

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.*

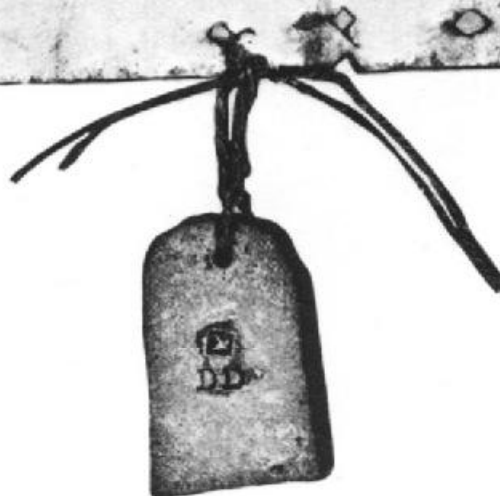




Daniel Doncaster the son of Samuel Doncaster
 And Apprentice of George Smith of
 Sheffield in the County of York Filesmith
 was admitted by the Master, Wardens, Searchers, and Assistants
 of the Company of Cutlers in Hallamshire, in the County of York, the
 twenty ninth Day of May in the
 Eighth year of the Reign of our Sovereign Lord
 George The Third by the Grace of God
 of Great Britain, France and Ireland King defender of
 the Faith, and so forth, and in the Year of our Lord One Thousand
 Seven Hundred, and seventy eight in the Time of
 Mr. Samuel Norris - Master of the same Society, and
 entered in the Great Paper Book under the Title of ADMISSIONS
 OF FREEMEN.

DD

Memorandum That the Day and Year abovesaid, the Mark Stamp
 in the Margin, and impressed on the Lead to these presents
 annexed, was assigned according to the Form of the Statute, by
 the Master, Wardens and Searchers of the said Society, to the
 aforesaid Daniel Doncaster 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 Term, for the use of the said Society, the Sum of Two 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

ONE 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)*



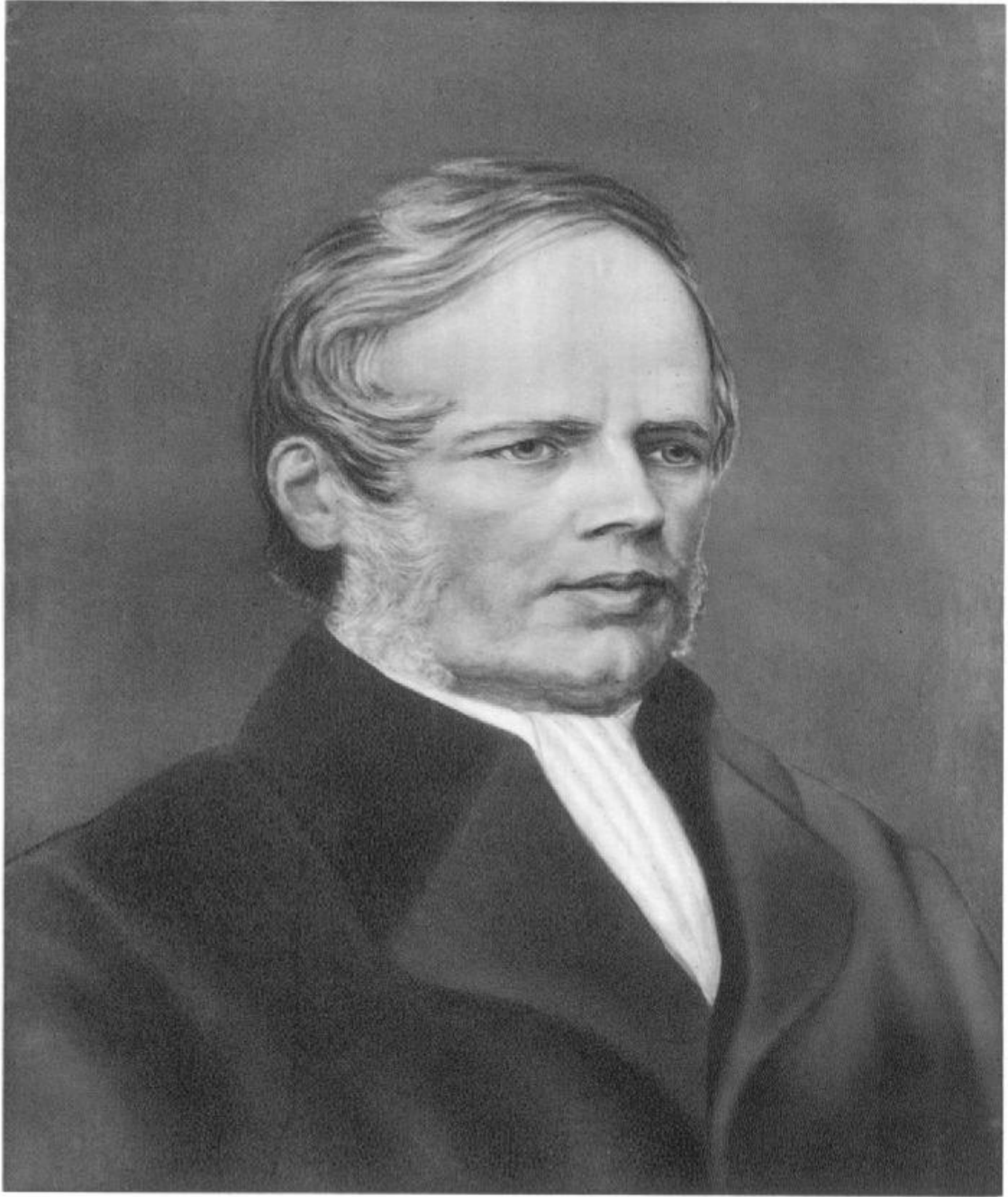
His father's business of "sope boiling" seems to have had no attraction for Daniel; perhaps he inherited an inclination towards our city's staple industry from his grandfather, the smith at Maplebeck in Nottinghamshire. At any rate, he was only twenty-one years old in 1778 when he commenced business 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 necessities 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.

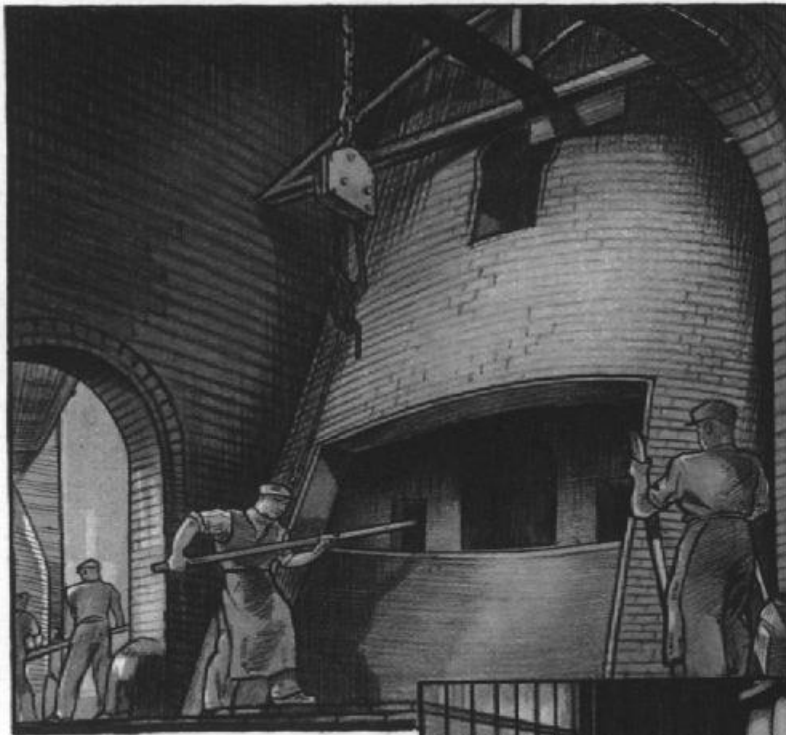
*Crucible
Melting*

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.

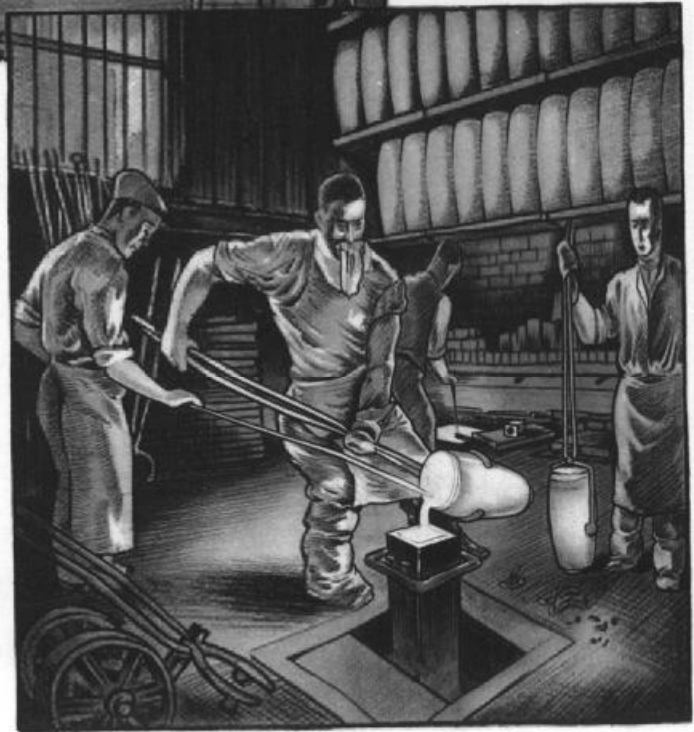
*Charles
Doncaster
(1841-1884)*

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





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.



ÅoK



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.

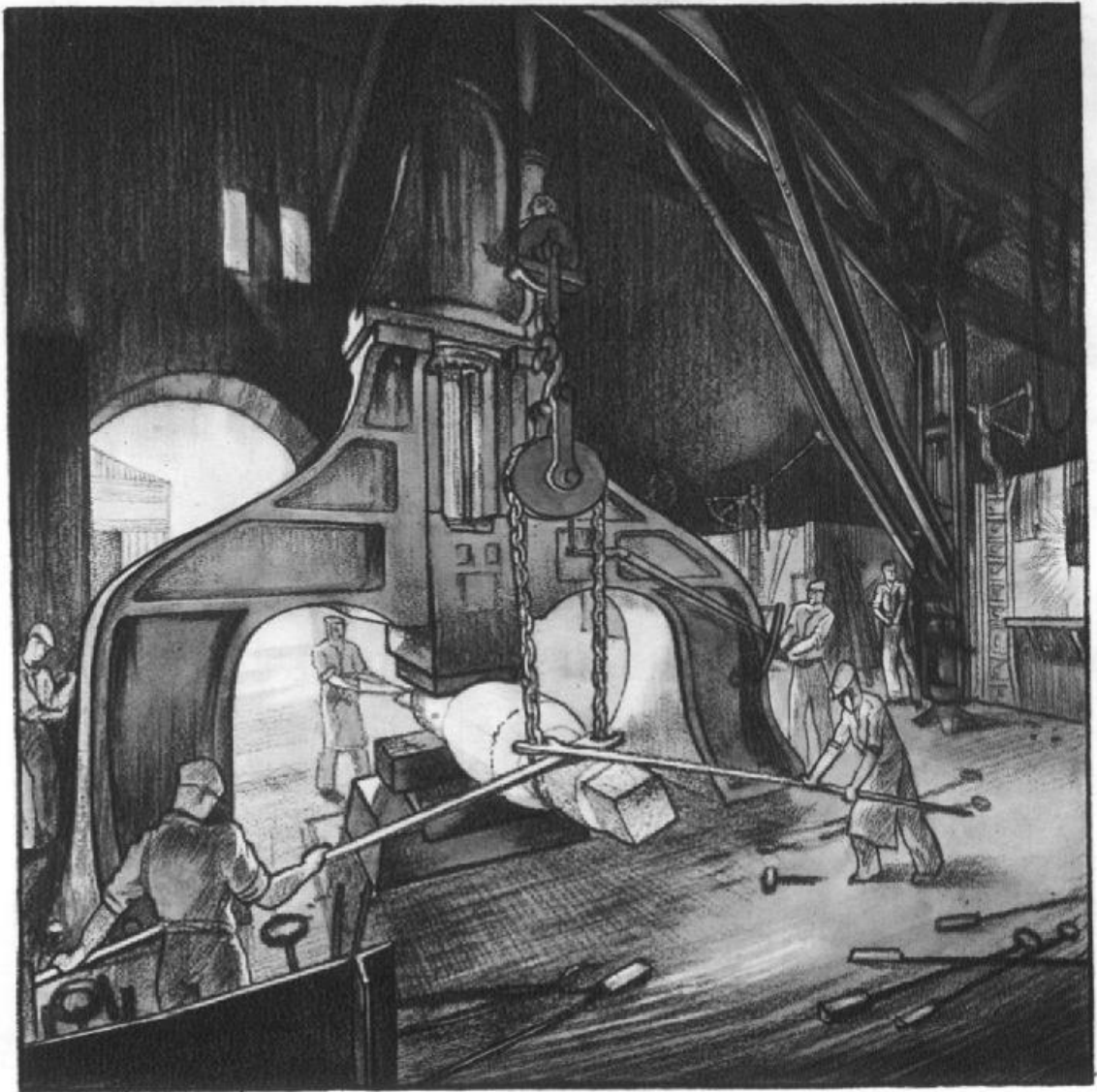


This forge at Penistone Road had a history older than that of its new owners, dating back to 1637 or earlier. Long years before Nasmyth and the steam hammer, old water hammers had worked there; under these the famous double shear steel of the period was faggotted and forged.



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.

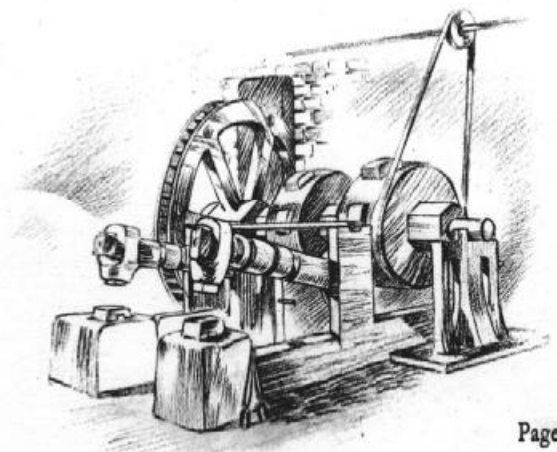
Tilting

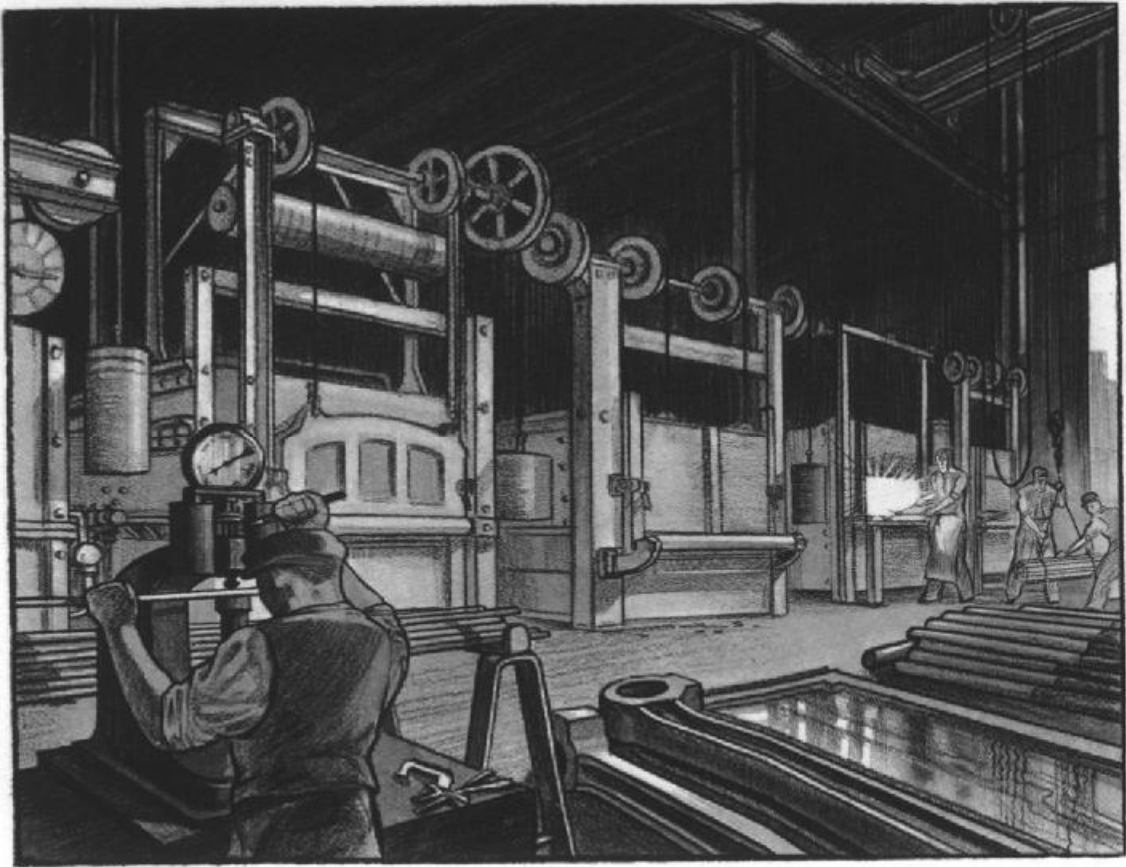
With the new century again, came the development of the more complicated alloy steels, and gradually the forge grew; more hammers were installed, and to-day, on the site of the old water hammers, stand twenty steam hammers, working the highly complex steels of 1938 into bars and forgings for railways,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

*The advent of
Alloy Steels*

Forgings

Old water-driven
Tilt Hammers.





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*

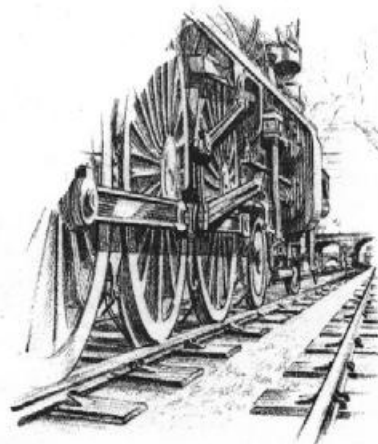
*Rare Metals
and Alloys*

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*





The Light Stamping Shop.

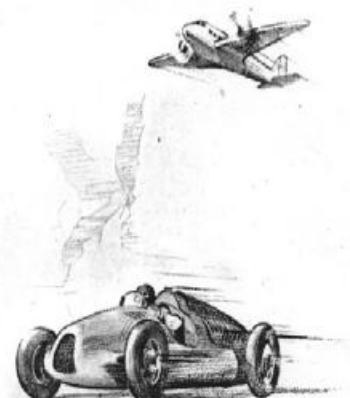
The year 1916 saw the modest beginnings of the stamping department on the site of an old dam, which fed a water wheel for a small wiremill; but alongside these stamps now modernized for use on preparatory work, stands the first large double-acting stamp erected in this country, where heavier stampings 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.

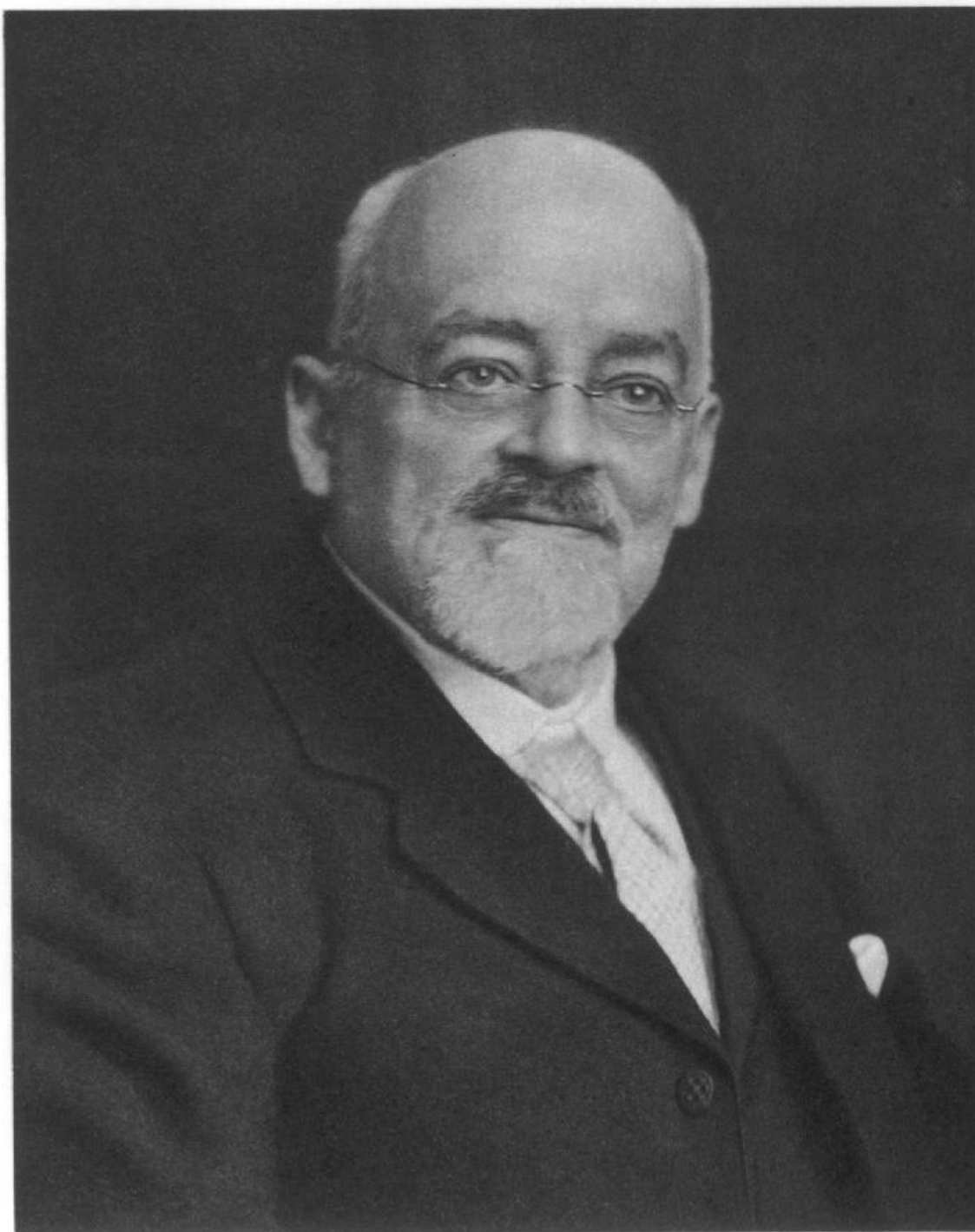
*Drop
Stamping*

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

*D. Doncaster's
Prices of Files
Last order*

PRICES OF FILES AND RASPS

JUNE 27, 1806.

*Daniel Doncaster
File Maker
Sheffield*

The Manufacturers of Files, in the Town and Neighbourhood of Sheffield, taking into consideration the Recent Advance on Steel, together with the increased Price of every Article used in their Manufactory, have resolved, — That all Orders shall be subject to the following Advanced Prices.

Flat, Round, Four Square, Knife, Cutting, Filament Range.		Half Round and Three Square.		Hand, Pillar, Chair, Round-off, Crow, Hackers, Ribber, Round, Jointer.		From 1 to 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.									
From 1 to 24	25	26	27	From 1 to 24	25	26	27	From 1 to 24	25	26	27	From 1 to 24	25	26	27
0.1.0	0.1.1	0.1.2	0.1.3	0.1.0	0.1.1	0.1.2	0.1.3	0.1.0	0.1.1	0.1.2	0.1.3	0.1.0	0.1.1	0.1.2	0.1.3
0.1.4	0.1.5	0.1.6	0.1.7	0.1.4	0.1.5	0.1.6	0.1.7	0.1.4	0.1.5	0.1.6	0.1.7	0.1.4	0.1.5	0.1.6	0.1.7
0.1.8	0.1.9	0.1.10	0.1.11	0.1.8	0.1.9	0.1.10	0.1.11	0.1.8	0.1.9	0.1.10	0.1.11	0.1.8	0.1.9	0.1.10	0.1.11
0.1.12	0.1.13	0.1.14	0.1.15	0.1.12	0.1.13	0.1.14	0.1.15	0.1.12	0.1.13	0.1.14	0.1.15	0.1.12	0.1.13	0.1.14	0.1.15
0.1.16	0.1.17	0.1.18	0.1.19	0.1.16	0.1.17	0.1.18	0.1.19	0.1.16	0.1.17	0.1.18	0.1.19	0.1.16	0.1.17	0.1.18	0.1.19
0.1.20	0.1.21	0.1.22	0.1.23	0.1.20	0.1.21	0.1.22	0.1.23	0.1.20	0.1.21	0.1.22	0.1.23	0.1.20	0.1.21	0.1.22	0.1.23
0.1.24	0.1.25	0.1.26	0.1.27	0.1.24	0.1.25	0.1.26	0.1.27	0.1.24	0.1.25	0.1.26	0.1.27	0.1.24	0.1.25	0.1.26	0.1.27
0.1.28	0.1.29	0.1.30	0.1.31	0.1.28	0.1.29	0.1.30	0.1.31	0.1.28	0.1.29	0.1.30	0.1.31	0.1.28	0.1.29	0.1.30	0.1.31
0.1.32	0.1.33	0.1.34	0.1.35	0.1.32	0.1.33	0.1.34	0.1.35	0.1.32	0.1.33	0.1.34	0.1.35	0.1.32	0.1.33	0.1.34	0.1.35
0.1.36	0.1.37	0.1.38	0.1.39	0.1.36	0.1.37	0.1.38	0.1.39	0.1.36	0.1.37	0.1.38	0.1.39	0.1.36	0.1.37	0.1.38	0.1.39
0.1.40	0.1.41	0.1.42	0.1.43	0.1.40	0.1.41	0.1.42	0.1.43	0.1.40	0.1.41	0.1.42	0.1.43	0.1.40	0.1.41	0.1.42	0.1.43
0.1.44	0.1.45	0.1.46	0.1.47	0.1.44	0.1.45	0.1.46	0.1.47	0.1.44	0.1.45	0.1.46	0.1.47	0.1.44	0.1.45	0.1.46	0.1.47
0.1.48	0.1.49	0.1.50	0.1.51	0.1.48	0.1.49	0.1.50	0.1.51	0.1.48	0.1.49	0.1.50	0.1.51	0.1.48	0.1.49	0.1.50	0.1.51
0.1.52	0.1.53	0.1.54	0.1.55	0.1.52	0.1.53	0.1.54	0.1.55	0.1.52	0.1.53	0.1.54	0.1.55	0.1.52	0.1.53	0.1.54	0.1.55
0.1.56	0.1.57	0.1.58	0.1.59	0.1.56	0.1.57	0.1.58	0.1.59	0.1.56	0.1.57	0.1.58	0.1.59	0.1.56	0.1.57	0.1.58	0.1.59
0.1.60	0.1.61	0.1.62	0.1.63	0.1.60	0.1.61	0.1.62	0.1.63	0.1.60	0.1.61	0.1.62	0.1.63	0.1.60	0.1.61	0.1.62	0.1.63
0.1.64	0.1.65	0.1.66	0.1.67	0.1.64	0.1.65	0.1.66	0.1.67	0.1.64	0.1.65	0.1.66	0.1.67	0.1.64	0.1.65	0.1.66	0.1.67
0.1.68	0.1.69	0.1.70	0.1.71	0.1.68	0.1.69	0.1.70	0.1.71	0.1.68	0.1.69	0.1.70	0.1.71	0.1.68	0.1.69	0.1.70	0.1.71
0.1.72	0.1.73	0.1.74	0.1.75	0.1.72	0.1.73	0.1.74	0.1.75	0.1.72	0.1.73	0.1.74	0.1.75	0.1.72	0.1.73	0.1.74	0.1.75
0.1.76	0.1.77	0.1.78	0.1.79	0.1.76	0.1.77	0.1.78	0.1.79	0.1.76	0.1.77	0.1.78	0.1.79	0.1.76	0.1.77	0.1.78	0.1.79
0.1.80	0.1.81	0.1.82	0.1.83	0.1.80	0.1.81	0.1.82	0.1.83	0.1.80	0.1.81	0.1.82	0.1.83	0.1.80	0.1.81	0.1.82	0.1.83
0.1.84	0.1.85	0.1.86	0.1.87	0.1.84	0.1.85	0.1.86	0.1.87	0.1.84	0.1.85	0.1.86	0.1.87	0.1.84	0.1.85	0.1.86	0.1.87
0.1.88	0.1.89	0.1.90	0.1.91	0.1.88	0.1.89	0.1.90	0.1.91	0.1.88	0.1.89	0.1.90	0.1.91	0.1.88	0.1.89	0.1.90	0.1.91
0.1.92	0.1.93	0.1.94	0.1.95	0.1.92	0.1.93	0.1.94	0.1.95	0.1.92	0.1.93	0.1.94	0.1.95	0.1.92	0.1.93	0.1.94	0.1.95
0.1.96	0.1.97	0.1.98	0.1.99	0.1.96	0.1.97	0.1.98	0.1.99	0.1.96	0.1.97	0.1.98	0.1.99	0.1.96	0.1.97	0.1.98	0.1.99
0.1.100				0.1.100				0.1.100				0.1.100			

Double Hand Raps 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72 74 76 78 80 82 84 86 88 90 92 94 96 98 100

Target Do. 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72 74 76 78 80 82 84 86 88 90 92 94 96 98 100

Call Steel Files, Ruff, Bafford, Second Cut, and Smooth, 9 Inches and upwards, one third more than the Common Steel price.

J. M. Gwynne, Printer, Sheffield

One of Daniel Doncaster's File Lists of 1806 found amongst the records of Neath Abbey Iron Works, South Wales.

Doncaster Steel, Sheffield,
22 VII 1857

I take the liberty of handing
you a current Price List of Steel delivered in Sheffield.

Yours respectfully, H. Onecaster

BLISTER STEEL.

TERMS. Estimated Cost Price as under + 2 1/2 % com.
Cash within one month of date of invoice.

N.B.—Our No. 1 Temper is a Spring Heat; No. 2, Cutlery; No. 3, Shear; No. 4, File Heat; No. 5, Steel through; and No. 6, Hard Making.

Mark.	Size.	Temper.	Price.	Mark.	Size.	Temper.	Price.
English	1 1/2 in. sq	No. 2	14/5	CCND	3 in.	No. 2 & 5	19/10
H		No. 6	18/10	RF	3 in.	No. 2 & 14	19/10
HGS		to arrive	17/4	CD	1/2 x 2 in. 7	No. 2 & 3	20/11
C	3/16 x 1/4 in	No. 1 & 6	17/4	BF	3 in.	No. 2 & 5	21/11
UG		No. 6	17/10	RW ⁿ		No. 5 & 6	24/10
HP		to arrive	17/10	S ₊	ass't	No. 2 & 14	26/10
LSH	1/2 in. sq	No. 2	17/4	⊙	ass't	No. 2 & 6	27/10
⊙	3 x 3 1/4 in	No. 1	18/4	⊙	ass't	No. 5 & 9	28/10
EST		to arrive		B	ass't	No. 2 & 6	31/10
FW	3 in.	No. 2 & 14	19/10	W	3 in.	No. 2 & 6	31/10
KB		No. 5 & 6	19/4	OO	ass't	No. 2 & 6	34/10
FINSPONG	3 in.	No. 1 & 6	18/4	G	ass't	No. 2 & 6	34/10
H	3 in.	No. 2 & 14	19/10	⊙	ass't. size in furnace		35/10
⊙	2 1/2 in.	No. 2 & 14	19/10				

List of Blister Steel Qualities and Prices of 1857.