# Tweedale Tile Works

This was located on the east side of the Wellington to Bridgnorth Road near where it crossed the Shropshire Canal. (SJ 702 051).

In 1836, the Marquis of Tweeddale applied for a patent for a machine for forming drain tiles, roofing tiles and bricks. Two years later, another patent was granted for improvements to the machine, and details were published in the Mechanics Magazine in 1839. In 1840, by act of Parliament, the Tweeddale Patent Drain, Tile and Brick Company was established with authorisation to transfer the patents to more than twelve persons and establish a company to use the patents.[1] By 1842, the Tweedale Patent Drain-Tile and Brick Company had been formed with offices at 20 Whitehall, London. Twenty tile works in fourteen counties had been established, and they were looking for licensees for the patent. The license fees for draining tiles ranged from 12d per thousand for the first one hundred thousand to 9d for two hundred thousand and above, and for bricks, 9d per thousand for the first one million and 6d for three million and above. [2]

In 1840, James Hunt described the operation and the formation of the company set up to manufacture products using the patented machinery.

> THE machine invented by the Marquis of Tweeddale is on the simplest construction, and may be described as follows:—A trough is made at the head of the machinery of the exact width of the intended tile. Into this the clay is placed by a workman, and is drawn through two revolving cylinders, compressing it with great force, so as to give it a consistency and firmness unattainable by hand labour.
>
> The clay thus flattened by the rollers is drawn forward by the machinery on a web of canvas, and passed through moulds which give it the exact shape which it may be required to bear, when it is cut off, by a very simple process, at any length which the maker may desire: thus, every tile being pressed in precisely the same manner, passed through the same moulds, and cut off at exactly the same length, they all obtain a uniformity of size and construction which is not to be attained to a similar extent by any other manner.
>
> The tile, being thus made, is carried away by an endless web passing over rollers which are turned by the same machinery that makes the tile, and thus travel of their own accord, without the labour of carriage, between the sheds erected for their reception, in which they are placed in rows on either side by labourers stationed for the purpose.
>
> By these means, four or five men can in a day make with ease from 8 to 10,000 tiles, all of uniform shape, size, and consistency, and when formed of good clay and properly burnt attain almost the durability and firmness of stone. It may indeed be safely affirmed of them that if properly planted in the soil, they would last almost forever.
>
> Nor is durability after the tile is laid down the only advantage in its construction; for all who have used the tiles made by hand will have experienced how great a loss arises in the breakage occasioned by their carriage from the tile-yard to the spot where they are to be used, as well as by the labourers employed in putting them into the ground; increasing their cost often as much as ten per cent., which loss falls entirely on the consumer.
>
> The patent for the manufacture of these tiles has been assigned to a company whose object is to introduce it extensively throughout the kingdom: possessed of large capital, they have the means of erecting the most efficient working establishments and of producing tiles of superior qualities at a cost much under the average market-price, and they are prepared to

[1] Sessional Papers of The House of Lords Volume XLI, 1845, Ann index to the Statutes, Public and Private 1801-1844.

[2] The Pattern System, H I Dutton

establish works on the estate of any landowner whose consumption of tiles, coupled with the demand of the neighbourhood, is sufficient to justify the necessary outlay for building sheds, kilns, &c., and to manufacture the tiles at a price to be agreed upon; or if works are at present in operation, the company are willing to become the tenants of them, paying a fair rental for the buildings and a royalty per thousand for the clay.

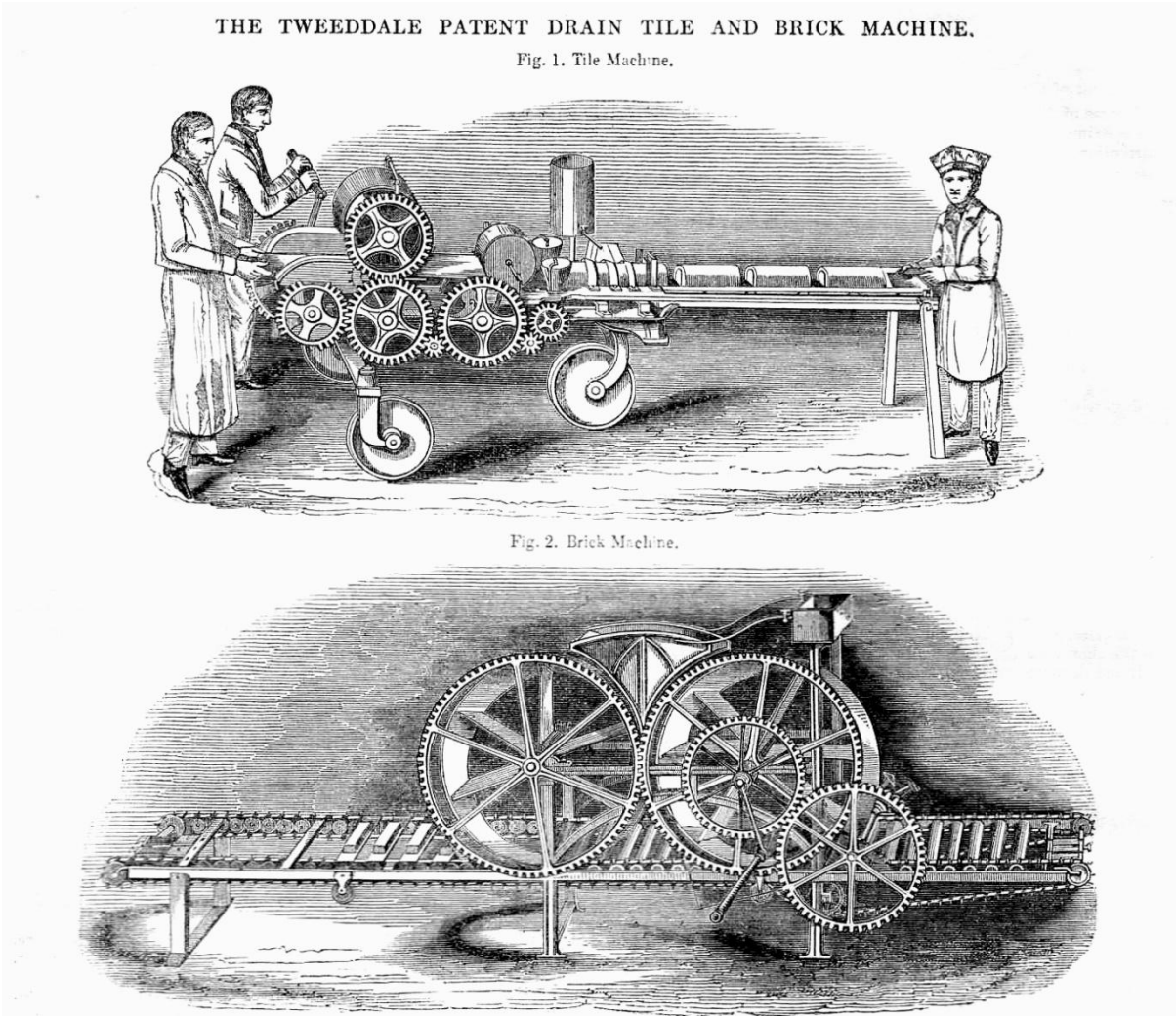



*Figure 1. The Civil Engineer and Architects Journal, June 1843.*

They have at present establishments working at Strathfield Saye, Hants; Broom Hill, near Alnwick; Sandon Bank, near Stafford; Thatcham, Berkshire; and Hanwell, Middlesex; Chippenham, Wiltshire; Brixton Hill, Surrey: and are proceeding with the election of others at Reading; Hull; Howden, Yorkshire; Coldstream, Berwickshire; Windsor Great Park, for Her Majesty's Commissioners of Woods and Forests.

The price of the patent tiles varies with the cost of fuel, &c., but the company have found no difficulty, where the demand has been considerable, in supplying them at a reduction in price varying from 10 to 20 per cent.

They are 15 inches in length, or about one-fifth longer than those usually made, and of various sizes to suit the views of purchasers, with a sole or flat tile at the bottom, on which it rests,—this mode of laying tiles being found far superior to any other in the efficiency and permanence of the drain formed by it, and by the exclusion of all vermin, which, if they find

> a means of burrowing under tiles laid on the ground without a sole, produce incalculable mischief.[3]

A general estimate for erecting a patent tile works was:

| | | | |
|---|---|---|---|
| The sheds, which will contain 11,000 tiles | £105 | 0 | 0 |
| The Kilns, which will hold about 12,000 tiles, cost | 85 | 0 | 0 |
| A cast-iron (pug) mill | 13 | 0 | 0 |
| A Tweedale patent tile machine | 40 | 0 | 0 |
| Licence | 2 | 12 | 6 |
| Incidentals | 10 | 0 | 0 |
| | 255 | 12 | 6 |

The cost of making tiles was said to average about twelve shillings per thousand. The flats cost exactly half, or six shillings per thousand.[4]

The Madeley Works had been established by 1840. The foreman of the Madeley Works was Mr Finch, and in 1843, the company advertised for sale:

> No 1 tiles 15½ by 3½ in 29s, No. 1 Soles 17s, Medium size tile 15in by 4 in 35s,
> No 2 tiles 15½ by 5 in 48s, Bricks 24s, Roofing tiles 25s,
> Flooring Quarries: 6in 40s, 7in 40s, 8 in 80s, 9 in 95s.
> Dressed Bricks, Cylindrical & Conical Pipes, Ridges, Hip and Valley Tiles &c &c[5]

In 1845, they were advertising reduced prices, suggesting they were unable to sell their products.[6] And in September, the Trustees of the Tweeddale Patent Drain Tile and Brick Company put their works in Madeley up for sale.

> TO BRICK AND DRAIN-TILE MAKERS.
> MR. TISDALE has been honoured with instructions from the Trustees of the Tweeddale Patent Drain-tile and Brick Company to offer for public competition, on Friday, the 26th day of September 1845, at the Tontine Hotel, Ironbridge, at four o'clock in the afternoon, subject to conditions then to be produced.
>
> THE unexpired term of all that valuable brick and tile yard, now in the occupation of the above Company, comprising an area of 5a. 1r. 0r. situate at Madeley, in the county of Salop, together with all the extensive and newly-erected shelving, capable of drying about 50,000 drain tiles, large kilns, and three circular ovens for burning, and an excellent LARGE well-built SHED, with drying STOVES for the manufacture of flooring quarries, roofing tiles, &c. store room, and stabling attached, an excellent STEAM ENGINE of ten horse power (new within four years), rollers and horizontal pug mill for preparing the clay, with other conveniences, the whole of which may be removed by the purchaser at his option at any time immediately after the sale.
>
> Also, the Marquis of Tweeddale's machinery with license for using them at a moderate rate of seigniorage, and the occupation of a comfortable Genteel House at a moderate rent.
>
> The LEASE of the above premises expires on the 25th day of December 1861, (determinable, nevertheless, on the 24th day of December 1847, or on the 25th day of December 1854, at the option of the lessee.). There is an inexhaustible mine of clay on these premises, and

[3]. Letter from James Hunt, 10 Whitehall, London 19th November 1840 Royal Agricultural Society Journal 1841.
[4] The Herald 2nd January 1845. Page 6.
[5] Shrewsbury Chronicle 27th October 1842
[6] Eddowes Salopian Journal 12th February 1845

> machinery ready fixed for working it at a trifling expense. This IMPORTANT PROPERTY possesses great local advantages, as it is situated in the centre of a thriving MINING DISTRICT, and COAL is delivered from the adjoining works on the premises at bank prices. The main turnpike road from Wellington and Bridgnorth adjoins, and the means of transit to Shrewsbury, &c. by canal and Severn is most desirable. The purchaser will have the power of converting the works for any other purpose of manufacture, such as a foundry, &c. for which it is most admirably adapted, as there is a great prospect of a Railway close to the Tweeddale works.[7]

The auction was repeated on 13th October, and patent draining tiles were still being advertised for sale from the works in 1846. Although the patent machine continued to be used, the Company gradually disappeared from the records, with works through the country closing and the equipment being sold off into the early 1850s

By August 1846, the Madeley Works had been taken over by John Davis, and he was now calling them the Hales Field (late Tweeddale) Brick and Tile Works. Davis was advertising Bricks and Tiles, Drain Tiles, Pipe Tiles, etc. and may have been using the patent machinery.[8]

At the time of the 1849 Madeley Tithe Survey, Davis was also occupying the public House on the main road adjacent to the works. This was presumably the Tweeddale Inn, which by 1878 was occupied by George Ray. Davis was still at Tweeddale in 1856.

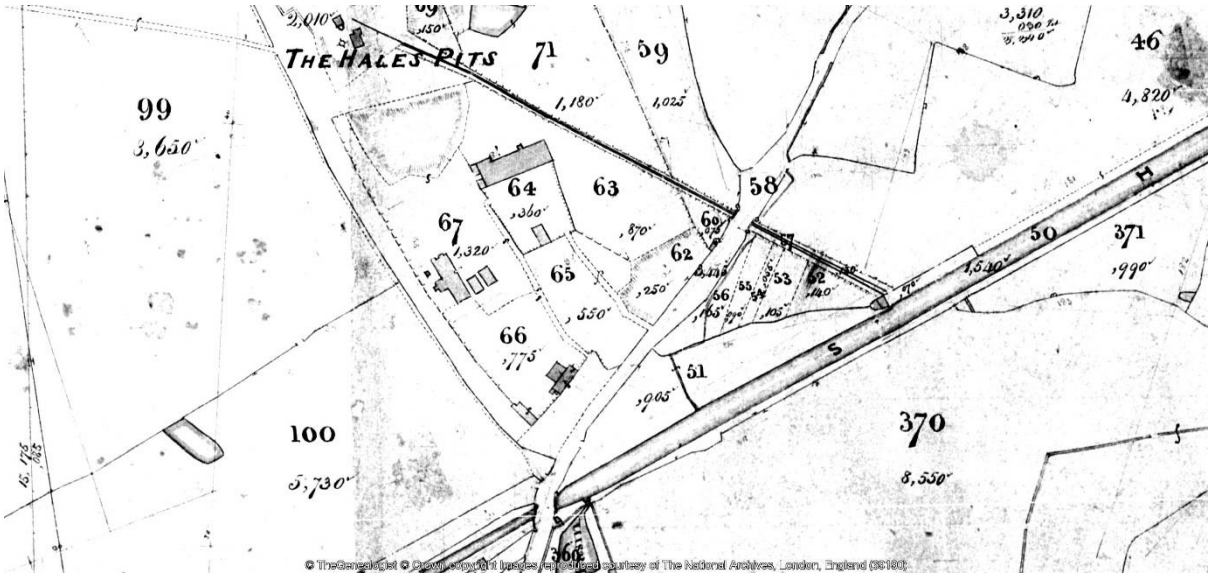



*Figure 2 1849 Madeley Tithe Map. The 1847 apportionment lists Plot 66 Public House, 67 Brick Kiln, Brickyard & Clay Pit, both in occupation of John Davies and owned by Edward Edwards. Plots 64 and 65 are a workshop and timber yard operated by Thomas Jones*

This may be the same John Davis who, by 1849, was also operating the Madeley Wood Brick and Tile Works in partnership with George Davis Junior. The Tweedale works were still operating in 1853, at which time Davies was also 'farming' the tolls at the Meadow Gate, near the bottom of Coalbrookdale. [9] The works had disappeared by 1881 when the 6" OS map was surveyed.

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[7] Eddowes's Shrewsbury Journal 24th September 1845. The also put up their works in Derby up for sale Derby Mercury 30th July 1845

[8] Shrewsbury Chronicle 28th August 1846.

[9] Shrewsbury Chronicle 4th November 1853. The works were called the Tweeddale Brook Works.

# Tweedale Tile Works

No reference can be found to an area called Tweedale before the establishment of these works, so it is possible that the area now known as Tweeddale got its name from the Marquess of Tweedale's brickworks. The Madeley Tithe Map apportionment lists the fields around the brickworks as 'Halesfield'. The first reference to Tweedale, unrelated to the brickworks, in the Shropshire newspapers is in 1848, when Robert Jones owned the Tweedale sawmill.[10] This was probably the one adjacent to the brickworks, listed as operated by Thomas Jones on the 1847 Tithe apportionment. The first mention of the placename was in 1865, and the name may have come from the Tweedale Inn, which was presumably named after the brickworks.[11]

S. Dewhirst

[10] Shresbury Chronicle 18th August 1848.

[11] Shrewsbury Chroncile 28th July 1865. A brass fitter ahd collapsed fromsunstroke in the road at Tweedale, Madeley.