



### PLANT OF THE DON VALLEY BRICK WORKS, TORONTO.

The subject of this article will need no introduction to our readers, as there is probably no company in Canada engaged in the manufacture of building material that is better known than the Don Valley Brick Works. Mr. Robt. Davies, the present owner, has been operating the plant since 1901, previous to which time it was conducted by Taylor Bros.

We will endeavor to give a clear and concise description of the plant of this company, which through many additions and improvements having been made, stands today, one of the largest and most complete brick factories in America.

The company are the owners of about 115 acres of rich clay land in the Don Valley and possess a fine deposit of shale which seems to be inexhaustible.

The method of mining the shale was changed some years ago tracks having been constructed to the

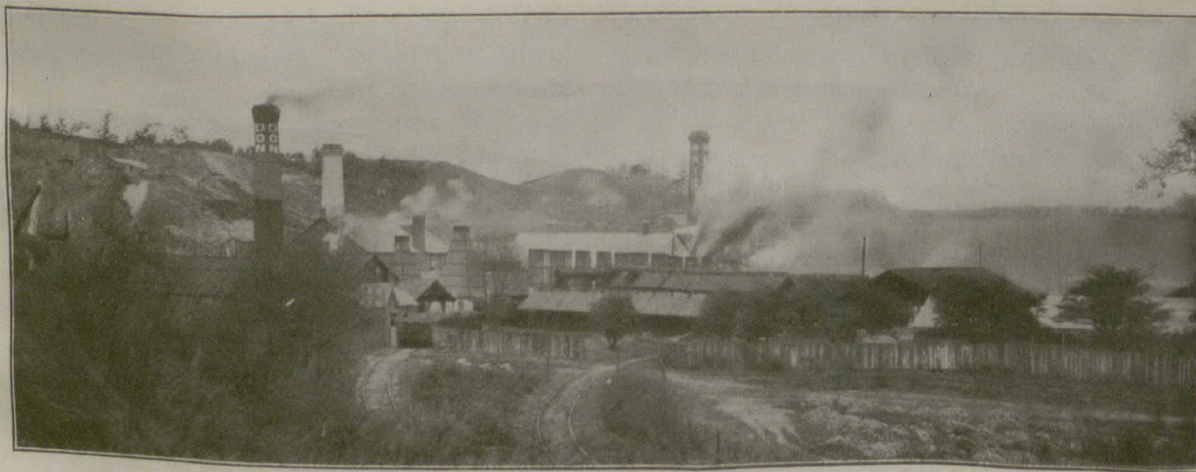
h. p. waterous engine and an 80 h. p. Leonard engine.

The shale from the main bank is used for the manufacture of the stiff-mud product. There are two driers used by this plant one using waste-heat and the other waste-heat and steam. The total capacity of the two driers is 288 cars at one time and it takes 24 hours to dry the product.

The material taken from the top of the bank is utilized for the dry-press brick. After being crushed the material is mixed at the dry pans, of which there are three, screened and delivered to the presses. The down draft kilns are used entirely for burning the products of this plant.

The demand for enamelled brick has greatly increased during the past two years and the fireproof brick department is also kept very busy.

We now come to the kiln department which is not only very interesting, but a very important section of the plant. The famous continuous kiln which is



GENERAL VIEW OF YARDS, DON VALLEY BRICK WORKS, TORONTO.

bottom of the pit and the cars hauled to the plant by a gravity arrangement.

The material for the red products is taken from the main bank and conveyed to a crusher which can handle material for 50,000 brick daily, while for the light-colored products the clay above the shale is used.

There are two soft-mud plants, having a total capacity of 41,000 brick per day, equipped with machinery supplied by Doig & Company, Toronto. The products of these two plants are dried on rock and pallet cars holding from 240 to 270 brick each, in two driers using waste heat and steam. One drier has eight tracks and uses both waste heat and steam drying the product in 24 hours, while the steam drier has 12 tracks and dries its products in 36 hours. The burning is done in down draft and continuous kilns but the former is preferred for soft-mud manufacture. The power equipment for these plants consists of a 50

a very popular topic of conversation in the trade, is probably the largest of its kind on the continent. It is 270 feet long and 150 feet wide, has 26 chambers each holding 50,000 brick and its daily capacity is from 85,000 to 100,000 brick, just about one-third more than all the other kilns combined. The other continuous kiln has 14 chambers which hold 122,000 brick each. The down-draft kilns are eight in number, there being from nine to twelve furnaces on each side. The average capacity is 175,000 brick each. There are also five enamel kilns with a weekly capacity of 10,000 brick each.

A 175 h. p. Wheelock engine, supplied by Goldie & McCulloch, Galt; a 225 h. p. high-speed engine, supplied by E. Leonard & Sons, London; a 125 h. p. Brown engine, supplied by Worswick, Guelph, and several fan engines of 40 h. p. each, complete the power plant.

There are also machine, carpenter and blacksmith