Vol. XLIV., No. 1.

THE JOURNAL OF COMMERCE

AGRICULTURE AND LIVE STOCK.

1871, and in order that we may get a clear idea of the

progress achieved during the fifty years we com-

pare the production of the principal field crops for

1870.

bushels.

Tons.

1916.

2,990,635

2.603.345

3,313,519

1,965,101

2,814,672

For farm live stock we may make a similar com-

parison by showing the increase between the two

1871.

At Confederation, in 1867, the dairying industry, as at present organized in Canada, was non-existent;

but soon after Confederation creameries and cheese

factories on the co-operative system began to be es-

tablished in Ontario, Quebec and the Atlantic pro-

vinces until at the close of the nineteenth century

they constituted a very important branch of agri-

cultural operations. Records of creameries and cheese

factories were not collected by the census before

1900; but in this year the quantity of butter made

in creameries was 36,066,739 lbs., of the value of \$7,-

240,972. In 1910 these figures had increased to 64,-

698,165 lbs., of the value of \$15,645,845. Of cheese

there is a steady annual production of about 200,000,-000 lbs., of the value of upwards of \$22,000,000, most

of it being exported to the home market of Great

Britain, where Canadian Cheddar has won a well-

deserved reputation for purity and excellence of

quality. In addition to the factory production of

butter and cheese, there has also been a great ex-

pansion in the production of home made butter. In

1870 the quantity of butter made on the farm was

74,190,584 lbs.; in 1910, it was 137,110,200 lbs. Home-

made cheese has been largely replaced by the fac-

tory product; but in 1910 a quantity of 1,371,000 lbs.

was still made on the farms. A trade of some importance has also sprung up in condensed milk pro-

ducts, and in 1910 the condensed milk products of eleven factories aggregated 27,831,596 lbs., of the

value of \$1,814,871. Beetroot sugar and tobacco are

minor agricultural enterprises of recent years that

have met with fair success. In 1915 the quantity of

sugar made in Canada from Canadian-grown sugar

beet was 39,515,802 lbs., whilst the output of tobacco

grown chiefly in Ontario and Quebec has lately

varied from about 5,000,000 to 10,000,000 lbs. accord-

1915.

bushels.

426,746,000

60.699.000

523,684,000

Increase.

2,153,892

1,352,136

1,940,438

*1,190,408

1.448.589

The first census after Confederation was held in

Jubilee of Canadian Confederation

A Statistical Retrospect.

By ERNEST H. GODFREY, F.S.S.

Dominion

1870 and 1915 as follows:

Barley 11,496,038

Oats 42,489,453

Rye ... 1,064,358

Corn... 3,802,830

Buckwheat 3,726,484

Peas 9,905,720

Beans 9,905,720

Flaxseed 118,044

Turnips, etc. 27,892,736

Hay and clover 3,818,641

years, 1871 and 1916:

*Decrease.

Horses 836.743

Other cattle 1,373,081

On Dominion Day this year Canada celebrated the fiftieth anniversary of the coming into force of the British North America Act, 1867, the Act of the Imperial Parliament by which four British provinces in Canada, independent of one another, but each owning allegiance to the British Crown, were federally united in a single Dominion, with powers for the admission of other provinces. These four provinces were Ontario, Quebec, Nova Scotia and New Brunswick, and the arms of each of them blended in one shield are still the legal armorial bearings of the Dominion. If Canada were not now strenuously en-" gaged in bearing her share of the tremendous conflict which is being waged for the world's liberties and the democratic principles that Confederation stands for, Dominion Day of 1917 would doubtless have been long prepared for and fittingly celebrated. Such a celebration can now only be deferred until the conclusion of peace, and we may fervently hope that next year, when Dominion Day will witness the completion of fifty years' existence of the Canadian Union, peace may have been restored and a double celebration be thus possible. As it is, however, it is not unnatural that we should turn aside for a moment from the pre-occupations of the war to glance at the marvellous progress' which the Canadian people have achieved during the last fifty years.

AREA AND POPULATION.

In 1867, the area of Canada, consisting of the four original provinces, was 540,000 square miles, with a population of 3,600,000. British Columbia joined the Union on July 20, 1871, and Prince Edward Island on July 1, 1873. An Imperial Order in Council of June 23, 1870, transferred to the new Dominion Rupert's Land and the Northwest Territories. The Province of Manitoba was formed in 1870, the Yukon Territory in 1898 and the two provinces of Saskatchewan and Alberta in 1905; so that at the present time the Dominion consists of nine provinces, the Northwest Territories and the Yukon Territory, the whole embracing an area of 3,729,665 square miles and containing a population of about eight millions, as compared with the area of the four original provinces, viz.: 540,0000 square miles, and their population of 3,600,000. But these changes do not include the whole of the territorial distributions effected since Confederation. In addition to the settlement in 1903 of the Alaska Boundary Question with the United States, there have been various adjustments of interprovincial boundaries. In 1884 the boundary between Ontario and Manitoba was adjusted, and in 1912 large areas of the Northwest Territories were transferred to the Provinces of Quebec, Ontario and Manitoba. Quebec then received the whole of the large territory of Ungava, excepting that part of Labrador which belongs to Newfoundland, Ontario was carried up to the southern shores of Hudson Bay and Manitoba was extended northwards to the 60th parallel of north latitude. These changes represented the addition to Quebec of 354,961 square miles, to Ontario of 146,400 square miles and to Manitoba of 178,100 square miles.

IMMIGRATION AND RAILWAY CONSTRUCTION. The progress of the great Dominion during the last fifty years has been so dependent upon the two factors of immigration and railway construction that we may appropriately introduce our comparisons by some influence In 1886 the Canadian Pacific Railway was completed, and led to the opening up of the great Northwest. British capital flowed into the country in great abundance and railway construction proceeded annually with feverish rapidity. In 1867 a great transcontinental railway system was little more than a dream of the remote future. Now to the Canadian Pacific have been added, with magnificent enterprise, the two additional transcontinental lines of the Grand Trunk Pacific and the Canadian Northern to open up lands which only await the settler and the plough for securing further vast increases in the production of wheat and other cereals. Before the opening of the present century the annual number of immigrant arrivals was from about 20,000 to 40,000; but from 1901 a great change occurred, and the numbers began to increase by leaps and bounds. In 1903, the 109,000 mark was exceeded for the first time. Ten years later the number reached its highest point, viz.: 402,432. Much of this immigration, but not all, was directed to settlement on the fertile lands of the prairie provinces, with the result that all but a small proportion of the wheat acreage of Canada is in these provinces and that in Saskatchewan alone is now

Guelph, established seven years after Confederation, and those of the Macdonald College at Ste. Anne de Bellevue, Quebec, established in 1907, have the widest range, but other provinces are also served by excellent agricultural colleges that carry on experimental work, including colleges or schools of agrigrown more than half of the total wheat of the culture at Truro, N.S., Winnipeg, Saskatoon, Edmonton, and Point Grey in British Columbia.

FISHERIES.

auspices those of the Ontario Agricultural College at

How great has been the activity of Canadians in the development of the fishing industry may be gauged by the single fact that in 1870 the total value of the fish products of Canada was \$6,577,391, whilst for the fiscal year 1914-15, the amount was \$31,264,-631. In 1870 data were not available for Prince Edward Island, British Columbia, and the western provinces; but the value of the production by provinces, for the two fiscal periods, 1870 and 1915, were as follows:

2.394.100	follows:		
14,368,000	Province. 1870.	1915.	
7,865,900	Prince Edward Island	1,261,666	
3,478,850	Nova Scotia \$4,019,425	7,730,191	
723,400	New Brunswick 1,131,433	4,940,083	
10,628,000	Quebec 1,161,551	1,924,430	
64,281,000	Ontario 264,982	2,755,291	
Tons.	Manitoba	849,422	
10,953,000	Saskatchewan	132,017	
ilar com-	Alberta	\$6,720	
the two	British Columbia	11,515,086	
	Yukon	69,725	
		8 C. 1 C. 1997 1997 19	

Total \$5,577,391 \$31,264,631 There are now nearly 100,000 persons employed in the Canadian fishing industry, and the total sum invested in it is about \$25,000,000. The interests of the industry are represented by a Department of the Dominion Government, and since 1382 annual bounties have been distributed to fishermen for encouraging the deep-sea fisheries. Other government assistance takes the form of the payment of express charges for the shipment of fresh fish to interior markets, the establishment and operation of fish-breeding hatcheries, and the supply of information concerning bait. Great as has been the progress made during the last fifty years it is safe to state that future development is limited only by the resources of capital and labor. With coast lines extending to over 5,000 miles on the Atlantic seaboard and to 7,000 miles on the Pacific coasts, besides more than 220,000 square miles of inland waters abundantly stocked with fish, the claim is made that the fisheries of the Dominion of Canada are more extensive than any other in the world.

MINERALS.

The oldest mining province in Canada is Nova Scotia, and statistics are available of the production of Nova Scotian coal since 1827, when the recorded output was 11,491 tons. At Confederation the gold and coal mines of Nova Scotia were the chief sources of the wealth of that province. During the year ended September 30, 1867, the quantity of coal sold from the Nova Scotian mines was 447,532 tons of round, and 34,546 tons of slack. In 1916 the Canadian coal production was 14,428,278 tons. The royalty receipts of Nova Scotia for the year 1867, were \$64,-486 for coal, and \$15,722 for gold. Annual statistics of the value of the mineral production of Canada start with the year 1886, when the total value did not exceed \$10,221,255. The following statement shows the annual value at the beginning of each decade since that date, with the value per capita of the population: Per capita. \$ \$ c

,976.616 1901 65,797,911 12.16 1911 103,220,994 14.42 1916 177,357,454 21.79 The value exceeded \$100,000,000 for the first time in 1910, and the total value has grown from a little over \$10,000,000 in 1886 to the present figure of our \$177,000,000, the respective per capita figures being \$2.23 and \$21.79. One of the first Government Departments of Mines in Canada was that of Ontario, which was established in 1881, with the late Archibald Blue as director. Now Departments of Mines exist in all the mining provinces, including Nova Scotia. New Brunswick, Quebec, Ontario and British Columbia. The Dominion Department of Mines as now organized was established in 1907, and succeeded the Geological Survey which since 1890 had formed a Department under the control of the Minister of the Interior. The minerals of greatest value now obtained in Canada, with the values for 1916, are: Coal (\$38,797,437). copper (\$32,580,057), gold (\$19,162,025), nickel (\$29,-035,497) and silver (\$16,854,635). Incidentally it may be mentioned that the value of coal at the pit's mouth in Nova Scotia did not exceed \$3 per ton at the time of Confederation.

Any review of agricultural conditions since Confederation, however brief, should not omit at least a passing reference to the fine work of the Canadian Agricultural Experiment Stations, both those established by the Dominion Government and those under provincial control. All agricultural experiment stations throughout the world have derived inspiration and impetus from the magnificent results of the Rothamsted Agricultural Experiments instituted nearly 75 years ago by the two famous investigators. Lawes and Gilbert. The example they set was widely followed in the United States; and in Canada, in 1886, the Dominion Government set up five experimental farms at Ottawa, in Nova Scotia, Manitoba, Saskatchewan and British Columbia. After about 20 years of patient work and fruitful results under the control of the late Dr. William Saunders, the value of these institutions began to be more widely recognized; and their number during the present century has rapidly expanded. We need only now mention that the five farms originally established in 1886 with an acreage of 3,472, have increased to 20 with a total acreage of about 9,000. Of the agricultural experiments conducted under provincial