

through the establishment of electro-chemical, metallurgical or other industries which, while demanding large amounts of power, support but few people. In other words, a policy of hand-picking our powers should be adopted by the federal and provincial governments, tending to conserve for the thickly populated parts of the Dominion such powers as are necessary for their common uses, and permitting the development for electro-chemical and electro-metallurgical processes only of those which are more remote from centres and therefore less valuable as supporters of population.

This is not to say that no power should be developed in manufacturing districts except for small manufacturing purposes, for it will frequently happen that a large and expensive power can only be developed in a manufacturing district if a large load be obtained which is sufficient to pay the bond interest from the start; but in this case it should be clearly understood that the electro-chemical user has only the right of use at cheap rates until the demands of the community require his power, which would then be salable at much higher rates for the greater good of the community as a whole. Neither are the above references pertinent when applied to such electro-chemical and metallurgical industries as can utilize off-peak power, provided again, of course, that these do not interfere with the overtime needs of the ordinary manufacturing plant. Furthermore, when only a limited amount of power is available, true conservation does not consist in so reducing the cost that it can be wasted, with a final result that industries for which such power is essential are robbed by those which under true conservation would utilize other agencies less valuable in that particular district.

The above is a mere academic discussion of obvious things as they ought to be, from which the very practical question arises as to how such matters can be adjusted and kept adjusted under a well-understood and accepted doctrine of conservation.

Some of our powers to-day are under the jurisdiction of the Dominion Government, but most of them are under the jurisdiction of the provinces. No true conservation in a national sense is possible except by the co-operation of provinces and Dominion. It is suggested, therefore, that some body,—call it "Ministry," "Department," "Commission" or by any other name,—should be constituted whose administration of our powers would be accepted by all governments under a general policy agreed upon, the results being logical development and the elimination of present patchwork methods.

Reference has been made to fuel resources as distinguished from water power resources. While in detail the doctrines applicable to these resources are different, the ultimate result expected from both is production of energy. Wide districts of Canada are bare of fuel but abundantly supplied with water power; others are without water power but are well supplied with fuel; therefore it is suggested that whatever steps are taken by the government in connection with our water powers, should carry with it the conservation and development of our fuel resources. In other words, whatever central body is constituted should deal with the energy problem of the country as a whole, and its jurisdiction should extend not only to water powers but to fuel resources, which are complementary thereto. It is only by such a method that the best use of our water powers can be determined.

The Quebec Railway, Light, Heat and Power Company is negotiating with several concerns in regard to the location of factories at or near Quebec City. The company has upwards of 20,000 h.p., which it can readily develop at short notice, and is looking for a market for it.

PERSONALS

J. W. ADAMS, city engineer of Chatham, Ont., has resigned.

Lieut. ALEX. ROSS ROBERTSON, of Toronto, has been wounded. He graduated in 1909 from S.P.S., Toronto.

R. C. HARRIS, commissioner of works, Toronto, has been appointed a member of the national committee to investigate the peat industry for the province of Ontario.

Lieut.-Col. WILLIAM G. MACKENDRICK, D.S.O., who has just returned from France, will address the Engineers' Club of Toronto this evening on his experiences as director of road-building for the Fifth British Army.

HENRY J. FULLER, vice-president of Fairbanks, Morse & Company, and president of the Canadian Fairbanks-Morse Company, Limited, has been elected a director of the Liberty National Bank of New York City.

F. C. LANE, O.L.S., has been appointed town engineer of Sudbury, Ont. He will have entire charge of the road, street and bridge departments and will also do all necessary engineering for the fire, water and light committee.

NORMAN HOLLAND, F.S.C., will give an illustrated lecture this evening before the Montreal Branch of the Canadian Society of Civil Engineers, on "Modern Varnish Making." As a chemist and manufacturer, Mr. Holland will speak with authority in regard to wood and metal protective coatings.

W. CHASE THOMSON, consulting engineer, Montreal, will address the Montreal Branch of the Canadian Society of Civil Engineers this evening, on the "Kettle Rapids Bridge," giving the reasons for his adoption of the unusual design (a thousand feet continuous girder in three spans) and describing the construction methods used and difficulties successfully overcome in the erection.

ROBERT A. ROSS, E.E., consulting engineer, Montreal, has been appointed by the Quebec provincial government as one of the five members of the new city commission that is to govern Montreal. Mr. Ross has not yet announced whether he is prepared to accept the appointment. He is a member of the Advisory Council for Scientific and Industrial Research, vice-president of the Canadian Society of Civil Engineers, and consulting engineer to the Hydro-Electric Power Commission of Ontario and to a number of municipalities and private companies.

OBITUARIES

EDGAR M. McDUGALL, son of the late John McDougall, founder of the Caledonia Iron Works, died on April 4th at Los Angeles, Cal., where he had gone some time ago for his health. He was a graduate of the Royal Military College, Kingston. At the time of his death he was president of the Canada Iron Foundries, Limited, successors to the Canada Iron Corporation.

JOHN B. BROPHY, C.E., of Ottawa, who has been connected with the engineering staff of the Cornwall Canal for the past seven months, passed away on March 31st, following a stroke of paralysis. A couple of weeks previously Mr. Brophy had been taken ill with pneumonia, but appeared to be well on the road to recovery when he was stricken. He was in his 73rd year. Two daughters survive him. Mr. Brophy's only son, Lieut. "Don" Brophy, a well-known athlete, lost his life a short time ago while with the Royal Flying Corps.