Chapter Sixteen

Principal Tool Companies

William's Tool Business

William, the second son of John(3) and Sarah, was born on 3rd October 1781. He founded a large tool company. On 18th April 1803, he married Sarah Osborne, his cousin, the daughter of Elizabeth Binney. When he wed he was of Bent's Green, just half a mile from his father's farm in Trap Lane and less than a mile from the churchyard where, as I hacked into the ivy, I found his large tomb and that of Sarah, near the Ecclesall Church door. Ecclesall Church offered choice burial sites to benefactors during its extension programme. William paid up; he couldn't take it with him.

The 1817 Sheffield directory, shows Thomas and William, in the same entry. Their South Street business was a joint enterprise and they continued to operate jointly until around 1824. That was when William needed his own premises. Until 1821, William's business was as described in the previous chapter for Thomas's. Between that time and 1825 William moved to Rockingham Street, which was to be the headquarters of his firm for more than fifty years. On 9th February, 1824, William signed an agreement to lease a plot of land in Rockingham Street for eight hundred years! It was of four hundred and four and one half square yards, with all appurtenances which he bought from Mary Johnson, whose husband George, had bought it from the Duke of Norfolk. The Memorial for the lease tells us that it fronted on the east of Rockingham Street, twelve yards, south, on other land belonging to Mary Johnson, twenty-six yards west on land belonging to the Church Burgesses of Sheffield twelve yards, north on land sold to Thomas Staley, twenty-eight yards.[1]

Although we do not have any pictures of William's factory in Rockingham Street, one of his neighbours did advertise in an 1834 Directory.[2] Below is a copy of the advertisement which shows the premises of John Davenport. His product range is almost identical to William's and refers to the competitors he has to contend with.

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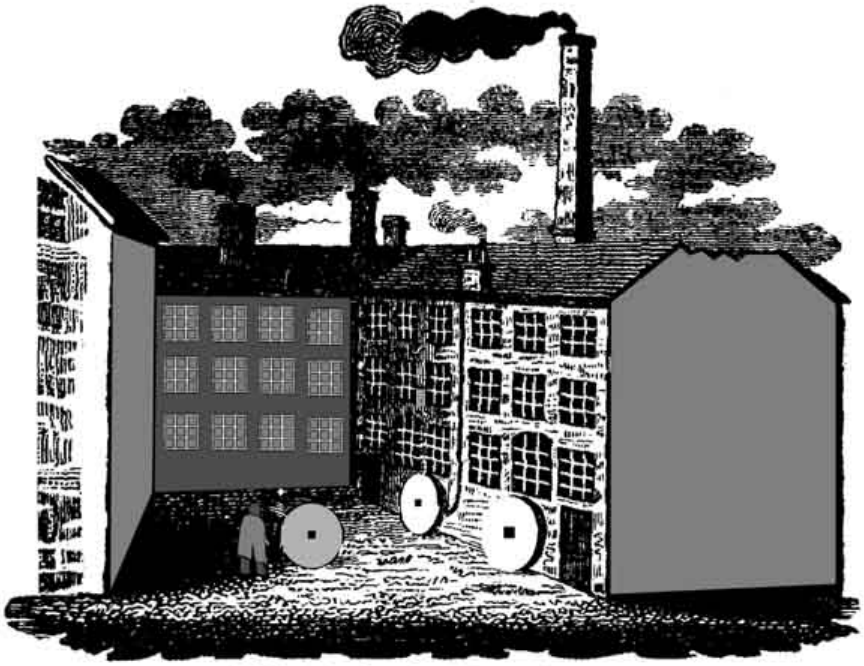
[1] West Yorkshire Archives Registry, Memorial 452, Johnson to Tyzack
[2] Pigot and Cos. National Commercial Directory, Durham, Northumberland and Yorkshire, 1834.



JOHN DAVENPORT,
ROCKINGHAM-STREET, SHEFFIELD,
SOLE INVENTOR OF THE
PATENT LATHE-TURNED CIRCULAR SAWS,
And Manufacturer of all other kinds of Saws,
ELASTIC STEEL BUSKS FOR LADIES' STAYS, MACHINE & MINCHING KNIVES,
AND CAST STEEL REFINER,

William set up the firm of W.Tyzack, at the Button Lane end of the Street, later adding the "& Sons". Further additions, of 320 square yards, were made to the premises in 1828, and these were followed by more. Warehouses and shops were built in the first extension and added 1s-8d to the rate. By 1831, a cast steel furnace with four pots was added. Rates were trebled over the period from 1824 to 1831, showing great growth and coinciding with an increase in the product range. By 1841 the choice included, [3]

saws,	calico webs,	patent scythes,
refined steel,	riveted hoes,	patent hoes,
chaff knives,	machine knives,	ladies steel busks,
hay knives,	files,	springs (for cotton machinery).

[3] Sheff. Dirs., 1828, page 96;1833, page 275; 1839, page 757;
1841 (Rodgers), page 206

In the 1833 directory William's eldest son Ebenezer enters separately as a sawmaker at the same address as his father's business. By 28th Jan 1843 [4] the company name was formally changed to William Tyzack & Sons and then sons William(2) and Joshua figure in the directory.

His premises at Rockingham Street were insufficient for all the output and so William took tenancies at nearby mills such as Whirlow Wheel in 1831. Whirlow Wheel, was formerly a saw-wheel on Limb Brook, a tributary of the Sheaf. It powered a grinding wheel from 1804 but was converted to a saw-wheel by the Enclosure award of 1827. Why William rented the mill is not clear but he would have known the Limb Brook well, being close to Walk Mill, his grandfather's and step-uncle Thomas's Mill.

A reference,[5] says William left for Whiteley Wood Works on the Porter in 1847. His instincts must have been good. Two years later his old mill pond was damaged beyond repair by a severe flood. Whiteley Wood Works were owned by the Silcocks. Mrs Phoebe Silcock was a grand-daughter of Thomas Boulsover. Her name appears in the rate books. However William's landlord during the tenancy was John Fowler. They had a long standing row. Tyzack complained that there were one hundred and thirty broken windows in the mill building and that Fowler had failed to carry out any repairs. Fowler was more concerned by William's sporting activities. Tyzack, he said had no rights to fish in the millpond but he persistently continued to fish. So we know at least that William had some spare time and was a keen fisherman! Three wheels were recorded, an Emery Wheel, a Saw Wheel, and a Cutler Wheel. No record has been found of William Tyzack's tenancy there but in 1846, the Emery Wheel was offered to let. So it fits with the reports from the Whirlow Wheel records. He moved the work from Whirlow Wheel to Whiteley Wood at that time.

By 1850 the invoiced value of the goods sent out was £11,276. Six years earlier it had been only £5,829. The company maintained its expansion during this difficult time.

In 1849, probably encouraged by his son Ebenezer, William entered a tenancy of Abbeydale. He took over the tenancy from the Dysons. Between 1842 and 1848 the Dysons struggled with arrears in rent. They suffered substantial uninsured losses when their grinding shop was blown up by members of the grinders' union in 1842, from which they never recovered. Abbeydale freehold was then owned by the Fitzwilliam estate.[6] So began the long tenancy of the Abbeydale works, which today is the industrial museum known as the Abbeydale Industrial Hamlet.

Abbeydale Works was one of the largest water-powered sites on the River Sheaf. The earliest known records date back to 1714, but it is possible that the site has been occupied since 1685, when Hugh Stephenson rented 'New Wheel' which can be traced through the rent books of that site. In the thirteenth century the monks of the nearby

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[4] Tyzack manuscript Bank Book 1843-8.
[5] Wheat Collection, 2328
[6] West Yorkshire Archive Service, Railway

Beauchief Abbey had a smithy in the vicinity, possibly occupying the site just across the river, behind the Hamlet. In 1777 the dam was enlarged during the Goddard family's tenancy of the Works. The field inundated for this purpose was referred to as Sinder's Hills on a map of 1725, reflecting the lead-smelting activity, which was carried on in the area during the sixteenth and early seventeenth centuries. A period of expansion followed the enlargement of the dam. The Tilt Forge was built in 1785, the Workmen's Cottages by 1793 and the present Grinding Hull in 1817. By the 1830s the site included a Crucible Steel Furnace of the type invented locally by Benjamin Huntsman in 1742, and a number of hand forges, warehouses and offices. The Manager's House, built in 1838, and the coach house and stabling built about 1840 were the last buildings to be erected apart from the first storey warehouse built over the Blacking Shop which was added in 1876.

Abbeydale Works added six acres to the space occupied at Rockingham Street with its small crucible steel melting furnace, a water driven forge, a grinding wheel and small workshop, as well as blacksmiths' shops and warehouses. Now they had greater capacity the Tyzacks were able to increase their output massively from £8,744 in 1849 to £66,587 in 1876.

Meanwhile land was bought in Trafalgar Street in 1846 and the Tyzacks decided to start a new venture. They judged that the market for files was one they should tackle. So a file shop was added to the Rockingham Street site by 1851. This is what the Tyzack Centenary Souvenir said about filemaking in 1912:-

The process of filemaking is complex. First the ingots are melted in a furnace and then cogged or hammered. They are rolled into long lengths of between fourteen and twenty feet. Depending on the sizes of the files they are cut into length and forged under the power hammers. This is followed by annealing so that the teeth can be cut. Next it is grinding and from the grinders they return to be divided into hand or machine cutting. Following cutting, they go to the hardening shop. First they are coated with a special composition so that when heated the oxygen in the atmosphere does not raise scale and so destroy the teeth. Files are then dipped hot into large baths filled with salt and water. Next they're scoured and sand blasted and emerge clean and sharp. Following this they are oiled and the tangs are softened by a special lead process. All files are then thoroughly examined and tested on tempered steel.

It seems surprising that in the 1851 census, with such a large business, William(2), the son was living in the manager's house at Abbeydale. Not by himself but with his wife, Fanny, two children and brother Joshua. When you visit the Abbeydale Industrial Hamlet and go around the house, you will see how cramped that would have been. Fanny died a year later, perhaps not surprisingly!
In 1855 a steam engine was installed at Abbeydale and this was used as well as water power. In 1858, William Tyzack, the founder, died. Amazingly this seems to have had little effect on the running of the company. William Tyzack left a will, which included a legacy of £2,000 for his daughter, Sarah. £1,000 was to be paid two years after his death. This need for so much ready cash to be paid from the business caused the

sons some thought. It resulted in a marriage settlement[7] for her when she married Thomas Binks of Frisby, in Leicestershire. A trust was set up for her. It was signed by Ebenezer, William, Joshua, and brother-in-law Benjamin Turner.

Around that time Tyzacks bought Totley Rolling Mill from James Sorby. In 1780 it had been used as a lead rolling mill but later in 1836 it was bought by John Dyson and used for steel. Many of the products made by the Company were fashioned from steel plate so their own rolling mill would be a great asset. Later when Messrs. Charles Cammell & Co. gave up the Borussia Steel Works they were purchased by the Company.

Chapter fourteen_ includes a copy of an apprentice indenture for one Alfred Wolstenholme as a Patent Scythe Maker which was signed in 1854 by William the elder, and by his sons, Ebenezer, William jnr., and Joshua. They all sign as carrying on business in “copartnership” together in the firm William Tyzack and Sons. In 1862, the co-partners all signed the contract for the sale of their freehold in Rockingham Street. [8]

The freehold of Smithy Wood Tilt, a scythe works, was added in the 1870s and probably it was used on a sub-tenant basis before that. A Tilt hammer was a much-used tool, which continued in use for many years. It was a power forge tool, which throughout the nineteenth century found no equal. All Crown or solid forged scythes were made in such a forge. Efforts made to forge scythes by means of other types of hammers were unsuccessful.

Ebenezer the son of William the elder, died in 1867 and there was a division of the company business between the other sons and the nephews. This Sheffield family had by then become large, and it was perhaps inevitable that different branches would want to run their own businesses. They established three separate firms, all with the name of Tyzack and all competing in the Sheffield tool trade.

Ebenezer's brother William(2) jnr., took a partner in 1870, named Benjamin Turner. William jnr. had an elder sister, Ann, who had been born on 29th January 1814. She married Benjamin Turner and they had three children Mary Emma, Sarah Ann, and Thomas. So in 1870, Benjamin had been a member of the family for many years. Their company then became known as W. Tyzack, Sons and Turner.

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[7] Marriage Settlement, Sarah Tyzack, Greater London Record Office, ref. 0/331/1
[8] WYAS Reference WR 541 576 1.1862.

William Tyzack, Sons and Turner

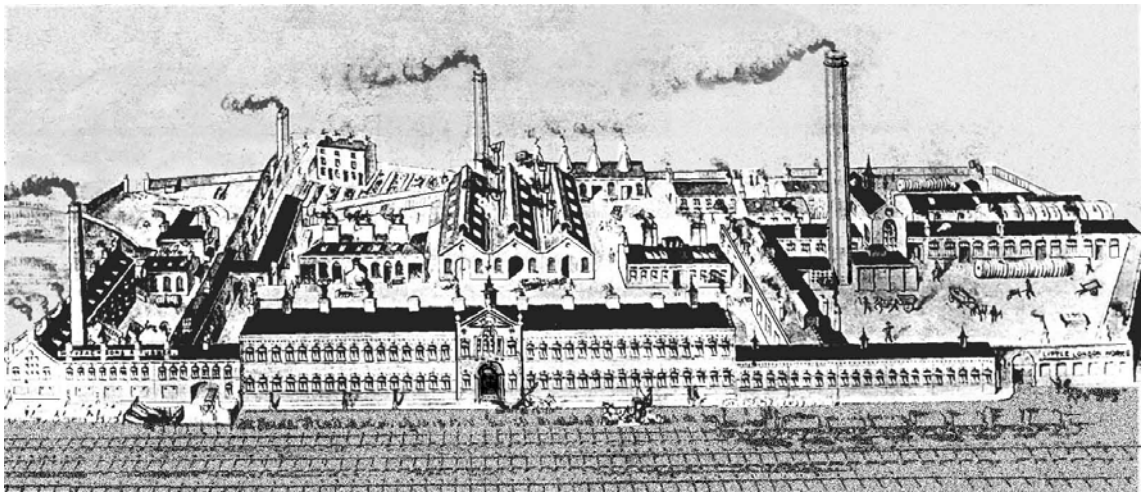
A directory shows William Tyzack of Abbeydale as tenant of Old Hay Wheel on the Sheaf in 1875 just one and a half miles south-west of Abbeydale. Tyzacks also operated the next wheel, Totley Forge. This period saw the invention of machines for reaping and mowing which used knife sections and W. Tyzack, Sons and Turner was the first to make these blades for them. So following enclosure, with larger fields, it became more economical to use a reaping machine behind horses than to use men with scythes. Gradually the scythe gave way, in the fields, to the reaping machines and to binders and baling machines. All used machine knives or straw and hay knives. So an army of little mesters making scythes gave way to bigger workshops making machine knives. Change in the metal industry paralleled the run down in the numbers reaping the corn and hay on their smallholdings. However with growing sales to the Commonwealth and elsewhere abroad, the sales of unfashionable scythes continued to hold up very well.

The Heeley Corn Mill was purchased in 1876. This was to be a momentous decision, because a plan was also implemented to move the headquarters to a site in Heeley, adjacent to the Little London Dam.

"*Close to "Little London Dam," on which and in which many generations of Sheffielders had disported themselves, and skirting the main line of the Midland system, was vacant land. It was then practically in the country, with fields and woods on three sides of it and in front across the railway the beautiful park of Meersbrook, a large portion of which has since been purchased by the town. Twelve acres of this land were taken, and upon it were erected works as substantial, as well arranged, as commodious as any of the kind in the country. The firm knew from long experience what departments they wanted, and how they should be arranged so as to secure the greatest economy of time and labour, and practically acting as their own architects, the "Little London Works" sprang into existence.*"[9]

Most of the commercial development of W. Tyzack, Sons and Turner after 1876 was at Little London. Whilst the forge was retained in use, most of the other buildings were demolished and the site redeveloped. New buildings housed a larger and more modern crucible steel melting furnace, and a large 60 hp steam engine around which were built four grinding wheels, a forge, and general machine shops. A large block included some workshops, all the warehouses, packing shops and offices parallel to the main Sheffield to London railway line. The layout of the factory, by the standards of 1870s, was very efficient. An ingenious system of line shafts around the central steam engine, gave power throughout the factory. This was at a time when labour was cheap.

[9] The Implement and Machinery Review. 1st December, 1887



The trade mark of the firm, the “Elephant," formerly stamped almost exclusively on their scythes, was now put on other articles.

A period of decline set in after 1876. First the main drive shaft in the tilt forge at Abbeydale, broke and had to be replaced at a cost of £150. Then overseas manufacturers, notably in USA and Germany were challenging on both price and quality. More galling was the competition from the company of Ebenezer’s eldest son, William Alexander. Turnover declined. From £66,587 in 1878, they averaged only £50,000 during the years 1880 to 1895. Several times they considered closing Abbeydale. From 1880 to 1881 they cut prices, cut wages and salaries, sold the Rockingham Street premises, sold land at Heeley Mill, and sold Totley Rolling Mill, for money to buy new plant. They bought a new eighteen hole crucible furnace, another large Davy Brother’s steam engine and the first file cutting machine for Little London.

1885 was the time when falling home sales sent them overseas. Members of the family travelled to France, Germany, Russia, Australia, and other Commonwealth countries. About this time their product range was defined by one reference as[10] “*various types of single and double shear, blister, and other steels, all kinds of knives for reaping and mowing machines knives for chaff and turnip cutters, knives for paper mills and tobacco works, all sorts of irons for planing, tonguing and carving for wood-working machinery, saws, scythes, forks, files, and other similar goods. ..... Demands have come in, chiefly from New Zealand and Australia, for heavy parts of agricultural and other implements such as plough and share plates of various patterns, plough mould boards plough circular coulters, and skeith plates, harrow discs stripper teeth, cultivator knives, &c. The machine for which the stripper teeth and other parts are supplied is being made in large numbers in these Colonies. As it travels across the*

[10] The Implement and Machinery Review. 1st December, 1887

field the ears of corn are stripped off, the corn is thrashed and winnowed, and the machine delivers the corn ready for market."

In 1897 S. Linley and Co., operating out of Clough Works, with its "Old O", trademark was purchased. This increased the production of Scythe Blades, and added hay and straw knives. Three years later complete machine knives and components for reapers and mowers joined the catalogue. By 1901 the rent at Little London was sixty times that at Smithy Wood, which the company had also bought in 1870 but had not developed.

In 1906, they registered as a Private Limited Company with chairman Frederick Tyzack, grandson of the founder and son of William jnr. Saw-making where the company started in 1812, had provided a large part of the output, but that industry passed through a tough period and suffered stiff competition, particularly from America. In the eight years to 1912, the Little London Works doubled its staff and output in saws. They covered the whole field of the trade from the smallest fret to six foot circular saws. In addition to the “Elephant” and “Nonpareil” brands there was also an “Abbeydale” quality of saw, a cheaper product. Hacksaws were included and knives for calico, india rubber, and cloth cutting. Saw production employed five hundred staff. At the centenary, in 1912, power for the new plant was run by electricity produced by a National 175 h.p. gas engine. Other sources of power were a 250 h.p. steam engine and a 50 h.p. Crossley gas engine. But in spite of all these modern energy sources, crown scythes were still forged by hammering by waterpower.

Frederick died in 1923 and was succeeded as chairman by John Blunt. Before the war, Frederick’s son, Eric D. Tyzack, was the company’s Metallurgical Chemist, with his own laboratory. One might reasonably have expected him to follow his father as chairman in the family firm but he became a pilot in the Royal Flying Corps and was killed over Passchendaele.

This company was the first to manufacture discs for harrowing and ploughing and these used the “Elephant “ mark, which had become an important quality guarantee on scythes and saws. These discs were made from very hard steel of high quality. After heat treatment they were bent and tempered and then ground by special machinery. Tyzacks had from their earliest operations made their own steel by casting from crucibles using a process similar to Huntsman. These special high-speed steels were marked by the trade name “Nonpareil”. It was an early mark of quality and a constant standard was maintained. Emphasis on quality by means of a works laboratory employing analytical

chemists was then an innovation and it enabled processes like tempering to be fully controlled.

In addition to the home market, it developed an export trade with France and Russia. Then they abandoned the love affair with waterpower and bought the first gas engine to generate their own electricity. By 1912, machinery had replaced the old hand craftsmen who cut and forged files as described in the Centenary Souvenir.[11] The original saw making business was still a bedrock but apart from this and the manufacture of files, they made scythes, sickles, hooks, hay knives, chaff machine knives, reaping and mowing machine sections, steel rivets, plough mould boards and coulters {the iron cutter in front of a ploughshare}, harrow discs, and other agricultural fittings and of course crucible steel. These were the products at the outbreak of the first world war. Such a factory could clearly produce parts essential for the war effort and it did. Colonel W. S. Middleton, M.C., T.D., married Dorothy the daughter of Frederick Tyzack and in 1919 he joined the company.

Motor cars brought with them a demand for clutch plates using similar technology to circular saws. To these were added the manufacture of circular knives, shear blades, guillotine knives and similar products, a big business. Later thicker and heavier clutch plates for large tractors were added.

Following the death of John Blunt in 1935, William Tyzack, nephew of Frederick, became Chairman, the other directors being Stuart M. Tyzack, (his brother), Colonel Middleton and Wilfred Tyzack, (son of Stuart), who had joined the company in 1926. William Tyzack and Colonel Middleton were Joint Managing Directors.

In 1945 Norman Turner, great grandson of the original Benjamin Turner, joined as a director, and three years later the firm became a Public Limited Company. During the same year, (1948), Colonel Middleton became Chairman with Colonel Wilfred Tyzack as Joint Managing Director.

Shortly after the war, British agriculture, which had lagged other countries, in mechanisation, notably North America, indulged in an orgy of re-equipment. It created an enormous demand for the specialist wearing parts, which Tyzacks made and a new 56,000 sq. ft. were added with new plant.

In 1961, Wilfred Stuart Tyzack, son of Stuart Meggitt Tyzack and Aguste Meizer, became chairman. Stuart Meggitt was the son of Stuart Tyzack and Mary Meggitt. This last Stuart was Frederick's brother.
By 1967, Tyzacks merged with the firm of D. Parker & Sons, filemakers of Ecclesfield. Twenty years later, soon after Bill Eastwood had taken over at nearby W.A.Tyzack, in 1987, that company acquired its long time rival William Tyzack and Turner. This was rapidly followed by the demolition of the Little London Works in 1988. In 1989 a management buy-out occurred, to last alas only a further two years before receivers

[11] Sheffield Library

were called in. One part of the original company retaining the name was Tyzack Transmission Components Ltd, owned by MIBA an Australian company. Eurovein was the company which got the machine knives and grass care equipment. The Tyzack and Turner name was changed to TT plc and as such became an engineering conglomerate.

Tyzacks retained Abbeydale and used and developed it until 1935 when their tenancy ended. Dr. J.G.Graves bought Abbeydale in that year and gave it to Sheffield City for use as an industrial museum. His philanthropic gesture was not taken up. Until 1938 attempts were made by the Society for the Preservation of Old Sheffield Tools to fulfil Graves wish. The Second World War halted these attempts. During the war, a direct hit on steel makers Wardlow & Co. resulted in their relighting the crucible furnace at Abbeydale. Sheffield Council then made one of their attempts to demolish Abbeydale. A public outcry, followed by Parliamentary activity, resulted in action by the Council for the Conservation of Sheffield Antiquities, (CCSA). They restored the buildings and handed them back to the Sheffield City Council. In 1970, the City Museums opened it after considerable restoration. The works, with their dam, tilt forge, grinding shop, smithies, warehouses and cottages, are fully restored and typify the small, self contained industrial hamlet in which the old hand-craftsmen produced the various tools which made Sheffield famous throughout the world.

W. A. Tyzack and Co.

After the death of Ebenezer in 1867, and reorganisation of the company, Ebenezer's eldest son William Alexander Tyzack (1836-1889), founded a separate company in 1868, with twenty employees.

William Alexander's company, known as *W. A. Tyzack and Co. Ltd* was located at Stella works, Hereford Street, Sheffield. These premises were sold in 1986 when the company transferred its operations to the Green Lane Works. William A. was an able salesman and travelled extensively on company business, including Imperial Russia.
All these Tyzack companies made basically the same products. This probably partly accounted for the reduction in trade they all complained about in the years after the original company split up in 1867. Here is an extract from a contemporary journal[12] describing the scythe process at W.A.Tyzacks. : -

Taking a bar of the best Swedish iron, already cut to length, the workman heats it, and then, under a rain of blows from the steam hammer, makes it quickly into the required shape. Another bar is put through the same process, and then a strip of steel is placed between the thin edges of both, and the three are hammer welded together. This is then passed under another steam hammer, and plated out to the required width. When hardened and ground it is taken for testing. The edge is run over a piece of steel, and if properly and evenly tempered a small portion of it will break off and curl in ringlets. Any soft place in the edge is found and the scythe is condemned as a 'waster'.

[12]. The Implement and Machinery Review. 1st June 1879 : "W.A.Tyzack & Co., Stella Works Sheffield"

The "Patent" scythe is produced by different process; in the machine shop, there are a dozen different cutting and punching machines, creating a deafening noise. From a heap of rolled steel plates, a workman takes one and places it under the machine, the die drops, and a scythe blade is cut out instantly. It is passed on to another machine and its point is turned up, and it is rimmed and gristed. Holes are punched in it; and, having been hardened the trademark is stamped on. Like the "Crown" scythe it is taken to the grinding wheel. In this particular "wheel" there are twenty "troughs". Astride each horse is a sturdy grinder, leaning over the cross-bar in front of him and bearing with all his weight and strength upon the scythe which he holds on the stone, which is enormous and is running at a fearful speed towards him. He can grind two to three dozen "Crown" scythes a day or, with the same amount of labour about four dozen "Patent" scythes. The "Patent" scythe does not require its edge to be tested, as it is made of solid steel and can be relied upon. It passes direct from the grinding wheel to the smith's shop, where it is backed, fitted, bored, and riveted. Finally all the scythes are blacked, cleaned, labelled, and wrapped in dozens ready for the market.

The company traditionally made and sold crucible steels, files, scythes, sickles, and hooks. In fact very much the same range as made by William Alexander's uncle's company.
Both William Alexander and his cousin Walter worked at tracing family roots. A number of the surviving records are available as a result of the work by these two.

Because of William Alexander's sideline interest in farming and because they were traditional products of the family companies, he manufactured many types of agricultural machine and machine parts. He took into partnership, James Gould, James Havenhand, and his two older sons, William and Bernard. On the sudden death of William Alexander in 1889, the business was taken over by his three sons, William, Bernard and John Stanley, together with James Gould and James Havenhand. After about 1902, John Stanley ran the company. William Alec Tyzack, his nephew, became a partner in 1934. On John Stanley's death in 1941, his son Donald S. Tyzack together with William Alec Tyzack ran the business. Bernard Tyzack was a director.

In April 1948, the company bought the Green Lane site. They purchased a factory from Messrs. Ibbotson Bros. & Co., Ltd., Sheffield[13], taking over with that factory a plant with a complete file manufacturing business. The whole package included plant, machinery, stock-in-trade and good will, as well as the name of "Ibbotson" and the "Globe" trademark to add to their own ''Horseman'' brand. A good vacant works was crucial. New products included many forms of coulter, harrow and plough discs, cultivator parts, sections, chaff knives, etc., and many other steel cutting and wearing parts for agricultural machines. The financing of all this required an increase in registered capital to £200,000. Additional capital was raised within the Tyzack family, and so the firm remained a private limited company.

Bernard Tyzack, who had been their South England representative for many years, took charge of the new London office at 137, Cannon Street, London, E.C.4. The board of directors was then:- Donald S. Tyzack, chairman and governing director, W. Alec Tyzack, joint managing director, William Johnson, Col. Vivian Hunt, O.B.E. M.A., LL.B., and Bernard Tyzack.

An item in the Morning Telegraph, 9th March 1977, said Green Lane Works was listed by the Environment Department for its historic and architectural importance and Whitehall sanction must be obtained before demolition. In recent years, members of the family sold their interest in the company, and, although still in existence, it no longer retains any family owners.

[13] Reported in Farm Implement and Machinery Review 1st Feb. 1949

Messrs. Needham, Veall and Tyzack

This business is said to have begun in about 1820 when John Taylor opened a small workshop in St. Phillip's Road. It operated for many years as the "Eye Witness" Works, Milton Street, Sheffield, S3 7WJ. He was granted the striking 'Eye Witness' corporate mark in 1838. Taylor specialised in pen, pocket and sport's-knives.

John Taylor lived at No. 15 St. Philips Road and next door, at No. 17, lived Edwin Needham, a spring knife cutler. One of Taylor's daughters married a Needham, so when he died in 1854, the business passed to his daughter, now a Needham. Taylor's grandson, Edwin Needham, became a chairman of the company. By 1876 the company joined forces with James Veall (d. 1906), in Milton Street. Walter Tyzack, was another partner. William(2) Tyzack, son of William and Sarah, had married Maria Pearson in his second marriage. Their eldest son was Walter, born at Abbeydale in 1857. He was educated at Mr Richard Bowling's School, Milk Street, and the Rev. Thomas Howarth's, Broombank House. For some reason I can't discover, he lived in Norway and Sweden and then became a partner in Needham, and Veall. Walter joined the business in 1879 and henceforth it was styled, Needham, Veall & Tyzack. Walter's sister, Helen, born in 1858 married William Cleverly Veall, son of James Veall and this may account for Walter's involvement. Walter lived at Broom Hall, (although the electoral roll showed him with his cousin William Alexander Tyzack both living at Abbeydale House), and he was a Searcher in the Cutlers' Company. Walter commissioned Charles Drury, an expert on Sheffield Parish Registers, to produce an invaluable pedigree of the Tyzacks of Sheffield in 1913, faded scraps of which can still be found in some Sheffield libraries.

Together these men began to expand the business. The firm's growth seems to have been particularly marked in the 1890s, when they reorganised the business. In 1897 Needham, Veall & Tyzack became a limited liability company, with a capital of £60,000, and with Walter Tyzack as chairman, and James Veall and William C. Veall (d. 1941), as directors. Another director of the firm, Edwin Needham, was a cutlery manufacturer and merchant, living in Birmingham. At about the same time, the company purchased Nixon & Winterbottom, which was capitalised at £20,000 and made into a limited company. Needham, Veall & Tyzack's purchase of this firm, which was one of the pioneers of machine-produced cutlery in Sheffield, may have been encouraged by a desire to acquire the machining production facilities.[14]

[14] From G.Tweedale, " *The Sheffield Knife Book* "

A detailed description of the manufacturing processes and products at the firm's Eye Witness Works in Milton Street can be found in a Victorian tour of the town, entitled, Sheffield and Rotherham Illustrated, Up-to-Date (1897). It stated that,

"*The leading features of Messrs Needham, Veall & Tyzack manufactures in these departments are pen and pocket knives in an infinite variety of useful and elegant shapes, table knives, butchers' knives, carvers, scissors, pruning shears, and razors of the finest make in hollow and plain ground, for which latter goods in particular their reputation is speedily becoming world-wide. Some idea of the range of patterns kept in these various goods may be derived from the fact that in pen and pocket knives alone the firm possess over two thousand separate designs, most of which are made in four or five separate coverings*."

In 1902 the firm bought the cutlery business of Joseph Haywood & Co., based at the Glamorgan Works in Pond Street. This was acquired for the sake of the factory site, since Haywood's trade marks and goodwill were immediately sold to Thos. Turner. By 1911 the operations of Nixon & Winterbottom had been moved to the Glamorgan Works where it joined another firm purchased at about this time, Michael Hunter & Co.

From the Sheffield and Rotherham Illustrated, 1897, mentioned above, it can be seen that Needham, Veall & Tyzack were also in the market for plated goods. They introduced the manufacture of spoons and forks, fish-eating knives, plated desserts, fish-carvers and tea and coffee-services. The Nimrod Works in Eldon Street, (formerly owned by Bartram, the powder flask maker), was occupied to deal with these products. A quaint reference says that this works was *electrically* connected to the central works. Showrooms were also opened to demonstrate Needham, Veall & Tyzacks' tastefulness in these matters, and 'well got-up' catalogues were issued to customers. But Eye witness knives remained the firm's best known line and both hand-forged and machine-made knives were produced. According to an obituary of James Veall, the company employed about thirty or so workers in the 1870s, a number which had reached nearly a thousand by 1906. However, even if this figure was not overstated it must have been a peak and the number of workers had fallen by the end of the First World War. After 1918, Needham, Veall & Tyzack suffered the fate of many other Sheffield makers, they were hit by the fall in the demand for high-quality pocket-knives and razors. Later, Needham, Veall & Tyzack took over Southern & Richardson. Nevertheless, the company did survive and after the Second World War it began to take over other Sheffield marks. It acquired Saynor, Cooke & Ridal in 1948; and also 'Wheatsheaf' (Wheatley) and XL ALL (Parkin & Marshall). In 1965 the firm was styled as Taylor's Eye Witness. Ten years later, it was absorbed and is now a division of Harrison Fisher & Co. Today it is still in the same location and is still Sheffield owned, trading again since 1965 as Taylor's Eye-Witness.

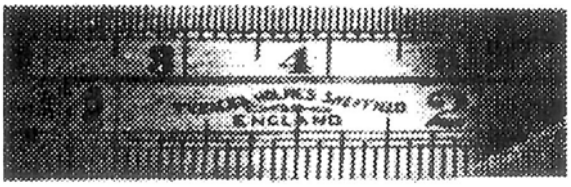
Tyzack & Holmes, Standard Works

Tyzack & Holmes, Standard Works, Cavendish Street a measuring tape manufacturing company was established in 1867. It was purchased by Alfred Holmes and Percy Tyzack, son of William(2) and Maria Pearson, in 1884, and run by them until 1902. Then Alfred Holmes who had been the works manager, died. He had been married to Annie Helen Cowling and when she became a widow in 1902 she married Percy, keeping the business in the family. Prior to 1884 Percy was in the Sheffield Directory as a scythe manufacturer and gave his residence as Abbeydale House, in which his brother Walter and cousin William Alexander had also lived. Percy continued with the company until 1916 and then appears with a private address of No. 225 Barnsley Road. We must presume he sold up or retired. The company retained its name and still appeared in the 1926 directory with the same product.

In 1907 a rival company called Chestermans alleged the infringement of one of their marks by Tyzack and Holmes. Percy signed an affidavit in which he explained the origin, dating to 1897, and use of the particular mark. He also gives some of the background of the company. In some related correspondence, F. Chesterman says, "*Dear Gerald, ...I know nothing personally against Mr Tyzack, but he has bought a business which has always been conducted on the principle of sailing as near the wind as possible by copying everything we do. I have always treated them with contempt and hoped that when Mr Tyzack, (he comes from a good stock), bought the business it would be conducted on more independent lines. Now the business is in the hands of someone who has some credit to keep up, (for the family's sake) I shall watch them more carefully*. ..... *Yours affectionately*,"

There is a picture of the rule that caused all the fuss.

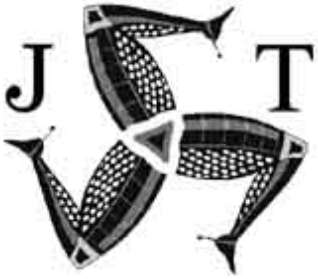
Rule offending Chestermans



In the 1930's Moore & Wright acquired this company and later it was in turn taken over by Neill Tools Ltd.

Joseph Tyzack & Son

Joseph was Samuel(1)'s third son and Henry's brother. He was born at Dobbin Hill on 29 March 1813. Joseph, a fendermaker, was in Drake's Directory for 1863 as *Joseph Tyzack & Son*, 160 Fitzwilliam Street. On the 20 July 1837 he married a seller of beer, Sarah Carr, a widow (formerly Sarah Wilkinson), and he set up business. He built a connection with the Isle-of-Man Steam Packet Boat Company. The three legged mark, which was required by this customer, was later adopted and registered with the Cutlers' Company in 1847. He invented and pioneered the now well known plasterer's steel trowel or float as one of his most successful products. Prior to his invention of this tool, wooden floats had been used. His wide range of products included garden, joiners' and moulders' tools, bricklayers' trowels, putty and palette knives, graining combs, butchers' and bakers' tools, and of course, as always with a Tyzack then, saws. The range needed a bigger works, so property in Bowden Street was acquired.



Joseph and Sarah had three children, a son Thomas, born 17th April 1842, a daughter Ann, (who married Louis Spencer), and a daughter Louisa, (who became Louisa Wolstenholme). Thomas was the "& Son" and took over the business when his father retired to Southport. He built the premises, known as Meersbrook Works, Valley Road, Heeley. Thomas married and had three daughters, Cassandra, Minnie and Rose, and two sons, George and Clement. Clement took over from his father and was succeeded by joint managing directors, Minnie and Rose.

The firm continued to exist until about 1942 when it amalgamated with Isaac Nash of Stourbridge to form Nash Tyzack Industries. This did not last long because by 1953 Brades joined in and the company became Brades, Nash & Tyzack. By 1962 the Skelton company added its name. This was followed by a take-over by Spearwell Tools, then Spear & Jackson but they were all in their turn acquired by Neill Tools Ltd in 1985.

So there was a pattern of change spreading throughout all these companies from about 1950. From 1712 Tyzacks had made tools, probably in a small way, and without much variation until 1800. Then from the founding of William's business in 1812 until around 1950, a total of one hundred and thirty-eight years, there had only been changes to the arrangement of the businesses largely to suit the needs of a growing family and a slowly changing product. 1950 onwards, however, witnessed the beginning of an explosion. We see a change towards gross rationalisation, where firms battled to take over or be taken over. As the second half of the century developed and cheap but reasonable quality imports became common, this became a fury and it proved difficult to keep track of all the moves affecting the residue of the Tyzack companies.