

partly covered by a grant from the Elizabeth Thompson science fund (the first help the author has had), we can gauge to some extent our past pecuniary indebtedness to the indefatigable author, who steadily issues these incomparable iconographs.

— W. William Topley, general secretary of the committee on organization of the coming (fourth) session of the International Geological Congress in London, desires that all scientific societies, libraries, institutions of learning, and individuals having any interest in the publications relating to the purpose of the congress, and the volume of its Proceedings containing the reports, papers, maps, etc., should secure these publications at the trifling cost of the membership fee to the congress, of ten shillings, or about two dollars and a half. For every such sum sent to him at the museum, 28 Jermyn Street, London, the sender, whether an institution or an individual, will receive all the documents which it or he would receive were the sender actually present as a member of the congress. Some of these publications, not to speak of the volume, will be of great value, and cannot be otherwise procured. Address William Topley, Esq., general secretary International Congress of Geologists, Museum, 28 Jermyn Street, London. The volumes of previous sessions of the congress alone are now difficult to procure at twice this cost, or more.

— The Royal Society of Canada has, since its establishment, done much to promote the interests of science in the Dominion. In his annual address delivered at the recent meeting which was held in Ottawa May 22–24, the president, Dr. Lawson of Halifax, reviewed the work of the society during the past year. The Transactions of the society for 1887 fill a large volume; although, of seventy papers which were presented, only forty were printed, the rest being kept back by the authors for the purpose of being perfected by additional work. He called attention to the preponderance of papers in the geological and biological section over those in the sections of English and French literature, which had increased more and more, showing the greater interest taken in science as compared to history and philology. In the course of his address he urged the granting of aid from the British Parliament for the purpose of making observations of tides and currents. This would not only be of substantial value to the shipping community, but would be a benefit to the country at large. A committee was appointed to co-operate with the British Association in pressing the necessity of such observations upon the Parliament, but so far no practical result has followed. A scientific federation of the empire, which was being agitated under the auspices of the Royal Society in London, also engaged attention, and was considered a matter of the greatest importance, in view of the aid that could be given to a geological survey of the Dominion. A committee appointed to inquire into the matter reported favorably on the subject, and the council of the Royal Society was given permission to act upon this report. On Friday the sections presented their reports. The section for French literature stated that they had decided to establish a fund of ten thousand dollars for a prize at the French Academy, to be called 'The New France Prize;' the interest, three hundred dollars, to be given in annual prizes to the author of the best work in French, to be published in France or Canada, on a subject to be determined by the academy. Sanford Fleming was elected president for the ensuing year.

LETTERS TO THE EDITOR.

*** Correspondents are requested to be as brief as possible. The writer's name is in all cases required as proof of good faith.*

Twenty copies of the number containing his communication will be furnished free to any correspondent on request.

The editor will be glad to publish any queries consonant with the character of the journal.

Genealogy of Ideas.

In the study of the genealogy of ideas there is a series of questions which have sprung up as corollaries to the problems involved in similarities. In Col. Lane Fox's exhibition of weapons, structure is the fundamental concept. All weapons of the same plan of structure are in the same row. The second concept is complexity of form and structure, and the pieces are arranged in their row according to their elaboration, the worst on the left. No good

anthropologist would argue from this order that the row represented a genealogical line, in which each one at the right is child of the one immediately on its left. The only safe conclusion is, that the history of invention has travelled somewhat in this manner.

The corollary to all this is, that arranging the arts of different races in such a developmental series gives us a fair means of gauging these races in the scale of excellence and advancement. If people A are found in the whole group of series to stand on the left of people B, then they are an inferior people. If, on the contrary, we make ourselves A, and, comparing our inventions and institutions of all kinds with those of B, we discover that we stand on the right rather than on the left, there should be no hesitation in rating ourselves accordingly.

The next corollary is, that we cannot neglect historical studies. Genealogies are to be traced historically. The Russian banjo did not descend from the Aleut banjo, but really descended to it, and shows that which occurs again and again in arts and institutions, the degradation of invention.

O. T. MASON.

Washington, May 30.

New York Schools.

AFTER investigating the English musical system known as the Tonic-Sol-Fa, and finding its great superiority to the staff method, which I had taught for twenty years, I naturally sought to interest music-teachers and educational people in the system. For this purpose I had several interviews with Superintendent Jasper. My reception from him was about as cordial as if I had been the vendor of a quack nostrum. At last he settled the question by saying very emphatically, "Mr. Seward, I am *opposed* to the Tonic-Sol-Fa System!" As he knew nothing about it, and refused to give any attention to the overwhelming testimony of English and American teachers, in favor of the system, I was led to ask myself what progress could possibly be made by the New York schools in any direction under the control of such a superintendent.

THEODORE F. SEWARD.

East Orange, N.J., May 30.

YOUR editorial note in the issue of your paper for May 25, discussing the system employed in the New York public schools and the relation of the present superintendent to it, ought to have been read by every teacher in New York City. The truth is, that barnacles by the score are nourished and fattened by the present state of affairs, and all their powerful influence is enlisted against any change. The publishers and the politicians run the schools at present, and neither publishers nor politicians hesitate to use corrupt and debasing means to attain their ends. One man who knows as well as any one else — if not better than any one else — how thoroughly rotten and inefficient the present administration is, takes the stand, and calmly testifies that it is scholastically perfect and sound! Why? Because his text-books are used, and he fears their being displaced by others if a new *régime* is inaugurated, or if he offends the "powers that be" at present.

New York's citizens do not understand the present crisis, or there would be an agitation which would put those in favor of high license, clean streets, or home rule into a dismal shade. The minds and manners of nearly two hundred thousand children are involved. Can nothing be done?

A PROFESSIONAL OBSERVER.

New York, June 1.

Answers.

32. HUMAN BEINGS AS PACK-ANIMALS. — Referring to my friend Professor Mason's query No. 32, I beg to refer him to Darwin's 'Voyage of the Beagle,' Chapter XVI., pp. 340 and 341, for a capital account of the 'duty' of men used as-beasts of burden. The passage is too long to quote here, but any one interested can easily turn to it. The Chinese porters of San Francisco would furnish him with examples of high 'duty' also. I regret that I cannot give numerical estimates. I can only say that loads which I have vainly tried to lift from the ground were carried by undersized Chinese at quite a rapid walk. In many cases such loads are carried up and down hills too steep to drive upon.

EDWARD S. HOLDEN.

San José, Cal., May 28.