

## WORK IS REVIEWED BY ASSISTANT CHAIRMAN

Mr. James White at Annual Meeting of Commission Summarizes Achievements in Conservation and Deals with Subject of Canada's Resources in Relation to Economic Situation.

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"2. Labour, machinery, and equipment.

"3. Business methods, buying and selling, co-operation.

"4. Educational work, schools, clubs, school fairs.

"At our first annual meeting the late Mr. C. C. James said that the solution of the problem of better agriculture was not the taking of the farmer to the experimental farm, but the taking of the experimental farm to the farmer. The latter is the policy adopted by us in initiating illustration farms in each province.

"Later we transferred these farms to the Dominion Department of Agriculture, that they might be extended and carried on on a much larger scale than our limited financial resources would permit.

"In Dundas county, selected as being a typical area and easily accessible from Ottawa, we have sixteen illustration farms in the four townships of the county. We can now see the results of work done by our advice, such as the effect of adding lime to the land prior to growing clover, results from thick seeding and from thin seeding of clover seed, from the use of certain varieties of seed, particularly of barley, oats, potatoes, and corn.

"Our agriculturist, Mr. F. C. Nunick, has held numerous meetings on our illustration farms in Dundas county and delivered addresses at numerous other points throughout Canada.

### WATERS AND WATER-POWERS.

"Cessation of manufacture of munitions will release some 30,000 to 40,000 horse-power of hydro-electric energy, which will be absorbed by municipalities and other power users whose demands have been curtailed. During the war this shortage of electric power in southwestern Ontario continued to affect production. Municipalities receiving energy from the Niagara system of the Hydro-Electric Commission were required to reduce their consumption by from 15 to 30 per cent of their maximum demands in December, 1917.

"All the water at Niagara Falls allotted to Canada and the United States under the Boundary Waters Treaty, 56,000 cubic feet per second, has now been apportioned to the various development companies. Certain interests are now urging that the treaty be amended to permit the diversion of a large quantity of water, one proposal being that each country be permitted to divert 60,000 cubic feet, or 120,000 cubic feet in all. It is a sufficient answer to say that if sufficient power is not obtained by means of the present diversion, it can be practically doubled by utilizing the water in the same way as the Ont-

tario Hydro-Electric in the Chippewa-Queenstown development by using the descent in the rapids above and below the falls as well as the fall in the cataract itself."

### WATER-POWER DEVELOPMENT.

After reviewing the power development during the year on both sides of the international boundary, Mr. White said that the subject of water-power development was receiving considerable attention at the present time, particularly in the United States, where 76 per cent of the total power was at present generated by steam prime movers. Steam also generated 72½ per cent of the power in electric generating stations in the United States. Data for Canada respecting the total power generated are not available. The recent investigations of the Conservation Commission showed in the Dominion only 13.7 per cent of power in electric stations is generated by steam. That steam had been able to hold its own in spite of the higher efficiency of water-power was largely due to the extraordinary success of steam turbines.

Mr. White dealt with the mining situation in the Dominion during 1918, briefly, and stated that with the exception of gold-mining, the industry had been much stimulated by the war. The mining production of Canada had increased from \$103,220,994 in 1911, to \$220,000,000 in 1918. The output of coal had increased in all the provinces except Nova Scotia. The greatest increase was in the production of Alberta. The tonnage of nickel produced in 1918 was nearly double that produced in 1914. In 1905 the nickel output of Canada had been 9,503 tons, in 1910 18,636 tons, in 1914 22,759 tons, and in 1918 44,700 tons, with a value of \$26,000,000. Three-quarters of the world's production of nickel was mined in Ontario.

Copper production had been stimulated by the demands of war—the war. Most of it was derived from the low-grade ores of British Columbia, and the nickel-copper mines of Sudbury, which produced about 23,000 tons during the year, valued at \$8,500,000. The British Columbia mines had produced 30,000 tons.

The gold production of Ontario in 1918 was valued at \$8,800,000, slightly greater than that of 1917. The Hollinger mine, one of the great gold mines of the world, had yielded two-thirds of the output, or \$5,752,370. Referring to petroleum, Mr. White stated that the chances of the discovery of oil in Alberta may "fairly be described as fair."

### UTILIZATION OF COAL.

He made a reference to the work of the Commission in the interest of more efficient utilization of coal; the objects aimed at, he said, were the use (1) lignite either as mined or with the expenditure of the minimum of cost and effort (2) the more efficient utilization of coking coal in plants near a market producing coke as a primary, and gas, tar, etc., as by-products (3) the manufacture of carbo-coal. He urged greater economy in furnace operation. There were about 24,500,000 tons of bituminous and lignite coal consumed in Canada each year. If our consumption were reduced by only ten per cent, it would represent a saving of at least \$7,500,000. Some large industrial plants in the United States, he declared, had in this way effected a saving of from 20 to 30 per cent in their fuel accounts.

Speaking of the briquetting of carbonized lignite in Western Canada, and experimental plant for the erection of which \$400,000 had been appropriated, he said that as far as was known, the construction of the plant had not yet been commenced.

In referring to the fuel shortage, Mr. White said Canada should endeavour to formulate a sane and wise policy respecting the development of our great water

## COMPOSITION OF THE DOMINION'S PEACE FORCE

List of Regiments which will be retained as Permanent Force after demobilization is completed.

### ESTABLISHMENT OF 5,000

[Continued from page 1.]

#### ARTILLERY—

Royal Canadian Horse Artillery—a brigade headquarters and three batteries.

Royal Canadian Garrison Artillery—a regimental headquarters and five companies (four coast defence companies and one heavy battery).

ROYAL CANADIAN ENGINEERS—Two fortress companies.

#### INFANTRY—

The Royal Canadian Regiment—a regimental headquarters and five companies.

Princess Patricia's Canadian Light Infantry—a regimental headquarters and four companies.

#### DEPARTMENTS AND SERVICES—

Detachments of the Canadian Permanent Army Service Corps, the Canadian Permanent Army Medical Corps, the Canadian Permanent Army Veterinary Corps, the Canadian Permanent Ordnance Corps, the Canadian Permanent Army Pay Corps and the Corps of Military Staff Clerks. Detachments of each as required.

#### ARMAMENT, R.C.H.A.

The Royal Canadian Horse Artillery will be armed with 18-pounders, on a 6-gun basis.

#### ORGANIZATION.

The C.E.F. Regiment, Royal Canadian Dragoons, will be demobilized into a permanent unit and reorganized at Toronto.

The C.E.F. Regiment, Lord Strathcona's Horse (Royal Canadians), will be demobilized into a permanent unit and reorganized at Calgary.

The C.E.F. Brigade, Royal Canadian Horse Artillery, will be demobilized into a permanent unit and reorganized at Kingston.

The Royal Canadian Garrison Artillery, will be reorganized at Halifax, Quebec and Victoria.

The Royal Canadian Engineers, will be reorganized at Halifax and Victoria.

The C.E.F. Battalion, the Royal Canadian Regiment, will be demobilized into a permanent unit and reorganized at Halifax.

The C.E.F. Battalion, Princess Patricia's Canadian Light Infantry, will be demobilized at Ottawa and the permanent regiment will be

reorganized at Toronto from where companies will be moved later to their allotted stations.

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### COMMISSIONS—PERMANENT FORCE.

A limited number of commissions will be open in the Permanent Force. The standard of military and educational qualifications must be high. All applicants must have had service in the theatre of operations of the war 1914-1918. The applicant must state age, and what rank he is willing to accept, the name of the C.E.F. unit or units he served in, his educational and military qualifications.

Applications received from overseas, England and Siberia, must be accompanied by a confidential report.

### CATEGORIES.

The category of all ranks of the fighting units of the Permanent Force, viz:—Cavalry, Artillery, Engineers and Infantry, shall be category "A". The categories of all ranks of the departments and services may be lower than category "A". Other ranks now serving, with fighting units with categories lower than "A" will be transferred to the services and departments.

### MARRIED ESTABLISHMENTS.

The married establishments of the other ranks of the Permanent Force may be up to 10 per cent.

### Tenders Asked For.

Sealed tenders addressed to the undersigned, and endorsed "Tender for Alterations and Additions, Pavilion "A", Military Hospital, Kingston, Sydenham, Ont.", will be received until 12 o'clock noon, Thursday, March 13, 1919, for the alterations and additions to existing stone building for conversion into Military Hospital, Pavilion "A", Kingston, Sydenham, Ont.

Plans and specification can be seen and forms of tender obtained at the office of the Chief Architect, Department of Public Works, Ottawa, the overseer of Dominion Buildings, Central Post Office, Montreal; Power & Son, architects, Kingston; and of the superintendent of Dominion buildings, postal station "F", Toronto.

Tenders will not be considered unless made on the forms supplied by the department and in accordance with the conditions set forth therein.

Each tender must be accompanied by an accepted cheque on a chartered bank payable to the order of the Minister of Public Works, equal to 10 p.c. of the amount of the tender. War Loan Bonds of the Dominion will also be accepted as security, or war bonds and cheques if required to make up an odd amount.

By order,

R. C. DESROCHERS,  
Secretary.

Department of Public Works,  
Ottawa, February 25, 1919.

### Quebec's Forest Products.

Forestry Bulletin No. 63, on the subject of wood-using industries of Quebec, contains statistics compiled from reports received from 864 manufacturers, showing that the wood-using industries of the province consume yearly a quantity of raw wood material equal to 44.55 per cent of the total log output of its forests and 64.8 per cent of the total lumber sawn in the province. Eighty-five per cent of the material consumed is native to the province, 10 per cent is purchased in the other provinces of the Dominion, and 5 per cent outside of Canada, mainly in the United States, according to the bulletin, which is issued by the Forestry Branch, Department of the Interior.

Buy W. S. Stamps. They pay well.

### HOW FIRE LOSS IN THE DOMINION IS INCREASING.

How fire loss in the Dominion is increasing, as shown by James White, F.R.S.C., M.E.I.C., in address before the annual meeting of the Conservation Commission, February 18 and 19:—

Total value of property destroyed by fire in Canada:—

1918	\$33,623,000
1917	24,800,000
1916	25,160,000
1915	19,022,000