

GARBAGE DISPOSAL IN MONTREAL.

BY W. M. WATSON.

Lately I visited and inspected the garbage incinerators in Montreal, which I was told cost \$45,000. They have twelve furnace grates, six on each side of the main flue. The fire places are about six feet wide each, and sixteen feet from front to rear, and have each two clinkering doors. The grate bars form a steep incline, and appear to be six feet higher at the rear than at the front doors, and terminate at the rear end—with a short shaft passing up to the floor line of the tipping floor—through which the refuse is passed down to the fire bars. Each furnace will hold about three tons, and they are apparently only charged two or three times each day. When first built they had a boiler which raised steam from the wasted heat (or should have done so), and steam blowers were supplied to increase the draught, and raise the temperature of the furnaces. But all such appliances have been taken off the apparatus; probably the men appointed to manage the works did not know the value of the appliances, and could not work them to advantage. There is also an extra furnace in the chimney flue that was placed there for the purpose of burning the fumes discharged from the furnaces prior to passing up the chimney and out into the atmosphere, but this is not used and no pretence is made of consuming the foul smelling gases passing up the chimney or to prevent the dust from escaping.

The fires are of course kept at a low temperature, and the ashes and clinker taken from the furnaces are of a soft nature and of little value for use on public works, though if a high temperature incinerator were near the clinker might be reburnt and made hard enough to use for roads, concrete, etc. The heat from the twelve fires is all wasted, showing how rich Montreal is. If the same amount of rubbish was burnt in England they would make profitable incomes from the heat coming from the fires from the many things of value that come mixed with the garbage, and also from the clinker that was drawn from the furnaces. But the British public authorities cannot afford to waste valuable products, they turn even their garbage into cash. There is a fine long chimney and large, straight flue running between the fires, having main and local dampers, so that the draughts can be wholly or locally cut off from each fire separately. There is also an incline road and tipping floor that covers all the fires and flues, well housed and roofed in. The garbage is chiefly vegetables, fish, meats, and light refuse, together with dead animals.

These incinerators are an improvement on the Toronto crematories, but even then they are a long way behind the garbage destroyers used in Europe, both from a sanitary and financial standpoint. As soon as some public authority has the pluck to have a first-class destructor erected and afterwards intelligently managed, the advantages over the present kind will be so apparent that Canada will see the last of the wasteful incinerators now in use.

—Toronto is about to make an experiment aiming at retaining trade in the eastern portion of the city by building a large hotel. The site chosen is one on King st. east, which has been left vacant by the failure of a large dry goods store. The promoters are not able, so far as we know, to point to a single instance in which it has been possible to alter the course of trade when once in motion toward the west. The new city hall and the large office buildings which have been built in the past couple of

years to the north and west of the proposed site will have a much greater influence in drawing business towards them than will an hotel, even if the hotel succeeds, which upon the face of it is in the present case unlikely. To succeed it would require to attract tourists and to hold largely the local restaurant trade of the best class. The proposed site is away from the theatres, the fashionable promenades, the railway stations, the large departmental stores, from everything that should be near at hand, and is in addition hot and unpleasant in summer, thus rendering a tourist trade impossible.

—There may be too much interference on the part of the Government with private interests, and we are accustomed on this continent to look with suspicion on Government regulations of any sort, but we are beginning to see more clearly the necessity of Government inspection of all works which are likely through defect to cause danger to public life or health. Liability of the owner to make good damages resulting from defective construction is not the safeguard in America that it has been found to be in England. Sometimes here the owner is a great corporation or controls a large local influence and investigation is burked. In the United States this is a usual, in Canada an exceptional circumstance. An example of what might have been a serious accident was recently brought to our notice. A high chimney for a large power-house had its foundation put in on a site where the nature of the soil and the work done made its collapse a certainty. Fortunately an engineer who happened to examine the work called the attention of the owners to the matter, the structure was taken down and a suitable foundation put in. In advance of an official report on the subject it is impossible to state the cause of the collapse of the O. & N. Y. railway bridge at Cornwall, Ont., described in another column. Had there been an efficient Government inspection of the work done on all railway bridges in and adjoining Canada we would have had on file the records of the borings made to locate the piers in the first place and a statement of the manner in which the concrete in the pier hardened as it was put in. With this and other data the public would be much more fully informed, and if these facts were published during the construction of the work many believe that the accident would never have taken place. Publicity in these matters is a good thing.

A SHORT HISTORY OF SEWAGE DISPOSAL AT THE ASYLUM FOR THE INSANE, LONDON, ONTARIO.*

BY R. M. BUCKE, M.D.

London asylum was ready for the reception of inmates in the autumn of 1870, and by the end of that official year 457 patients had been admitted chiefly from the Malden and Orillia branch asylums, which were thereupon closed. The sewage of the new asylum was thrown into a small creek three miles above the opening of the same into the south branch of the Thames. The said opening being three miles above the city of London. Every summer the creek became nearly or quite dry, and it was not very long before the farmers and others who lived along its course complained bitterly of the nuisance caused by the asylum sewage. Complaints and threatened prosecution were met by the establishment of a charcoal and gravel filter at the lowest point of the asylum land. The said filter was operated intermittently with more or less (chiefly less) success for some fifteen years. It would do its work fairly well when fresh charged; but it proved impossible, by any reasonable expenditure of labor and charcoal to keep it in a state of continuous efficiency. The protests of the property holders along the creek, which had been partially silenced by the establishment of the filter, broke out anew and were naturally intensified by certain cases

*A paper read before the Ontario Association of Executive Health Officers, at the Ottawa Convention.