

destruction. This is an extract from the paper which I read to the Engineering Institute of Canada on December 7, 1922:—

“In districts served with hydro-electric power, there is possibly not the same incentive to utilize the heat from the combustion of refuse for generating electricity as in localities using steam-electric power, but other opportunities and possibilities should not be overlooked or lightly considered. Steam is required in every large town for many purposes, not only in factories, but, particularly in this climate, for heating buildings.

“A modern high temperature destructor will furnish sufficient waste heat for the evaporation of from one to two pounds of steam per pound of refuse burned, depending upon the composition of the materials, in addition to any preheating of air required for the furnace operation. Taking a conservative figure of 1,750 pounds of steam, or 50 boiler horse power per ton of mixed garbage and rubbish burned per hour, as available for actual outside use, then a 200-ton destructor plant, which normally would take care of a population of 200,000, equipped with boilers and operating 16 hours per day, as is common practice, can supply over 20,000 pounds of steam per hour for manufacturing purposes, or say 1,000 engine horse power.

“The household ashes collected from a district containing the same population can be utilized to generate up to 70,000 pounds of steam per hour, 24 hours per day, throughout the heating season, depending on the outside temperature. In other words, there would be sufficient fuel to operate a central station to heat, and supply domestic service for buildings aggregating over 10,000,000 cubic feet volume. To appreciate better what this means it may be mentioned that the cubic contents of the entire group of buildings of McGill University are approximately 8,000,000 cubic feet.”

In Canada we have done nothing in that way.

*By Hon. Mr. Casgrain:*

Q. What about the Decarie incinerator, near the River St. Pierre?—A. You mean the little one?

Q. Down by the canal.—A. It is out of business now.

Q. The Decarie incinerator.—A. Was the heat ever utilized for any purpose?

Q. To make electric light.—A. I am speaking of the present time. That was some years ago.

*By Hon. Mr. Webster:*

Q. You mentioned the exception of Westmount.—A. Westmount has a small suburban plant. They use it as an auxiliary for supplying light.

Q. A very important plant.—A. Yes, it is. But now the larger cities do not. Take Toronto: it does not. Montreal of course does not, it has no incinerator. But if you take a population of 200,000, which is the basis, because it is the size of plant required for such a population that could be put in very economically,—the heat from burning garbage and ashes, and particularly ashes, is sufficient to heat a district up to 10,000,000 cubic feet capacity, volume of buildings. That is quite a large amount. As a matter of fact, that is the size of your Centre Block here. Of course this may not look so large because it is

[Mr. F. A. Combe.]