

Report of a Committee of the Council of the Royal Society of Canada on Proposals for an Imperial Union of Geological Surveys and Societies.

Your Committee have had under consideration the proposals contained in a letter of Sir William Dawson, LL.D., F.R.S., President of the British Association for the Advancement of Science, addressed to Prof. George Gabriel Stokes, M.A., D.C.L., &c., President of the Royal Society of London, and a copy of which was submitted to the Council of the Royal Society at its meeting on the 31st of March last. Your Committee begs leave to report.

(1.) That the objects referred to seem of the greatest importance to the advancement of Geological Science, and deserve the consideration of this Society, and more especially of its Geological Section.

(2.) That the present year, when all the subjects of the British Empire are united in a common desire to celebrate the fiftieth year of the reign of Her Most Gracious Majesty, when the public mind is impressed with the recent gathering of the resources of the empire in the Colonial and Indian Exhibition, when plans for Imperial Federation are before the public, and when a conference of delegates from the Colonies, for the purpose of promoting a more intimate connection, is being held in London, appears eminently favourable to the realization of the idea of an Imperial Geological Union.

(3.) It would appear that the first steps toward such union should be taken by Scientific bodies in London, and that the Royal Society of London should be requested to begin the movement by inviting in the first instance to a Conference, representatives of the Geological Survey of Great Britain and of the various Societies and Associations in Great Britain and Ireland prosecuting Geological work, with representatives from similar bodies in the Colonies. Such conference might define the objects to be attained, and might prepare a constitution and arrange for subsequent meetings and for Reports to be sent in on important questions.

(4.) It appears to your Committee that when thus organized, the work of the "Imperial Geological Union" might be carried on by local and general conferences and conventions; by regular reports from local branches for publication annually by the Officers or Council of the Union; by correspondence and conference with geological bodies abroad, and possibly by other methods which would develop themselves.

(5.) In so far as Canada is concerned, this work might be aided by the Geological Survey of the Dominion, by this Society and the Societies affiliated with it, and possibly also by the Universities.

(6.) The Director of the Geological Survey of the Dominion has intimated his willingness to co-operate in sending representatives of the Survey to any conference or convention, and also by furnishing information as to the work and methods of the Survey.

(7.) It appears to your Committee that this Society might co-operate by empowering the Council to continue its committee and to select delegates to represent the Society in event of a preliminary conference being called in London, and by inviting all the affiliated Societies which prosecute Geological work in the Dominion to take similar action.

Your Committee would therefore recommend that this report, with the letter appended, be printed and circulated to the different local Societies connected with this Society, and to such other bodies as may be interested in the matter, and that their aid and countenance be solicited in carrying out the scheme, and that the Society empower the council, or a committee appointed for the purpose, to represent the views of the Society by correspondence, or by attending any conference on the subject which may be summoned. It will however be understood that no expense shall be incurred without consent of the Council of the Society.

It appears to your Committee that while the usual language of the Union would necessarily be English, communications should be received in any language used within the Empire, and that in this Dominion the English and French languages would be recognized as in this Society.

(Signed) J. WM. DAWSON.
ALF. R. C. SELWYN,
J. C. K. LAFLAMME.

Copy of a letter addressed to Prof. George Gabriel Stokes, M.A., D.C.L., LL.D., &c., President of the Royal Society.

McGILL UNIVERSITY, MONTREAL,
Feb. 17th, 1887.

DEAR PROF. STOKES :—

Referring to your recent presidential address, and to that of last year by Prof. Huxley, and to the proposed action of the Council of the Royal Society on the subject of a scientific federation of the empire, under the auspices of that Society, I beg leave respectfully to invite your attention and that of the Council to the aspect of the matter with reference to Geological Science, which in some important respects will lend itself to such union more readily than most other departments of scientific work. I had the honour to refer to this subject in my presidential address at the meeting of the British Association in September last, and also in a paper previously read before the Geological section of the Royal Society of Canada, and trust, therefore, that you will not consider it out of place on my part to address this communication to you.

It is, I think, evident from the report of the last meeting of the International Congress of Geologists, that great, if not insuperable, difficulties lie in the way of any general agreement as to geological classification, nomenclature and mapping. These difficulties, however, depend so largely on difference of language and of habits of thought, that they would not affect a union for scientific purposes on the part of the geologists of the British Empire, and ultimately of all English-speaking countries. It therefore appears that such a more limited union might with advantage be undertaken in the first instance, and with the view, not of obstructing, but of aiding the wider movement.

The British Empire also possesses exceptional facilities for taking the lead of other nations in so far as Geology and Physical Geography are concerned. The British Islands, as is well known, are remarkable for the great variety of their formations and the excellence of their exposures, and much of the present classification and methods of representation in Geology has originated in Great Britain, and has been adopted with slight variation in all English-speaking countries, and to a considerable extent in other countries as well. In Canada, we have the larger half of North America, and much of this very satisfactorily explored. We have also the advantages of the best exposures of the older crystalline rocks, of a development of the Palæozoic series in the Eastern Provinces, more closely allied to that of Europe than to that of the interior American plateau, and of Pleistocene deposits so extensive and complete that they must ultimately decide many of those questions of glacial geology which have been so much agitated. In India, Australasia and South Africa, with the western districts of Canada and various smaller dependencies, we hold a controlling influence in the Geology of the great Pacific and Indian ocean areas. Arctic and Antarctic geology and modern oceanic deposits have been worked principally by English observers, and English-speaking geologists have been and are exploring in many countries not under the British flag. More especially the large amount of geological work done in the United States is based on English methods, and is published and discussed in the English language, and the most intimate and friendly relations subsist between the geologists of the United States and those of Great Britain and the colonies.

In these circumstances it would seem that a union of British geologists might overcome the difficulties which appear so formidable as between the different European nations, and might lay a broad foundation of geological fact, classification, nomenclature and representation which would ultimately be adopted by other countries as far as local diversities and differences of language might permit. Such a geological union would naturally be accompanied or followed by similar co-operation in other departments of investigation in natural science.

It seems probable that the Geological Survey of Great Britain and the Geological Surveys of the Colonies and of India, with the British Association and the Geological Societies and Geological sections of societies in all parts of the empire, would be willing to co-operate in such a movement under the auspices of the Royal Society, and that the Council might usefully invite communications on the subject from public departments and societies, beginning with those of the mother country and its colonies and dependencies, but looking ultimately to union with those of the United States also.

In the meantime, I propose to mention the subject to the Council of the British Association, to the English and American committees of the International Congress of Geologists, and to the Council of the Royal Society of Canada, and shall be glad to have your permission to regard this communication as an open letter to be used in any way likely to promote the object in view.

I have the honour to be, with all kind regards,

Yours sincerely,

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