ITTO IOIS



1778-1938

THE STORY OF FOUR GENERATIONS

Dedicated

to all our business friends, both living and departed, who have given us their support during these one hundred and sixty years.





Dancel Doncaster the son of Samuel Doncaster

and suprentice of George Smith

Sheffield in lie County of York Trilesmith

was admitted by the Master Mardens searchers, and Aloustants
of the County of Culters in Hallamphire, in the Country of York the

wenty minty — Year of the Reign of our Jovereign Lord

George The Third by the Grace of God

of Great Britain France and Ireland Tang defender of

the Faith, and so forth, and in the Year of our Lord One Thousand

Seven Thindred, and so worky ought in the Time of

M. Samuel Novis — Master of the same Society, and

entered in the Great Paper Book under the Title of ADMISSIONS

OF FREDMEN.

DD

Memorandum That the Day and Year above said the Mark Stampt in the Margin and imprefeed on the Lead to these presents annexed, was a signed according to the Form of the Statute by the Master Kardens and Searchers of the said Society to the aforesaid Daniel Doncepter to mark his Files by him to be made. To Hold to him during his Life, paying therefore yearly to the said Master Wardens and Searchers and their Successors during the said Torm for the use of the said Society, the Sum of Ino Pence at the Feast of Pentecost only.



Certificate granting the original Trade Mark to Daniel Doncaster in 1778.

THE STORY OF FOUR GENERATIONS · 1778-1938

NE hundred and sixty years ago, in the Reign of George the Third (who you will note from the opposite page was at that time "King of France, defender of the Faith, and so forth"), the Master Cutler of Sheffield, with the Wardens and Searchers, and no doubt with becoming dignity, bestowed on one Daniel Doncaster the trade mark:

The first trade mark granted to Daniel Doncaster I (1756-1819)

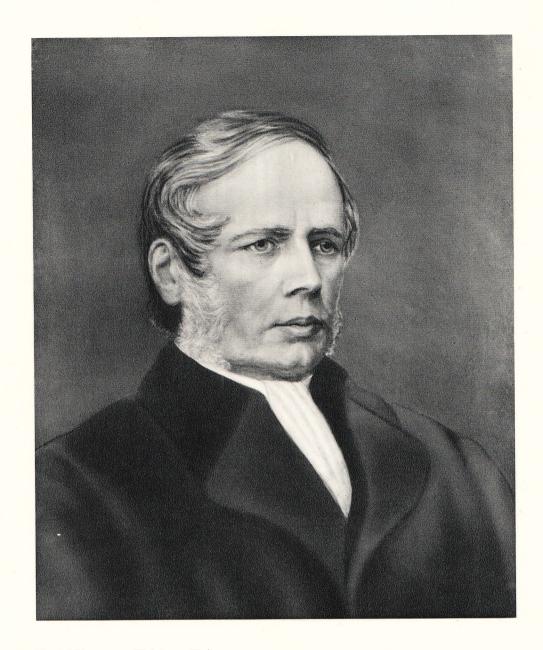
His father's business of "sope boiling" seems to have had no attraction for Daniel; perhaps he inherited an inclination towards our city's staple industry from his grandfather, the smith at Maplebeck in Nottinghamshire. At any rate, he was only twenty-one years old in 1778 when he commenced business as a filemaker; starting as a "Little Mester", he gradually but steadily advanced to extended operations, going into the country trade and personally taking journeys for about three months in the year, far afield to the Scottish border, to Birmingham, Bristol and London.

A "Little Mester"

His son tells us that "he usually travelled on horseback, "packing his wardrobe and necessaries in saddle bags, a "very limited space as we should think for comfortable "personal accommodation, and contrivance must have been "needed to get his linen afresh got-up by the way. A few

Long Journeys





Daniel Doncaster II (1807-1884).

"of his last journeys he drove a small gig to hold one, "called a 'sulky', that he might be the less tempted to give "a roadster a lift by the way".

After his death in 1819, the file business did not prosper, and in 1831 his son, Daniel the second, whose portrait you see on the opposite page, built his office and steel warehouse and his first converting furnace in Doncaster Street, on land which had been his father's garden and orchard. Here he bought the pure irons of Sweden, and in his furnace "cemented" them by heating in charcoal, just as we do to-day in the same furnaces, and converted them into blister steel for the making of rasps, knives, and scythes, or for melting in the crucible furnaces of Sheffield into steel which would be sold in all corners of the earth.

Daniel Doncaster II (1807-1884) starts in Doncaster Street

Swedish Iron and Blister Steel

It was here in Doncaster Street more than seventy years ago that he built his own crucible furnaces, the fore-runners of those working to-day nearby.

Crucible Melting

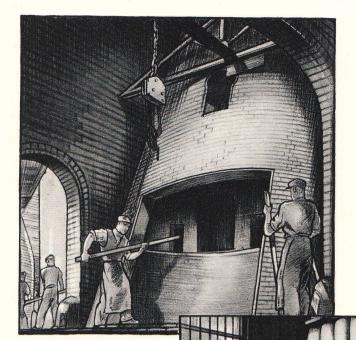
For ten years before his complete retirement in 1872, Daniel was helped by his three elder sons, one of whom, Charles, the chief partner, guided the conduct of an ever-increasing business until his death in 1884.

Charles Doncaster (1841-1884)

Medal awarded to Daniel Doncaster for his Exhibit of Steel at the Great Exhibition of 1851.



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Charging a Cementation Furnace for converting Swedish Iron into Blister Steel.

Crucible Steel Furnaces
—Teeming an Ingot.

It is now that we are at the beginning of the period of expansion, which took place under the fourth son, Samuel, who had joined his brothers ten years before.

Samuel Doncaster (1853-1934)

It was the great age of steel, of railway building set in motion by Henry Bessemer. The pure irons of Sweden were followed by the Bessemer steel of Sweden, made from charcoal pig iron, and sold by Doncasters to the Sheffield makers for saws, files, springs, needle wire and all kinds of tools where purity is essential.



ÅoŔ

The ingots come from Sweden by sea and canal to Sheffield, where they must usually be hammered down into billets and finally into small bars. Therefore in 1898 a small forge was bought and new hammers installed; so, with the new century, the Company, no longer a partnership, started as forgemasters by manipulating its own Swedish steels.



(U)

This forge at Penistone Road had a history older than that of its new owners, dating back to 1637 or earlier. Long years before Nasmyth and the steam hammer, old water hammers had worked there; under these the famous double shear steel of the period was faggotted and forged.



DANDEE



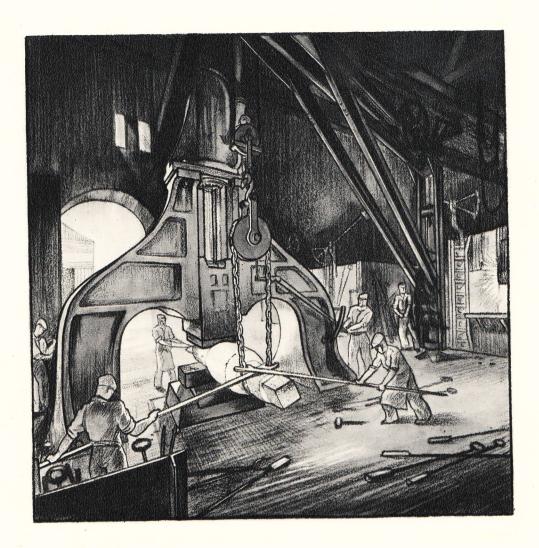












Forging a Steel Roll.

Water as a motive power had its drawbacks—a tablet on one of the walls still marks the height reached by the great Sheffield Flood, caused by the bursting of a reservoir dam, in 1864. A more constant source of concern was the holding up of water by neighbours upstream. It is recorded that the owner, who lived in a cottage adjoining the forge, tired of waiting all day for water, would doze off, to be awakened by his more vigilant wife with the cry, "John, t'watter's comin'!", at which he would hasten down to work, no matter what hour of day or night!

Drawbacks of water as motive power

The old forge was transformed by the application of steam, but the skill of craftsmen such as John is still needed to hammer Swedish and other steels into small bars for tools—more accurately than the eye can detect—tilting, as it is still called, a word derived from the old hammers which tilted-up and fell again with the help of the water-wheel.

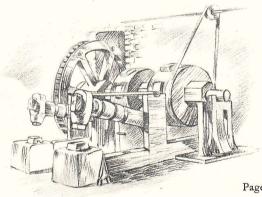
Tilting

With the new century again, came the development of the more complicated alloy steels, and gradually the forge grew; more hammers were installed, and to-day, on the site of the old water hammers, stand twenty steam hammers, working the highly complex steels of 1938 into bars and forgings for railways, motor cars, aeroplanes and machine tools of every description.

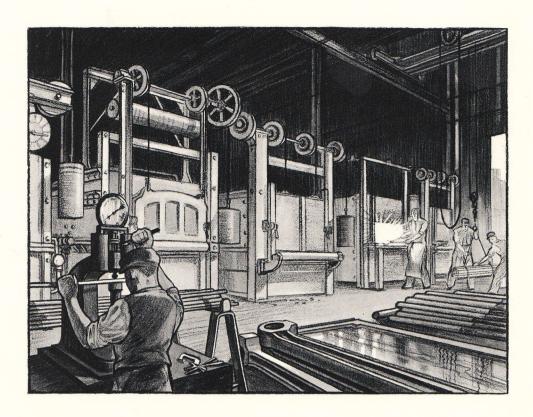
The advent of Alloy Steels

Forgings

Old water-driven Tilt Hammers.



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The Heat-Treatment Shop.

These notes would not be complete without mention of Samuel's brother-in-law and partner, Herbert Barber, who joined the firm in 1876; he was elected Master Cutler of Sheffield in 1909, and during his year of office the King of Sweden conferred upon him the distinction of the Order of Vasa. The merchanting of rare metals used in steel making and iron founding was begun by his eldest son, and this to-day forms an important part of the Company's business.

Herbert Barber, Master Cutler

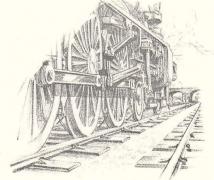
Rare Metals. and Alloys

Just as Doncasters needed plant for their Swedish steel, so did they need plant for their alloy steels. The year 1911 saw the beginning of the heat treatment plant at Penistone Road. This branch of the trade had no tradition, it started by trial and error, but the plant was the home of the alloy steels sold by the Martino Steel & Metal Company Ltd. of Birmingham. Its brands such as M.N.O. and C.V.S. were well-known to the motor and kindred trades from 1911 onwards; eventually Martino became financially allied with Doncasters, who continue to use these brands.

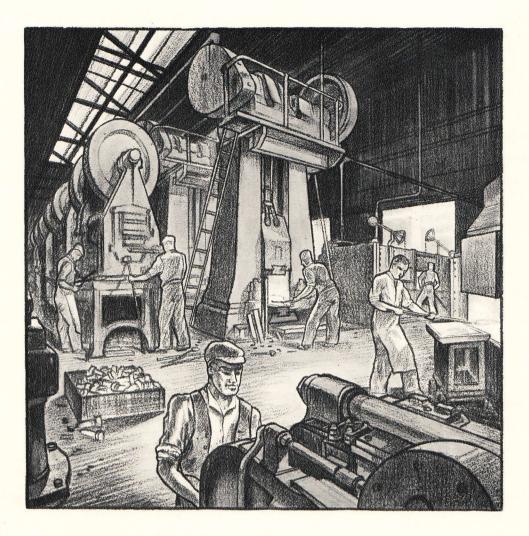
Heat Treatment Plant

This long experience in the treating of steels has led to the latest development, the manufacture of hardened steel rolls which was formerly almost a continental monopoly. With new shops equipped specially for the purpose, the old experience in forging and treating is applied to this new branch of manufacture, one of the most exacting products of the steel industry.

Hardened Steel Rolls



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The Light Stamping Shop.

The year 1916 saw the modest beginnings of the stamping department on the site of an old dam, which fed a water wheel for a small wiremill; but alongside these stamps now modernized for use on preparatory work, stands the first large double-acting stamp erected in this country, where heavier stampings for motors, lorries and aeroplanes are made. In the next shop is the new light stamping and valve forging department, with a layout of the most modern design. The raw material starts in the saw shop, and in a straight line the work flows through to the furnaces, the stamps and the presses into the adjacent shop for treatment, inspection and despatch. This department specializes

in the production of austenitic valve forgings and alloy steel stampings for all trades where high quality is

demanded.

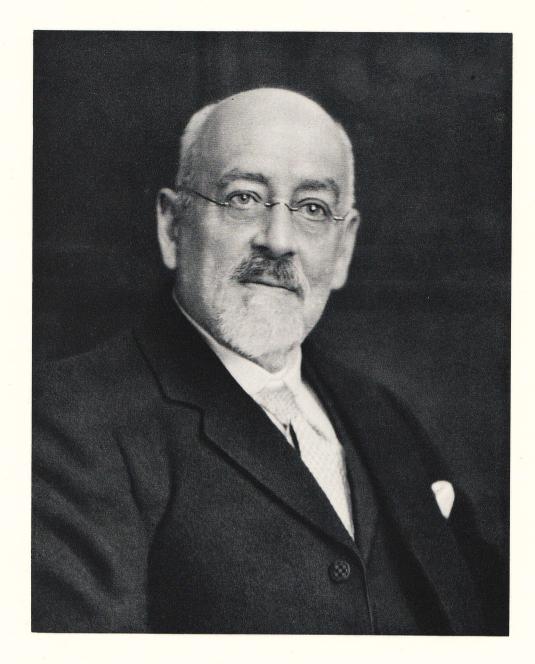
Drop Stamping

Valve Forging

After the war, in 1920, The United Steel Companies Ltd. bought the ordinary shares, and with them control of the company, but the family connection with the business continued actively under Samuel Doncaster's chairmanship. There followed a period of continuous modernization of plant and expansion of the manufacturing side of the business, but the severe depression in the steel industry from 1931 to 1934 made a financial reconstruction advisable; in 1936 it was, therefore, decided that the best way to effect this was for The United Steel Companies Ltd. to dispose of their interests, and the control of the Company passed back to the Doncaster family.

A period of extension and continuous modernization





Samuel Doncaster (1853-1934).

Samuel Doncaster retired from the chairmanship in 1931, but remained on the board until his death in 1934, and was succeeded by his brother Charles' son, James Henry Doncaster, the present chairman.

J. H. Doncaster, Chairman

Samuel Doncaster's sons, Charles and Basil, who have been active in the management of the business for over thirty years, form the board, with William Henry Wilkinson, Ronald Steel, George Coop and Percy Hemingway.

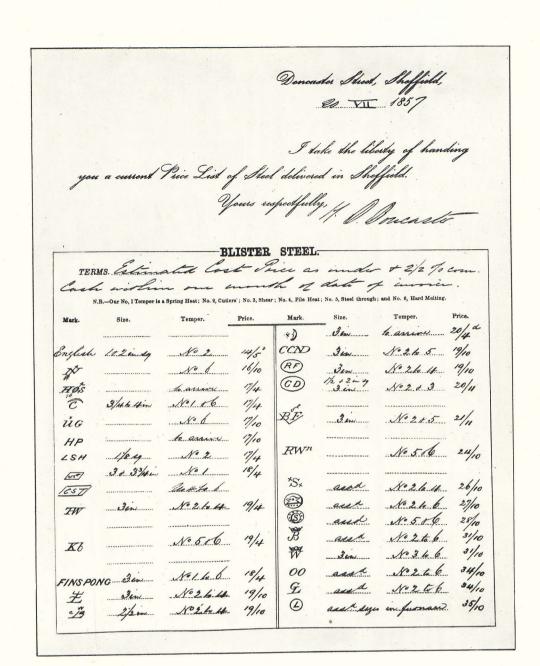
Directors

So, to-day, one hundred and sixty years from the granting of the firm's first trade mark, Daniel Doncaster & Sons Ltd., now better equipped and larger than ever in its history, with 900 employees, forms an example of the old-established yet progressive British firm, possessing in 1938 much of the individuality and character imparted in no small degree by its founder, Daniel Doncaster, four generations ago in 1778.

One hundred and sixty years of development

and orders				OF FILES AND RASP Sile Man JUNE 27, 1806. Dheffield									2	
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One of Daniel Doncaster's File Lists of 1806 found amongst the records of Neath Abbey Iron Works, South Wales.



List of Blister Steel Qualities and Prices of 1857.