

VISIT TO THE WORKS OF MESSRS. E. J. AND J. PEARSON,
LTD., STOURBRIDGE.

Wednesday, March 15th, 1922.

THE firm dates back to 1860, when it was commenced under the above title at the Delph and Tintam Abbey Firebrick Works near Stourbridge, and between 1861 and 1920 the output has increased nearly seven-fold.

The fireclay mines are situated at Delph, Crown, Iron Jack, Birch Tree, Ravensitch, and Homer Hill, whilst the firebrick works are located at Delph, Tintam Abbey, Crown, Homer Hill, and Brettell Lane.

The Tintam Abbey works are now used solely for the manufacture of glasshouse pots. Delph works have been greatly enlarged, the latest addition in 1920 being the building of a new fifteen-chamber continuous kiln. The Crown works were built in 1877, and have since been much enlarged. The equipment includes a twenty-eight-chamber continuous kiln built in 1912. Homer Hill works, together with the mines and estate, belonging previously to Samuel Evers & Sons, were purchased in 1916 to cope with the heavy pressure of war work.

Brettell Lane works, belonging previously to the late Mr. H. T. Hickman, were purchased at the same time as the Homer Hill works.

From these different pits the Company is able to offer clays of varying characteristics, some of them best suited for one purpose, and some for another. Thus, the various products of the Company are supplied for glass works, and for gas, steel, iron, cement, pottery, engineering, spelter, and many other industries. The number and variety of different sizes of firebrick kept in stock for so many different purposes are surprising. It is said that the Company attempt to keep as many as 4,000 different sizes and patterns always in stock, quite apart from the large number of "specials" continually being made for one purpose or another. The Company's manufactures, when in full swing, entail a consumption of considerably more than 1,000 tons of clay per week, and it is a matter of pride to the Directors that they have kept on their works on full time until this month, March, 1922.

Careful records are kept of every batch of clay used for different orders, whether for tank blocks, pots, or any other purpose, and

regular tests are made as to the refractory standard, porosity, shrinkage, and composition.

The Company fully recognises the importance of improving the life of tank blocks. Co-operation with glass manufacturers is welcomed and is already bearing good fruit. The Company is prepared to work to definite undertakings as regards analysis, refractory standard, and porosity. Samples were shown to the visitors having a porosity of under 20 per cent. in a mixture containing 70 per cent. of grog.

It is recognised that owing to the changed conditions of glass works practice some alteration to the old standards for tank blocks is necessary. The following analysis is put forward as perhaps the most suitable for present day requirements for flux line purposes.

	per cent.
SiO ₂	60.1
TiO ₂	1.6
Al ₂ O ₃	34.8
Fe ₂ O ₃	1.5
CaO	0.3
MgO	0.5
Alkali	1.3
	100.1
Porosity	22.9 per cent.
Refractory standard. Cone 31—32.	

At the Homer Hill works a considerable development is about to be undertaken at once, namely, the building of extensive soring pits capable of holding many hundreds of tons of tank block clay.

Engineering Department.

The Company undertakes, not only the supply of materials, but also the actual setting of retorts whenever required, and have secured very excellent results in many instances.

In this Department also, the setting of boilers is undertaken and special attention is directed to the patent asbestos-cushioned seating blocks and flue covers. Out of the many hundreds of boilers set on this principle, the firm has never been called on to replace a single piece of asbestos between the seating blocks and the boiler. The economy due to a perfect seal between the side and bottom flue must obviously be considerable, and the life of the boiler is greatly increased owing to the fact that no abrasion takes place on the line of contact between the boiler and the seating blocks.