

### PERSONAL.

HON. DR. ROCHE, Minister of the Interior, will begin a western tour of investigation about August 15th for the study of irrigation developments and necessities.

ARTHUR J. CANTIN, formerly sales engineer with the German Clancey and Grindley Company, Limited, of Edmonton, Alta., has been appointed superintendent of the Electric Light and Power Department of the town of Melville, Sask.

STANLEY LIGHTFOOT has taken over the Toronto business of Lloyd, Blackmore and Company, Ottawa, patent attorneys. The business will be owned by Mr. Lightfoot and conducted under his own name. The same office will be maintained in the Lumsden building.

L. C. GRAY, Ph.D., of Wisconsin University, and at present engaged in research work at the Carnegie Institute at Washington, has been appointed to a professorship at the University of Saskatchewan, Saskatoon. The research work of the institution will be in his charge.

The following members of the staff of the Faculty of Applied Science and Engineering, University of Toronto, have attained the rank of assistant professor in the department indicated: C. R. Young, structural engineering; W. M. Treadgold, surveying; J. R. Cockburn, drawing; M. C. Boswell, organic chemistry, and E. G. R. Ardagh, chemistry.

### COMING MEETINGS.

ONTARIO MUNICIPAL ASSOCIATION.—Annual Meeting to be held in Toronto, August 28th and 29th. Secretary-treasurer, Mr. K. W. McKay, County Clerk, St. Thomas, Ont.

THE NEW ENGLAND WATERWORKS ASSOCIATION.—Annual Convention to be held in Philadelphia, Pa., September 10th, 11th and 12th, 1913. Secretary, William Kent, Narragansett Pier, R.I.

THE ROYAL ARCHITECTURAL INSTITUTE OF CANADA.—Sixth General Annual Assembly will be held at Calgary, Alberta, September 15th and 16th. President, J. H. G. Russell, Winnipeg, Man.; Hon. Secretary, Alcide Chaussé, 5 Beaver Hall Square, Montreal, Que.

CANADIAN PUBLIC HEALTH ASSOCIATION.—Third Annual Meeting in Regina, September 18th, 19th and 20th. General Secretary, Major Lorne Drum, Ottawa; Local Secretary, R. H. Murray, C.E., Regina.

AMERICAN ROAD CONGRESS.—Annual Session will be held in Detroit, Michigan, from September 29th to October 4th. Secretary, J. E. Pennybacker, Colorado Building, Washington.

AMERICAN SOCIETY OF MUNICIPAL IMPROVEMENTS.—Twentieth Annual Meeting to be held in Wilmington, Del., October 7th to 10th. Secretary, A. Prescott Folwell, 15 Union Square, New York.

UNITED STATES GOOD ROADS ASSOCIATION.—Convention will be held at St. Louis, Mo., November 10th to 15th. Secretary, J. A. Rountree, Lo21 Brown-Marx Building, Birmingham, Ala.

AMERICAN ROAD BUILDERS' ASSOCIATION.—Tenth Annual Convention to be held in First Regiment Armory Building, Philadelphia, Pa., December 9th to 12th. Secretary, E. L. Powers, 150 Nassau Street, New York, N.Y.

AMERICAN CONCRETE INSTITUTE.—First Annual Convention to be held in Chicago, February 16th to 20th,

1914. Secretary, E. E. Krauss, Harrison Building, Philadelphia, Pa.

THE INTERNATIONAL ENGINEERING CONGRESS.—Convention will be held in San Francisco in connection with the International Exposition, 1915.

### POWER DERIVED FROM REFUSE.

Those who have not followed the more recent developments in the disposal of city refuse, will find something instructive in a paper read by E. H. Foster before the American Waterworks Association at Minneapolis, Minn., in June. They will be surprised to learn that in a number of places part, if not all, of the steam used in driving steam pumps at waterworks pumping stations is derived from burning waste material. As a result of the development in the incinerator method of disposing of mixed refuse in England and in continental cities, several plants have been installed in this country, and, in all probability, the older and less sanitary methods hitherto in vogue will gradually give way to this more modern method, particularly as our cities increase in size.

Having produced the effect of destroying refuse in a sanitary and inoffensive manner, the question of how best to utilize this heat is answered by combining a steam boiler with the furnace and producing steam at any desired pressure. Steam so produced is available for running engines to produce electricity, but, as a rule, the amount which could be produced is but a small proportion of the total amount consumed by the community, also, the operation of the destructor does not lend itself to the requirements of peak loads which are incident to all lighting and power stations. A pumping load, however, is ideal for a destructor because of its uniformity and constancy, and it is in this direction that a municipality has its greatest opportunity for conserving this energy.

It would hardly be expected that the exact amount of steam available from the destructor would coincide with the exact amount of steam required at the pumping station, but the almost invariable condition is that the destructor steam is somewhat less than required by the pumps. Therefore, the difference is made up by auxiliary boilers.

The steam may be passed direct from the destructor to the steam range of the pumping station or converted into electricity and used to drive motor-driven pumps. Instances where steam from a destructor is used directly for driving pumps are found at Montgomery, Ala.; Westmount, Que., and Savannah, Ga., while instances where the power is first converted into electricity and the current used to drive motor-driven pumps to furnish the water are found at Milwaukee, Wis., and Savannah, Ga.

### RUST-PROOF COATING FOR IRON OR STEEL.

This new rust-proof coating is a paint that is applied to the surface of the article to be coated and is then baked. The ingredients are mixed in the following proportions: Linseed oil, 25 parts; calcium resinate, 36 parts; manganese borate,  $\frac{1}{2}$  part; lead acetate, 1 part; naphtha,  $37\frac{1}{2}$  parts; artificial graphite, 25 parts. These are mixed and applied to the metal by brushing or dipping or any other method. The article is then baked at 300° F. for 1 hour and 40 minutes. The coating is stated to be highly lustrous and resistant to corrosion. No other form of graphite gives satisfactory results.