

A Personal History of Chance Brothers

by Ray Drury

“May 18th, 1824 Robert Lucas Chance purchased the works of the British Crown Glass Company; from those beginnings the internationally known glass company of Chance Brothers Limited has developed.”

Now in spite of rumours to the contrary I was not about at this time so my treatise will only be from 1949 to the close of the flat glass division in 1976.

Joining Chance as an apprentice draughtsman, the company was vast, employing thousands of people and working 24 hours a day 365 days a year. The products were many and included engineering commodities as well as glass. These were lighthouses, submersible pumps, standby generators and switchgear. On the glass side you might say that if it was made in glass then Chance Brothers made it. The labour force was of course local people, the “salt of the earth” who showed tremendous loyalty to the company who in their turn were loyal to their employees. Generations and siblings worked there and it was not uncommon to have three generations employed at the same time. The apprentices had their own club in the Malt house on the other side of Spon Lane. The Recreational side of things was well catered for on their grounds in Oldbury Road. When you worked at Chance’s you were part of a large family, I don’t think firms like this exist anymore.

Taking a look at the engineering side of the company where the main products were lighthouses, Chance not only made the glass lenses but all of the mechanisms, only the stonework was made by others. The shiny brass mechanism was a thing of beauty and was

driven by a relatively small weight which had to be winched up through the centre of the tower to make the light unit rotate as it descended. This unit was floating on mercury so that it turned easily without friction. Chance also made large fog-horns which were heard all around the district when they were tested. A German named Sumo was travelling around trying to find someone to manufacture his idea of a submersible pump. His travels stopped at Smethwick. Now if you suck water up with a pump, the limit is 32 feet a fact of physics. If you submerge a pump down a borehole you can pump up to any height that the pump is capable of. Seemed a good idea and it appealed to Chance entrepreneurs. Following this the automatic switchgear for the then GPO and also large diesel generators as standby power supplies for industry and commerce came about. Engineering products ceased at Chances after Pilkington Brothers bought the company; their interest was essentially glass so the engineering production was sold to Messrs' Stone Ltd.

The main thing Chance is known for is of course glass. Glass be it clear, coloured, heat resistant, optical, blown, pressed drawn or rolled has all been made at Spon Lane Smethwick. With regard to location Chance also had works in Glasgow (making rolled window glass) Malvern (making laboratory glass) and Umbroc (a shadow factory for optical glass). The optical department made all sorts of lenses ranging from spectacle lenses to lighthouse optics. Many types of marine lenses were made and a world famous one was the Chance light which was at the end of nearly all runways to guide aircraft down. I wonder how many still exist at the end of runways? The quality of the optical glass was superb and was melted in pots in small furnaces.

the surrounding warehouses also filled up so there was no- where to put it production ceased.

The biggest department at the works was the Rolled Plate with three major production plants rolling out glass for the world's windows. Rolled glass is essentially patterned glass as the other type of window glass is sheet glass which is clear. We do not talk of "Float" glass as we were never involved in this at Chance Bros. The finer patterns like "Reeded" and "Flemish" could only be produced at Chance Bros. and present day patterns do not have the sparkle of the old Spon Lane glasses. The rolling machine was like a massive wringer with all sorts of complications built in. It could be adjusted in all manner of ways while still rolling glass. The bottom roller had the pattern on and the top roller was smooth. The glass came out of the furnace with the consistency of treacle and went between the rolls. It could not be touched or it would mark so it was supported on a cushion of air until it had set, then onto asbestos rolls to travel through an annealing lehr. Out in the open it was cooled then cut and carried off. The cutting and carrying was all done by hand originally, with men carrying thin sheets of glass up to ten feet by five feet, but this was eventually automated. Spon Lane led the world in this and was copied by many glassworks internationally. The other type of glass was "Sheet" long before "Float" was invented. This was drawn upward as it could not be rolled out onto rollers as this would mark it. The seven storey building was built this high to accommodate this process. The ribbon of glass was drawn upward from the furnace until it had hardened enough to be clamped by rollers then annealed and cut. By this time it was seven storeys high. The glass was then cut and processed coming down the building. Another product was called "Profilit" which was of German origin and was a glass channel ten inches by three and a half inches which had the advantage of being

glazed in long lengths without the need for glazing bars. Some of this was used in the new Liverpool Cathedral. Problems with fire regulations led to the demise of this product. Flat coloured glass was also made by gathering a large ball of molten glass, blowing it into a large hollow ball and then swinging it over a pit to form a large cylinder about two feet in diameter and six feet long. The ends were cut off while it was still hot by a cold water drip and the cylinder split along its length. This was then taken to an oven and the cylinder was opened out to form a flat sheet.

Chance Bros. were constantly improving and developing and the old processes were gradually phased out until the main products of Rolled plate and fluorescent tubing became the main products, with Fiesta and Microscope glass still being made. The rolled Plate division ceased production in 1976. The tubing division and the rest of the site finished five years later. Microscope glass and Fiesta ware continued to be made for a short time after this on a new site developed at Spon Lane.

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