Its efficiency, the engineers claim, will be greatly increased as time goes on, principally because the rapidly increasing loads tend to reduce the cost of fuel per horsepower delivered.

Unexpected Demand is Met.

The smallest of the three present units was installed in view of the belief that little or no motor load would be obtained in Westmount, and the intention was to operate the small generator during periods of light load. However, the

and this unit should be of such a size as will double the present plant.

General Management of Plant.

The entire management having been placed in the hands of the contracting engineers, they proceeded to engage a staff of competent men. Mr. Davidson, chief engineer of the plant, was appointed to oversee the installation of the machinery, and was afterwards put in charge of the powerhouse. Later, the general superintendent, Mr. Thompson, was engaged and he selected his own staff.

A system of book-keeping was inaugurated, showing details of all receipts and expenditures, and test apparatus and other auxiliary machinery was installed to assist in ascertaining the exact results of the plant. The instruments, etc., included a five-ton scale for weighing coal, a coal hoist for distributing the coal into bins to minimize handling, appliance for testing coal and oils and for weighing and measuring fuel and water. Even in the construction of the plant certain portions were carried on by contract and certain by



Westmount Destructor Plant,

Interior of Lighting Station.

extension into Notre Dame de Grace offered an opportunity to obtain a motor load of about 125 horse-power, to be operated almost entirely on garbage, giving returns of \$5,000 to \$6,000 per year, but the results from a technical standpoint have been bad. The small engine, installed for day operation, cannot handle the unexpected demand, and the cooling pond, instead of having 12 hours out of the 24 to cool, is in continuous operation. The returns will, however, practically pay for all the coal the plant has to contract for, and hence the advantage of the new contract.

The loads obtained at present run up to between 250 and 300 kilowatts at night, necessitating the employment of one large and the small engine, and as new customers are being constantly added it is not thought that there will be much falling off on this maximum load during the spring. Accordingly it may be necessary to shortly install a fourth unit to meet the demands of the winter of 1907 and 1908,

day labor in order to ensure the greatest efficiency and saving.

The results of operation show that within six months the department has been placed on a paying basis, even with the reduction of 33 per cent. on the rates previously paid for private lighting.

The contracts now total about 750. (February 15th, 1906.) Apart from light supplied to private customers a number of small motors throughout the town, aggregating 45 horse-power, are being driven, in addition to a contract for the operation of a waterworks pump of about 125 horse-power, throughout the day.

Financial Results.

The capital expenditure to the first of this year was \$212,000, exclusive of land, but including \$2,000 for a line to convey power to a pump outside the municipality. During