

THE MAKING OF CLAY PIPES.

(SPECIALLY CONTRIBUTED.)

THE greatest centre in the world for making the familiar churchwarden pipes and the short-stemmed "clay jacks" is Gouda, a little city about 12½ miles from Rotterdam, in Holland. Its population is in excess of 24,000, and it has been famous for centuries because of the famous clay pipes which are made there and which are sent all over the world.

It will be probably news to many to know that within

little tact and judgment, might at the present day have been a huge source of revenue to the city, for, about the years 1780 to 1800, the yearly turnover of the Leeds Pottery amounted to well over £30,000. Of course, such a sum as mentioned may, at the present day, seem very trifling, but then we must consider the huge growth of industries all over the country from that time up to the present day and the increase in the value of money. The Leeds potteries were in full swing about 160 years ago, and the Potteries occupied a very extensive site between Jack-lane and the old Wagon-rd., at Hunslet. The only reminder of the Leeds pottery to-day are a few

old buildings and one or two small firms here and there scattered about the city.

The output of the Leeds pottery seriously affected at one time that of Staffordshire, and a very big European and American trade was done, and this especially refers to South America, as Savile Green, the last of the great Leeds potters, frequently crossed the herring pond to Buenos Aires to sell Leeds pottery ware; but things have altered considerably since that day, and what was once a thriving pottery can only be seen in the old-time buildings scattered about the district in which the industry was carried on.

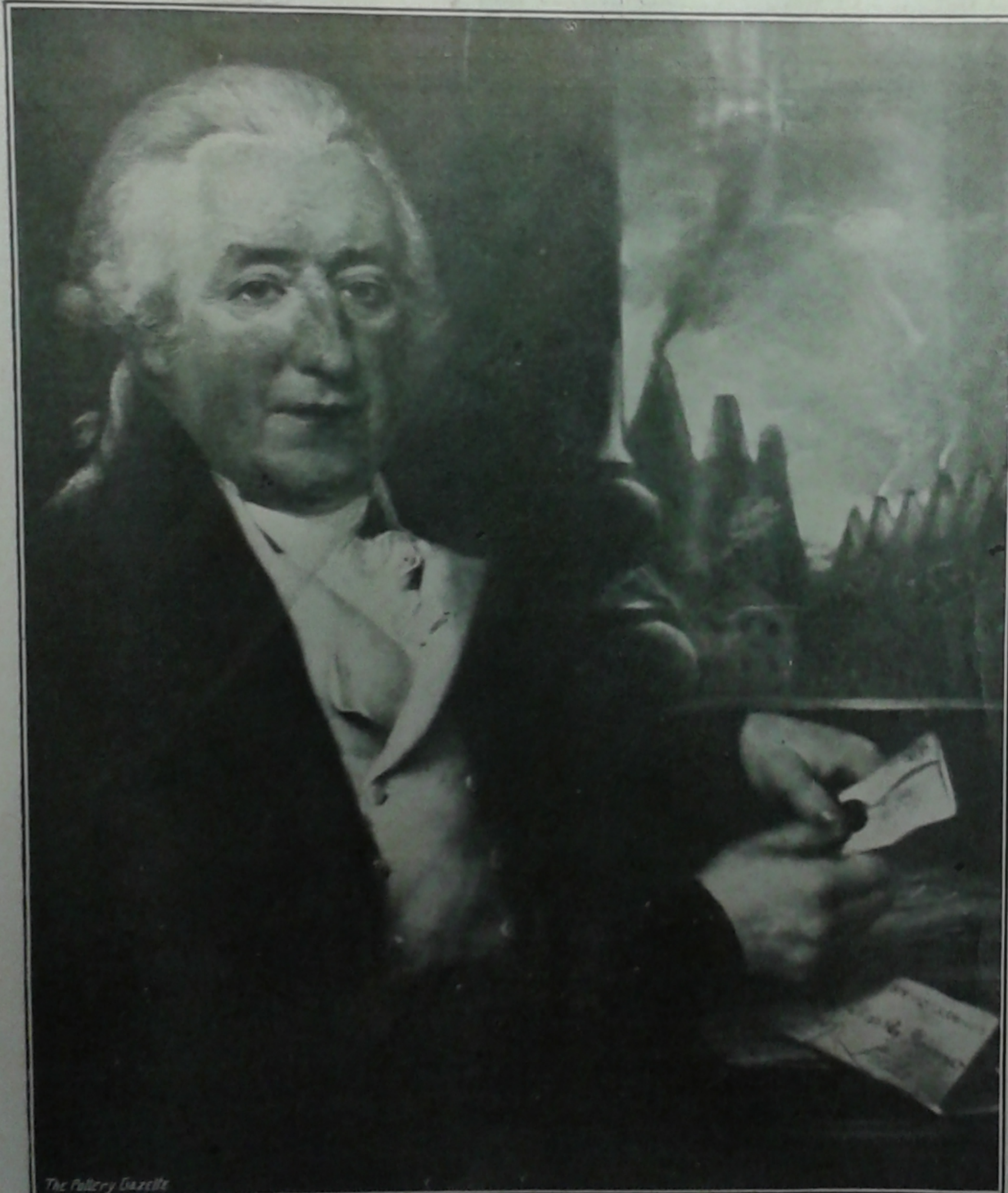
Along with the pottery a big trade was done in the manufacture of clay pipes. At one time as many as 20 to 30 firms were engaged in the industry, but with the growth of public favour of the cigarette and the decline of the custom of publicans in the hotels and inns of giving clay pipes away to those who frequented their hostels, the industry has declined, until now only two or three firms are engaged in the work. But the war has affected everything, even to clay pipes, and the churchwarden, with its long stem, so admirably shown in the well-known tobacco advertisements, is again finding public favour.

The City pipe works at Leeds, carried on by Mr. Strong, are unlike the Gouda works so far as the supply of the clay is concerned, for the Dutch pottery centre gets its clay from the little river which flows by the

city, whilst the Leeds works get it from St. Austell, in Cornwall; and it is needless to say that the clay is in every way an exceptional one for the making of pipes.

In its preparation it is first roughly cleaned and tempered according to the requirements. The first process in pipe-making is rolling by hand the clay into a rough shape of the pipe—these are called rolls; the clay then has to be dried a little harder, after which is done the moulding, which is performed in two halves.

The boring of the stem is done with a wire which fits into the mould. The mass is placed into a small press to shape the head, the wire then being taken out. The



MR. SAVILE GREEN, THE FAMOUS LEEDS POTTER OF OLDEN TIME.

the busy city of Leeds, in Yorkshire, there has existed for well over 200 years a pipe-making industry, and in one particular case the "secret" of manufacture has been closely guarded by being carried on in one particular family. Owing to the difficulty of getting the famous Gouda churchwarden clay pipes, the local industry has been given a new life.

Leeds, as a pottery city, or, to be more correct, a Pottery centre, had at one time a very extensive connection and reputation so far as the finer arts of the potter is concerned, and it makes one wonder why so important an industry was allowed to lapse which, by means of a

pipes again have to stand to dry and set a little more, and the finishers, in this case females, scrape all the seams and see to it having an outlet in the stem. The pipes are then thoroughly dried and placed in the kiln for burning, which takes about twelve hours. Potting is the term given by the pipe-makers when they put the pipes into

the kilns, which is a very difficult operation; it is self-evident

in the same year, consisting principally of plate glass and technical glass, amounted to 3,145,000 kr. Artistically decorated glass and superior kinds of crystal are made principally at the large table glass works at Kosta, Reijmyre, Eda, Fare, Foglavik, and Lammared, while the smaller works manufacture more common goods for regular use. Some years ago the larger works in the different branches amalgamated. In the window glass



FILLING THE KILNS.



FEMALE WORKERS FINISHING CLAY PIPES.



THE FINISHED PIPES.

they require very careful handling, as they are so soon broken. Whilst the making of clay is not by any means the greatest of the potter's art, yet it requires no small skill to make a clay pipe, for very little machinery is used, every operation being mostly done with the hands.

THE SWEDISH GLASS INDUSTRY.

THE origin of the Swedish glass industry is to be traced to a works started between 1640 and 1650. This factory existed till 1815, making both common and finer glass ware, but owing to various vicissitudes it never attained important dimensions. In the middle of the eighteenth century the industry began to develop through the starting of new works. The older factories still in existence are Lammared in Vastergotland founded 1740, Kosta in Smaland 1741, Sando in Angermanland 1845, Liljedahl in Varmland 1761, Reijmyre in Ostergotland 1808, also Eda Swarte and Glava. To-day, says the "Crockery and Glass Journal," of New York, Sweden possesses an important glass industry carried on in sixty works. Of these twenty-eight are occupied in table glass manufacture; ten in making window glass, and sixteen in bottle making. Some of them carry on different branches. The productive value in 1912, the latest available report of the table glass plants, was 5,137,000 kroner (a kroner is about 28 cents in American money); of the bottle making works, 4,493,000 kr., and of the window glass works, 11,922,000 kr. The number of workmen employed during the same period was 5,182. During 1913 the value of exports from Swedish glass works amounted to 4,019,000 kr. Imports

branch may be mentioned Forenande Fensterglass brukens Aktiebolag; in the bottle making branch-Aktiebolaget Surte-Liljedahl; and in the table glass branch Aktiebolaget De Svenska Kristallglasbruken, the last-mentioned company with a production in 1912 valued at over two and a half million kr., occupying the third place with respect to output among the glass works of the world. The glass industry of Sweden is a most important one, as it gives more work for men than many of the other industries, since much of the work is done by hand. It is stated that on an average labour represents about 50 per cent. of the cost of the finished product, while the cost of the raw materials is about 10 per cent. These raw materials are imported, as is also, to an ever-increasing extent, coal, which is used for the furnaces instead of wood fuel.

Crockery and Glass Ware are mentioned in a British Consular Report from Tengyueh among a number of articles formerly supplied by Germany and Austria-Hungary, the trade in which is capable of development.

Glass and Earthenware were among the imports to the Dominican Republic, which were virtually monopolised by cheap German goods prior to the war, and to which the attention of British exporters might now be profitably directed.

