

minute; and one belt-driven single-stage centrifugal sewage pump connected to a 40-h.p. gasoline engine, capacity 750 Imperial gallons per minute. The electric units, which are operated by the Cutler Hammer self-starting device, take care of the daily flow of sewage, the gasoline unit being used only in cases of emergency.

The sewage treatment plant is situated on a plot of land north of the Grand Trunk and Railway and facing Grand Avenue, and consists of sedimentation tanks, sprinkling filters, chlorine house, humus tanks and effluent pipe.

These works are only designed to take care of a population of 3,000; additional units may be added as the population increases.

Fig. 1 shows the general layout of the plant. Each building is roofed in for protection from the weather.

Figs. 3 and 4 show plan and cross-section of the sedimentation tanks. These tanks are in duplicate and of the two-story type. Each upper compartment is 30 ft. in length by 15 ft. in width by 7 ft. in average depth. The sewage enters the tanks through submerged weirs and passes through at a slow velocity; the solids falling to the bottom impinge on the sloping aprons and pass through the trap into the sludge tank or lower compartment. This sludge tank has an estimated capacity of six months' sludge storage. The head of water in the tank is utilized for driving out the sludge from this compartment into a 10-inch pipe leading to the drying beds.

Figs. 5 and 6 show plan and section of the sprinkling filters. Each filter is 100 ft. in length by 25 ft. in width by 6 ft. in depth. It is proposed to use the travelling distributor in these filters, but it has been found impossible to obtain them on account of the War Office taking over the factories in which they are built. The plant is, therefore, at present being operated without filtration. Brushwood is the media which will be used.

Fig. 7 is a plan view of the chlorine house and gives a very excellent idea as to its general arrangement. The chlorine solution tanks and the piping arrangement are quite clearly shown.

Figs. 8 and 9 show plan and section respectively of the humus or final settling tanks. These are in dupli-

cate and in design are similar to the sedimentation tanks shown in Figs. 3 and 4.

The effluent from these tanks is carried by means of a 24-inch vitrified pipe to the mouth of Mimico Creek, a distance of about half a mile.

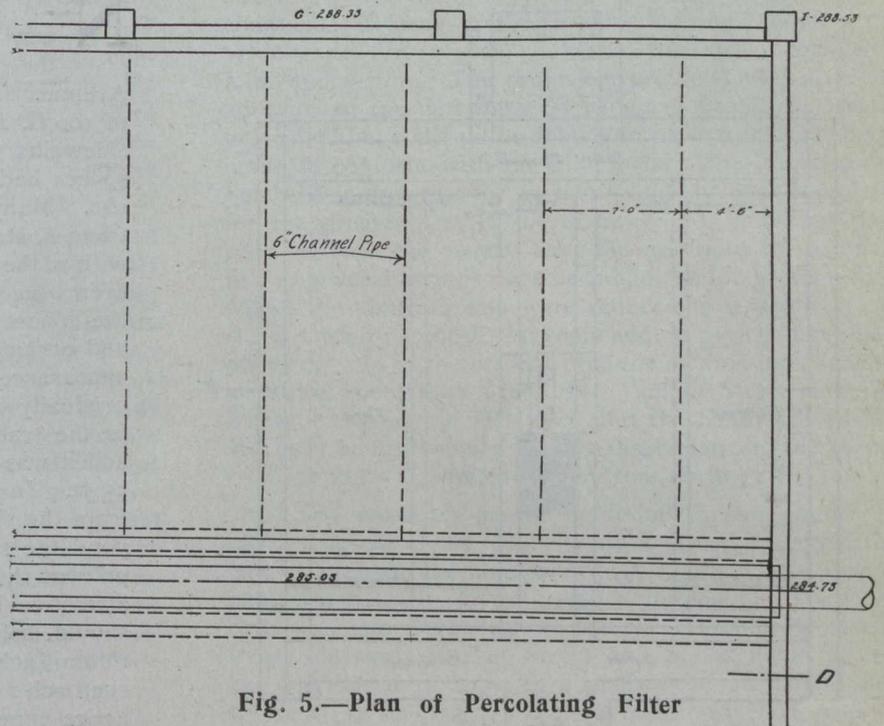


Fig. 5.—Plan of Percolating Filter

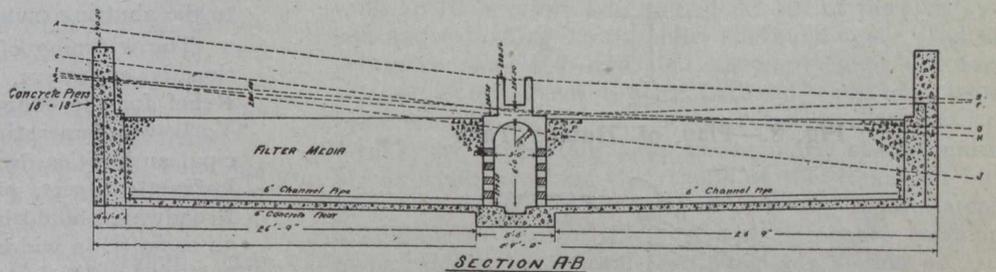


Fig. 6.—Section of Percolating Filter

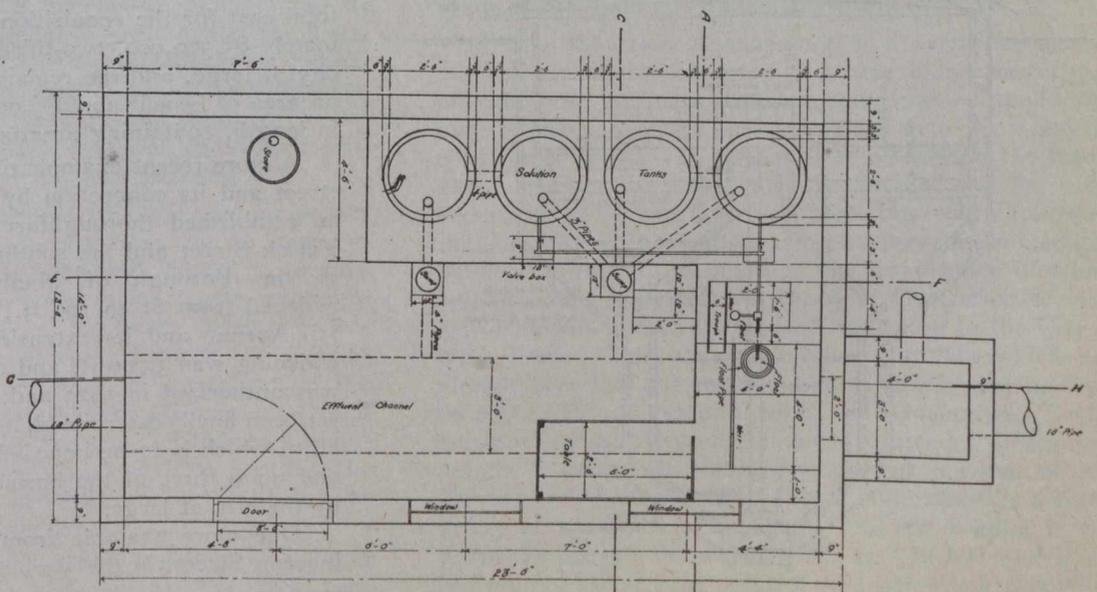


Fig. 7.—Plan of Chlorine House