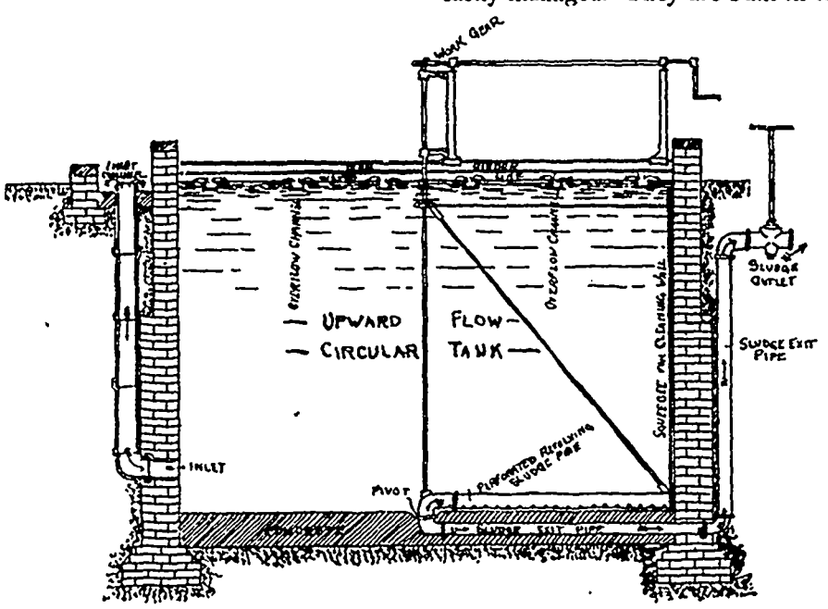
ning to see that simple and inexpensive methods give the best results.

The manufacturing town of Bradford built, nearly twenty years ago, about the largest sewage works in England. I fully explained their system in Toronto newspapers for January 25th, 1887.

They are now preparing to erect new works on the "continuous-flow" system, because the old works have never been able to handle all the sewage, though the cost of maintenance has been $18,500 per year, and $16,750 for interest and sinking fund.

The town of Huddersfield has lately adopted the Ferozone and Polarite system. In this system, the sewage runs through a strainer to a settling tank, and during its passage from strainer to tank a substance called Ferozone is mixed with it, which causes the dirt to separate from the water much more quickly than by mixing it with lime. When the sewage arrives at the outflow end of the tank it has let go the heaviest dirt, and it is then passed upward through a filter containing Polarite, which the inventor claims will never foul or lose its efficiency. There is an arrangement attached to settling tank and filter, which cleans out the sludge without interfering with their working. (See sketch).

By the advice of several town engineers, I visited the Baildon Combined Destruction and Sewage Works. These appear specially suitable for large places, as it destroys the garbage and night-soil, and the products of the destructor furnace are used to clean the sewage, large clinkers being placed at the bottom of the filters, over them a thick layer of large cinders, then another layer of smaller cinders, all covered with about 8 inches of fine stuff that has been passed through a quarter inch sieve.



— CROSS SECTION —
— OF —
— CANDY'S PATENT —
— SELF CLEANSING CIRCULAR TANK —

The sewage is passed through a strainer into a tank divided by walls into three sections; nothing is mixed with it, but during its passage through the three sections of the tank most of the heavy matter is left. After passing through the tank the sewage is distributed over the four filters in small streams, and passing downward through them, runs out a bright, clear water. Double the quantity of tanks and filters are made, so that one set can be cleaned while the others are in use. They need very little attention and only require cleaning about twice a month, and the sewage is continually on the run. Between the settling tanks and filter beds the water is made to pass over a wheel, which shakes up the water and supplies power for screening the ashes. One man on day and one on night duty are all that are needed to attend to the works.

This appears to me to be the best system of destroying garbage and cleaning sewage water, and it certainly is the cheapest. I believe there is no patent on the apparatus, it being (with the exception of the destructor furnace) a home-made concern.

I inspected several refuse and garbage destroyers. The best I saw was at Hamerton street, Bradford. The ashes and night soil of the neighborhood, also all the fish and vegetable refuse of the wholesale market, are here burnt up and made into a profitable product. The clinkers are prepared and sold to make concrete; some are mixed with one-fourth lime and made into building mortar. The old shoes and boots are sold for export to Germany. Old cans, after passing through the fire, are sold to chemical manufacturers. The bad fish is passed through a separate retort heated by steam and ground to a fine powder, which brings a high price as manure. The heat from the destructor fires are used to heat two large boilers, supplying steam to the engine which turns the grinding rollers, clinker and lime crushers, hoists, electric light dynamos, etc., besides steam to supply the fish retort, furnace blowers and heating pipes. The sale of the products nearly covers the expenses. The furnaces are well and solidly built, and every appliance is put in to keep the place clean and easily managed. They are built in the midst of a dense population, yet not the least offensive smell is noticeable in or out of the works, except in the shed, where the night soil is tipped and thrown into the fire. No fuel of any kind is used, a fierce fire being always kept up of night soil, ashes and garbage, aided by steam injectors which are placed under the grate bars of each fire-section. The amount of material destroyed is over 24,000 tons per year, and the income from sale of products is $4,500.