

John William Dawson

Two Unpublished Letters

[To the mathematician George Gabriel Stokes, President of the Royal Society of London. Dated McGill University, Montreal, February 17, 1887. *Royal Society Archives, Miscellaneous Correspondence 14 (1885-88)*, 189.]

Dear Professor Stokes,

Referring to your recent presidential address and to that of the last year by Professor 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 the Royal Society, I beg leave respectfully to invite your attention and that of the Council to the aspect of the Matter with reference to the 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 the advantages of the best exposures of the older Crystalline rocks, of a development of the Palaeozoic series in the Eastern provinces which is 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 excellent 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 and English speaking 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 the Colonies and India with the British Association and the Geological Societies and Geological Sections of Societies in all parts of the Empire would be willing to

cooperate 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 mean time 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 cited in any way likely to promote the object in view.

Have the honour to be, with all kind regards, Yours Sincerely

J. W. Dawson, LLD, FRS

[To Professor Stokes. Confidential (For Council of Royal Society only), dated McGill College, Montreal June 9, 1887) *Royal Society Miscellaneous Correspondence 14 (1885-1888)*, 222.]

Dear Prof. Stokes,

In reply to your communication of May 27th I hope to send with this or by the mail immediately succeeding copies of a Report adopted by the Royal Society of Canada at its recent meeting, and which contains some suggestions as to the manner of affecting the Imperial Geological Union proposed. In addition to this I may refer to the following points.

The proposed Geological Union might form a part of a general Scientific Federation of the Empire, if any plan of this nature is entertained by the Royal Society.

Either in this connection or alone, it would be best promoted by convening a conference under the auspices of the Royal Society, to which representatives of the Geological Survey and of Societies prosecuting Geological work might be invited. In the first instance, to save time, such a conference might be confined to Great Britain, except that it might include

official representatives of the Colonies and India, resident in London or happening to be there.

The Conference might appoint a central committee in London with authority to convene at a suitable time a more attended conference representing all parts of the Empire, to adopt formally a constitution for the Union. The Constitution might include the following provisions: 1) The establishment in London of a central council consisting of representatives, *ex officio* or otherwise, of surveys and Societies under the Presidency of the President of the Royal Society. 2) The affiliation of local Branches of similar character in each Colony or Dependency. In Canada the Branch Association might be under the auspices of the Royal Society of Canada. 3) Each local Association would be empowered to hold conferences and to appoint delegates to attend such general conferences as might be held in England, and to communicate Reports or other information respecting Geological work in the colony or dependency represented, as suggestions as to combination of action for particular objects. 4) General conferences would be convened from time to time, if possible annually, and would receive papers and Reports relating to the progress of Geological work, the methods of observing and recording observations, uniformity of classification and nomenclature, concentration, of effort in particular departments of inquiry, and other matters affecting the progress and unity of work throughout the Empire and the opening up of new fields of investigation. 5) The Reports of such conferences should contain a Geological Directory for the Empire, so as to facilitate intercommunication, Reports, and notices of the work in progress in all parts of the Empire, references to all publications of general interest, and in general such information as would enable any working geologist to know what was being done in his department and by whom. 6) The General Council should be empowered to open communication with bodies in foreign countries, as for example, in the United States of America with the National Academy, the U.S. Geological Survey and the American Association, and to invite them to send delegates to conferences or in other ways to cooperate in the advancement of Science. 7) The expenses of Secretariat and publication might be provided for by a small membership fee entitling to attend conferences and receive copies of publications; and as the work would be of practical value and would tend to economy of expenditure, grants in aid might be secured from Scientific funds or from the Governments of the various parts of the Empire. It is not improbable that the contemplated "Imperial Institute", if established, might

give substantial aid in rooms or otherwise. The expenses of the Union need not in the first instance be large.

The above are to be regarded as somewhat crude suggestions; but these and others would I have no doubt rapidly assume form and consistency if a preliminary conference could be held, say about the time of the meeting of the British Association if not earlier. Lastly, though I have confined myself alone to the Geological aspects of the matter, there seems no reason why other scientific subjects more especially those relating to the aspects of nature in different regions such as Astronomy, Physical Geography, Meteorology and Biology should not form one general Union on some basis of the nature suggested above.

I have sent a communication, with extracts of my former letter and of the Report of the Royal Society of Canada, to *Nature*, with the view of exciting a wider interest in the matter.

I remain, Dear Prof. Stokes, Yours very sincerely

J. W. Dawson