## Cammo Foundry, Clockmill, Duns

# David McLean (2023)



#### Introduction

The Clockmill factory (properly known as Cammo Foundry) which still stands on the western outskirts of Duns was at the heart of farming life in central Berwickshire for over a hundred years, manufacturing and supplying a variety of farm implements and machinery as well as carrying out repairs. The business was also a key employer in the area, providing a valuable training in engineering skills to generations of local young men. Over most of its time, the Cammo Foundry was operated by two companies – Thomas Brown and Sons between 1875 and 1919 and the Clockmill Engineering Company from 1919 to 1974. Throughout their history, the buildings were tenanted by the proprietors of the businesses, ownership remaining with the Hays of Duns Castle.

From a distance, and at first sight, it has the appearance of an entirely brick structure. However, the original walls were clearly constructed in random stone, as might be expected for a building of its age. Then, at some point, most of these first walls were taken down and re-built in brick. Curiously, these stone walls were demolished to different, almost haphazard levels – sometimes to ground level, sometimes to window level or even higher. Evidence of the original stone with the later brick built on top can be seen all around the building. We know that the foundry was 'extended' in the 1890s but it would appear that this extension work consisted of a much more dramatic reconstruction.



Evidence of the original stone and later brick construction

# James Hunter

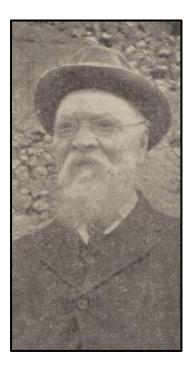
A map of 1845 shows very little at the location of the present Clockmill factory except for a tollhouse and a couple of cottages serving as a brewery. There had been substantial change by 1857 when the ordnance survey map of that year shows a large industrial building exactly where the factory now stands – so it would appear that the foundry, together with some other buildings, was erected in the years around 1850.

The first proper evidence of their use can be found in the Berwickshire News of January 1870 when James Hunter, millwright and engineer, advertised that he had commenced business in the Cammo Foundry at Dunse; he was immediately looking to employ more millwrights. Originally, millwrights were highly skilled men who built, maintained and repaired corn mills, sawmills and the like operated by water or wind power. Their work required skills in both wood and metal working. With the passage of time, millwrights adapted to build and maintain all types of increasingly complex machinery, often with intricate moving parts such as gears and toothed wheels, becoming engineers in the true sense of the word.

In his newspaper adverts, James Hunter called attention to his iron thrashing machines which could be fitted up for horse, water or steam power; the machine had received an award at the 1867 Dumfries Union Show. He continued to regularly advertise his Cammo business in both the Berwickshire News and the Illustrated Berwick Journal for the next year but, for whatever reason, his time at Dunse was short since he gave up his lease at some point in 1871. In December of that year, the Cammo Foundry was advertised for let, the buildings being described as 'extensive and in good repair'; there was also good water power. It took some months to find a new tenant.

## **David Denholm**

David Denholm was born in Chirnside in 1838 although his surname was spelled 'Denham' in his Church of Scotland birth record. He served his apprenticeship as a millwright with his father before working as a journeyman wright for a firm in Tweedmouth. When his father died in 1866, he returned to Chirnside to take over the family business, employing a number of time-served men and apprentices. In the summer of 1872, he took the lease on the Cammo Foundry while continuing to run his other business in Chirnside.



David Denholm, master millwright (1838-1924)

He made reaping machines to order and repaired all kinds of farm implements but, like James Hunter, he did not stay at Dunse for very long. Perhaps running two businesses turned out to be too demanding since he had given up the Cammo works by 1875. Denholm and his wife Margaret Annandale (whose father was a local paper-maker) had five sons and two daughters. Four sons followed their father into the Chirnside business and the oldest, also called David, took over its management in 1910.

David Denholm senior made his mark on Chirnside life aside from being an employer. He was secretary of the local Unionist Association for over 20 years and involved himself in local politics in a variety of other ways, including being elected to the parish council and the school board. In 1906, he was appointed as Inspector and Clerk of Works to supervise the project bringing Chirnside its new water supply. He died at his home in the village's East End at the age of 86 in 1924.

#### **Thomas Brown & Sons**

The next proprietors of the Cammo Foundry remained there for over 40 years and built the reputation of a business which came to be known far beyond Berwickshire. Thomas Brown was born in Fogo and served his apprenticeship as a blacksmith in Whitsome. In 1855, at the age of 26, he married Eliza Purves from Channelkirk (Oxton). In time, he set himself up in his own business at Edington, south of Chirnside. Like all country blacksmiths, he spent much of his workshop time shoeing horses and making and repairing ploughs but he developed a fascination for the horse-drawn reapers which were being imported into this country from America.

In the Berwick Advertiser in the spring of 1875, Thomas Brown, 'agricultural engineer, iron and brass founder', announced that he was moving to the Cammo Foundry at Clockmill, Dunse where his business would now be known as Thomas Brown & Sons. They would benefit from larger premises and good water power. He was already looking for extra men.

Brown's family lived in the property called Cammo House or Foundry House in the grounds behind his industrial premises. At the 1881 census, there were no fewer than thirteen people living under his roof - Thomas Brown and his wife both age 55; six sons and two daughters ranging in age from 27 to 10, including his already widowed daughter, Margaret; there was Margaret's infant son; and finally, two employees who boarded in the house. Eventually, all Brown's sons worked in the Cammo business and, in time, so too did his grandson, John (Margaret's child).



'Cammo/Foundry House', home to Thomas Brown and his family

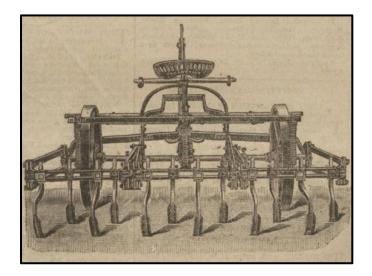
After a period of poor health, Thomas Brown died in 1892 at the age of 66, not long after the extension to the Cammo premises which he had arranged with Duns Castle. The Berwickshire News declared that 'his name will long remain honourably identified as that of a skilful mechanic, and a hard-working and upright man'. The business was afterwards managed by his sons, especially his oldest son, Robert.

# The Browns at Cammo Foundry

Under Thomas Brown, Cammo Foundry developed a reputation of the highest order for the quality of its farm implements and machinery. While they would supply equipment produced by other makers when necessary, they never intended to be agents or distributors - most of their work was in manufacturing their own implements such as ploughs where the foundry came into its own. Essentially, a foundry produced cast iron, the result of pouring molten metal into moulds. This was an ideal process for producing plough parts and, indeed, a myriad of other parts for tools, implements and machines.

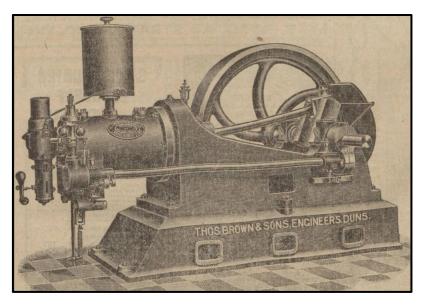
As already mentioned, Brown had taken a great interest in horse-drawn reapers invented in the USA and he set about designing and manufacturing his own versions of these essential implements which replaced the sickle and the scythe. His patented 'Cammo Mowers' (for cutting grass for hay) and 'Cammo Reapers' (for harvesting grain crops) first appeared in 1874 and became famous far and wide. He was always looking at ways to further improve these and, by 1877, he was able to show his new 'anti-friction' reaper, designed so that the cutting bar moved effortlessly over the field even when very close to the ground.

But numerous other implements were manufactured such as the 'Cammo Cultivator', designed for hoeing weeds and breaking up soil between the rows of growing crops like turnips and potatoes; the machine was eventually fully adjustable to cope with variations in distance between crop rows. They produced horse-drawn rakes and hay collectors as well as turnip cutters. In 1902, they even produced cast iron road direction posts for Berwickshire County Council.



The famous 'Cammo Cultivator'

In the early years of the twentieth century, Thomas Brown's sons were building on their late father's legacy by producing their 'Cammo Oil Engine', described in the Berwickshire News as a 'beautiful piece of mechanism'. Engines like this, running on paraffin, were now replacing steam engines as a means of driving threshing mills, turnip cutters and other types of fixed farm equipment. Following their appearance at the Northumberland Show in Berwick in 1911, the Browns had orders for over a dozen of these engines; Duns Town Council paid almost £78 for one to pump water into the public supply tank at the top of the town in the field known as 'Tinker's Acre'. The Browns were also branching out by developing these engines for motor boats, probably for the fishing industry.



The 'Cammo Oil Engine', replacing water and steam power

The Great War brought new opportunities to Cammo. When Britain's food supplies were seriously threatened by the German campaign of unrestricted submarine warfare in 1917, one of the government's responses was to direct farmers to plough more land for cereal crops. This required more machinery and it was needed quickly. In the summer of 1917, Thomas Brown & Sons was one of the businesses given a government contract by the Board of Agriculture to supply farm machinery and implements. The contract was worth around £16,000, equivalent to a purchasing power of around £1,000,000 today. Production would be spread out over the following twelve months and around 40 extra staff had to be taken on. Many of these were skilled engineers drafted back out of the army (finding accommodation for them was a challenge) but there were also painting jobs for local women and girls.

And then, inexplicably, things seem to have gone badly wrong. In early 1919, the business of Thomas Brown & Sons was in sequestration (insolvency) in the Edinburgh Bankruptcy Court with assets of around £3500 against liabilities of some £4500. Charles Romanes, chartered accountant of Edinburgh, was appointed trustee of the company's estate and he had sold the business within a month. Whether the Browns had over-stretched themselves with the government contract, whether they failed to adjust to peace-time conditions or whether there was some other cause, there is no evidence to confirm.

But there was a recovery of sorts for the Browns. In the summer of 1923, Thomas Brown & Sons opened new premises in Bowmont Street in Kelso although it seems that they now concentrated on repairing and modifying farm implements rather than manufacturing them – probably because all their designs, plans and patents had been sold with the old business.

# **Clockmill Engineering Company**

In February 1919, it was announced that the 'old-established business of Messrs T Brown & Sons' had been acquired by the Clockmill Engineering Company. They were keen to emphasise that they intended to continue production of the 'famous Cammo implements' for which they now held the patent rights. But one of their early advertisements in the Berwickshire News showed that the commercial world was changing since the new company were also agents for a number of big firms which manufactured farm implements and machinery including Harrison McGregor in Lancashire (makers of Albion brand implements) and the American Deering and McCormick companies.

The reason for this change is not hard to find. The inter-war years saw the horse steadily being replaced by the tractor and the Clockmill business responded by selling, repairing and servicing these new machines. After Harry Ferguson's invention of the hydraulic three-point linkage in 1928, a wide range of implements designed specifically for tractors began to appear on the market. For a relatively small business like Clockmill, trying to keep up with the manufacture of both horse and tractor implements during this transition period would have been impossible – hence the need to act as agents and sell other companies' products.

The Clockmill Engineering Company continued for many more years as a key business in central Berwickshire, supplying and repairing farm equipment of all kinds, from complex crawler tractors and manure spreaders to cream separators, humble hen-houses and feeding troughs. Their engineers were called out into farmyards and fields over a wide area to deal with break-downs, especially at harvest time. But, with the passing years, the Clockmill works became economically unviable, too small to compete in a changing world with companies backed by national and even international manufacturers, operating on a far larger scale and selling at more competitive prices. The Clockmill Engineering Company Ltd went into voluntary liquidation in the summer of 1974 with Taits of Hide Hill in Berwick appointed as liquidators. At least the company was wound up in good time since Taits were able to announce that all creditors had already been paid or would be paid in full.

Whether Robert Pringle Short had been proprietor of the new Clockmill company from the outset in early 1919 is unclear but he certainly ran the business for some years between the wars. The 1921 census shows him as an agricultural engineer at the age of 33, living at Allanbank in Gavinton's main street with his wife, Eleanor, age 34. He died of heart disease at his Gavinton home in 1940, the Clockmill company subsequently being operated by his son, James Pringle Short who married Rachel Hunter in Duns in 1951. In 1955, James Short and his mother, Eleanor Trotter Short, re-constituted the business as the Clockmill Engineering Company Ltd with a capital of £40,000 in £1 shares. This was the company which went into liquidation twenty years later in 1974.

Eleanor Trotter Short, who continued to reside at Allanbank in Gavinton, died in the Duns Whitchester hospital in 1966 at the age of 80. Her son, James Pringle Short, was killed in 1969 at the age of 47 when his car was struck by the Edinburgh to London express train on an unmanned level crossing at Goswick, south of Berwick. He left a wife and five children aged between 5 and 16.



The information in this paper has been researched from various newspapers of the time but especially the Berwickshire News, Berwick Advertiser and Illustrated Berwick Journal; and from public records – census; valuation rolls; and birth, marriage and death records.

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