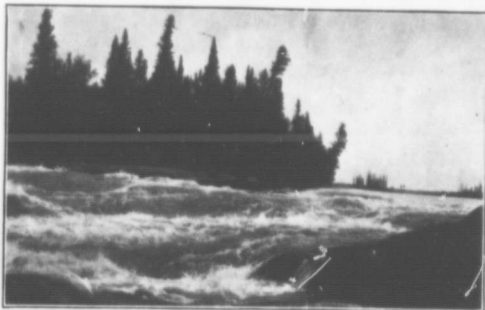


UNUSED POWER ON NORTHERN RIVERS



A View of the Fort Smith Rapids on the Slave River

These rapids are situated at the northern boundary of Alberta, 340 miles north of Athabaska Landing. See article on "Northern Water Powers."



A Rapid in the Peace River Canyon

The photo was taken near the western boundary of the Peace River block in British Columbia, about 122 miles due north of the Grand Trunk Pacific railway. The intervening region is, of course, mountainous.

Canada's Northern Water Powers

Potentialities of Two of the Great Rivers of North-Western Canada

Very little is yet known of the value of the natural resources of Canada's far Northwest. Explorers have, from time to time, described, in general terms, the great rivers, such as the Mackenzie, the Athabaska, the Slave and the Peace. In still more general terms, the forests and mineral resources, and even the agricultural possibilities, have been described.

During the past two summers, the Commission of Conservation has had its Hydro-Electric engineer at work gauging streams and examining possible water-power sites in this region. Two of the rapids thus examined are described herewith:

Fort Smith Rapids

The Cassette, Mountain, Pelican and Drowned rapids, collectively known as the Fort Smith rapids, are situated on the Slave river and extend from Smith Landing to Fort Smith, a distance of some 16 miles.

The various rapids, whose descents, taken separately, vary from 10 feet to 38 feet, may be considered as a continuous rapid from head to foot, broken by short intervals of swift water, giving a total descent, in the 16 miles, of some 135 feet.

It would probably be difficult to group all these rapids into one development, although it would be very desirable to do so from the standpoint of conservation, but numerous islands and projecting points from the mainland afford natural conditions for easy development.

The volume of water in these rapids is enormous, being the combined flow of the Peace and Athabaska, and their tributaries, with one of the great northern lakes, lake Athabaska, acting as a reservoir to regulate the flow. The total power available during the season of navigation (May to November), by utilizing the total head of 135 feet, is estimated at 1,000,000 h.p.,

and is divided among the different rapids in proportion to the head in each. Raw material for pulp and lumber industries is found all along the river and at the rapids.

Peace River Canyon

The Peace River canyon has long been renowned for the wild character of its waters, and no white man or Indian, be he ever so experienced in river work or egged on by foolhardiness, ever attempts to run its rapids. Rafts or boats which, by carelessness or otherwise, are allowed to drift past its upper gates are never seen again, being engulfed by some of its many powerful whirlpools. It is little wonder that the so great when one considers, as has recently been ascertained, that the descent from head to foot is some 225 feet in a distance of less than 18 miles. This immediately suggests its possibilities as a water-power development.

The total minimum power available during the open-water season (May to November) is estimated at 400,000 h.p. This is based on the assumption that the total head of 225 feet can be utilized. Its development for water-power purposes will involve rather intricate problems, but to compensate for this, one must consider its situation near the raw material for pulp and lumber industries. It is also at the head of navigation of the Peace river and lying adjacent to it are immense coal fields, a large portion of which have already been staked out.—L.G.D.

WANT MERIT SYSTEM IN FORESTRY SERVICE

On December 6, a delegation representing the Canadian Forestry Association urged upon Premier Borden and the Minister of the Interior, that all appointments to the outside Dominion Forest Service be based on capability and experience ascertained by examination conducted by the Civil Service Commission. These representations are the result of recommendations made at the last meeting of the Association held at Victoria, B.C.—M.J.P.

National Aspects of Public Health

Present Organization Incomplete and Inefficient—Re-organization Essential

The fathers of Confederation apparently knew little, and certainly thought less, of health matters than they did of the political and economic factors which make for national existence. This is not to be wondered at, for in the early sixties of the nineteenth century but little attention was given to health questions by the governments of the older countries. As an indication that health questions were considered as coming under the purview of the Federal Government, it is of interest, as it is of importance, from the standpoint of those who believe that Public Health is a national question, to note that, for several years following Confederation in 1867, public health questions were handled directly by the Government at Ottawa. Unfortunately for the people of Canada, the question was relegated to the Provinces, not by any direct legislation, but by the inertia which existed at headquarters, or rather, by the failure on the part of the Dominion Government to fully realize that health was as important as agriculture, commerce and the many other activities, which go to make for the greatness of a people.

Present Status of Health Affairs

The position of health affairs in the Dominion at the present time, is that the Dominion Government controls the quarantine service at the head of which is the Director General of Public Health, who is an officer under the Minister of Agriculture; the so-called medical inspection of immigrants is in the hands of the Minister of the Interior, while the inspection of food is by statute supposed to be administered from the office of the Minister of Inland Revenue.

A glance at the situation of the Federal Government, will reveal

the fact that in every instance the medical work of each department is a mere side issue to a mass of other official work handled by the Deputy Minister who, when he comes to deal executive with a medical subject, is handling something of which he has no technical knowledge and, therefore, cannot be expected to pass thereon in an intelligent manner.

What is within reason and will give the desired results, is not so much a Minister of Health as the bringing together of the scattered and isolated medical and health units which are to be found in the federal service, and co-ordinating them under a Deputy Minister of Health. There is fully enough work even now for the employment of such federal officer, and if he is given that which the Commission of Conservation of Canada has recommended, viz., a Federal Laboratory, which would be the workshop and centre around which and in which the medical members of the staff could gather, work, and be trained, it is not indulging in any idle prophecy to say that there would be such a stimulus given to health work throughout the whole Dominion as has never been witnessed under the present method of disorganization.—C.A.H.

To Study Farm Finance

The United States is sending a commission to Europe to study agricultural finance. It will sail on April 26 next and will be absent three months. From two to five delegates from each state will accompany the commission. Canadian provinces are making application for representation and arrangements have already been made with Premier Scott to have Saskatchewan represented.—M.J.P.

In making tons of lead pencils, Europe has depended on the imports of American cedar. A firm in one German city has made 300,000,000 lead pencils a year from this cedar.