

VISIT TO THE CHARLTON WORKS OF MESSRS. UNITED GLASS BOTTLE MANUFACTURERS, LTD.

A LARGE party of members (about 80) visited the works of the United Glass Bottle Manufacturers at Charlton, London, S.E. 7, on December 14th, 1921, and spent some two hours making a thorough inspection of the plant.

The works, situated near the river Thames, occupy some 35 acres of land, and are designed to operate automatically as far as possible, and to utilise labour-saving devices and up-to-date machines. The raw materials are conveyed (by a bucket-conveyor) from the railway trucks into concrete bins capable of holding about 600 tons of sand. The sand is passed through a rotary hot air drier before being filled to the sand bin. The bins are arranged in a row astride of a track along which an electrically driven car and weighbridge rides, collecting the requisite amount of raw materials from each bin through hoppers at the bottom of the bin operated by levers which can be controlled from the operator in the car. The cullet is crushed, elevated, and conveyed on a belt conveyor to the cullet bin, passing over a magnetic separator.

After collecting the batch, the car discharges its contents into a rotary mixer, from which the batch is elevated to a car running some 40 feet above the ground level adapted to discharge into a row of hoppers situated over the filling end of the furnaces. These hoppers each contain about 40 tons of batch, rather more than one day's output, for the furnace which the hopper feeds. At the time of the visit three furnaces were in operation, two making amber glass and one high quality flint glass. Two Owens machines are operated from each furnace, but owing to the fire which had broken out on the works a few weeks previously, two machines were temporarily out of action. A fourth furnace was nearing completion.

The machines normally produce all types of bottles; at the time of the visit 1 oz., 4 oz., and 16 oz. Bovril bottles were being made, and 8 oz. medical bottles. About 30 tons of glass per day were being drawn from each furnace, the machines making from 20-60 bottles per minute (depending, of course, on the size of the bottle). The lehrs, which were of the muffle type, were situated

below the level of the furnace floor, the bottles being conveyed down shoots to the front of the lehrs. Each machine employs two lehrs, making in all therefore, 12 lehrs, and, in addition, four others are nearing completion.

The works (lehrs, furnaces, boiler plants, etc.), were operated on oil fuel (Shell Mex.), and oil firing was found to be giving very satisfactory results. Air blown burners were in use at pressures of about 25 lb.

The factory is equipped with a mould shop for supplying the machines with the necessary equipment and power stations for the production of the pressure and vacuum needed for the machines.

Those of the party who did not leave early were entertained with light refreshments.