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Toronto, September 6, 1870. 32-1y

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THE MONTREAL TRADE REVIEW.

TORONTO, CAN., FRIDAY, OCT. 28, 1870.

THE CENSUS OF CANADA.

Ever-fleeting Time has again brought around the period for taking the census of Canada. During the debate upon the subject in the House of Commons last session, although no precise time was fixed upon, it was agreed to be taken in 1871.

The Minister of Agriculture and Statistics, the Hon. Mr. Dunkin, is rapidly completing his arrangements for the enumeration. Several appointments have already been made of Census Commissioners; the staff of officials at Ottawa, whose particular duty it will be to attend to the census, is being increased, and it is to be hoped the whole machinery required in each district will be arranged before the new year, so that it may start and act with precision when the appointed time comes round.

The importance of obtaining a correct census cannot be over-rated. The last one, taken in 1861, was admittedly deficient, and although the task is a difficult one, in consequence of so many different persons requiring to be employed, still we hope to see that of 1871 as nearly correct as such an enumeration can be made. Mr. Dunkin is credited with entertaining something like a passion for "details," however numerous and minute. If so, the census will afford him an ample opportunity for its gratification.

According to the Act passed last session, the four Provinces are to be divided into

census districts, to each of which the Governor in Council will appoint a Census Commissioner. These districts will generally have the same bounds as the present electoral divisions. Then these districts will be divided into census sub-districts, generally corresponding to the municipalities, and one or more enumerators appointed for each. The Minister of Agriculture and Statistics will prepare and supply all the necessary forms—through the district commissioners—to each enumerator, who shall at the appointed time make domiciliary visits, and the most careful personal enquiry. The enumerators will have to swear to their returns, and it is provided that any neglect or false return, will be a misdemeanor.

Schedules are to be left at every house by the enumerators, and any person refusing or neglecting to fill them up, or who shall wilfully make any false statement or answer to any matter specified therein, will be liable to a fine of not less than \$10 nor more than \$40. This is but a bare outline of the *modus operandi* by which the coming census is to be taken, and if carefully worked out, it appears to us well calculated to attain a satisfactory result.

Besides the number and classification of our population, the coming census is expected to furnish a pretty correct estimate of the aggregate value of the real and personal property of the Dominion, and of the produce, state and resources of our agricultural, fishing, lumbering, mechanical, manufacturing and other industries.

Since the last census was taken a good deal of discussion has taken place with regard to the number of inhabitants. During the previous decade, the increase was at the following rate: Ontario 4.34 per cent.; Quebec 2.50; Nova Scotia 1.82; and New Brunswick 2.67 per cent.; accepting these figures as indicating the rate of increase since 1861, the following would be the correct numbers, at the two dates respectively:—

Province.	Census 1861.	Census 1871.
Ontario	1,396,091	2,136,308
Quebec	1,111,596	1,422,546
Nova Scotia	330,857	396,449
New Brunswick	252,047	327,800
Total	3,091,591	4,283,103

Some writers maintain that the approaching enumeration will prove that our progress in population has been fully as rapid as the above figures indicate. Others have as warmly contended that it will not. It is not worth while, however, wasting time now, in discussing the point, for a few months will set the matter at rest. The above estimate in our opinion, will be found slightly above the mark.

According to the British North American Act, a re-adjustment of the representation of

the various Provinces must follow the taking of the census. (See section LI.) Should the figures given above to Ontario and Quebec be realized, the former province will be entitled to 97 representatives, 15 more than its present number.

The success of any efforts to procure correct census returns, must necessarily depend largely on the willingness of the people to give the required information. We hope it is not necessary to say, in this enlightened age, that no possible reason can exist why any respectable citizen should refuse to answer a single question which will be on the schedule. Indeed, it is earnestly to be hoped that the Census Commissioners and their subordinates will have the candid co-operation of all classes of the community, and that each and all will endeavour to make the returns as correct an exhibit of the population and wealth of the Dominion as possible.

GOLD MINING AS A COMMERCIAL ENTERPRISE.

The various modes employed for extracting the gold from the substances with which it is mixed up in the ore, will form the next subject of our consideration; in order to a clear understanding of which it is advisable to give a brief account of the state in which the precious metal occurs in nature.

Gold occurs in the rocks in two states—(1) native or metallic, and (2) mineralized with other matters. The most important of these forms is the native gold, as it furnishes nearly all the gold of commerce; that which is found in combination with mercury, tellurium, &c., being rather valuable as specimens for the cabinets of the curious than as articles of commercial importance. Our remarks will, therefore, apply exclusively to native gold as it is found in the rocks.

In this state the metal generally occurs in the veins of quartz which traverse the strata in various directions, either alone, or more frequently associated with common and magnetic iron pyrites (sulphide of iron), mispickel (arsenical pyrites), copper pyrites (sulphide of iron and copper), or galena (sulphide of lead). Where copper or lead prevails, it forms an alloy with either or both, and even after separation contains a larger or smaller proportion of silver, from which it is very difficult to free it entirely.

When gold exists in such veins, it is generally in particles of sufficient size to be visible to the naked eye; but that which is in connection with and included in the pyrites is often so finely divided as to be invisible even after the decomposition of the sulphides; and rock which exhibits no indication of the presence of gold will often yield a rich return when submitted to proper a process of reduc-