charges and depreciation. The cost to the Health Department for the refuse destroyed was \$9,449.06 for the year. The population of Westmount is about 16,000.

Other examples could be cited but the paper is already longer than was anticipated.

One incidental result of good steam production is the production of good clinker, which can be used for many purposes. Low temperature cremation results in soft clinker which is not only useless but objectionable, as it cannot be used and it often contains partially consumed organic matter. Clinker should be well fused and vitrified and this can only be produced by maintaining an uniformly high temperature in the furnace.

Good clinker is used for making pavement slabs, for sewage filtering media, brickmaking, crushed into sand and mixed with lime for mortar, etc.

Reference has already been made to steam production. In the earlier plants, the boilers were placed in the furnace directly over the fire, but it was found that the cooling effects of such boiler militated against the successful cremation of the refuse. The next step was to place the boiler between two cells and, although better results were obtained, the makers in later installations have located the boilers beyond the combustion chamber. By this means the maximum temperature is secured and the gases adequately combusted before coming into contact with any cooling surfaces. The figures quoted point to the possibility of developing considerable power by the high temperature cremation of refuse. If due attention is paid to the fundamental requisites of a destructor the cost of operating the same can be materially reduced by the sale or utilization of the steam and hard vitrified clinker produced.

In conclusion, the author has observed that some disappointment has, in places, been experienced owing to the makers' claims being exaggerated and impossible of realization. It would, of course, be folly to decry every new device, arrangement or design, until it has been put to a practical test, for that would be tantamount to placing an embargo on all legitimate developments, but experiments are costly and occasionally disturbing, as was recently found to be the case in a large plant in North America, whose designers received due publicity in engineering journals. The achievements that were going to be accomplished fell short and the works are now being improved.

The evolution of the destructor has been slow and expensive and the results of experience in all parts of the world has greatly assisted the makers in deciding upon the arrangements, capacity and construction best suited for the refuse produced in different places in different climes.

New York, Westmount or other destructors in the the east may not be quite suitable for western refuse, and doubtless this is the case. Each city has its own problem to solve and it, therefore, behooves that the authority contemplating the installation of a destructor or incinerator should take the fullest possible advantage of the experience of others under similar conditions and of the plant best suited to satisfy its own specific needs.

A Government wire ess station will shortly be opened on Valentia Island, on the southwest coast of Ireland. It has been constructed by the wireless department of the Post Office, the installation being supplied by the Marconi Company. With a range of 500 miles, it is chiefly destined to keep Atlantic liners in touch with land two hours longer than is possible at present with the Crookhaven station.

## THIRTY-THIRD CONVENTION, AMERICAN ELECTRIC RAILWAY ASSOCIATION.

The program for the 33rd Annual Convention of the American Electric Railway Association to be held at Atlantic City October 12th to 16th has been announced. The American Association proper and its four allied associations-Engineering, Accountants, Claims, and Transportation and Traffic—all hold sessions during the time of the convention. The programs are very elaborate. Over 73 committees are to report and papers are to be read on some very important subjects. The speakers before the American Association include Hon. Frank W. Stevens, former Chairman of the New York Second District, Public Service Commission; H. C. Donecker, Assistant General Manager, Public Service Railway Company, Newark, N.J.; Calvert Townley, Chairman of the Board of Directors; Lackawanna and Wyoming Valley Rapid Transit Company; Harry A. Bullock, Secretary, New York Municipal Railway Corporation, and R. B. Steams, Vice-President, The Milwaukee Electric Railway and Light Company.

Among the important reports to be made is one from the Committee on Public Relations, presenting a "Platform of Principles" covering what the committee believes to be the fundamentals of a lasting and proper adjustment of relations between the railways and the public.

The Accountants' Association is to consider the new classification of accounts which was prepared by the Interstate Commerce Commission in connection with one of the committees of the association, and will pass on a plan for an educational course for the accounting employees of electric railways. John R. Wildman, Professor of Accounting, New York University, H. S. Swift, treasurer, West Penn. Traction Company, J. F. Fogarty, secretary, North American Company, A. T. Smith, assistant chief, Division of Valuation, Interstate Commerce Commission, and Robert Sealey, North American Company, will deliver addresses.

The Engineering Association has a very large number of important matters to come before it, including the reports of its standing committees.

To the Claims' Association will be presented the report of its committee having in charge the formation of an accident prevention board, which it is intended will conduct a campaign for the prevention of accidents among the electric railways of the country.

Among the speakers before the Transportation and Traffic Association is N. W. Bolen, General Superintendent, Public Service Railway Company, Newark, N.J., who will talk on the Organization of a Transportation Department. This association will consider among other things a report of the committee dealing with the question of motor buses as auxiliary for electric railways.

The report of the Joint Committee on the Joint Use of Poles, made up of representatives from the American Electric Railway Association, National Electric Light Association, the American Institute of Electrical Engineers and the American Telephone and Telegraph Company will be considered by the American Association.

This committee has now been at work for two years in the preparation of a form of agreement and specifications covering the joint use of poles and the adoption of its report, it is believed, will mean much in the clearing up of obstructions in the streets of the cities of the country.