOTT, MONEY AND THE FINANCIAL CRASH OF 1825/6

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## **Abstract**

*This paper examines the financial motivation and judgement of Sir Walter Scott, both in his business and personal affairs. In spite of being, in his own day, Scotland's (and the world's) most widely read and most influential author to date, Scott's consumption and handling of money during his lifetime has somewhat tarnished his reputation as a literary giant, national and international celebrity and inventor of Scotland's identity in the eyes of the rest of the world. His financial failure in the Crash of 1825/6, has, particularly from the 1960's, been seen by some as the natural consequence of moral weaknesses in his character, notably, his alleged avarice. Drawing on contemporary sources and recent research, the paper reaches the conclusion that Scott deserves better treatment at the hands of literary commentators and critics vis-a-vis his relationship with money. This conclusion takes account of recent research by McKinstry and Fletcher (2002) concerning Scott's accountancy knowledge and experience, as well as Alloway's (2008) work on Robert Cadell, which provides insights into the financial machinations which led to the collapse of Scott's publishers, Constable, together with Scott's own firm, Ballantyne, in the crisis of 1825/6. General industrial and financial conditions in the opening decades of the nineteenth century are also considered.*

## Introduction: Scott's Achievement

Sir Walter Scott (1771-1832) was born in Edinburgh and was educated at the Royal High School and Edinburgh University, where he studied law, going on to become a member of the Scottish Bar in 1792. He became Sheriff of Selkirkshire in late 1799, holding this position for the rest of his life. He was appointed a Principal Clerk to the Court of Session in 1806 and continued in this post until 1830 (Clark, 1969; Jeffares, 1969; Lockhart, 1898; Lockhart, 1902; Scott, 1981[a]).

Scott's huge reserves of energy enabled him simultaneously to build a literary career, initially centred around criticism and the writing of poetry. His first successes were with epic poems such as *The Lay of the Last Minstrel* (1805) or *The Lady of the Lake* (1810), which sold in substantial numbers throughout his life and were read by all classes of society. *The Lady of the Lake* in its own right dynamised tourism in the Trossachs, for many decades filling its inns and hotels with Scottish, English and international tourists keen to experience the poem's setting. *Rokeby* (1813) was geared to an English readership, with *The Lord of the Isles* (1815) returning to Scottish themes but still appealing to an international audience (Scott, 1894).

The first of twenty seven novels, *Waverley* (1814), was a huge success, but was published anonymously for reasons that have often been speculated upon and which Scott never made clear, a matter which is pertinent to understanding his financial circumstances. It has been argued that the uncertainty over the novel's success initially caused Scott to choose anonymity lest a failure interfered with the success of his poetry (Daiches, 1971). There is other evidence that Scott simply liked the game of cat and mouse with his public which anonymity caused, and may have used it as a marketing device (Kelly, 2010). Further anonymous novels came out at the rate of about two per year, the earlier ones including *Old Mortality* (1816), with *The Black Dwarf* appearing the same year. *Rob Roy* appeared in 1817, with *The Heart of Midlothian* following in 1818, and *A Legend of Montrose* and *The Bride of Lammermoor*

coming close behind in 1819. These novels enjoyed unprecedented national and international success, both in English language versions and translations.

Scott's knighthood in 1820 did not depend on the novels, but on the reputation he had gained for his romantic poems, mostly set in a Scotland which appealed to its readers because of its rugged, sublime qualities and its proud, heroic people with their turbulent past. When George IV came to Scotland in 1822, Scott, as a national hero, was the obvious choice to stage-manage a series of events mostly in and around Edinburgh to unify the nation as austerity began to lift in the post-Napoleonic War era and as Radical protest grew. Scott saw to it that the portly figure of the Hanoverian king was draped in Royal Stewart tartan, the dress of the Jacobite dynasty, thus symbolically effecting reconciliation between the Stuart and Hanover houses. For these events, Highland clans, Scottish regiments and dignitaries were paraded through Edinburgh dressed in tartan, cementing in the eyes of the world an impression of Scottishness conveyed in Scott's writings that was to linger until the present day (Kelly, 2010).

Scott's literary works were translated into French within the year of publication and soon afterwards were also published in Italian, Greek, Portuguese and even Polish. They were hugely popular throughout Europe and also in the New World. Everyone read Scott, who was seen as a genius by fellow writers such as Byron, Balzac, James Fenimore Cooper, Heine, Hugo, Pushkin, Sainte-Beuve, Washington Irving and Wordsworth. His influence was such that he started nationalistic schools of writing in several of the countries represented in this list, and was credited by Mark Twain for creating a nationalistic spirit that led to the American Civil War. His novels were mostly historical, and up to 1820 were all set in Scotland, but afterwards, many were set in England (for example, *Kenilworth* or *Ivanhoe*). Some later novels were set abroad. A few of the novels gave rise to operas, the most enduring of these being Donizetti's *Lucia de Lammermoor*. Scott's financial failure in 1825/1826 did not stop him from producing many other works of literature, which

included more novels (this time revealing his authorship) and also works of history (Jeffares, 1969).

Scott was the inspiration for the Gothic Revival in British architecture, initiated by the architect A.W.N. Pugin and carried on by his followers. Pugin read his poems and novels 'eagerly', before going on to change the face of Britain and its dependent colonies for ever, through Gothic-style churches and buildings such as the Houses of Parliament (Hill, 2007). As well as dynamising the architectural community through the Gothic Revival, Scott's own home, Abbotsford, became the inspiration for thousands of Scots Baronial buildings, the most notable of these being Balmoral (Wilson, 1980).

As Kelly (2010) has recently observed, Scott through his writings created 'Scotland', and succeeded Burns in popularising his native land all over the world. Scott was arguably the most influential and well-liked Scotsman ever, with his monument in Princes Street, Edinburgh, the largest in the world devoted to a literary figure.

### **Scott and his Finances: Controversies and Negative Opinions**

In spite of the above unparalleled achievements, Scott has not been without his critics in the area of money, from the first, with more strident and negative voices being raised in the last forty or fifty years.

Financially speaking, Scott's literary works made him a very rich man. When success came, he was already very comfortably off from his twin legal appointments. The novels themselves brought him an extra £10,000 or more per year from the mid 1810's onwards (Scott, 1981), equivalent to some £800,000 per year at today's values.

In addition, in 1805, Scott had entered into anonymous partnership with James Ballantyne, printer, first of Kelso then of Edinburgh, with whom he had been at school, thus profiting from the printing

as well as the publication of his works. In 1809, Scott entered into a further partnership with John and James Ballantyne, forming John Ballantyne and Company, again with a view to publishing his own works, much of which had earlier been published by the highly successful Edinburgh firm of Archibald Constable. By 1813, the firm of John and James Ballantyne was in deep trouble, stocked up with unsold works of criticism and other antiquarian publications which Scott had produced but which did not appeal to readers in the volumes he had hoped for. The firm was rescued by Archibald Constable, who bought up its dead stock and 'in other ways, eased the last days of the firm' (Daiches, 1971, p76), in order to please Scott and gain access to the copyrights of his works once again. The printing firm carried on, but Scott became the sole partner in 1816, with Ballantyne assuming the role of salaried manager until 1822, when he became a partner once more (Daiches, 1971).

As Kelly notes, Scott's early biographers, William Weir and George Allan 'raised the idea that greed, not fey lack of concentration', lay at the heart of his financial collapse in 1825/6 (Kelly, 2010, p 295). Even before that, Scott was aware of contemporary critics, alluded to by the imaginary Captain Clutterbuck in the Introductory Epistle to *The Fortunes of Nigel* (first published in 1821), thus: 'Are you aware that an unworthy motive may be assigned for this rapid succession of publication?' (Scott, n.d., 22-25). The anonymous Author (Scott) made a detailed defence, which will be looked at in detail later.

Scott's son in law, John Gibson Lockhart, in his monolithic *Life of Scott* (1837), stressed Scott's noble character in choosing to avoid bankruptcy by writing for his creditors for the rest of his life, which hastened Scott's death. In this work, Lockhart blamed James and John Ballantyne for the mismanagement of the printing and publishing firms in which Scott had been involved, exempting his father-in-law from blame for the crash which had brought him down, and implying that as a man of literary genius, it was not to be expected that Scott should be able to understand finance (Kelly, 2010). A refutation of Lockhart's claims was published by

Ballantyne's Trustees and son in 1838. This was followed by Lockhart's *The Ballantyne Humbug Handled* in 1839, after which a final rejoinder was published by the Ballantynes in 1840 (Ballantyne Controversy, *passim*). In defence of James and John Ballantyne, evidence was produced by the family and its representatives which made it clear that Scott had been the dominant partner in both the printing and publishing firms, drove a hard bargain both with his partners and with publishers, and had drawn off large sums of money for personal consumption and for the building of Scott's country house, Abbotsford, especially between the years 1812 and 1824.

Lockhart had also been highly critical of Archibald Constable, but no-one in Constable's family sprang to the late publisher's defence. His son became mad as a result of the crash, and his son-in-law, Robert Cadell, published Lockhart's *Life of Scott* and had gone on to purchase the copyrights of Scott's works. These actions meant that he was not in a position to defend his late father-in-law (Kelly, 2010).

Another notable critic of Scott's attitude to money was Thomas Carlyle. In 1838, Carlyle criticised 'our highest literary man [Scott]' for failing to send out through his works any 'message' which might enable the world to 'elevate itself', but in contrast, wanted the world to 'simply pay him for the books he kept writing' (Hayden, 1995, 345-377).

As the years passed after Scott's death, his financial affairs receded from the consciousness of the public, with the dominant view of Scott's financial behaviour tending to stress his nobility in writing to liquidate his debts in the wake of his ruin, above any financial failings he might have had. As Kelly (2010) observes, these views have been perpetuated by commentators and biographers such as John Buchan (1932) or Hesketh Pearson (1954).

The status quo was upset by the publication, in 1968, of Eric Quayle's *The Ruin of Sir Walter Scott*. Quayle was the historian of

the Ballantyne bookselling business, and as Kelly has recently noted (2010) was a descendant of the Ballantyne family. Quayle's book utilised primary sources to sift the detail of the relationship between Scott and the Ballantynes, and came to the conclusion that Scott was greedy, 'a weakling beset with traits of character that allowed a consuming self-interest to dictate modes of conduct that finally brought ruin on himself and lesser men' (Quayle, 1968, 11). According to Quayle's analysis, financial ambitions and his desire above all else to be seen as a Tweeddale laird dominated Scott's thinking and drove him to produce a literary output which sacrificed quality for monetary gain. It was greed, according to Quayle, which led Scott to invest in ventures involving the Ballantynes. He argued that the creation of Abbotsford had caused Scott to 'light-heartedly' enter into large financial obligations on the strength of future anticipated income from the sale of copyrights to future novels. One example of Scott's alleged greed produced by Quayle was Scott's negotiation of a high fee for the poem *Rokeby*. Quayle cites Constable, who observed that 'he [Scott] wishes to squeeze us as he has the B's [Ballantynes]' (Quayle, 1968, p66). At various points, Quayle also noted that Scott insisted on 15% interest on capital in the James Ballantyne business, making it clear that Scott was the dominant force in the firm.

The upshot of Quayle's assertions is that some later critics and commentators have tended to emphasize Scott's alleged financial failings. For example, David Daiches, normally balanced, erudite and even-handed in his assessments of Scott, has him 'so often teetering on the edge of financial disaster' in an otherwise laudable and balanced work informed by Quayle's analysis (Daiches, 1971, 109).

Edinburgh University's website on Sir Walter Scott is also somewhat negative in discussing Scott's finances, more so in connection with the fall of John Ballantyne and Company in 1813. Here, Scott is seen as making a 'wildly optimistic assessment' of the partnership's prospects, and 'selecting a series of financially

disastrous titles for publication', a conclusion which comes about partly as a result of its author reading Quayle (Internet 1).

Stuart Kelly's very recent work on Scott reaches the conclusion to his chapter on his financial crash in 1825/26 that Scott was 'generous and mean-spirited, noble and venal, cautious and feckless; in a word antisyzigical' (Kelly, 2010). This scarcely absolves Scott from the allegations with which we are concerned, amounting to a refinement of Quayle's allegations as part of Kelly's project to present Scott as a somewhat schizophrenic Caledonian stereotype.

It is contended in this article that these and similar conclusions need to be subjected to the lens of more recent insights, both in the area of research on Scott and in terms of the financial realities of the opening decades of the nineteenth century, a theme that will be developed in subsequent sections. First, Scott's own view of his financial motivation and culpability for his crash is discussed below.

### **Scott's Own Discussions of His Financial Motivation and Affairs**

A valuable source for insights into Scott's own mind are provided in the introductions to his novels, where imaginary characters converse with 'the Author', whose identity was not officially known to his readers prior to him revealing who he was in 1826. As was mentioned above, the Introduction to *The Fortunes of Nigel* (1821) contains a discussion of Scott's rapidly produced output, between the Author of *Waverley* and his interrogator, Captain Clutterbuck, who asks; 'Are you aware that an unworthy motive may be assigned for this rapid succession of publication? You will be supposed to work merely for the lucre of gain'. The Author replies as follows:

*'Supposing that I did permit the great advantages which must be derived from success in literature, to join with other motives in inducing me to come more frequently before the public - that*

*emolument is the voluntary tax which the public pays for a certain species of literary amusement - it is extorted from no-one, and paid, I presume, by those only who can afford it, and who receive gratification in proportion to their expense. If the capital sum which these volumes have put into circulation be a very large one, has it contributed to my indulgences only? Or can I not say to hundreds, from honest Duncan, the paper-manufacturer, to the most snivelling of the printer's devils, "Didst thou not share? Hadst thou not fifteen pence?" I profess I think our Modern Athens much obliged to me for having established such an extensive manufacture; and when universal suffrage comes in fashion, I intend to stand for a seat in the House on the interest of all the unwashed artificers connected with literature.'*

The Captain replies that 'This would be called the language of a calico manufacturer'. The Author's rejoinder warrants extensive quotation:

*'...I do say it, in spite of Adam Smith and his followers, that a successful author is a productive labourer, and that his works constitute as effectual a part of the public wealth as that which is created by any other manufacture. ... why are the author's bales of books to be esteemed a less profitable part of the public stock than the goods of any other manufacturer? I speak with reference to the diffusion of wealth arising to the public, and the degree of industry which even such a trifling work as the present must stimulate and reward before the volumes leave the publisher's shop. Without me it could not exist, and to this extent I am a benefactor to the country. As for my own emolument, it is won by my toil, and I account myself answerable to Heaven only for the mode in which I expend it. The candid may hope it is not all dedicated to selfish purposes; and without much pretensions to merit in him who disburses it, a part may "wander, heaven directed, to the poor".'*

The Captain notes that 'it is generally held base to write from the mere motives of gain'. The Author replies that:

*'It would be base to do so exclusively, or even to make it a principal motive for literary exertion. Nay, I will venture to say that no work of imagination, proceeding from the mere consideration of a certain sum of copy-money, ever did, or ever will succeed. ...Cant set apart, it is the same thing with literary emolument...For myself, I am not displeased to find the game a winning one; yet while I pleased the public, I should probably continue it for the pleasure of playing; for I have felt as strongly as most folks that love of composition which is perhaps the strongest of all instincts, driving the author to the pen...I might perhaps... exculpate myself from the charge of being either of a greedy or mercenary disposition; but I am not, therefore, hypocrite enough to disclaim the ordinary motives....'*

The notion that many workers benefit from what is today more familiarly referred to as the 'multiplier effect' is a dominant feature of the anonymous Scott's defence. Among these workers are the employees of 'Honest Duncan' the papermaker, namely, Duncan Cowan of Cowans of Penicuik, who sold paper to Ballantynes, and also the various 'printer's devils', especially those working for Ballantyne. The author, the initiator of the economic prosperity which benefits workers such as these before a single copy of a book has been sold, has been a benefactor to 'the Modern Athens'. Indeed, it is clear that the creation and production of novels leads to an industrial process, contrary to Adam Smith's view that authors were not productive, and as much part of the Industrial Revolution of the early 1800's as calico manufacture. As will be seen later, this has implications for an understanding of Scott's finances.

Scott is at pains to show that the financial aspect of writing novels, in his case, is far from the only reason for their creation, and that such a base motivation as money would produce unsatisfactory work. He is happy to write for the 'love of composition', but is 'not

displeased' to be financially successful. Of note, too, is Scott's comment that some of his earnings will 'wander, heaven directed, to the poor'. In short, Scott denied that he was venal, mercenary or selfish in pursuing his literary career.

Of his financial crash in 1825/26, which will be discussed in more detail later, Scott noted in his journal that he was the victim of 'a run of ill luck', and that the main problem was that 'London chuses to be in uproar' (Anderson, 1998, 51).

In summary, Sir Walter Scott made it clear that he believed he was not venal, and that the principal causes of his financial ruin lay outside his control. This will be evaluated in a later section.

## **Scott's Financial Knowledge and Business Experience**

This section of the paper will deal with what is known of Scott's involvements with business, finance and accountancy, and of his expenditure patterns.

### ***Education and Early Legal Experience***

First, Scott was taught bookkeeping and accountancy while at the Royal High School of Edinburgh, part of a long standing tradition there, which in turn was part of an Enlightenment flowering of accountancy studies, publications and education in Scotland (McKinstry and Fletcher, 2006). He knew from this education how to draw bills of exchange and keep balanced and tidy accounts. His mother kept domestic account books, typical of a middle class family, at the time (Daiches, 1971). While at Edinburgh University, Scott was Treasurer of the Speculative Society where 'the minutes kept in his handwriting attest the strict regularity of his attention to the small affairs, literary and financial, of the club' (Clark, 1969, 206). In this capacity he needed to deal with protested bills and promissory notes as well as preparing accounts.

During his legal apprenticeship in his father's office, of which little detail survives, he would be exposed to more accountancy processes and to the financial affairs of clients. After leaving the practice to take up work as an advocate, his involvement in commercial cases increased. One of his early engagements in this type of remit forms the basis for a court case which is discussed in detail in the semi-autobiographical novel, *Redgauntlet*, published in 1824. In a passage from that novel, Scott describes a young advocate building a case for court by navigating the complexities of commercial transactions 'from the waste-book to the day-book, from the day-book to the bill-book, from the bill-book to the ledger', utilising 'his own knowledge of accounts, in which he had been sedulously trained' (Scott, 1912, 186). This level of detailed description is a mirror of Scott's own accountancy experience and knowledge relating to a case he had to handle in 1792.

When Scott became Sheriff of Selkirkshire in 1799, he was quickly involved in settling small lawsuits relating to accounting and financial matters. His very first case was concerned with the unpaid accounts of an agency. Cases in 1801 and 1803 involved claims for unpaid wages. A more complex case concerning unpaid agricultural rent with counterclaims regarding the terms of the lease came up in 1804, and this resulted in Scott asking for rectified statements of account and the production of appropriate vouchers. The case was appealed to the Court of Session and remitted to the Sheriff again, which resulted in deductions from the rent for expenses paid. In 1805, there was a case which involved an action of 'count and reckoning' relative to a copartnery in a Selkirk hosiery manufactory to determine funds due to an absentee investor. This early sample of work proves that Scott had some experience of practical accounting and finance, as Sheriff (Chisholm, 1918, *passim*). No one has as yet attempted to analyse the content of his work as one of six Principal Clerks to the Court of Session in this regard, but he was a senior legal functionary when acting in this capacity, having 'charge of the papers connected with a case, and... responsible for ensuring that correct legal procedures were followed' (Anderson, 1972, xxi-xxii). In addition, at the end of each case, the Clerks reduced the judge's

decision to a concise written decree or 'interlocutor', involving considerable legal knowledge and skill. It cannot be doubted that Scott both contributed and gained significant business and financial knowledge in carrying out this post in Scotland's most senior civil Court.

### ***Scott's Personal Account Books, Accounting and Expenditure Patterns***

The survival of Scott's personal account books has already, fairly recently, enabled a study of his accounting habits and personal expenditure patterns to be carried out (McKinstry and Fletcher, 2006). Five account books of varying complexity have survived, covering the years 1796-1826, with a significant gap between the years 1807 and 1823. There are, however, 375 completed pages in the books which survive, a not inconsiderable amount of data. To these may be added those parts of Scott's personal journal, kept from late-1825 onwards, which were intended for publication, and in which he reconciled his personal income and expenditure.

Broadly, there are three types of accounting analysis of his personal expenditure employed across the period of the account books. First, from 1796 to 1807, a straightforward two-sided accounting is carried out for 'cash in' and 'cash out', with balances carried forward from page to page and from year to year. From 1799 to 1801, Scott kept a larger format cash book, within which he analysed his expenditure by type of item, as well as recording cash in and balances carried forward. It seems that, as his literary career was picking up at about this time, it became too onerous to continue the system. For the years 1802 to 1807, the system reverts to its original format of simple 'cash in' and 'cash out' recording. Scott was not deterred from attempting more detailed accounting altogether, as, from 1804, when Scott's newly rented country residence, Ashiestiel, also included a farm, he attempted to account for it. This involved separating out farm income and expenditure, which was done at the rear of his account book for a short time, amounting to only 15 pages. Neither income nor expenditure exceeded £20 on any page,

and it is reasonable to assume he concluded it was not worth the trouble or his increasingly scarce time to make this type of analysis (McKinstry and Fletcher, 2006).

Prior to him being married, in 1798, Scott's expenditure patterns from the books confirm a bachelor existence, with payments for stabling of horses, postages, items of clothing and losses at cards, a favourite pastime of the Edinburgh middle classes. Income of about £150 per year was derived from fees for his work as an advocate, with the occasional sum coming from parents, possibly as a gift. The sums remaining at the end of each year were quite small.

After Scott was married, both income and expenditure increased dramatically. The couple took up residence at South Castle Street in Edinburgh, while also taking up occupancy of a rented 'cottage orné', complete with thatched roof, at Lasswade to the south of the city, in which Scott resided when not required to stay in Edinburgh. The books from this point onwards point to a lavish lifestyle, with Scott's income from advocacy fees of several guineas coming in every few days, later supplemented and then supplanted by Scott's earnings of £300 per annum as Sheriff of Selkirkshire. There was also an annual income of £400 per year from his wife's brother in India. Scott's cash book for 1799 shows a large expenditure total of £966, as against an income of some £700. Around 20 per cent was spent on wines and liquors, as Scott built up his cellar in support of his social entertaining, with book purchases underpinning his literary activities accounting for a similar proportion and domestic expenses (excluding rent and servants' wages) also coming to around the same amount. Travelling, wife's expenses and servants accounted for most of the balance. In 1805, a legacy of £5,600 was received. At a time when Scott's salary of £300 as Sheriff would alone have brought him 'a life of gentlemanly ease' (Scott, 1981), he enjoyed an income well in excess of that amount before his literary career took off. Later, as a Principal Clerk to the Court of Session, Scott was to earn a further salary of £800 per year, before which he was already living lavishly, and supporting this by drawing down

balances with Forbes' and Drummonds' Banks in advance of receipts (McKinstry and Fletcher 2002).

In 1806, by which time sums of money were beginning to be received for poems and occasional literary and historical articles, a legacy of £1,000 was received from his father's estate, £900 of it passing immediately to a neighbouring gentleman, Sir William Riddell, in repayment of a loan. Occasional illegible and cryptic entries in the books for years prior to this seem to reflect portions of income from bills of exchange, possibly in connection with literary activities, being received, the beginnings of a cycle that gathered pace as Scott's writing career took off. In spite of these transactions showing a tendency to spend in anticipation of receipts and to live opulently, there were investments at this time, including a payment of £1,500 in 1805 into the James Ballantyne printing business.

The evidence available for later years is thin, as Scott's next surviving account book covers the period 1823-26. In this, the bare essentials of financial affairs are recorded in a very incomplete way. For 1823, Scott only records two large receipts, for £8,910 and £9,000 respectively, indicating the huge literary income of £17,910 for the year. Against these receipts, a number of payments of sums ranging from £150 to £790 are recorded, to 'Curries', a London bank, Constable, Scott's publisher, or 'JB', namely, Ballantyne. What used to be a carefully kept cash book has, in these later volumes, been turned into an 'aide memoire' only, but an impression of the complexity of Scott's financial affairs at this time still comes through. A later book from 1826, after Scott's crash, merely records occasional payments of £750 to an illegible recipient, and one for £667 to 'Hunt and Company'.

In spite of his extremely busy life continuing unabated after the financial crash of 1825/6, Scott still took time to prepare brief personal accounts of income and expenditure every two or three weeks. One example records a figure of £50 'in purse' on 5 July 1827, from which £20 is paid 'to Anne', his daughter, with a further deduction of £2 for 'post horses' leaving a balance in purse of £28.

### *Summary*

It can be concluded from the above that Sir Walter Scott was extremely knowledgeable and very experienced in the areas of personal and business accountancy and in business itself. Keeping personal accounts was an ingrained instinct in him, a habit Lockhart confirms that he kept up his whole life; it was a practice he sought to inculcate in his own son, begging him to keep a personal account book in 1819 (McKinstry and Fletcher, 2002). Furthermore, Scott regarded accountancy as an honourable profession, recommending it to his nephew in 1820 (Brown, 1905). At the very least, this evidence makes nonsensical any claim that Scott as a great writer should not have been expected to understand finance. Added to this is the obvious fact that Scott liked to know exactly where his finances stood, not just at the level of personal cash in hand, but also across the board. One instance of this desire to know his total assets and liabilities and his resultant worth is found in Scott's Journal for 1825, the year of the crash, when he noted that, 'on a fair balance', he was worth 'not less than £40,000 or nearly £50,000 above the world' (Anderson, 1998, p 45).

On the other hand, the personal account books and related evidence shows that Scott had a high propensity to spend vast amounts of money, even at times faster than he was receiving it. He entertained frequently and lavishly in his homes in Edinburgh and in the borders, and the creation of Abbotsford from 1812 to 1824 became his pet project. The surviving evidence makes it conclusive that while building it, he drained as much capital as he could from Ballantyne's and spent much of his copyright income purchasing many acres of land around Abbotsford and filling the house with historical relics (Ballantyne Controversy, *passim*). A discussion of Scott's rationale for building the house, which sheds light on his alleged venality, belongs to a later section.

## **Everyday Financial Arrangements Between Scott, his Publishers and Bankers up to and Including the Crash of 1825**

Chief among the parties to the financing of Scott's literary efforts at this time were Constable, to whom he sold the copyrights of books and other works. Scott also sold the copyrights of works to James Ballantyne and Company when this was preferable, and in such cases, Scott also benefited from his partnership in this firm by profiting personally from the publishing of the works as well as their printing. Constable's London agent was the firm of Hurst, Robinson & Co., to whom Constable would re-sell a Scott manuscript or who would market books in the south for Constable. Trading between Scott and his publishers frequently took place by means of bills of exchange. Constable's practice of making generous advance payments for the copyrights of works is traced by Kelly (2010) to his purchase from Scott of the as yet unfinished *Marmion* in 1810 for 1,000 guineas, reputedly the first ever literary advance. Typically, the form of payment would be a post-dated bill of exchange, payable at, say, three or six months' notice.

### ***Bill Financing***

The bill of exchange, now mostly used in connection with the financing of export transactions, has been more or less obsolete as a payment mechanism in general UK business circles for domestic trading for the best part of a century, although there are exceptions. As a result of its desuetude in domestic markets, its contemporaneous use in connection with Scott's affairs has attracted considerable suspicion, if not outright misunderstanding, on the part of literary commentators on Scott (Alloway, 2008). It needs to be stated at the outset that its use was a regular and respectable feature of everyday business and had been for hundreds of years in Scotland. Its genesis has been ascribed to the mediaeval Jewish merchants of Florence and Venice, a fact mentioned by Scott himself in his 1819 novel, *Ivanhoe* (Scott, 1912). A bill of exchange was typically drawn up by one person who had provided

goods, money or services to another, or who had agreed to do so, and then presented to the other party. Its purpose was to require the party to whom it was presented (the drawee) to sign it, thus undertaking to pay a sum of money to the presenter (the drawer) at a future date. A distinction was commonly made between a 'trade bill', involving payment for goods, and those bills raised for payments of services yet to be rendered or other future financial obligations, the latter category being known as 'accommodation bills'. Bills were negotiable, meaning that if a drawer held a signed bill for future payment and did not want to wait until the due date, the title to the bill could be signed over to a third party by endorsement, and that third party (usually a bank) might be willing to give the drawer cash for the bill, thus providing working capital. The amount advanced on the bill would be less than its face value, reduced by a charge for interest at a rate which reflected the bank's assessment of the risk involved. The bank would receive the full amount on the due date. If not, it would have recourse to the drawer of the bill, indeed, it had the right to pursue any of the signatories to the bill for repayment.

Advances on Bills formed a significant part of Scottish bank lending from the beginning. Thirteen per cent of outstanding loans at the Bank of Scotland were in the form of bills as early as 1700, with the total rising to 97 per cent in 1800. At the Royal Bank, bills discounted accounted for 65 per cent of outstanding loans in 1794, rising to 69 per cent in 1817 and to 77 per cent in 1822. Discounts at the Royal's Glasgow office at this period have been referred to as 'the great flywheel of the commerce of the West' (Checkland, 1975, p 229). As well as financing iron and cotton, bills discounted financed the grain trade, for whisky production, the trading of cattle and the paper trade, inter alia. All this was perfectly understood by Scott, who, in *St Ronan's Well* (1824) notes, through his character, Bindloose the banker, that 'There might be an accommodation bill discounted now and then...but men must have accommodation, or the world would stand still - accommodation is the grease that makes the wheels go' (Scott, 1912, p169). The discounting of bills was accorded high importance in the banks, and was the

responsibility of the Treasurer at Head Office in the Bank of Scotland. Cameron (1995) has graphically described the careful and methodical bill discounting practices of Robin Carrick, an important Glasgow banker at around this time, making it clear that, however financially reckless a trader might be, he needed to meet the exacting requirements of his banker if he was to have his bills discounted. Reputation, trustworthiness and financial strength were all-important.

A revealing snapshot of the use of bills by Scott in the James Ballantyne business survives from 12 July, 1816. Ballantyne's 'Monitor', or business diary, records that Scott arrived and supplied him with a cash forecast of amounts required to discharge due bills of exchange given to others in payment, including Cowan the papermaker, together with wages due to the workforce. To meet these 'Demands', Scott had listed bills to be discounted from 'Hollingworth', with one being renewed (rediscounted) by 'Miller', and a further bill for discounting involving Cowans, who were presumably helping out from time to time with finance by rescheduling bills. These bills were to be discounted by Forbes' Bank, when the overdraft of £300 would be eliminated, leaving approximately the sum required for payments, about £900. Sir Walter was deeply involved in the everyday cash flow management of his firm, and at this time spending large amounts of money on Abbotsford, drawing as much as he could out of the firm as well as receiving large personal sums directly from the sale of copyrights to publishers. Of significance is the fact that several of the parties to these financial arrangements were social acquaintances of Scott, notably Forbes and Cowan.

## **The Crash of 1825**

Although details are lacking, it is clear that the finances of the three interlinked firms of Ballantyne, Constable and Hurst Robinson continued to flow until the financial Crash of 1825. This economic disturbance still attracts the interests of historians and economists

keen to learn possible policy lessons, and proved a life-changing event in the lives of Scott and his publishers.

Bordo (1998), commenting on an analysis of the crash by Neal (1998), concurs that the roots of the crash may be traced to the end of the Napoleonic Wars (1799-1815). The government discontinued income tax in 1816, seeing less need for revenue. The Wars and their aftermath witnessed an increase in the National debt of the United Kingdom from about £1,060 million in 1804 to about £1,570 million by 1819. The unfunded debt (short-term) portion of some £750 million fell to about £660 million by 1824, as returns were dropped to minimise debt-servicing costs, reducing the total debt to about £1,430 million, deemed adequate for post-Napoleonic War finances. The net result of lowered debt and taxes was monetary expansion. Good harvests and a strong economy from 1821 to 1824 also increased prosperity and money supply, but this led to speculation, centred on London, which, during the Napoleonic Wars had become the world's most important financial centre. Speculation also fuelled inflation.

The outlets for speculation were various: new canal companies, railway lines and gas works, together with overseas funds which mimicked 3 per cent UK Consols, sold by France, Prussia, Spain, Denmark, Russia and Austria and Latin American securities, but at higher coupon values. The Latin American investment options arose from the recent loss of control by Spain over its South American dependencies and the formation of independent states, whose government bonds and mining shares were available on the London Stock Exchange, at increasingly higher and more unrealistic prices. Inability to service or repay the Latin American bonds would soon reveal itself, as the money raised was used for military purposes, often in connection with border disputes between the new states. In the UK, 624 joint-stock companies were floated in the years 1824 and 1825, with a capitalisation of £372m. The speculative fever reached its peak in April 1825. By 1827, only 127 of these new companies existed, with a capitalisation of £103m, of which only

£15m had been paid in, but with a market value that had sunk to only £9.3m.

Towards the end of 1825, the Bank of England, then a private monopoly bank, woke up to the liquidity crisis that was appearing in the wake of the bursting speculative bubble, as firms, banks and individuals lost out on investments and became bankrupt, producing a run on the English banks, which had also greatly extended their note issue as the economy prospered over the early 1820's. During December, 1825, the Bank of England rapidly discounted bills and notes for their customers, some of which were banks, acting as a voluntary 'lender of last resort'. The Bank of England had been reducing dramatically its advances from 1820 to 1823, in order to build gold bullion stocks for purposes of underpinning its notes. Realising there was a liquidity problem within the system, it allowed its advances to rise again to mid-1825, but not immediately to the level of the end of 1820. This high level was only reached again at the end of 1825, by which time there was widespread collapse in the economy. By the end of the Crash, 73 out of the 770 banks in England had failed, with three small banks in Scotland succumbing.

The general effects of this crisis on Scott and his associates have recently been made clear in research on Robert Cadell by Alloway (2006).

### **Robert Cadell's Role During the Crash**

Cadell played a pivotal role as the 'chief financial officer' in the Constable publishing house. He was never fully accepted into the inner circle of Edinburgh writers and publishers who shared literary enthusiasms, although a full partner in Constable, and has tended to be seen as a mercenary character who went on after Scott's death to purchase the manuscripts to his books and subsequently became rich.

In contrast, Alloway's research reveals him to be an unsung hero of the Crash period in the history of Ballantyne, Constable and Hurst Robinson, acting as the main liaison between the three firms on matters of finance. Until October, 1825, the drying up of credit for loans and bill discounts witnessed south of the Border had not been felt in Edinburgh, due to the existence of two essentially separate banking systems in the two countries. On 10 October, Cadell had the discounting of a bill refused for the first time, which he regarded as a bad sign, but not necessarily a disaster, although the presence of his signature on any bill would be a problem for Constable's credit if it were refused. He also sensed the danger that might arise if payments to Hurst Robinson from its many English customers collapsed. That would inhibit Hurst Robinson's ability to pay Constable and for Constable to pay Ballantyne, who in turn would have a reduced ability to meet bills due and other debts, making the relationship 'a fragile triumvirate of debt' (Alloway, 2008).

By this point, the three firms were assisting each other in the procurement of finance. Ballantyne and Constable 'accommodated' each other by accepting bills of exchange drawn by the other. Each firm kept a note of the amounts and dates for which they had signed bills to be discounted by the other, ensuring that the total for discounting signed by the other was more or less in balance. By the end of 1825, the total amount accepted on behalf of each of the two firms by the other stood at just over £29,000 apiece (Anderson, 1998).

As the Crash spread in the north towards the end of 1825 and refusals to discount bills became more common, Cadell attempted several unusual methods of financing the increasingly critical cash flow. One of these has been described by Alloway as 'loan laundering', but this in practice amounted to the discounting of bills drawn by Constable on Hurst Robinson, and Constable sending the cash immediately to Hurst Robinson. This meant that when Constable was due to repay the discount, some means of discharging the obligation needed to be found by Hurst Robinson. Alloway notes that these types of transactions led to 'incredibly

complex arrangements in order to preserve the appearance of solvency' (Alloway, p 138).

A second approach involved Cadell in advising his partners and those of Hurst Robinson to sell personal assets and introduce the proceeds into their firms as capital, also seeking loans from friends which he could inject as capital. Several obliged Cadell with £3,500 in total.

A third avenue of help arose from Cadell's brother William and William's son, Henry. William was Treasurer of the Bank of Scotland, the second most senior position in the Bank, and Henry worked for him as an accountant. William Cadell's main duty was to approve bills for discounting, and as such, was in a position to discount bills for Robert with limited oversight. Between October 1825 and January 1826, thirty five bills were discounted, at a total of £13,143. A further £3,300 was discounted on 29 December 1825 but no trace of this was found later in the Bank's carefully kept books, at the time of the sequestration. When William was dismissed from the Bank's service in 1832 for discounting bad bills, it may also have been the case that this missing sum was taken into account. William had complied in early January 1826 when other major banks had refused to continue discounting Constable's bills.

Cadell's success in discounting bills was remarkable, and the totals at the time also show the deteriorating financial markets across the critical four months between October and December 1825. Cadell discounted some £6,000 in bills in October, a light month in the trade, £25,000 in November, some £12,000 in December and about £10,000 in January (Alloway, 2008, p136).

A third and final approach to resolve the mounting financial problems was the creation of what Cadell called 'a large monied aid'. Together with Constable he planned to raise up to £57,000 from a group of London banks, secured on Scott copyrights valued at £37,000 and a bond given by Scott for £20,000. If this was obtained in long-dated bills and these were gradually discharged

from book sales, the solution was viable. To the frustration and annoyance of Cadell, Constable refused to travel to London, on the grounds of ill health, as he suffered from debilitating gout. Under the persuasion and warnings of Cadell that doom was certain if he did not travel and success not certain if he delayed, Constable eventually arrived in London on 16 January, only to find it was too late. Hurst Robinson had on 14 January failed to redeem a bill due that day. This had the effect of stopping the credit of Constable, Hurst Robinson and Ballantyne and thus ruining the firms.

Clearly brought out by Alloway (2008) is the role of speculation in the ruin of the three firms. While the scale of Hurst Robinson's loss from speculation in hops was spectacular, eventually amounting to £100,000 over a three month period towards the beginning of 1826, Cadell himself was not averse to speculation, having bought some shares at around this period that disappointed with their returns. Cadell commented to Robinson in a letter that, should the opportunity arise in the next year, he himself might try and replicate his (Robinson's) success. As Robinson's fortunes began to tumble, Scott called and advised Cadell that there were rumours in London that 'our principal correspondents had been engaged in other trade besides bookselling', whereupon Cadell was obliged to tell him of 'the Hops matter' (Alloway, 2008, p133). Ironically, Constable had upbraided Robinson openly concerning his hop speculation, advising him to get out of it, whilst himself speculating in property for the previous six years 'and by every device getting money from his business to assist his operations', according to Cadell (Alloway, *ibid*). Constable even used the increasing value of his property to borrow against, for purposes of his lavish life style. The responses of the two partners to the crisis of late-1825 could not have been more different: Cadell, racked by stress and guilt at the balancing act he was performing to keep three interdependent firms afloat, resigned from the firm on 20 December 1825 (although carrying on working for it until the end), while Constable continued to take out cash for personal purposes at the height of the Crash, at a time when the dishonouring of a bill for only £1,000 by Hurst Robinson brought the three houses down.

The final figures struck by Scott's trustees in bankruptcy in 1827 show the extent of Scott's indebtedness, taking into account his obligations on behalf of others. His private debts amounted to £20,067, with Ballantyne & Co's debts at £12,615. Constable bills discounted by Ballantyne and dishonoured came to £29,088, with discounted bills granted by Scott to Ballantyne and Company and not honoured at £15,366. Debts of Constable for which Scott became liable stood at £9,129. Ballantyne bills granted to Constable came to £29,624, making a total of £115,888. Ballantyne assets were worth £24,000 (Anderson, 1998). Amounts collected from the other failing firms were used to pay off interest on Scott's debts. His own assets, valued at some £25,000, consisted of the liferent and effects of Abbotsford, which had become the property of his son on marriage, plus his Edinburgh house and some copyrights. Famously, Scott's creditors chose the option of a Trust Deed as a means of Scott working off his debt. Unlike the other choices for bankruptcy of *Cessio Bonorum* or Sequestration, this method allowed Scott to remain in Abbotsford and to keep his library, writing in order to discharge his obligations honourably while also avoiding the stigma associated with being a common debtor (Anderson, 1998).

## **Conclusion**

What is to be made of this great weight of evidence? There are two elements that need considered, Scott's motivation and his financial behaviour and judgement. We will begin with the latter, where the evidence is plentiful and tangible, as was seen earlier.

Scott, we have found, was steeped in personal, business and professional accountancy knowledge and experience throughout his life. Sophisticated personal account books, bookkeeping in his father's law firm as a trainee, participating as a young advocate in cases involving the investigation of account books, adjudicating on small-scale business cases as Sheriff of Selkirkshire and the summarisation of complex business cases as Principal Clerk to the Court of Session all formed part of his experience. So, too did the

regular business meetings and forecasting of cash flow with Ballantyne and the coordinating meetings frequently held with Cadell, especially but not only towards the height of the Crash of 1825. It can well be imagined that someone with Scott's impulsive and creative nature (Daiches, 1971) would never find much pleasure in accountancy, nor even in squaring his own books, but the evidence shows that he persevered, in return for the sense of control and order these practices brought. As for his observation of 1823 to Willie Laidlaw, his friend and factor, that 'I have not a head for accounts and detest debt' (NLS, MS970, ff60-1), his consistent, contrary, practice in both fields takes precedence as evidence. It must be remembered in this connection that Scott also put his children off reading his poems, telling them they were too trivial! In summary, Scott was no financial 'basket case', as some, perhaps including himself in his more self-deprecating moments, have implied.

In terms of the Crash, what emerges from the evidence, through comparisons with Constable and Robinson, is that Scott's business finances and long-standing, lavish personal expenditure, were both typical of well-connected and wealthy publishers and related trades. While it is not disputed that he drained as much surplus cash as he could for Abbotsford out of his capital account at Ballantyne's up to 1824, his behaviour at the time of the Crash appears in his consultations with Cadell restrained and responsible in contrast with that of Constable, who, until the very last possible minute and almost over the dead body of the longsuffering Cadell, squeezed personal cash from a business in the grip of terminal cash-flow problems. This picture is very much at variance with Quayle's depiction of Scott as 'a weakling beset with traits of character that allowed a consuming self-interest to dictate modes of conduct that finally brought ruin on himself and lesser men' (Quayle, 1968, p11). By any measure, this is an inaccurate and unbalanced account of what is now understood to have happened, and deserves at last to be discarded.

It is clear, too, that as in the present global financial difficulties stemming from the 2007 financial crash, the problem with the 1825/6 Crash quickly became one of credit, and it was the lack of credit from which Ballantynes, Constable and Hurst Robinson finally suffered. The ready access to liquidity to which they had become accustomed for many years was simply no longer available. As Bordo puts it, 'The Bank of England is the main culprit. Expansionary monetary policy fueled the boom, tight money ended it, and the Bank acted as lender of last resort too late to prevent massive bank failures from creating real economic distress' (Bordo, 1998, p78). Scott was in no doubt as to where the blame lay: south of the Tweed. In March 1826, his anonymous *Letters of Malachi Malagrowth* praised the Scottish banking system that had stood so firm during the Crash, and which was now under threat of emasculation, in the form of the removal of its right to issue its own notes. After parliamentary consideration, the threat was soon withdrawn (Scott, 1981 [b]).

Andreades spreads blame for the Crash further than the banks in his *History of the Bank of England* (1909). He states that 'The errors of all the banks put together were trivial compared to the outbreaks of speculative insanity which seized upon all classes. ...Was it the issue of Bank Notes that led a respectable book-selling firm to risk £100,000 on a speculation in hops?' Andreades concludes his analysis with the observation that the 'Bank had committed many errors before, as serious as those of 1825, without leading to any such disaster'. The Bank of England's historian is therefore unwittingly on Scott's side in singling out Hurst Robinson, not only as an egregious example of speculation, but as blameworthy in the downfall of Ballantyne, Constable and therefore Scott. Unlike Robinson or Constable, Scott had not speculated for financial gain.

His motivation for spending on Abbotsford, his self-confessed 'Dalilah', was of a different kind. Scott, although the son of a moderately successful Edinburgh lawyer, as a result of his all-consuming interest in history, had traced his ancestry to an ancient border laird, Auld Watt of Harden, who was related to the Dukes of

Buccleuch. He regarded the current Duke of Buccleuch, who became his friend, as his 'clan chief'. Scott's circle of friends included William Clerk of Pennycuik, together with other landed gentlemen, future judges, private bankers and high government officials. Scott was not a snob, but 'believed in rank and in the importance and public responsibility of the landowning class' (Daiches, 1971, p45). This class he set out to join.

A prominent public figure as a result of his patriotic poetry, Scott was knighted in 1820. It was his intention to turn Abbotsford and its surrounding estates into the dynastic home of a new, aristocratic branch of the Scott family, which was to be passed from himself through to future generations. As Daiches has put it, 'he wanted to act out...the old traditional role of landed proprietor at the head of a social hierarchy within his domains' (Daiches 1971, p95), but to do so in an enlightened, modern way, with generosity of feeling, best summed up in the close friendships he maintained with his trusted staff. This appealed to Scott's desire to 'achieve by his own way of life the resolution of those tensions between tradition and progress which provide the theme of his greatest novels' (Daiches, *ibid*). This was why Abbotsford was created, and yet it was more: it was designed as a historic time capsule, with its gothic entrance hall and armoury encompassing a museum of Scottish historical artefacts, and with its library a store of rare historical books which acted as a source for Scott's writings. It also became a perfect setting for Scott's lavish 'open house' entertainment of the cream of national and international literary figures. It could be argued that Abbotsford was as much for others as for Scott himself.

Daiches takes the view that Scott's plan for Abbotsford and his descendants 'was...a silly ambition' (Daiches, 1971, p75); but this is perhaps harsh, given that Scott still lived in an era where an unchallenged, landed, aristocracy was in charge of most aspects of British life, and where the practices of primogeniture and entail still existed in order to maintain its power. It was only towards the end of Scott's life that these certainties started to break up. Whatever else it may have been, Abbotsford was a romantic, historical

construct far removed from the showy, extravagant expenditure of the shallow and greedy, 'a thing to dream of, not to tell', as Scott once put it to a writer friend (Daiches, 1971, p92).

If this interpretation convinces us that, in spite of consuming so much on Abbotsford, Scott was 'not of a greedy or mercenary disposition' in any ordinary sense, there is plenty of evidence which also points to the fact that he was generous in many conventional ways; some of his money did indeed 'wander, heaven-directed, to the poor', as he had claimed it would (Scott, 1821, p38). His account books, letters and journals reveal a host of small and sometimes large acts of charity to friends, family and the poor, both by him and Mrs Scott. This certainly was 'a thriftless sort of charity', as he put it, as the amounts concerned were vastly smaller than, and did not begin to interfere with, his pet project of developing Abbotsford, but charity it nonetheless was.

Finally, the acid test of Scott and his motives perhaps lies beyond his account books and financial diaries, in the literary works themselves, in all their unevenness, where a breadth of sympathy, warmth and generosity of spirit towards all classes and types of people still speaks to the reader. As AN Wilson has put it, 'the experience of reading Scott brings one into touch not merely with great art, but with the greatness of the man' (Wilson, 1979, p5).

## References

Alloway, R., 'Cadell and the Crash' in *Book History*, Vol.11, pp.125-147, 2008.

Andreades, M.A., *History of the Bank of England*, London, P.S.King & Son, 1909.

Anderson, W.E.K., *The Journal of Sir Walter Scott*, Oxford, Clarendon Press, 1998.

Ballantyne Controversy (n.d.) Bound Volume in National Library of Scotland, No.LC248.

Bordo, M.D., 'Commentary on Paper by L.Neal', in *Federal Reserve Bank of St Louis Review*, May/June, pp.77-82, 1998

Brown, R., *A History of Accounting and Accountants*, Edinburgh, T.C. & E.C. Jack, 1905.

Buchan, J., *Sir Walter Scott*, London, Cassell, 1932.

Cameron, A., *Bank of Scotland 1695-1995: A Very Singular Institution*, Edinburgh and London, Mainstream Publishing, 1995.

Checkland, S.G. *Scottish Banking: A History, 1695-1973*, Glasgow & London, Collins, 1975.

Chisholm, J., *Sir Walter Scott as a Judge*, Edinburgh, W.Green, 1918.

Clark, A.M., *Sir Walter Scott: the Formative Years*, Edinburgh and London, Blackwood, 1969.

Daiches, D., *Sir Walter Scott and His World*, London, Thames and Hudson, 1971.

Hayden, J.O., (Ed.), *Walter Scott: the Critical Heritage*, London and New York, Routledge, 1970.

Pearson, H., *Walter Scott: His Life and Personality*, London, Methuen, 1954.

Jeffares, A.R., *Scott's Mind and Art*, Edinburgh, Oliver and Boyd, 1969.

Hill, R., *God's Architect: Pugin and the Building of Romantic Britain*, Toronto, Allen Lane, 2007.

Kelly, S., *Scotland: the Man Who Invented a Nation*, Edinburgh, Polygon, 2010.

Lockhart, J.G., *The Life of Sir Walter Scott, Bart.*, (Abridged), London, Adam And Charles Black, 1898.

Sir Walter Scott, Money and the Financial Crash of 1825/6

Lockhart, J.G., *The Life of Sir Walter Scott (10 Vols.)*, Edinburgh, T.c. & E.C. Jack, 1902.

McKinstry, S. and Fletcher, M., 'The Personal Account Books of Sir Walter Scott', in *The Accounting Historians Journal*, Vol.29, No.2, pp.59-89, 2006.

NLS, MS970, ff60-1, Letter from Sir Walter Scott to his Factor, Tom Purdie, 1823.

Neal, L., 'The Financial Crisis of 1825 and the Restructuring of the British Financial System', in *Federal Reserve Bank of St Louis Review*, May/June, pp. 53-76, 1998.

Quayle, E., *The Ruin of Sir Walter Scott*, London, Rupert Hart-Davis, 1968.

Scott, P., *Walter Scott and Scotland*, Edinburgh, Blackwood, 1981 (a).

Scott, P., (Ed.), *The Letters of Malachi Malagrouther*, Edinburgh, Blackwood, 1981 (b).

Scott, W., *The Complete Poetical Works of Sir Walter Scott*, London, Frederick Warne & Co., 1894.

Scott, W., *Waverley*, (first published 1814) London, Wordsworth Classics, 1984.

Scott, W., *The Black Dwarf*, (first published 1816), London, Marcus Ward, 1912.

Scott, W., *Old Mortality*, (first published 1816), London, Marcus Ward, 1912.

Scott, W., *Rob Roy*, (first published 1817), London, Marcus Ward, 1912.

Scott, W., *The Heart of Midlothian*, (first published 1818), Marcus Ward, 1912.

Scott, W., *A Legend of Montrose*, (first published 1819), London, Marcus Ward, 1912.

Sir Walter Scott, Money and the Financial Crash of 1825/6

Scott, W., *The Bride of Lammermoor*, (first published 1819), London, Marcus Ward, 1912.

Wilson, A.N., *The Laird of Abbotsford*, Oxford, University Press, 1980.

<http://www.walterscott.lib.ed.ac.uk/biography/finance.html>  
Edinburgh University's digital archive on Sir Walter Scott

# MELFORT GUNPOWDER MILLS, ARGYLL: A LETTER BOOK OF 1859-60

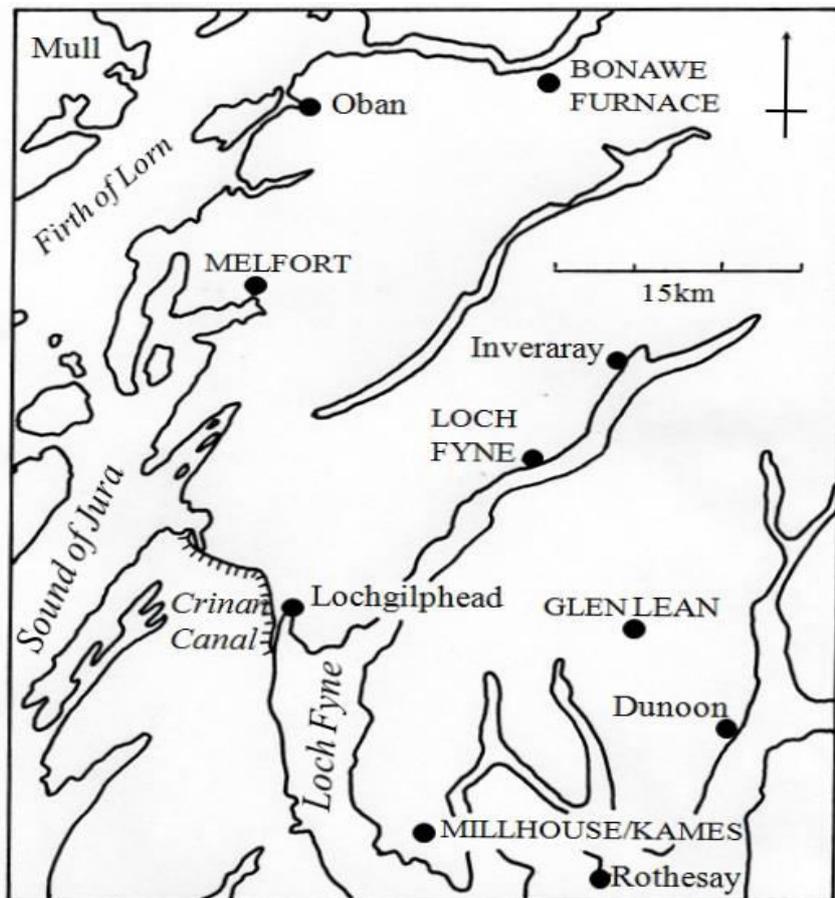
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## **Abstract**

*The Melfort gunpowder mills, near Oban in Argyll, which operated from 1853 to 1874, were owned by Harrison Ainslie, a major iron-mining and smelting company based in Furness, Cumbria. A rare letter book covering an eight-month period in 1859-60 survives and provides an invaluable account of the work of the mills, their place in the local community and their national and international interactions. It contains 334 hand-written entries and the most significant of these are examined and discussed. In particular, priority is given to the acquisition of raw materials for making gunpowder and of other materials and equipment for operating the mills. An account is also presented of the sale of gunpowder to customers in Scotland and, through agents in Glasgow, worldwide, including Australia and Chile. The transport of gunpowder and other goods by road and ship, including both sail and steam powered vessels, and the recruitment of staff are also examined. Finally, the purchases of commodities for the company store are noted. Aspects of the contents of the letters that are considered to be particularly interesting are discussed and readers are encouraged to discover and research letter books associated with other industries. Appendices list the names and addresses of the recipients of letters and of the names and some details of the ships used.*

## Introduction

The Melfort gunpowder mills in Argyll were located at NGR NM 8414, on the west coast of mainland Scotland, 16km south of Oban and 1km north-west of the village of Kilmelford. The buildings stretch for about 1km along the valley of the River Oude before it enters Loch Melfort. The works were established in 1853 by Harrison, Ainslie & Co, based at Newland House, near Ulverston in Furness, then part of Lancashire but now in the south-west region of Cumbria.<sup>1</sup> This firm was mainly concerned with iron mining and smelting and since 1753 had, with their predecessors, operated the Bonawe or Lorn furnace (NN 009318) just south of Taynuilt on Loch Etive, 14km east of Oban. They also held extensive woodlands in Scotland to provide charcoal for both the Bonawe furnace and their furnaces in Cumbria.<sup>2</sup> In particular in 1838 they purchased over 5,600 acres (2,268ha) of coppiced woodlands at Melfort. The charcoal produced was at first used exclusively for smelting but it is also an ingredient of gunpowder and Harrison Ainslie required blasting powder for their haematite mines in Furness. This was the reason given for establishing the Melfort gunpowder works. However, they were no doubt aware that Britain was likely to become involved in the Crimean War, which started in 1853, so that there would be an increased demand for gunpowder for military use. At that time there were already three gunpowder works in Argyll: Glen Lean, at Clachaig (NS 1281), 7km north-west of Dunoon, Kames, at the villages of Kames (NR 9772) and nearby Millhouse (NR 9671), on the Kyles of Bute and Loch Fyne at Furnace (NN 0201) 10km south-west of Inveraray. These were established in 1832, 1839 and 1841 respectively.<sup>3</sup> The locations of all these works are shown in figure 1.



*Figure 1. Location map of Melfort, Glen Lean, Kames and Loch Fyne gunpowder works and the Bonawe iron furnace in Argyll.*

Accounts of the establishment of the Melfort gunpowder mills, explosions there in 1860, 1866 and 1867 and its closure in 1874, have been published and it is known that there were 68 gunpowder mill workers in 1871.<sup>4</sup> Also, the 25 inch Ordnance Survey map published in that year provides an exceptionally detailed plan of the works, individual buildings being labelled. Figure 2 is based on this map. Otherwise, little or no information has been published on the customers, the suppliers of raw materials, the transport of gunpowder from the mills, particularly by sea, the management of the mills and the influence they had on the local community. It is therefore encouraging that in the present article an account can be given of the contents of a Harrison Ainslie letter book, compiled at the works in 1859-60. This is held at the Cumbria Record Office and Local Studies Library, Barrow-in-Furness, and provides a wealth of information about the mills.<sup>5</sup>

## Melfort Gunpowder Mills, Argyll: A Letter Book of 1859-60

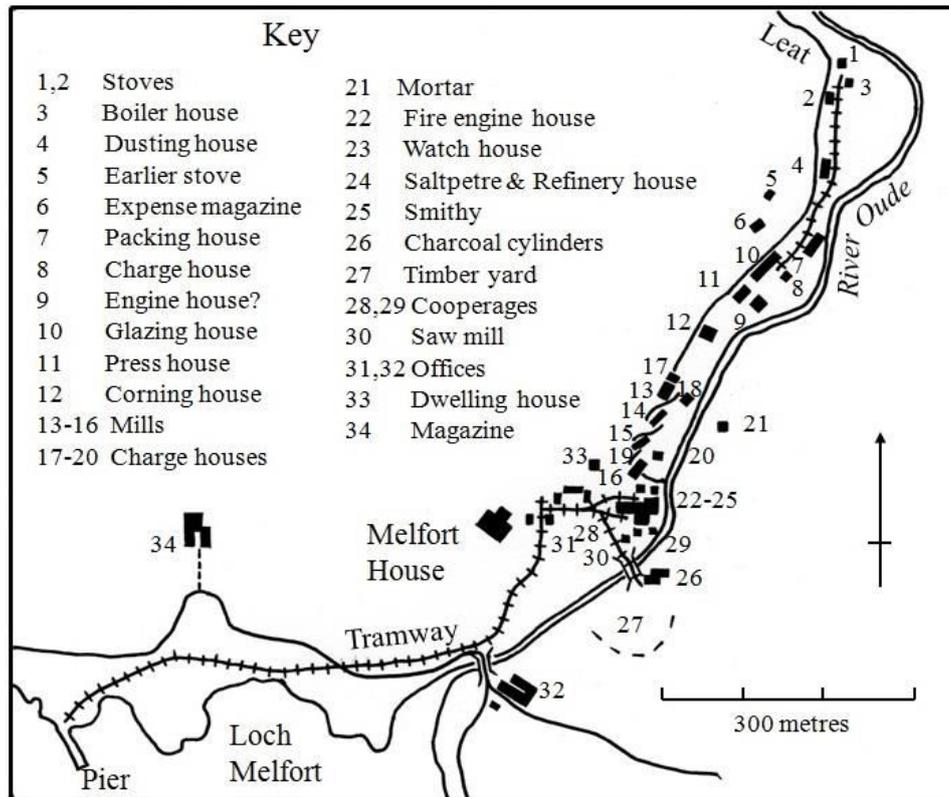


Figure 2. Sketch map of the Melfort gunpowder works in the early 1870s.

### General Description of the Letter Book

The Melfort letter book contains approximately 760 pages, measuring 342 x 264mm and ruled with very faint lines 8mm apart. No watermarks have been detected in the paper. The book is 48mm between the boards, each of which is 5mm thick. There are marbled endpapers and the edges of the pages are also marbled. At the front of the book there is an index of the entries, mainly names and addresses of firms and individuals to whom letters were sent together with the page numbers where copies of these entries can be found. Further information about this index, including a full list of recipients, is provided in Appendix 1.

The letters start on page 1, which is the first right hand page after the index, and end on page 130. The remaining pages of the book, over 600, have not been used. The first letter was written on 13 June 1859 and the last on 16 February 1860. Most of the 130 pages

contain copies of either two or three letters but 13 have four letters and in four cases the letters occupy more than one page. They have clearly been written with quill pens and most of them are in black ink. However those written from 11 November 1859 to 5 January 1860, on pages 81 to 110, are in blue. In addition, all the page numbers on letter pages 1 to 110 are in blue. It is thus clear that the pages were not numbered before the period covered by blue ink started and therefore an index could not have been prepared before then. Indeed the ink used on the index pages for the names and addresses and the page numbers suggests that the index was in fact started in blue on 4 January 1860 and extended for the first time, in black, on 13 January 1860. One of the letters, written on 4 January, is about ink purchased from an Oban stationer and is discussed below.

## **Contents of the Letters**

The book contains 336 hand-written items. These can be divided into 297 copies of letters sent to firms or individuals, 18 notes about other letters sent, 12 notes on money received from customers, seven copies of letters received and two records of amounts of gunpowder made, sold and in stock. All of these items appear to be written by the chief clerk William Murray. He also signed 189 of the originals on behalf of the manager Richard Roper Kelly<sup>6</sup> and 41 in his own right. A further 44 were signed by Kelly himself and 21 by John Sinclair the manager of the company store, but 14 of these were countersigned by both Murray and Kelly. The rest of the items in the book are unsigned. The letters cover a wide range of topics, and notes on the information provided are presented below, where the following historic units have been used:

1 pound (£) = 20 shillings (s) = 240 old pence (d) = 100 new pence;

1 foot (ft) = 12 inches (in) = 0.305m;

1 ton = 20 hundredweights (cwt) = 2240 pounds (lb) = 1000kg (approx). However note that, to allow for wastage, a 1cwt barrel of gunpowder was said to contain 100lb and not 112lbs and correspondingly for other weights.

### *Purchase of Raw materials for Manufacturing Gunpowder*

Gunpowder is a mixture of saltpetre, charcoal and sulphur, which are incorporated together with a small amount of water in a mill and then pressed, granulated, dried, polished and dusted.<sup>7</sup> The separate buildings for carrying out these processes at Melfort are indicated in figure 2. For good quality powder the proportions of the three ingredients are about 75:15:10 but these may vary considerably, particularly for blasting powder. The length of time taken for incorporation varied between about two hours and eight hours depending on the quality of gunpowder being made.

Saltpetre, or simply 'petre', is mentioned in ten letters but none of these are orders for more saltpetre. Seven concern the sale of saltpetre refuse, one the purchase of cocks for saltpetre boilers, one a query about an earlier charge for saltpetre and one stating that the war on the Continent has raised the value of saltpetre. The amount of saltpetre refuse was substantial, one letter recording that 11 tons 4cwt was being sent to Glasgow and another that they had received £207.0s.5d for 12½ tons, about £16.11s.3d per ton. This refuse was generated when the incoming saltpetre, which was almost certainly imported in a 'rough' state from India, was refined using boilers in building 24 of figure 2. The refining process was usually repeated a few times and the waste then had to be disposed of. The apparent lack of orders for saltpetre suggests that the mills already had a large amount in store.

Charcoal, wood for making charcoal and cylinders in which it was made are referred to in eleven letters. Coppiced wood was used, particularly alder and willow. Five of the letters are to the owner of saw mills at Omagh in County Tyrone, who had offices in Londonderry and Donegal. He supplied peeled alder, willow and birch. Some charcoal wood was also acquired, through an arrangement made with a Dumbarton merchant, from Ardsheal, which is about 19km north-north-east of Melfort. However one letter turns down an offer, from a resident of Islay to supply charcoal, stating that they always manufactured it themselves. Also,

two letters record charcoal being sent to Alexander Kelly of Bonawe for smelting iron at the furnace.<sup>8</sup> Finally, three letters to Carnlachie foundry in Glasgow concern the purchase of a total of ten charcoal cylinders 'exactly the same as the last lot'. These would have been housed in building 26 of figure 2, which is conveniently located next to the timber yard. A further five letters refer to 'coals' that, in context, seems to mean coal rather than charcoal.

Two letters to an agent in Glasgow complain that they had persuaded Harrison Ainslie in Furness to purchase 50 tons of sulphur, after Melfort had told them that they would not require any for nearly a year. Clearly they kept a very large stock at the works, the same situation that has been suggested above for the case of saltpetre. This sulphur would probably have been imported from Sicily. A further letter to a merchant in Glasgow informs him that they had sent 1cwt of sulphur waste and asked him to make an offer for larger quantities. The sulphur would have been refined in building 24 of figure 2.

The only other raw material involved in the manufacturing process was black-lead, which was used to polish or glaze the grains of gunpowder so that they became less hygroscopic. At Melfort building 10 of figure 2 was used for this purpose. Twelve letters were written to the North British Colour Co of Leith, Edinburgh, ordering two varieties of black lead, 'Dull' and 'HG', which probably stands for 'High Gloss'. These were sent in barrels or casks by train to Glasgow and then by steam ship to Oban. Several of the letters complained about delays in fulfilling the orders. The final large order was for 1 ton of HG and half a ton of Dull.

### *Other Materials Purchased for the Mills*

Many of the letters are addressed to merchants in Glasgow who supplied a wide range of other materials for the works. For example, James Allan, to whom 20 letters were sent, provided brushes, files, grease, hoops, lead, linseed oil, locks, nails, oil, paint, saws, screws, staves and white lead. Many of the nails and screws were of copper

or brass as they were to be used in danger buildings where explosions were most likely and sparks had to be avoided. The staves and hoops were for making barrels in the cooperages (buildings 28 and 29 in figure 2). Alexander Causland was sent five letters and provided sieve rims six inches high and wire cloth. It therefore appears that the works completed the manufacture of the sieves they required. Most of the wire cloth was made of brass, and the sieves would have been used in the corning house (building 12) where incorporated and pressed gunpowder was granulated. The iron wire cloth supplied must have been used in the preparation of the raw materials rather than after they had been mixed together. There are seven letters to David Gibb, who was supplying rope, twine, canvas and bagging cloth. Gunpowder was often put into bags inside barrels to stop the powder escaping through possible gaps between staves. Leather and lime were purchased from other suppliers.

Eight letters are to Allan & Mann of the Port Eglinton Brick Works.<sup>9</sup> They concern the supply and transport to Melfort of common red bricks, fire bricks and fire covers. In particular, in one letter 100 tons of common red bricks were ordered and unspecified amounts, typically to fill up a vessel, on four other occasions. Also, 1000 side-arch fire bricks, 4000 square fire bricks and 400 fire covers measuring 18 x 12 x 3in were ordered. One of the letters asks for a good bricklayer to be sent and a further five letters to other recipients concern bricklayers rather than bricks. Two of these offer work to individuals stating that two bricklayers were already employed, one requests that payment be made to a bricklayer's wife, one asks that bricks be delivered urgently as the bricklayers were waiting for them and, finally, one states that charcoal cylinders must be sent urgently as the bricklayers were waiting for them. This last letter clearly suggests that many of the bricks were used not for buildings but for brick structures supporting cylinders and perhaps other equipment in the raw materials buildings.

Five letters were sent to Mrs Miller, stationer of Oban. She appears to be the widow of James Miller who in 1837 was described as a

bookseller, bookbinder and printer and ran a circulating library and newsroom in Oban.<sup>10</sup> The letters concern purchases of foolscap paper, a ledger, a package of quills, almanacs, transires, red sealing wax and ink. The order for the ledger is interesting because it suggests that the letter book itself had been purchased from Mrs Miller and that for quills tends to confirm that these and not pens with metal nibs were used for writing the letters. Transires were custom-house permits for removals of goods by coasting vessels. It is, however, the letter concerning ink that is particularly interesting. It is undated but was written after one on 31 December and before one on 4 January and reads:

'Dear Madam

I am requested by Mr Kelly to return to you the last ½ dozen Ink Bottles got, as this ink is not the kind he wanted.

Yours Respectfully  
Wm Murray'

This presumably refers to the blue ink that, as noted above, was used in the letter book from 11 November until 5 January. It appears that Kelly had just become aware of its use and promptly asked for it to be replaced by black.

Another interesting group of three letters refer to salmon. One is to the Edinburgh Roperie & Sail Cloth Co ordering rope and twine for salmon nets, another to Messrs Cumstie of Oban ordering 20lbs of cork for salmon nets and returning useless corks supplied earlier and the third saying that a total of 68 salmon were being sent, apparently as presents, to two contacts in Glasgow.

### *Sales of Gunpowder*

Fifty of the letters informed customers that their orders had been dispatched. A list of the eight types of gunpowder involved, the amounts of each type sold and suggestions for the meaning of the abbreviations used to describe them are given in table 1. The total amount of gunpowder involved was 196.04 tons and approaching

one-half of this (44.6%) was Fo and one-third (33.5%) was HGB. It seems likely that several of the other types were also used in quarries and mines but it is interesting that the mills were capable of manufacturing TP powder, which was the best quality made.

**Table 1: Significant Amounts of Different Types of Gunpowder Sold to Customers**

Type		Amount	%
Co	Common ordinary	13.75tons	7.0
Fo	Fine-grained ordinary	87.33tons	44.6
FFFo	Triple Fine-grained ordinary	6.26tons	3.2
HGB	Hard-Grained Blasting	65.7tons	33.5
HGCo	Hard-Grained Canon ordinary	8.25tons	4.2
HGCB	Hard-Grained Canon Blasting	11.75tons	6.0
HGFo	Hard-Grained Fine ordinary	2tons	1.0
TP	Tower Proof	1ton	0.5

Some of the meanings are tentative, e.g. 'C' could stand for 'Coarse' or 'Cannon' and 'o' for 'ordnance'.

The powder was supplied in five different sizes of barrels and two different sizes of canisters. The barrels contained 100lb (199 barrels; 5.2% of the powder), 50lb (2507; 32.9%), 25lb (8068; 52.9%), 20lb (200; 1%) or 12½lb (1566; 5.1%). Much of this powder was 'bagged' in fabric inside the barrels. The canisters contained 1lb (9200; 2.4%) or ½lb (3600; 0.5%). These canisters were used for the high quality FFFo and TP powder. They were usually packed in boxes of 50 1lb canisters or 100 ½lb canisters. Three letters concern orders for labels for these canisters.

Most of the powder was sold at 59 shillings for 100lb but there were discounts for large orders. Also, small quantities cost more, including 15s, for a ⅛-barrel of FFFo powder, equivalent to £6 for 100lb. Some was sold to individuals or small stores but most was delivered in large quantities to agents who exported it. In particular, Blackburn Low & Co of Glasgow, had arranged to take 5 tons per

month for export to Melbourne. However, it appears that it was unclear whether the agreement was with the Melfort works or with the parent company, Harrison Ainslie in Furness, and this led Kelly to write the longest letter in the book (2.3 pages). Blackburn Low also sent powder to Penang in Malaysia and Batavia (Jakarta) in Java, Indonesia. They wrote to Melfort pointing out that 'The war on the Continent has raised the value of saltpetre which will doubtless have a corresponding effect on gunpowder.'<sup>11</sup> Demand from the African Coast has dropped. We must depend principally on the demand from Madagascar.' There are also letters from James Leehman & Co in Mauritius explaining that there is 'No improvement in demand for gunpowder as Bourbon is at present suffering from visitations of cholera' and that 'The magazine is full and no demand'.<sup>12</sup>

Another agent was John H Swan of Glasgow, who arranged for Melfort gunpowder to be exported to Malta. However, Kelly was very dissatisfied with the service, as demonstrated by the following letter.

*'There is something so superlatively absurd in the Glasgow shippers to Malta charging 3s.9d to 4s per barrel freight when it is done at from 1s.9d to 2s at Newport that we shall never allow ourselves to be duped to such an extent and now write to say that we shall not ship by the Clyde but shall send the powder away from Newport. ... The 20 tons for Malta will leave here now and Newport, I hope, next week.'*

Harrison Ainslie shipped large amounts of haematite from Furness to Newport in Monmouthshire (Gwent) so it would have been easy to send gunpowder on the same boats.<sup>13</sup>

The company also had an agent, Robert Russel, in Newcastle upon Tyne to whom 25 tons of gunpowder was sent on a sailing ship, the Kelpie, that must have used the Forth & Clyde Canal. It was sent in ½- and ¼- barrels and consisted of Fo (48%), Co (8%), HGCo (8%), HGB (15%), and HGCB (21%) grades of powder. Russel gave

instructions about how the delivery should be made, using lighters, to Heworth Parish pier in Gateshead and from there over 20 tons was to be sent by cart to Darlington.

One of the letters was to H E Drayson of 2 New Palace Yard, Westminster, whose father had been Superintendent of the Royal Gunpowder Mills at Waltham Abbey. Drayson jnr owned Maresfield gunpowder mill (TQ 4623) in Sussex from 1852 to 1858 and in 1859 established a new mill at Eyeworth Lodge, Fritham, (SU 232140) in the New Forest.<sup>14</sup> The letter offers Drayson 228 ¼-barrels of common size powder and 65 quarter-barrels of musket size powder at 70s per barrel delivered to Bristol, less 10% discount for prompt payment. One can only speculate about why he might be interested in buying Melfort powder.

One of the fairly local customers was Malcolm Sinclair of Lismore, an island 12km north of Oban. A letter sent to him acknowledges a payment of £2 19s received for a barrel of gunpowder. It states: 'We regret much that Mr Sinclair should want this powder so long but from the want of water and the explosion which took place here, it could not be helped'. This payment had been made following a letter sent to Sinclair requesting immediate payment. Indeed Sinclair, a relative of the storekeeper at Melfort, appears to have been a problematic customer. Another letter asks him to collect four quarter-casks of gunpowder waiting for him at the steam packet office at Oban, as the manager had said that 'in future he will not take charge of any powder as this lot is lying there so long'. However, a later letter states that four ¼-barrels would be sent to Oban on the following day and left at the same office. This letter, sent in January 1860, included a bill for £16.2s.3d for gunpowder purchased between October 1856 and October 1858 but still ends with the statement: 'We shall be glad to attend to further orders'.

The two entries in the letter book recording the amounts of gunpowder made, sold and in stock are on a single undated double-page spread prepared between letters written on 4 and 5 January 1860. They provide monthly information between 25 March and 1

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October 1859 and between 1 October and 31 December 1859. A transcript of these entries is provided in table 2. On 25 March about 62 tons of gunpowder was in either the factory magazine or the mills. This increased to 94 tons on 1 October and to 108 on 31 December. The monthly amount of powder made varied considerably from none in April and 4 tons in June to 77 tons in August, 79 in November and 102 in December. The reason for this could reflect the demand or more likely be because of maintenance work being carried out or lack of water to power the mills in some months. The total amount of powder made was about 476 tons. Similarly, the amount of gunpowder either sold or sent to Harrison's Ainslie's magazine at Barrow-in-Furness varied from about 8 tons in April to 105 in November, the total being about 430. Therefore just over 90% of the powder made was transported from the mills. This could suggest that business was quite good but the mills might not have been working to capacity. As the amount of powder sold directly to customers from Melfort was almost 200 tons, just over one-half of it was shipped to Barrow.

**Table 2: Transcript (with Minor Changes for Clarification) of Pages 108 and 109 of the Melfort Letter Book, Recording the Gunpowder Made and Sold Between March and December 1859**

Note of Gunpowder made, Shipped and Sold from 25th March to 1st Oct 1859

1859		tons	Cwt	lbs	1859		tons	cwt	lbs
March 25	To stock in Magazine	31	12	37½	April	By Consigned and Sold as under	8	4	12½
	To ditto on hand	30	3	0	May	Ditto	31	7	50
April	Making over ordnance Powder				June	Ditto	26	18	50
May	To Powder made	23	15	0	July	Ditto	44	2	0
June	To ditto	4	3	50	Aug	Ditto	50	3	91
July	To ditto	44	5	75	Sept	Ditto	47	12	87½
Aug	To ditto	77	7	87½	Oct 1	on hand	93	16	25
Sept	To ditto	90	18	25		[Total]	302	5	16
	[Total]	302	5	16					

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Note of Gunpowder made, Shipped and Sold from 1 Oct 1859 to 31st December 1859

1859		tons	cwt	lbs	1859		tons	cwt	lbs
Oct 1	To stock on hand in Magazine	67	6	0	Oct 31	By Consigned or Sold during month	90	10	0
	To ditto in Works	26	10	25	Nov 30	By ditto	105	8	37½
Oct 31	To Powder rec'd to Magazine	54	8	0	Dec 31	By ditto	25	5	50
Nov 30	To ditto	78	17	28½		By Stock in hand	108	4	75
Dec 31	To ditto and on hand	102	6	50		[Total]	329	8	62½
	[Total]	329	8	62½					
Dec 31	Magazine Stock	72	12	25					
	Mills	35	12	50					
	[Total]	108	4	75					

Sent Duplicate of the above to Messrs Harrison Ainslie & Co by Ulverston

### **Purchases of other goods**

The 21 letters from John Sinclair of the company store were addressed to five merchants based in Glasgow and were orders for arrowroot, barley, barley sugar, blacking, books, bran, butter, canary seed, candles, catsup, cayenne, cheese, clay pipes cream of tartar, flour, ginger cordial, ground ginger, heels, hemp seed, juice, meal, a meat saw, mints, mustard, paper (for wrapping tea, sugar and butter), pins, polishing paste, rice, salt, stationery, tobacco, oranges, snuff, soles, split peas, starch, sugar, tea, treacle, twine and washing soda. The letter ordering books and stationery is summarised in table 3.

**Table 3: Books and Stationery Ordered for the Melfort Store on January 1860**

12 McCulloch course of reading	200 pencils for slates
12 first collection by White	8 packets envelopes (2 sizes)
24 school testaments	1 gross quills
24 No. 3 lesson book by White	10 dozen mock valentines
24 No. 2 lesson book by White	10 dozen valentines @ 1d, 2d, 3d & 4d
36 No. 1 lesson book by White	2 packets envelopes for the valentines
12 Lennies grammar	1/2 ream ruled blue plain foolscap paper
12 pocket bibles @ 2/-, 2/3 and 2/6d	1/2 ream with money columns,
12 dozen penny ink bottles, black	1/2 ream school manuscripts
6 dozen pen holders	10 dozen shorter catechisms
6 dozen pencils to sell @ 1/2d	10 dozen mother catechisms
6 dozen pencils to sell @ 1d	1 box very best steel pens

### *Transport of Goods*

Local transport of goods was by cart, almost entirely between Melfort and Oban. In particular, company carts would meet incoming steam ships from Glasgow at Oban harbour. Indeed the request that goods be sent on 'the first steamer to Oban' occurs in 55 of the letters. Some gunpowder was taken by cart from the mills to Oban but most was loaded on to sailing ships from the pier at Melfort. This is shown on the map of figure 2 and in the photograph of figure 3. Eighteen of these ships are mentioned in the letter book. Their names and some notes about the four that were used most frequently are given in Appendix 2. Ships sailing from Melfort or Oban to Glasgow would have made use of the Crinan Canal, shown in figure 1, thus avoiding a 210km passage around the Mull of Kintyre. Maximum dimensions of craft that could use the canal were 88 x 20 x 9.5ft draught.<sup>15</sup> One letter notes that the journey should take 5 days.

### *Recruitment of Workers*

One letter, written on 22 August 1859, was to Robert Henderson of the Kames powder mills,<sup>16</sup> who had written seeking employment. Murray responded saying that Kelly was willing to give him immediate employment if he produced certificates of sobriety.

Another letter addressed to the Editor of the Inverness Courier asked them to print an advertisement for a drill sergeant, suggesting that a pensioned sergeant would be appropriate. The only other letters concerned with recruiting staff are those seeking bricklayers and are mentioned above.



*Figure 3: Photograph of the gunpowder works pier taken in 1986. Courtesy of Glenys Crocker*

## **Discussion**

The Melfort gunpowder letter book described in this paper is the only one that appears to have survived from the 21-year period during which the mills were active. It covers eight months of activity and the entries occupy 130 pages. However over 600 pages have been left blank. If copies of letters were written at the same rate in similar ledgers and if these were fully used, five further ones would have been needed and the surviving one would have been the second. It would be very rewarding if publication of the present paper led to the discovery of one or more of these volumes.<sup>17</sup>

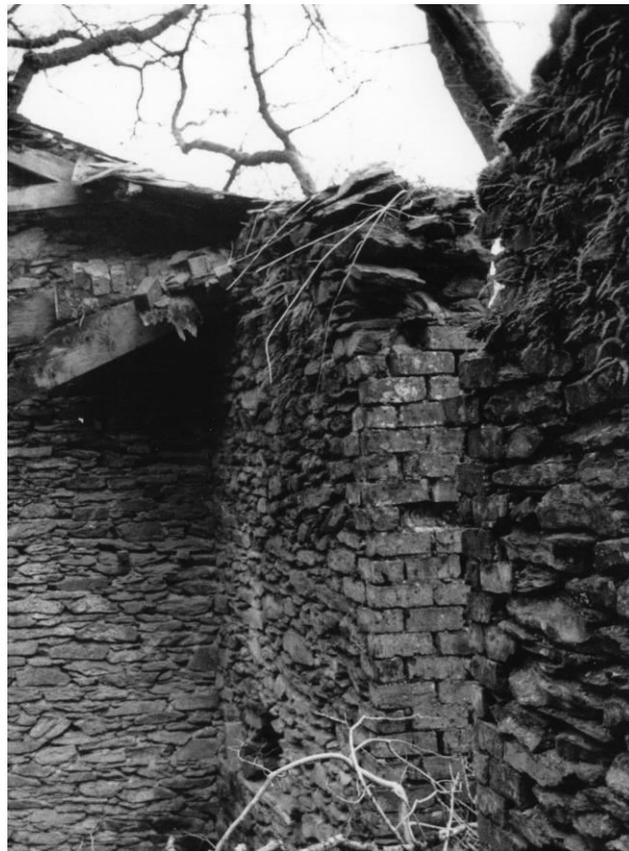
It is interesting to speculate about why entries were made on only 130 pages of the ledger. The reason is probably linked to the fact that the last of these pages is glued down to the next but fortunately it could be read by an archive conservator using a light box. It contains two letters, one to Alexander Kelly of Bonawe, Richard Kelly's father, and one to Neil Robertson, captain of the Kelpie. However, in the index, an attempt has been made to erase the latter entry. This suggests that the Kelpie letter contained information that the company did not want to be disclosed. It concerns the transport of alder tree saplings, which appears to be innocuous. Nevertheless, the fact that the ledger was deposited in the Barrow-in-Furness record office seems to indicate that the Harrison Ainslie Company removed it from Melfort in mid-February 1860 and kept it at their headquarters in Furness. The problem could have been the ownership of the Kelpie, either Kelly & Co or Harrison Ainslie. It may also be relevant that one of the other ships used was the Mary Kelly named after Richard Kelly's mother or sister. The other ledgers might have been kept at Melfort until the works closed in 1874 and then been disposed of locally.

Some of the letters, particularly those written by Richard Kelly, the manager, are rather aggressive, threatening actions because payments had not been received for powder supplied, excessive charges having been made for goods and services, mistakes made in accounts and decisions made at Melfort apparently being overturned by agents in Glasgow or Harrison Ainslie in Furness. It is also interesting that the 13 letters sent to Alexander Kelly at Bonawe do not reveal that he was Richard's father and one also wonders whether he was related to John Kelly of Newport, Monmouthshire, to whom one letter was sent.

One of the reasons given by Harrison Ainslie for establishing the gunpowder mills at Melfort was that they were already using the coppiced woodland there for producing charcoal, one of the ingredients of gunpowder.<sup>18</sup> In practice however it is clear from the letters that charcoal made from the local trees was not suitable so that wood had to be obtained from Ireland and elsewhere and new

plantations of alder established. This suggests that at the start of this venture the firm had no practical experience of the manufacture of gunpowder and must have recruited skilled workers from other gunpowder mills, probably those in Cumbria.

The purchase of large numbers of Allan & Mann bricks is of interest as the buildings at Melfort are almost entirely of stone. The only obvious bricks are those surrounding the doors and windows of building 9 in figure 2. Some of these bricks, which are stamped 'ALLAN & MANN, PATENT, GLASGOW' are shown in the photograph of figure 4. This building was not constructed until after the 25inch OS map of 1871 was surveyed and presumably before the works closed in 1874.<sup>19</sup> It has been concluded therefore that most of the bricks purchased must have been used to house charcoal cylinders and other equipment within stone buildings or for the construction of service structures such as drains.



*Figure 4: Allan & Mann bricks around an opening in a wall of building 9 in figure 2. Courtesy of Glenys Crocker.*

The two entries in the letter book recording the amounts of gunpowder made, sold and in stock make no reference to financial matters. However they do enable an estimate to be made of the income from both direct and indirect sales during the nine-months period covered. Almost 200 tons was sold directly and the letters indicate that most of this would be priced at 59s for a barrel, although some would have been much more than this and large orders were sold at a discount. Assuming that 59s is a reasonable average, the total income would then have been almost £12,000. A further 230 tons was shipped to the Harrison Ainslie magazine at Barrow for distribution to other customers and for use in the company's iron mines. If this is again valued at 59s it was worth, approximately, a further £13,500, giving a total of £25,500, or £34,000 over a 12-months period. Unfortunately it has not been possible to make a corresponding estimate of the cost of operating the mills. A striking feature of the contents of the letter book is that they reveal how diverse and complex the management of a gunpowder mill could be. The book is, of course, mainly concerned with the sale and transport of gunpowder. There are also many orders for equipment, including charcoal cylinders and a crane for the pier, and materials, such as grease and paint, for running and maintaining the machinery and buildings. However, surprisingly, there are few orders for the purchase of raw materials for manufacturing gunpowder, particularly when compared with the large number for food, tobacco, stationery, books etc for the company store. Most of the recipients of letters were agents and dealers in Glasgow. Indeed, the company depended almost entirely on their Glasgow links. This must also have been true of the other three gunpowder mills in Argyll but, as shown in figure 1, these were much closer to Glasgow and did not have to use the Crinan canal. The only other gunpowder mills in Scotland at that time were at Roslin (NT 2736) and Gorebridge (NT 3461) within 15km of central Edinburgh.<sup>20</sup>

In 1859-60 there were 33 gunpowder mills active in the British Isles so that commercially Melfort was in competition with many other manufacturers. It is therefore impressive that they had a significant

international trade. For example, through their Glasgow agents, they shipped gunpowder to Australia, Chile, Indonesia, Malta, Mauritius, Madagascar, Malaysia, Singapore and South Africa. However, several letters indicate that for various reasons some of these markets had problems.

Several of the letters are orders for labels to be attached to canisters of gunpowder giving the grade of powder contained and the name of the Melfort company. Many such labels and indeed canisters of other companies survive but unfortunately none are known for Melfort. It would be very encouraging if publication of the present paper resulted in the discovery of examples.

Following the period covered by the letter book the company appears to have continued to work at a more or less steady rate until the next detailed information becomes available. This is contained in a stock book, dated 1871-76, of the Harrison Ainslie magazine at Barrow.<sup>21</sup> In 1871 the amount of gunpowder sent from Melfort to this magazine was about the same as in 1859. However, in succeeding years the amounts declined gradually but did not end when the mills closed in March 1874, as powder was still stored in the Melfort magazine. It was not until July 1875 that the last shipment arrived at Barrow. It was in 1875 that a new Explosives Act was passed and this imposed far greater restrictions on the operation of gunpowder mills. Harrison Ainslie may have anticipated this and decided that it would not be economic to continue work at the Melfort mills. Richard Roper Kelly was aged 40 when the Melfort mill closed; when he died in 1886 he was living in West Dulwich, London.<sup>22</sup>

In conclusion, it is considered that the present paper provides an example of the enormous amount of information about industrial sites that can be deduced from company letter books. It is hoped that its publication will encourage others to examine the Melfort letter book in greater depth and to discover and research other letter books relating to the gunpowder and other historic industries.

## Appendix 1: The Index of the Letter Book

The 24 pages of the index at the front of the letter book have cut-away fore-edges labelled, in vertical sequence with the letters of the alphabet, except that X, Y and Z are linked together on the last page and that M has been replaced by Mc. This labelling has been achieved by sticking small squares of paper with letters alternately printed in red or black in the appropriate places but some of these are now missing or loose. The entries start on left hand pages but in some cases, when a large number of letters and hence references to pages are involved, they spread across to the corresponding right hand pages. Of the 24 pages, those for I, J, Q, U, V, and XYZ are unused.

Perhaps not surprisingly, the page with the most entries is Mc with 21, although six of the names actually start with M and not Mc. Seventy-two of the 80 addresses involved are in Scotland, 25 in Glasgow, 13 in Oban, and 34 elsewhere, including Ballachulish, Bonawe, Dumbarton, Inverness, Islay, Leith and Mull. Of the remaining eight addresses, four are in England (Darlington, London, Newcastle and Whitehaven), two in Wales (Newport in Monmouthshire and Queensferry) and two in Ireland (Donegal and Londonderry). More than half of the letters (172) were to Glasgow and 40 were to Oban, including 11 to the Customs Officer.

The index is reproduced below except that the page numbers have been replaced by the number of letters involved, which ranges from one to 34, the average being just over four.

Allan, James Senr, Bothwell St, Glasgow. [Ironmongers] 20  
Allan & Mann Messrs, Port Eglinton Brick Works. 8  
Addams, James & Co., Tradeston, Glasgow. [Saw mills] 3  
Allan, A & J, 108 Candleugg St, Glasgow. [Wholesale grocers] 7  
Ardfinaig Granite by Ross of Mull. [Customer] 1  
Astley, F D P, Mains of Arishaig. 1

Braithwaite, J & J, Ironmongers, Whitehaven. 3

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- Blackburn, Low & Co, 135 Buchanan St, Glasgow. [Agents] 34  
Brown, Hugh, Plasterer, Oban. [Also slater] 1  
Ballachulish Stone Co, Ballachulish. 8  
Brown, Donald, Bowmore, Islay. [Offered charcoal] 1
- Campbell of Auchindaurch. [Customer] 1  
Chapman, David, Port Hamilton, County Donegal. [Supplied wood for charcoal] 4  
Causland, Alexr, 5 Mitchell Street, Glasgow. [Supplied wire cloth and sieve rims] 5  
Cumstie, William & Sons, Oban. [Supplied cork and rope] 8  
Cameron, John & Party, Strontian. [Customer] 1  
Cross, Alexr & Sons, Seed Merchants, 53 Argyle Street, Glasgow. 2  
Campbell, Archd, Saddler, Oban. 4  
Campbell, Captain of the Melfort. 5  
Campbell, J & W, Merchants, Glasgow. 1
- Dalgliesh, Archibald, Glenmore. [Customer] 1  
Donald, John & Co, 54 Argyle Street, Glasgow. 1  
Davidson, James, Weaver, Symington By Biggar. 4  
Drayson, H E Esq, 2 New Palace Yard, Westminster, London. [Gunpowder manufacturer] 1
- Edinburgh Roperie & Sail Cloth Co, Glasgow. 5  
Editor of the Inverness Courier, Courier Office, Inverness. 1
- Flint, Thomas, Lochgreen by Denny. [Customer] 13
- Gregorson, Angus, National Bank, Oban. 1  
Gunn, Robert, 106 Union Street, Glasgow. 1  
Gibb, David, 78 Miller Street, Glasgow. [Supplied canvas and cloth] 7  
Gray, John, 13 Jenner Court, Glasgow. [Wholesale tobacconist] 4  
Greenfield, John, Bricklayer, Crinan. 1  
Griffiths, Richard Esq, Queensferry, near Flint. [Customer] 1
- Henderson, Wm & Sons, Oil Merchants, New Wynd, Glasgow. 10

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- Henderson, Robert, Kames Powder Mills, Kyles of Bute. 1  
Harrison Ainslie, Messrs, & Co. 2  
Hunter, William, Merchant, Old Kirkpartick, Dumbarton. 1
- Kelly, Alexr Esq, Bonawe. [Ironmaster] 2  
Kelly, John & Co, Newport, Monmouthshire. [Customer] 1
- Lockhart, Miles Esq, Ardshead Drive, Bonawe. [Customer] 1  
Livingston, Neil, Bricklayer, 94 King Street, Tradeston, [Glasgow] 1  
Loxton, Mr Dudley. [Customer] 1
- McIntyre, Messrs Dougall & Co, 65 Jamaica Street, Glasgow.  
[Shipping company] 11  
McLaren, Ronald, Oban. [Customer] 4  
McCulloch, S & W, 27 Argyle Street, Glasgow. [Wholesale  
grocers] 10  
McLane & McDonald. 1  
McKinnon, Niel, Merchant, Tobermory. [Customer] 6  
McIntyre, John, Salm Lime Works, Lismore. [Customer] 2  
Mitchell & Wallace, Carnlachie Foundry, Glasgow. 7  
McCulloch, Charles, Merchant, Easdale. 5  
McNair, Saddler, Oban. 2  
McIntosh, Peter & Sons, 129 Stockwell Street, Glasgow. [Leather  
merchants] 2  
Marshall, R, Customs Officer, Oban. 11  
McEwan, A, Esq, National Bank, Lochgilphead. 2  
Miller, Mrs, Stationer, Oban. 5  
Munro, Duncan, Joiner, 22 Graham Street, Bridgeton. 1  
McColl, John, Steam Boat Office, Dumbarton. 1  
Munro, Archd, Merchant, Millhouse. Cowal by Greenock. 2  
McArthur, Duncan, Esq, Oban. [Shipping agent] 2  
McLaurin [McLaren?], Ronald, Merchant, Oban. [Customer] 1  
McPhail, Duncan, Slater, Oban. 1  
McPherson, John, Merchant, Oban. 1  
Munro, John, Contractor, Strontian. 1
- North British Colour Co, Leith. [Black lead] 12

Orr, Francis, & Sons, Stationers, Glasgow. 4

Parker, James, Oil & Grease Merchant, Glasgow. 1

Pollock, Gilmour & Co, Glasgow. [Supplied staves] 2

Penny, Charles Junr, Merchant, Glasgow. 2

Parker, John, of the Dora. 1

Russel, Robert, Agent for Melfort Gunpowder, Newcastle on Tyne.

2

Railton, Mr, Commission Agent, Darlington. 1

Robertson, Neil, of the Kelpie. 1

Swan, John, 153 Queen Street, Glasgow. [Agent] 28

Sinclair, Malcolm, Sheep Island Lismore. [Customer] 5

Smith, A & H, Eglinton Engine Works, Glasgow. [Supplied grease]

3

Thompson, Joseph, Esq, Strand, Londonderry. [Customer] 6

Walker, Robert, Esq, Oban. 1

Wilson, Matthew of The Earl of Glasgow. 1

Wilkie, James, 21 King Street, Calton, Glasgow. 1

Wyllie & Lockhead, Messrs, Cabinetmakers, Glasgow. 1

## **Appendix 2: Sailing Ships Mentioned in the Letter Book**

Eighteen ships were used.<sup>23</sup> Appropriately, the most common vessel was the Melfort. She is mentioned in 32 letters up to 17 September but then only once, on 27 January. Some of the letters accompanied by transires, were sent to its captain, Duncan Campbell. She was a 36 ton sailing vessel with one mast, known as a smack or sloop, and was owned by Harrison Ainslie. She was built at Chester in 1856, sold in 1875, when the Melfort works had closed, and wrecked in 1888. Next came the Earl of Glasgow, with 29 letters spread over the whole period. She was a 35 ton smack built at Lairg in 1843 and wrecked on Walney Island, Barrow, in 1852. After salvage and

repair, she was bought by Harrison Ainslie in 1853. They sold her in 1866 and she foundered off Pembrokeshire in 1881. Then came the Kelpie, a schooner of 50 tons with a female figurehead. She was built by Wishart of Glasgow, registered in October 1859 and mentioned in 15 letters from 25 September to the end of the book. The sole owner from new was Richard Kelly of the gunpowder works. She is recorded in Lloyds Register in 1862 and 1867 and was sold in August 1869.<sup>24</sup> A kelpie is a water spirit, usually a horse, that haunted the rivers and streams of Scotland and delighted in the drowning of travellers. In spite of this it appears to be a common name for sailing ships. The Dora, owned by Harrison Ainslie, is mentioned in 8 letters. She was built at Ulverston, Furness, in 1834 and in 1852 had a crew of three, a master, a mate and a seaman. In that year she visited Barrow, Cardiff, Chepstow, Glasgow, Lancaster, Liverpool, Newport and Oban. She was described as a 55 ton schooner with two masts in 1854, was sold in 1861 and lost off Holyhead in 1862.

The other vessels, mentioned on only a few occasions, were Agnes & Mary, Cairngorm, Christina Turner, Dream, Elizabeth, Ellen & Sarah, James III, Jane, Kandy, Mary Kelly, Mayola, Silistria, and Venillia. In the 1850s Harrison Ainslie owned nine schooners and three sloops.<sup>25</sup> Of these ships, only the Melfort is mentioned in the 1871-6 stock book of the company's magazine at Barrow-in-Furness, bringing gunpowder from Melfort and taking some of it from there to customers elsewhere in Britain.<sup>26</sup>

## **Acknowledgements**

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photographs and transcripts of all the letters in the book. He also arranged for page 130 of the letter book, which had been glued to the next page, to be transcribed by Brenda Degbro, Cumbria archives conservator. Finally he provided valuable comments on earlier versions of this paper. Miles Oglethorpe, now of Historic Scotland, provided information on the Allan & Mann brickworks at Glasgow and also commented on an early version of the paper. Christine Roberts, manager of Melfort Village that now occupies the site of the mills, commented on surviving features. The staff of the Cumbria Record Office and Local Studies Library, Barrow, have been very supportive throughout the research. Finally, Glenys Crocker is thanked for many valuable discussions and suggestions.

## Notes and References

1. Robertson, J., *'The Powder Mills of Argyll'*, IA Review, 12(2), (1990), 205-213.
2. Riden, P., *A Gazetteer of Charcoal-fired Blast Furnaces in Great Britain in use since 1660*, (Merton Priory, 1993), 146-7, 149.
3. Crocker, G., *Gunpowder Mills Gazetteer*, (Wind & Watermill Section, SPAB, 1988), 4, 47-8. Electronic edition with additional data on [www.millsarchivetrust.org](http://www.millsarchivetrust.org).
4. Robertson, ref. 1; Crocker, G., ref. 3; Crocker, A., *'A Note on the Industrial Archaeology of the Melfort Gunpowder Site'* (appendix to ref. 1) IA Review, 12(2), (1990), 213-15; Royal Commission on the Ancient and Historic Monuments of Scotland, Argyll volume. 2: Lorn, (RCAHMS, 1975), 34, 292-3.
5. Cumbria Record Office and Local Studies Library, Barrow: BDB2/20, Melfort Gunpowder Letter Book, 1859-60. A transcript prepared by Peter Sandbach has been deposited, with

the permission of the Cumbria Record Office, Barrow, with the Business Archives Council of Scotland.

6. Kelly's forenames do not appear in the letter book. They are taken from other documents, including an announcement of a collection he made for a memorial to Richard Harrison published in Soulby's Ulverston Advertiser, dated 10 May 1860.
7. Crocker, G., *The Gunpowder Industry*, 2nd ed. (Princes Risborough, 1999, Shire).
8. Alexander Kelly was Richard Roper Kelly's father. Alexander's wife Mary was the daughter of Richard Roper, who became a partner of Harrison Ainslie & Co in 1820.
9. Hulme, J.R., '*A Glasgow Brickmaker in the 1860s*', unpublished, c1980; Allan & Mann advertisement in Slater's Directory of Scotland, 1860, 157. (Copies provided by Miles Oglethorpe.)
10. Pigot's Directory, 1837.
11. The Franco-Austrian War began in April 1859.
12. Bourbon, now known as Réunion, is an island 200km south west of Mauritius.
13. Cumbria Record Office and Local Studies Library, Barrow: BDB/2 5/3, '*Gunpowder Stock Book, 1877-75*' [actually 1871-76]; Crocker, A., and Sandbach, P., '*A Harrison Ainslie Gunpowder Stock Book of 1871-76*', Trans. Cumberland & Westmorland Antiquarian and Archaeological Society, in the press.
14. Crocker, G., ref. 3, 28.

15. McKnight, H., *The Shell Book of Inland Waterways*, (Newton Abbot, David & Charles, 1975), 456.
16. Crocker, G., ref. 3, 45-6.
17. The only other letter book known to survive from a gunpowder mill is one for the Chilworth gunpowder mill in Surrey, which worked for 294 years. It covers a 12-month period in 1790-91 and contains 279 letters. A full transcript of the letters accompanied by an analysis has been published: Crocker, A., *'The Letter Book of William Tinkler, 1790-1791'*, in *Gunpowder Mills: Documents of the Seventeenth and Eighteenth Centuries*, (Woking, Surrey Record Society, 2000), 106-72.
18. Robertson, ref. 1, 209-10.
19. Robertson, ref. 1, 207-214.
20. Crocker, G., ref. 3, 49-51.
21. Crocker and Sandbach, ref. 13.
22. Information provided by Peter Sandbach.
23. Sandbach, P., *'Richard R. Kelly and the Unfinished Ledger'*, Newsletter, Cumbria Amenity Trust Mining History Society, 99, in the press. Much more detailed information on the ships mentioned here is provided in this article.
24. Lloyds Register, 1862, 1867, 1870.
25. Marshall, J.D., *Furness and the Industrial Revolution*, 2nd ed. (Beckermest, Michael Moon, 1981), 208.
26. Crocker and Sandbach, ref. 13.

# THE SCOTTISH COAL MINING INDUSTRY SINCE 1945

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*Historic Scotland*

## **Abstract**

*Sixty years ago, over 90% of Scotland's energy was provided by a domestic coal industry that employed over 100,000 people, 80% of whom worked at or in the mines themselves. All the industries for which Scotland was famous were utterly dependent upon this energy. Collieries were so much a part of the landscape in the central part of the country that they were almost invisible.*

*From the 1960s, however, this position of supremacy was eroded at an accelerating rate, and by 2002, Scotland's 200 collieries had shrunk to zero. The physical remains of the industry had also receded in the face of major environmental programmes that cleansed the landscape of recognisable evidence of industrial activity. Significant parts of the country had therefore entered a phase of denial in which the fundamental role of the mining industry in the history and culture of communities was deliberately overlooked. At the same time, literature covering the history of the industry tended to focus on much earlier periods of development, with little attention being paid to the post-war era.*

*The purpose of this paper is therefore to provide an account of how such a hugely important industry disappeared within five decades after first entering a period of boom, and then suffering a series of ultimately fatal setbacks.*

## Coal in Context

In the early 21st century when public attention is concentrated on issues of sustainability, climate change and the price of oil and gas, it may seem scarcely believable that 50 years ago the Scottish economy was entirely dependent upon coal for its energy. This is, perhaps, all the more difficult to grasp because Scotland is not especially well known in a UK context for being a major centre of coal production, an industry which is more generally associated with south Wales.

The fact is, however, that Scotland's extraordinary industrial development during the 18th, 19th and early 20th centuries would not have been possible without a large and increasingly sophisticated coal industry. Scotland's great industries, including iron and steel, shipbuilding, engineering, chemicals and textiles were all heavy intense energy users and depended on local supplies of high-quality coal. By 1913, Scotland was no longer North Britain, and the Clyde in particular had earned its reputation as the 'Workshop of the British Empire' on the backs of miners across the Lanarkshire, Dunbartonshire, Stirlingshire and Ayrshire coalfields.<sup>1</sup>

Yet, by 2002, a country which took over 200 collieries into public ownership at nationalisation in 1947 had no surviving deep coal mines, its entire production being accounted for by open-cast mining. This contrasts with neighbouring Norway where over 95% of energy demand is satisfied by hydro-electricity, much of the gas and oil of the North Sea can be exported, and three coal mines remain in operation.

Coal was therefore an immensely important part of life in Scotland. In addition to the industries that were so dependent upon coal for their energy, over 100,000 people were employed in the mines and associated industries during the 1950s. The mines themselves were also an important part of the Scottish landscape. Anyone travelling across central Scotland was bound to encounter collieries scattered across the countryside and in towns and villages. Indeed, they were

such a common feature of the landscape that they were taken for granted. Few people bothered to contemplate life without them.

The purpose of this paper is therefore to provide an account of how such a hugely important industry disappeared within five decades. Rather than being a story of unremitting decline, it is one of unbridled confidence being overcome by technological change, industrial upheaval and a transformation of the UK's energy markets.

### **The Golden Era**

In July 1946, over 50 years after nationalisation of the coal industry was first proposed to parliament by James Keir Hardie, Clement Atlee's Labour Government passed the 'Coal Industry Nationalisation Act'. This resulted in the formation of the National Coal Board (NCB) on 1st January 1947, in which the principal assets of the coal industry were to be taken into public ownership. Given the deteriorating condition of the coalfields in the aftermath of six years of war and the years of depression that had preceded it<sup>2</sup>, there was an atmosphere of great optimism, particularly in the Government and amongst the Unions, who believed that huge improvements in working and living conditions were now possible, and would result in substantial increases in productivity and prosperity.

Across the British coalfields, the total assets transferred from private ownership in the vesting process comprised a vast estate including 1,500 working collieries and their associated assets, 30 fuel and briquetting plants, 55 coke ovens and associated chemical by-product plants, 85 brickworks, 1,803 farms, 140,000 houses, 27,000 farm houses and cottages, numerous offices, 275 shops and business premises, several swimming baths, a cinema and a slaughterhouse. There were in addition thousands of miles of private mineral railways, wharves, depots, retail milk rounds, a

holiday camp, a bicycle track, and 177,000 mainline railway wagons and locomotives.<sup>3</sup> However, the NCB inherited no working capital with which to operate and develop these assets, and therefore needed to seek funding from the Treasury. The NCB published series of strategies, the first being the Plan for Coal in 1950.<sup>4</sup> This earmarked £635 million of spending over the following 15 years, a significant proportion of which was to occur in Scotland.

The NCB's remit was not restricted to the production of coal, but embraced a broad range of activities, including welfare. The work of its Medical Service, for example, extended well beyond the workplace, tackling health issues in the coal-mining communities, promoting health education and advising on medical aspects of safety. A major outcome was the NCB's statutory obligation to provide first-aid rooms at the surface of all coal mines. A questionnaire distributed to colliery managers in 1948-9 after nationalisation revealed an extraordinary lack of medical facilities at the pithead, the full extent of some collieries' cover being a nurse in a neighbouring village.<sup>5</sup>

Working conditions at the pithead were also to improve hugely as a consequence of the introduction safety programmes, which significantly reduced the incidence of accidental death and injury and established a health-and-safety culture that has subsequently been emulated across many industries.<sup>6</sup> At the same time, although the work of the Miners Welfare Fund had begun the process of improving surface facilities at collieries in the 1920s and 30s, especially through the construction of pithead baths, the majority of pits were still poorly provided for. After 1947, the NCB took over many of the responsibilities of the Miners' Welfare Fund, but these duties eventually fell to a new organisation, the Coal Industry Welfare and Social Organisation (CISWO), which still operates today. The NCB inheritance also included large numbers of houses. Much of these were eventually transferred to local authorities, but the Board proved ineffective as a landlord in some places. In Newtongrange, for example, parts of the village fell into disrepair, and only survived as a result of community action, the imposition of

a Conservation Area by Midlothian Council, and the intervention of the Castle Rock Housing Association.

Despite post-war shortages, coal remained the primary fuel for nearly all energy needs, with only sea and road transport relying on petroleum-based fuels, alongside a growing aviation sector. Gas and electricity, which were both expanding towards the creation of national grids, remained entirely dependent upon coal. Against this background, the Plan for Coal sought to increase coal production as fast as possible to meet both domestic demand, and to restore exports to earn desperately needed foreign exchange.

In Scotland, nationalisation took just over 200 collieries into State ownership,<sup>7</sup> leaving over 100 smaller mines, usually employing less than 30 people in private ownership. Many of the older collieries, especially in Lanarkshire, were approaching exhaustion, or were unsuitable for mechanisation, and were immediately targeted for closure. In order to replace the lost capacity, a programme of sinking short-term surface drift-mine was begun. These targeted relatively shallow inclined seams of coal that were relatively easily exploited with a minimum of capital expenditure. As a consequence, the number of operating collieries did not fall as rapidly as would have been expected with such a major closure programme, and the number of miners employed by the industry in Scotland grew during the first ten years following nationalisation. However, despite the new investment<sup>8</sup>, Scotland's contribution to UK production shrank to 10.44% by 1955 when the NCB published Scotland's Coal Plan, which outlined a new phase of investment and modernisation.

The new plan categorised collieries, earmarking those that had served their time for closure, and identifying others that could be resurrected through investment. The latter were subsequently re-constructed in a process that often involved the re-building of surface and underground infrastructure and buildings, increased mechanisation, improved welfare facilities, and where appropriate, merging with neighbouring collieries. Examples of reconstructions

include Bowhill, Frances and Valleyfield in Fife, Kames and Barony in Ayrshire, Polmaise 3 & 4 and Manor Powis in Stirlingshire, Cardowan and Bedlay in Lanarkshire, and Polkemmet and Kinneil in West Lothian.

Most ambitious, however, were plans for fifteen ‘new sinkings’<sup>9</sup>. Primary responsibility for the new generation of collieries and some of the larger reconstructions fell to the NCB’s Scottish Division production architect, Egon Riss. Born in Austria in 1901, he had been educated at the Weiner Technische Hochschule in Vienna. Early examples of his work include the Tuberculosis Sanatorium in the Lainz hospital complex in Vienna, which was completed in 1931.<sup>10</sup> After escaping to the UK in 1938, he was recruited by the Miners’ Welfare Fund, leaving to join the NCB in Scotland in 1947.

The first new project with which he was associated was Rothes Colliery in Fife, to the north of Kirkcaldy, which had been planned initially by the Fife Coal Company. The layout of the surface buildings and ancillary components of the pithead appears to have influenced the design of subsequent Scottish collieries, and possibly projects elsewhere in UK as well as new sinkings in Germany, Poland and the Netherlands. Certainly, they reflect the desire of the NCB to project a dynamic, modern and confident image.

Rothes was opened by Her Majesty Queen Elizabeth II on 30 June 1958, and confidence in the project was reflected not only in its imposing architecture, but also in plans to build the adjacent new town of Glenrothes in anticipation of a long working life for the colliery. The reality, unfortunately, was rather different because severe geological difficulties had led to insurmountable drainage difficulties, and the colliery was forced to close after only four years of poor production.<sup>11</sup>

Not far away at Glenochil in Clackmannanshire, plans to create Scotland’s largest surface-mine complex also ran into difficulties because of unforeseen geological problems, and it too closed in 1962, the site later being converted into a young-offenders

institution, and subsequently to a full-scale prison for the Scottish Prison Service. These two failures were not, however, typical of the fate of Scotland's new sinkings, some of which proved to be comparatively successful.

The new collieries varied in scale and form. Some were new substantial surface mines, such as Minnivey near Dalmellington in Ayrshire, but the most prominent were the Superpits at Killoch in Ayrshire, Bilston Glen and Monktonhall in Midlothian, and Seafield to the west of Kirkcaldy in Fife. All came into production within a few years of each other in the mid-1960s, and reflected Riss's belief in the importance of putting miners' welfare at the heart of colliery design. The majestic towers and headframes on the surface hinted at the immense scale of the investment, but this was manifested most in the extent of underground development at each pit, which involved the driving of large permanent roadways at and near to the pit bottom to handle much larger volumes of materials and output than had been the case at most traditional pits. There is no doubt that the new Scottish super-collieries that opened in the 1960s became potent industrial landmarks representing a period of optimism within the coal industry, and very much in tune with the era of 'white-heat' technology that was unfolding at the time.

Meanwhile, the greatly enhanced productivity of the new superpits, and of many of the reconstructed collieries, permitted the less productive pits to be culled in sustained programme of closures, the heaviest period occurring during 1959, and throughout the 1960s during rule by both Conservative and Labour governments. Although there were significant job losses, substantial numbers of miners were transferred to new or reconstructed collieries, some of which employed over 2,000 men.<sup>12</sup> As well as being a profound change of culture for some miners<sup>13</sup>, the geography of coal production shifted from west to east as closures in Ayrshire and Lanarkshire were compensated by new collieries commencing production in Fife and the Lothians.

Not all the colliery closures were intentional, and one of the most unpleasant surprises occurred in September 1967 when spontaneous combustion of a coal seam caused a fire which not only killed nine people but also destroyed millions of pounds worth of recently completed development work. Alongside the recently closed neighbouring Wellesley pit, Michael had been the Wemyss Coal Company's showpiece colliery, and until the big new sinkings, was easily the largest mine in Scotland at the time of nationalisation, at its peak in 1957 employing over 3,000 people.<sup>14</sup> In retrospect, the demise of Michael Colliery seems to have been a turning point, after which the decline of coal accelerated. It was also a landmark in safety, the NUM, and Mick McGahey, forcing through health and safety regulations making the carrying of portable respiratory equipment (known as 'self rescuers') by all miners mandatory in all pits.

### **Decline and Fall**

At the time of the Michael Disaster, the number of nationalised collieries working in Scotland was 65, but this shrank by almost two thirds in the ensuing decade.

Twenty years later, the number had fallen further to only eleven, and by 1997, only two were still operational. The numbers of miners employed in the industry followed a similar pattern which was amplified by mechanisation programmes that had commenced in the 1950s and 1960s with the reconstructions and new sinkings. So, whilst the workforce shrank rapidly, output-per-man increased during the 1960s and in the mid-1970s during the oil crisis, after which it dropped severely during the strike of 1984-5.

The causes of the steep decline in demand for Scottish coal are complex. At nationalisation following the end of World War Two, the market for coal was unchallenged, and the priority was to assist the recovery of mining to help maintain energy supplies and achieve national post-war reconstruction. In the decades that followed, coal

# The Scottish Coal Mining Industry Since 1945

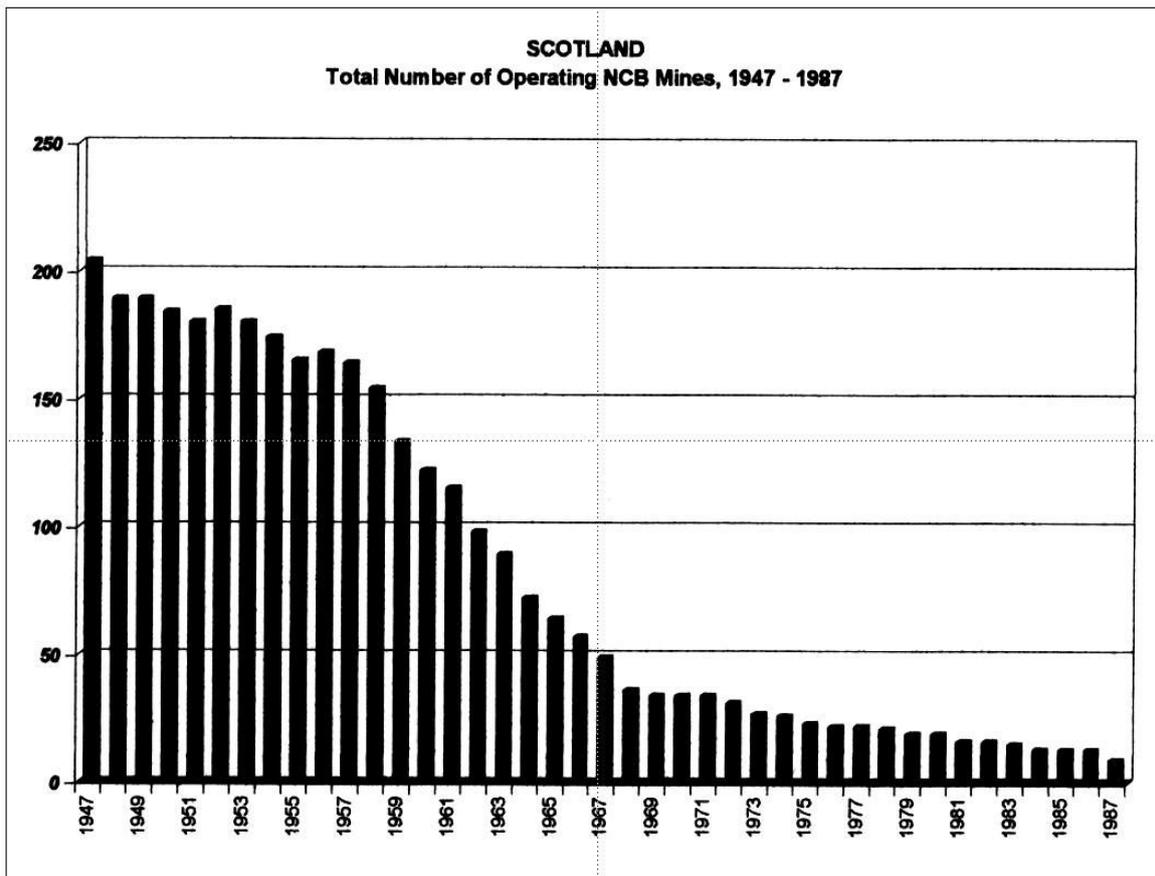


Figure 1: Chart showing the decline in the number of NCB coal mines between 1947 and 1987 (Crown Copyright: RCAHMS)

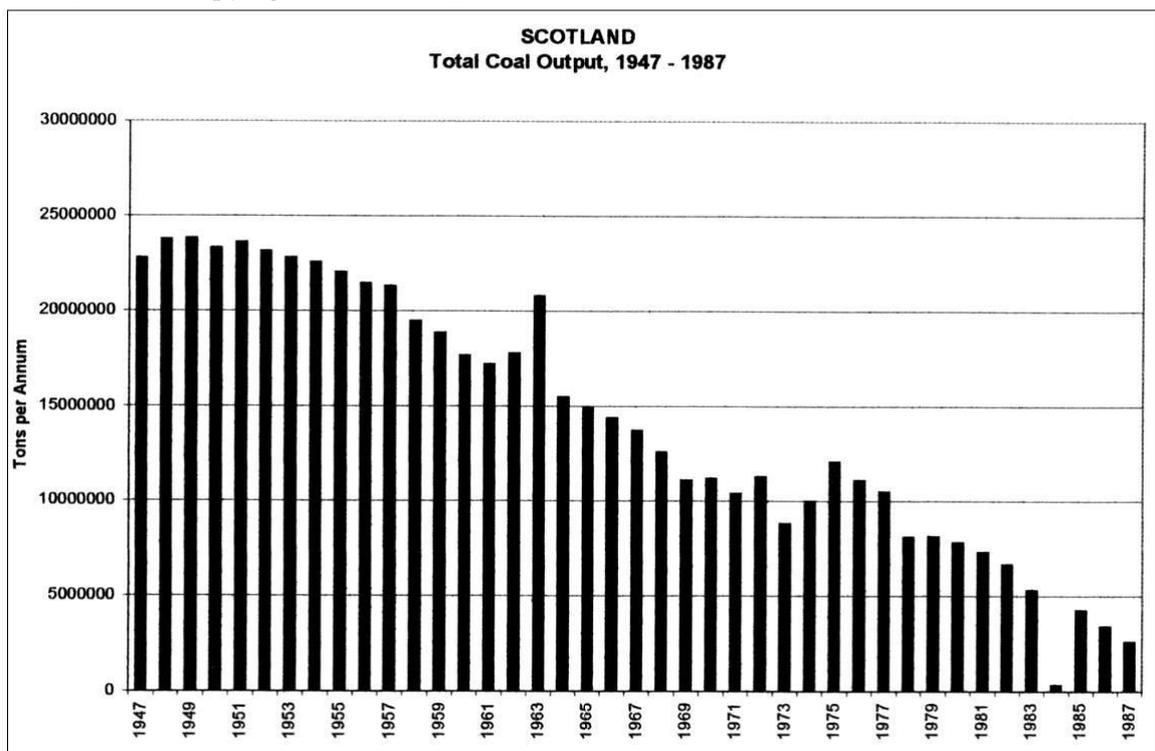


Figure 2: Chart showing decline in the output of NCB coal mines (Crown Copyright: RCAHMS)

was undone by the diversification of energy sources, government policy and the internationalisation of the coal trade<sup>15</sup>.

Perhaps the first serious blow to the reputation of coal was the impact of a sequence of 'pea-souper' smogs in the early 1950s in British cities during which thousands of people perished, and which resulted in the imposition of clean-air legislation in 1956 and 1968, curtailing the burning of coal in towns and cities by both domestic households and industry. At the same time, the British railway network was being radically cut back in the aftermath of Richard Beeching's *The Reshaping of British Railways* report in 1963, and steam engines were in any case being replaced by diesel and electric locomotives.

As a consequence of the smogs, coal had acquired the not unjustified image of being a 'dirty' fuel, and the industry reacted by introducing smokeless fuels. Anyone who has or has had an open coal fire knows that the drawback is the need for an incessant cleaning routine in the house to tackle the dust released unavoidably when cleaning ashes from the grate. Recognising the allure of modern central heating systems, the NCB launched publicity campaigns promoting coal as now being a clean fuel, bought fleets of shiny new lorries, and re-branded its fuel, an example being 'Nuggets', which were made at Niddrie near Edinburgh. Photographs used in advertising at the time depict coal delivery men dressed in white overalls, like milkmen, emphasising the purity of the new fuel (Figure 10). Another campaign included the installation of a prototype coin-operated automatic vending machine, *The Fuelomatic*, dispensing sacks of coal to passing passengers at St Andrew's Bus Station in Edinburgh.

The demand for household coal continued to decline in the 1960s and 1970s, partly because of competition from cheap heating oil, but more because of affordable electricity. Electricity was the most convenient, and at point of delivery, the cleanest and most flexible form of energy. With the expansion of the National Grid, it was now available to most householders. From the coal industry's

## The Scottish Coal Mining Industry Since 1945

perspective, this was not all bad news because much of the UK's electricity supply was still generated by coal, and was even referred to as 'coal by wire'. However, coal's dependence on the electricity generators was also a major weakness.

The introduction of nuclear power in the 1960s was therefore an ominous development, especially as it ultimately attracted government subsidy away from the coal industry. A further setback occurred in the form of natural gas, which arrived first from the Southern North Sea, and then in 1977 on a larger scale from the Anglo-Norwegian Frigg field via St Fergus in Scotland. Soon, all of the UK's town gas works were closed, and the Gas Board oversaw the conversion of over 30 million gas appliances from town to natural gas. At the same time, a steep decline in Britain's high-energy-consuming industries further undermined the demand for coal as the traditional heavy industries wilted in the face of competition from newly industrialising nations and the European Union. Of these, perhaps the most significant were the iron and steel industries, which consumed significant quantities of coking coal.

As the decline accelerated, so coal's dependence on the electricity generators intensified. In 1947, electricity generation accounted for almost 15% of the coal market, but by 1971, this had risen to over 50%.<sup>16</sup> New coal-burning thermal power stations had been built all over the UK, usually at or close to coal mines, as was the case with Barony, Kincardine, Cockenzie and Longannet in Scotland. However, there was no guarantee that in the long-term these power stations would always burn Scottish or British coal. The situation worsened in the 1980s following changes in policy resulting from the return of the Conservative Party to government in the 1979 general election.

Led by Margaret Thatcher, the new administration favoured the deregulation of markets and the privatisation of state-owned industry. Privatised industries such as British Steel and the electricity-generating companies were no longer obliged to buy all their coal

from the NCB. With the market de-regulated, major energy companies such as Shell, BP and Exxon were able to diversify and offer steam coal from new coal-producing countries such as Australia, South Africa, Columbia, Indonesia and Venezuela at lower prices.<sup>17</sup> The Government added increased pressure to the coal industry by choosing to invest further in nuclear energy and, despite increasing awareness of its environmental problems and immense latent costs. A cross-Channel 'Connector' was also established which allowed electricity generated by France's nuclear power stations to be brought into the National Grid.

From the mid-1980s, the decline of deep mining took on terminal proportions. Between 1983 and 1987, coal imports had jumped from 4 to 10 million tonnes, and the futile 1984-5 miners' strike caused deep divisions in the mining communities and failed to arrest the flow of pit closures. New contracts with the privatised electricity companies put more pressure on mining costs, and new environmental legislation forced English coal-burning power stations to install expensive flue-gas de-sulphurisation units. In this respect, Scotland escaped relatively lightly because much of the locally-mined coal burned in its Longannet, Cockenzie and Kincardine Power Stations was naturally low in sulphur. However, perhaps the worst setback was the decision by the Government to issue licences for several natural-gas burning power stations, which resulted in the so-called 'Dash for Gas', and the accelerated depletion of the UK's North-Sea gas reserves.

## **Disinterest and Obliteration**

As sequences of Conservative governments continued to privatise and deregulate during the 1980s and 1990s, the coal industry was finally considered ready for a return to the private sector. Immediately prior to privatisation in 1994, only 15 mines remained in production in the UK as a whole, two of which, Monktonhall and Longannet, were in Scotland. At the former, miners and management were encouraged to organise a buy-out and to establish

of miners' co-operative modelled on the successful experience at Tower Colliery in Wales. This proved to be inappropriate for a superpit such as Monktonhall because of the huge scale of its operating costs, and the fact that the new business had insufficient capital to support more than one coalface in production at any one time. The project eventually failed, the miners lost the redundancy payments that they had invested in the co-operative, and the colliery buildings, once a landmark on the east side of Edinburgh, were demolished using high explosives in November 1997 and February 1998.

The Longannet complex near Culross in Fife, Scotland's last surviving deep coal mine, was taken over by the company Scottish Coal and continued in production, successfully negotiating contracts with Scottish Power, the private company that took over from the local electricity authority, the South of Scotland Electricity Board (SSEB). The upper Hirst coal produced by the mine proved to be exceptionally low in sulphur, so the relationship between the colliery and the adjacent power station was exceptionally strong. This was broken, however, in 2002 when the mine suffered a major flood, and its subsequent closure proved to be the final curtain for deep mining in Scotland.

Meanwhile, whilst most attention was focused on the nationalised industry, a substantial private sector made up of numerous small-scale operations had continued to operate. Following nationalisation in 1947, over 100 small operations, most of which were incline surface mines, remained within the private sector, operating under license to the NCB. Generally employing less than 30 miners, they often extracted not only coal, but also clays and fireclays for use in the heavy ceramics industries. They also tended to be transient in nature, and at times, although a license had been successfully gained, production did not always ensue. Ten years after nationalisation, 92 private operators had retained licenses to mine, but this figure almost halved to 50 in 1967, 24 in 1977, and 20 in 1987.<sup>18</sup> By the time of the flood at Longannet Colliery in 2002, all other private mines had ceased production in Scotland.

Information collated by the Scottish Mining Museum suggests that although they were large in number, the output of the licensed mines remained comparatively small, achieving a peak of 2.3% in the UK in 1955, retreating to 1% by 1980.

Since 2002, all Scottish coal has been produced by open-cast mining, the contribution of which had previously been negligible until World War Two<sup>19</sup>. During the war, attempts were made to increase production by commencing open-cast projects throughout the UK. Shortly after the war in 1947, 2.5% of Scottish output was opencast, and by 1967 it had grown to 6%. Ten years later, it had leapt to 18.6%. Such was the decline of the deep mines that this had increased to 40.87 by 1989.<sup>20</sup> By 2006, all Scotland's coal was produced by opencast, and in 2007-8, Scotland's production amounted to 36% of all the UK's coal production, and two thirds of British open-cast production.<sup>21</sup> Scotland is therefore very much a major producer of coal, but no longer through deep mining.

### **What is Still Out There?**

Deep coal mining tends to leave a substantial mark on the landscape, not only because of the surface buildings and machinery required to enable extraction from the strata beneath, but also the associated infrastructure needed to prepare and dispatch the coal to its markets, and the resulting waste material, which often towers above the landscape in the form of distinctive spoil heaps or 'bing's'. The 20th century brought with it fewer but bigger mines, so the surface buildings, infrastructure and spoil heaps tended to be more prominent.

At first, the major closure programmes of the nationalised era in the 1940s and 50s did not necessarily induce rapid destruction, but attitudes changed radically after the Aberfan Disaster in south Wales on 21 October 1966 when a bing became unstable, the resulting landslide engulfing a local school causing the deaths of over 140 people. The extent of demolition and land reclamation

gathered pace subsequently, every substantial spoil heap being eyed with suspicion. Entire mining landscapes began to disappear in a process that was enhanced by the re-working of spoil heaps for coal, their use as a source of material for brickworks, European funding designed to encourage land reclamation in mining areas, the introduction of contaminated land legislation, and a substantial increase in open-cast mining. This process was further accelerated by privatisation in the 1990s, after which it was normal for mine surface buildings to be demolished within a year of closure, whilst older surviving structures such as the towers at Rothes Colliery, which had remained a local landmark since closure in 1962, were demolished either to minimise potential liabilities or to permit the maximum realisation of assets prior to privatisation.

The preservation of the physical remains of the coal industry has presented major challenges, wherever it has been attempted. The buildings and structures associated with deep coal mining were not generally built with long-term survival in mind, most having a finite purpose usually confined to a maximum of a few decades, and even then, assuming continuous care and maintenance. Most collieries comprised a mixture of brick, steel and reinforced-concrete structures which, if not maintained, deteriorate rapidly, especially in the often hostile environmental conditions of the coalfields. In addition, attempts at preservation have also not always been greeted with local enthusiasm, particularly as mining communities often associate the collieries with bad memories, bitter disappointment and betrayal.

This explains to some extent at least the fact that successful attempts at preservation have been rare in Scotland. With the exception of the Scottish Mining Museum at Newtongrange and the Prestongrange Industrial Museum, both in the Lothians near Edinburgh, very few recognisable remains have survived. Only a handful of colliery headframes or winding towers can now be found. In 2009, these are those at Highhouse and Barony, both near Auchinleck in Ayrshire, Mary and Frances in Fife, and Castlebridge in Clackmannanshire. In other parts of Scotland, there are

incidences of surface buildings surviving as a result of random re-use, or in the case of Killoch, conversion to deal with open-cast coal preparation. Even the best architectural examples of pithead baths have tended to disappear, with very few surviving into the 21st century. An unusual survivor is the baths at Ramsay Colliery in Midlothian, which now forms part of a scrapyard. There are, in addition incidences of the survival of earlier, ruinous remains associated with the coal industry. These include two isolated beam-engine houses in Fife at Kilmux and Thornton, the remains of the surface buildings and salt pans at Preston Island and of the Moat Pit near Culross. In the west, the substantial remains of early engine houses at can be found at Auchenharvie<sup>22</sup> near Stevenson and Caprington near Kilmarnock in Ayrshire.

The coal industry was, however, much more than merely the collieries, and many mining communities have survived, together with buildings and amenities such as miners' welfare institutions, sports and leisure facilities, meeting halls, libraries, colleges and convalescent homes, often with the support of CISWO<sup>23</sup>. Many communities contain poignant memorials to the thousands of miners who died as a result of accidents or work-related diseases, one of the most recent being the memorial at Barony's 'A' frame in Ayrshire. It is, however, important to note that nationalisation brought about major improvements in safety, and that the coal industry was instrumental in pioneering health and safety culture in the workplace which has survived through its transfer to other industries.

A further legacy of the coal industry has been the broad range of clay products produced by brick, tile and fireclay works adjacent to or part of many collieries, and in many instances, inherited by the NCB. Although Scotland is not known for being a country of brick buildings, the coal industry's brickworks churned out millions of bricks during the 20th century, and most buildings constructed in this period contain these bricks, often behind a rendered façade or forming internal walls. In addition, a variety of other clay products were produced by coal companies, including sanitary ware (for

which Scotland was famous), refractories, drain pipes, sewers and architectural products such as wall copes, ridge tiles, pavoids, special facing bricks and chimney cans<sup>24</sup>. Most of Scotland's villages, towns and cities contain great quantities of these materials, a significant proportion of which takes the form of invisible infrastructure.

As for the collieries themselves, from the three hundred large-scale mines that existed at some stage in Scotland during the nationalised era, only one coherent, recognisable and complete example survives, and that is Lady Victoria at Newtongrange in Midlothian (Figure 16). The wholesale disappearance of the industry elsewhere has rendered it even more important, so its survival in the form of the Scottish Mining Museum has become a major issue. Pressure on local authority funding is once again causing Midlothian Council, a co-founder of the museum, to consider withdrawing its funding, and with major maintenance issues now unavoidable, questions remain as to whether Lady Victoria Colliery can survive. Against this backdrop, it was very encouraging to see in 2008 that it came top of a poll of historic sites in Scotland run as part of the Royal Commission on the Ancient and Historical Monuments of Scotland's centenary 'Treasured Places' programme. More encouraging still was the decision in early 2009 by Scottish ministers to award the museum a capital grant of £1.3 million to address some of the more severe maintenance issues. With this at least, Lady Victoria can live to fight another day, and Scotland can maintain a physical link with one of its most important historic industries.<sup>25</sup>

### **Bibliography**

Ashworth, W (1986), *The History of the British Coal Industry, Volume 5: 1946-1982, The Nationalized Industry*, Clarendon Press: Oxford

## The Scottish Coal Mining Industry Since 1945

Colliery Guardian (1948 to 1988), *Guide to the Coal Fields*, Colliery Guardian: Redhill

Douglas G and Oglethorpe M (1993), *Brick, Tile and Fireclay Industries in Scotland*, RCAHMS: Edinburgh

Dron, R W (1902), *The Coalfields of Scotland*, Blackie & Son Ltd: London

Grimshaw, P N (1992), *Sunshine Miners: opencast coalmining in Britain 1942-1992*, British Coal Opencast: Mansfield

Halliday, R S (1990), *The Disappearing Scottish Colliery: A Personal View of some aspects of Scotland's Coal Industry since Nationalisation*, Scottish Academic Press: Edinburgh

Haynes, W W (1953), *Nationalisation in Practice: The British Coal Industry*, Bailey Bros. & Swinfen: London

Hudson, R (2002), 'The changing geography of the British Coal industry: nationalization, privatisation and the political economy of energy supply, 1947-97', *Transactions of the Institute of Mining and Metallurgy, Section A*, Vol. 111, No. 3, pp. 180-187

Hughson, I (1996), *The Auchenharvie Colliery: an early history*, The Three Towns Local History Group, Stenlake Publishing: Ochiltree

Hume, J R (1976), *The Industrial Archaeology of Scotland – 1. Lowlands and Borders*, Batsford: London

Moss, M S and Hume, J R (1977), *Workshop of the British Empire*, Heinemann: London

Hutton, G (2001), *Scotland's Black Diamonds*, Stenlake Publishing: Ochiltree

Lochside Coal and Fireclay Co. Ltd. (1955), *Lochside Coal and*

## The Scottish Coal Mining Industry Since 1945

*Fireclay Co. Ltd., manufacturers of composition bricks and every description of fireclay goods, company catalogue: Dunfermline*

Martin, M and Sparling, C, *The Fife Miners* at: <http://www.users.zetnet.co.uk/mmartin/fifepits/>

Ministry of Fuel and Power (1945), *Coal Mining: Report of the Technical Advisory Committee (Reid Report)*, [Cmd. 6610], HMSO: London

NCB (1948), *Colliery Questionnaire* (data gathered from colliery managers after vesting day), Scottish Division. Unpublished

NCB (1947-95), *Shaft Register*. Unpublished

NCB (1948 and subsequent years until 1982), *Annual Report and Statement of Accounts for the year ended 31st December 1947*, HMSO: London

NCB (1950), *Plan for Coal*, HMSO: London

NCB (c.1953), *Dalkeith Central Coal Preparation Plant*, NCB Press Office (Scottish Division): Edinburgh,

NCB (1955), *Scotland's Coal Plan*, NCB Scottish Division, Edinburgh

NCB (1956), *Investing in Coal: Progress and Prospects under the Plan for Coal*, Ministry of Fuel and Power

NCB (1957), *British Coal: Rebirth of an Industry*, NCB: London

NCB (1958), *A Short History of the Scottish Coal-mining Industry*, NCB Scottish Division: Edinburgh

NCB (1958), *Visit of Her Majesty the Queen and HRH The Duke of Edinburgh to Rothes Colliery on Monday, 30 June 1958*, NCB

## The Scottish Coal Mining Industry Since 1945

Scottish Division: Edinburgh

NCB (c.1960), *The Case for Coal*, NCB: London

NCB (1972), *National Coal Board: 25 Years, 1947-72*, NCB: London

NCB (1984), *Facts and Figures: Britain's Coal Industry*, NCB: London

NCB (various dates), colliery brochures for: Barony (c.1950), Benarty (1947), Bilston Glen (1952, 1961), Bowhill (1952 and 1953), Cardowan (c.1958), Castlebridge (1983), Easthouses (1955), Frances (1947), Garscube (c.1950), Glenochil (1952, 1955), Killoch (1952), Kingshill No. 3 (c.1952), Kinneil (1951), Monktonhall (1953), Polkemmet (1958), Rothes (c.1955), Seafield (1954)

Nott-Bower, G and Walkerdine, R H, eds. (1958), *National Coal Board, The First Ten Years: A Review of the First Decade of the Nationalised Coal Mining Industry in Great Britain*, The Colliery Guardian: London

Royal Incorporation of British Architects (1964), Obituary, Egon Riss, *RIBA Journal*, May 1964, pp.229

Robertson, G W (1988), *Egon Riss – Architect*, unpublished honours dissertation, Mackintosh School of Architecture, Glasgow.

Scottish Home Department (1944), *Scottish Coalfields: Report of the Scottish Coalfields Committee*, cmd. 6575, HMSO: Edinburgh, 23 and 54-5 [stats on Lanarkshire]

Stephenson, H S (1968), *Fire at Michael Colliery: Report on the causes of, and circumstances attending, the fire which occurred at Michael Colliery, Fife, on 9<sup>th</sup> September, 1967*, Ministry of Power, HMSO (Cmnd.3657): London

Supple, B (1987), *The History of the British Coal Industry, Volume*

4: 1913-1946, *The Political Economy of Decline*, Clarendon Press: Oxford

The Times (1952), 'Removing Scenes of Squalor from Scottish Pit-heads: The Architect's part in modernizing mining', *The Times*, 12 November 1952, London

Whatley, C A (1977), 'The Introduction of the Newcomen Engine in Ayrshire', *Industrial Archaeology Review*, Vol. II, No. 1, pp. 69-77

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<sup>1</sup> See Hume and Moss (1977), and for a general account of industry in central Scotland, Hume (1976)

<sup>2</sup> For an account of the coal industry in the decades prior to World War II, see Supple (1987), and the official report on the state of the coalfields by the Scottish Home Department (1944)

<sup>3</sup> Ashworth, *The History of the British Coal Industry*, p. 23-4.

<sup>4</sup> NCB, *Plan for Coal*, HMSO (London, 1950), followed by several subsequent plans, such as that in 1955

<sup>5</sup> See NCB Colliery Questionnaire (1948), available through the National Monuments Record of Scotland.

<sup>6</sup> See *The Times*, (1952), 12 November, London

<sup>7</sup> These figures exclude the oil shale industry, which was not nationalised. Scotland's oil-shale mines were mostly located in West Lothian immediately to the west of Edinburgh.

<sup>8</sup> These output statistics were compiled by NCB staff, and supplied to the author by the archivist at the NCB's Newbattle Records Centre.

<sup>9</sup> Information on both the new sinkings and the more ambitious reconstructions was included in some colliery brochures published by the NCB in Scotland to advertise the progress that was being made. One of the best of these was a special publication celebrating the opening of Rothes Colliery by HM Queen Elizabeth II (NCB 1958).

<sup>10</sup> See Robertson (1988)

<sup>11</sup> The political fallout from the failure of Rothes was so severe that

many of the NCB files currently stored in Kew at The National Archives are still closed.

<sup>12</sup> Halliday (1990), p. 44.

<sup>13</sup> David Hamilton, MP, reported to the author in an interview in February 2009, that it was a major shock to move from Easthouses Colliery, with only a few hundred miners, to Bilston Glen, with over 2,000.

<sup>14</sup> For an account of the Michael Disaster, see Stephenson (1968)

<sup>15</sup> For view of the changing markets of British coal, see Hudson (2002).

<sup>16</sup> Ashworth (1986), p.41

<sup>17</sup> Hudson (2002) notes that in 1973, the world trade in steam coal was estimated to be 14million tonnes, and that by 1989, it had grown to 172 million tonnes.

<sup>18</sup> Information collated from editions of the *Guide to the Coalfields*, published annually by *The Colliery Guardian*

<sup>19</sup> See Grimshaw (1992)

<sup>20</sup> Data collated by the Scottish Mining Museum.

<sup>21</sup> Information from the Coal Authority, and accessed on its website ([www.coal.gov.uk](http://www.coal.gov.uk)) on 10<sup>th</sup> April 2009.

<sup>22</sup> See Hughson (1996) for information on the history of Auchenharvie Colliery, and Whatley (1977) for an account of the introduction of Newcomen engines to Ayrshire.

<sup>23</sup> The Coal Industry Social and Welfare Fund

<sup>24</sup> For information on Scotland's heavy ceramics industries, see Douglas and Oglethorpe (1993), and as an example of a coal company's catalogue of ceramic goods, Lochside Coal and Fireclay Co. Ltd. (1955).

<sup>25</sup> There are a number of virtual links to Scotland's coal-mining past in the form of websites, by far the best of which has been created for Fife by Michael Martin and Christopher Sparling, *The Fife Miners* at: <http://www.users.zetnet.co.uk/mmartin/fifepits/> )

# **WEATHERING THE STORM: SURVEYING OFFICER ACTIVITY IN 2009-11**

**David Powell & David Luck**  
*BACS Surveying Officers*

The UK recession has had an impact on the work of the Surveying Officer. While surveys have continued to be undertaken of business records, their number has reduced slightly on previous years. Companies have been reluctant to give time and access to records during a period where they are doing their best to keep their heads above water.

Yet it is times of recession and economic downturn that the work of the BACS is so important. So, while survey work has been less in the past year, there has been a rise in the number of archive rescues undertaken and transfer of archives into publicly accessible repositories. Some of this work has come to the BACS via liquidators and insolvency experts, and this is an area where the Council is looking to expand its contacts and increase its profile.

A big part of the last two years has been spent working on two major projects. The first has been the completion of the Scoping Survey undertaken on behalf of the Capturing the Energy initiative.<sup>1</sup> This has involved visits to numerous oil and gas related companies and organisations to survey records and find out the challenges and difficulties that collecting such records now and in the future may include. The final report of this was delivered in February 2010 and is available on the website of Capturing the Energy and also the Business Archives Council of Scotland's website.<sup>1</sup>

The results of the report should help the initiative to take a more strategic and informed approach as it moves forward into the future.

The second major piece of work has been the development of a Business Archives Strategy for Scotland. Undertaken with the support of the Scottish Council on Archives and the National Archives of Scotland, the archivists of the BACS and Ballast Trust have worked tirelessly to devise the strategy. A strategy has already been published for England & Wales<sup>2</sup>, and the Scottish strategy takes the same key goals but places them into a Scottish context. Thanks to the work of the BACS, National Archives of Scotland, Ballast Trust and Glasgow University Archives, not to forget the many local government, university and other archives in Scotland, the position of business archive collections in Scotland is certainly better than that of England and Wales. Scotland is seen as an exemplar of good practice but there is still more we could be doing, especially in times of economic uncertainty.

Kiara King of the Ballast Trust and David Powell organised focus group with academics, archivists, librarians, users and heritage professionals to discuss what they all wanted from the strategy.<sup>3</sup> A draft went out to public consultation in May 2010 and was warmly received. The strategy was finalised in late 2010 along with an Action Plan to take its aims and objectives forward. On 20th January 2011 the official launch of the strategy at Museum on the Mound in Edinburgh was attended by representatives of business, government, archives and libraries. The NSBAS implementation group will still be meeting regularly to ensure that the strategy can continue to develop and adapt to difficult new circumstances, and that the key aims of the strategy are achieved. The strategy has been published on the Business Archives Council of Scotland's website but you may also want to follow our blog, Business Archives Scotland, at <http://businessarchivesscotland.blogspot.com/>.

Since December the BACS Surveying Officer has begun a project to map the surviving records of Scotland's oldest-100 Companies. Although the project is still underway at the time of writing, the response to it from business and archival institutions has been strong and enthusiastic. A website (<http://oldestscottishcompanies.wikispaces.com/>) containing the

completed project entries has been launched, and the project has led to some interesting surveys of historical records that might otherwise have passed by the attention of their holders.

The recent government cuts have created a climate of uncertainty in the archive sector, and about the future role of the BACS and the Surveying Officer. It is clear that the organisation will have to change and adapt, as other organisations in the heritage sector have done. Although this will mean changes in the type of work carried out by the BACS, it does not mean that the purpose and aims of the BACS have somehow become unnecessary or worthless in the new austerity. The central message of the strategy that archives are useful and exciting resources that can be exploited cheaply by business is more important and vital than ever. Yet if the strategy is to succeed there needs to be a ready source of professional advice and guidance, and this means the BACS is as relevant and needed as ever.

## **Summary of Activity**

### **I Rescue / homing of records**

1. Begg, Cousland & Co Ltd, wire mesh manufacturers, Glasgow. Having vacated their Parkhead office for demolition as part of the Commonwealth Games development, some records were left in the building. These have been removed to Glasgow University Archive Service where some records were already held.
2. Hood, Morton & Co Ltd, lace weavers, Newmilns. The company ceased trading some years ago and records were still in situ. Unfortunately vandals had accessed the building and some records had been damaged beyond a point of reasonable repair. Salvageable records were removed to the Ballast Trust, surveyed and then transferred to Ayrshire Archives at Kilmarnock.

3. Nobel's Explosives, Ardeer, Ayrshire. The SO was notified of glass plate negatives in an outbuilding on part of the site. These have been moved to safety and ultimately should be transferred to Ayrshire Archives who hold the bulk of the Nobel collection.
4. Fergusons Shipyard, Port Glasgow. The drawings and records of the most recent ships to be built have been selected and removed to The Ballast Trust for sorting and cataloguing.
5. English & Welsh Business Archives Strategy Disaster Response Network. The BACS Surveying Officer is now part of the network to help coordinate any cross-border rescue work that may occur.

## **II Survey activities**

1. Bovril Ltd, beverage manufacturers. Records held at Edinburgh City Archives.
2. Dhamai Tea Co Ltd, Edinburgh. Records held at Edinburgh City Archives.
3. Graphic Printers, design consultancy, Edinburgh. Company has been wound up and a home for the records is being discussed.
4. Hood Morton & Co Ltd, lace weavers, Newmilns. Records transferred to Ayrshire Archives.
5. MacTaggart & Scott Ltd, hydraulic engineers, Loanhead. A large survey project undertaken in conjunction with Midlothian Archives.
6. McGruer & Co Ltd, yacht builders and repairers, Clinder, Helensburgh.
7. Morton Young & Boreland Ltd, lace weavers, Newmilns.

8. Scottish Civic Trust, Glasgow.
9. Total E&P (UK) Ltd, Aberdeen. A very broad survey undertaken.
10. Woollard & Henry Ltd, dandy roll manufacturers, Dyce. Closely linked with the paper making industry, they have now diversified into the manufacture of lifting gear for the oil and gas industry.
11. Scottish Water, Glasgow.
12. Standard Life, Edinburgh. Ongoing work with their archive to update NRAS.

### **III Projects**

1. Capturing the Energy. The final survey report has been submitted for this project and a small number of further surveys undertaken including visits to Total and the archives of Shell in London. The Surveying Officer continues to attend Steering Group meetings and presented a paper on the survey at a seminar held in April 2010 at the Belmont Picture House, Aberdeen. Following the seminar, oil and gas film footage from the Scottish Screen Archive was shown which the SO has been involved in editing.
2. Medical Research Council, Glasgow. The SO provided peer support to a recently qualified archivist undertaking a records management project at the MRC.
3. Bovril Ltd and Dhamai Tea Co Ltd. These records have been appraised and listed by the SO at Edinburgh City Archives. Further records in private hands of the Dhamai Tea Co Ltd have been located and should be transferred to ECA in due course.

4. Business Archives Strategy (England & Wales). The Surveying Officer attended the launch of the strategy at the House of Lords and represents Scotland on the strategy's crisis response network.
5. Business Archives Strategy for Scotland. The Surveying Officer and Kiara King of The Ballast Trust have drafted a Scottish Strategy. See above.
6. Whisky brand research. An American trademark company commissioned BACS to undertake research into a specific brand's history using archive sources in the National Archives of Scotland as well as publicly accessible secondary sources such as trademark journals and advertising. In a follow-up piece BACS looked at the origins of whisky jugs for the same company.
7. Scotland's 100-oldest Companies. See above

#### **IV Liaison and advice**

1. Capturing the Energy: Recording the UK Offshore Oil & Gas Industry. The Surveying Officer continues to be an active member of the initiatives steering group.
2. Scottish Industrial Archaeology Panel member.
3. Glasgow University MPhil Archive students – lecture and workshop presented on business records.
4. Glasgow University Heritage & Cultural Informatics – student session on business records and records management.
5. Using Business Records for Family History presentation, Mitchell Library, Glasgow.

## Weathering the Storm: Surveying Officer Activity in 2009-11

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<sup>1</sup> Business Archives Council of Scotland, <http://www.gla.ac.uk/archives/bacs>

<sup>2</sup> National Strategy for Business Archives (England and Wales), <http://www.businessarchivescouncil.org.uk/activitiesobjectives/lobbying>

<sup>3</sup> The Ballast Trust, <http://www.ballasttrust.org.uk/>

*Cover images are of:*

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*Roths Colliery, Fife, designs by Egon Riss (not in copyright)*

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*Miners celebrating nationalisation at New Craighall Colliery, 1/1/47 (East Lothian Council Museums Service, David Spence Collection)*