

THE INTERNATIONAL CONGRESS OF AMERICANISTS.

It is now two years since the sixth meeting of the International Congress of Americanists was held at Turin. The next meeting is going to be held at Berlin from the 2d to the 5th of October. Before the adjournment of the Turin meeting an organizing committee was appointed, which, in agreement with the bureau of the Turin session, proposes the following subjects for the discussion of the congress. The first day of the meeting will be devoted to the history of the discovery of America, to the pre-Columbian history of the continent, and to American geology. Among the important subjects proposed for this day is a discussion of the early history of Central America, more particularly of the nationalities living there before the invasion of the Aztecs and other northern tribes, and of the chronology of the invasions of uncivilized tribes into Mexico. Professor Guido Cora of Turin will report on the publication of documents referring to Columbus, incident to the celebration of the fourth centenary of the discovery of America, and on the origin of the name of America. Mr. Gelcich, who recently published in the Journal of the Berlin Geographical Society an elaborate study of the life of Columbus, will report on recent researches in this field.

The second day will be devoted to the discussion of archæological questions. Of course, the most prominent of these is the comparison of American and Asiatic relics; and the similarity and dissimilarity of American and Asiatic jade implements and pottery will be discussed.

On the third day the anthropology and ethnology of America will be treated. Prof. R. Virchow will report on the anthropologic classification of the ancient and modern inhabitants of America and on a craniological atlas. It is to be hoped that this important work will be materially furthered by the researches of the congress. Another problem not inferior in importance to the former is that of the ethnological atlas of America, to which the Bureau of Ethnology of Washington has made a contribution of the greatest value. While the discussion of the congress will hardly add any thing to the facts referring to North America collected by the scientists at Washington, our knowledge of the distribution of tribes of South America will undoubtedly be materially increased. While these two questions refer to material to be collected, a number of others will treat the ethnological problems of our continent. Prof. A. Bastian will illustrate the theory of geographical provinces by the ethnology of America. Profs. C. Fritsch and Guido Cora will discuss the unity of the American aborigines by studying their anthropological features, and the latter will compare the diluvial human remains with those of the Indians. Professor Virchow will compare the artificial deformations of skulls practised in America with those found in Asia, Europe, and on the islands of the Pacific Ocean. Another problem of general interest will be treated by A. Krause, — the question of a connection between Asiatic races and the natives of the north-west coast of America.

The last day of the session will be devoted to linguistics and paleography. The question will be discussed whether there exists any characteristic feature common to all American languages. Another subject of general interest, upon which Prof. L. Steinthal will make a report, is the question if any similarity exists between Polynesian and north-west American languages.

A detailed programme will be published about the middle of September, and members are requested to send their manuscripts, or the titles of their communications, to the bureau of the congress before Sept. 15. The bureau is in the Royal Ethnological Museum of Berlin, which will also form one of the principal attractions of the coming congress. There are few collections in Europe which represent the ethnology of America so well as that of Berlin, and none has collections of equal value from the civilized races of ancient America. Fortunately the collections have been recently transferred to a new and magnificent building, where they will be accessible to the visitors of the congress. There are a number of old collections from the central part of South America showing the beautiful feather-work of the Indians of those regions, but the student will principally be interested in Von den Steinen's collections from the Xingu River. This distinguished explorer will report to the congress on his recent expedition, from which he has

just returned. The ancient civilization of Peru, which forms one of the objects of discussion, is represented by valuable collections in the museum, particularly the great collection of pottery and gold ornaments of Macedo and that of Reiss and Stübel, which contains, besides specimens of pottery, numerous mummies, beautiful samples of woven clothing, etc. The collections from Central America date back to the travels of Alexander von Humboldt; but since that time numerous new collections have been added, principally those of Bastian and of Strebel. Last, we have to mention the extensive collections from British Columbia and Alaska.

It is to be expected that the approaching congress will materially further the study of American archæology and ethnology.

THE HISTORY OF A DOCTRINE.¹

"MAN, being the servant and interpreter of nature, can do and understand so much, and so much only, as he has observed, in fact or in thought, of the course of nature. Beyond this he neither knows any thing nor can do any thing." — BACON'S *Novum Organum*, aphorism 1.

IN these days, when a man can take but a very little portion of knowledge to be his province, it has become customary that your president's address shall deal with some limited topic, with which his own labors have made him familiar; and accordingly I have selected as my theme the history of our present views about radiant energy, not only because of the intrinsic importance of the subject, but because the study of this energy in the form of radiant heat is one to which I have given special attention.

Just as the observing youth, who leaves his own household to look abroad for himself, comes back with the report that the world, after all, is very like his own family, so may the specialist, when he looks out from his own department, be surprised to find that, after all, the history of the narrowest specialty is amazingly like that of scientific doctrine in general, and contains the same lessons for us. To find some of the most useful ones, it is important, however, to look with our own eyes at the very words of the masters themselves, and to take down the dusty copy of Newton, or Boyle, or Leslie, instead of a modern abstract; for, strange as it may seem, there is something of great moment in the original that has never yet been incorporated into any encyclopædia, something really essential in the words of the man himself which has not been indexed in any text-book, and never will be.

It is not for us, then, here to-day, to try

"How index-learning turns no student pale,
Yet holds the eel of science by the tail;"

but, on the contrary, to remark that from this index-learning, from these histories of science and summaries of its progress, we are apt to get wrong ideas of the very conditions on which this progress depends. We often hear it, for instance, likened to the march of an army toward some definite end; but this, it has seemed to me, is not the way science usually does move, but only the way it seems to move in the retrospective view of the compiler, who probably knows almost nothing of the real confusion, diversity, and retrograde motion of the individuals comprising the body, and only shows us such parts of it as he, looking backward from his present standpoint, now sees to have been in the right direction.

I believe this comparison of the progress of science to that of the army which obeys an impulse from one head has more error than truth in it; and, though all similes are more or less misleading, I would almost prefer to ask you to think rather of a moving crowd, where the direction of the whole comes somehow from the independent impulses of its individual members, not wholly unlike a pack of hounds, which, in the long-run, perhaps catches its game, but where, nevertheless, when at fault, each individual goes his own way by scent, not by sight, some running back and some forward; where the louder-voiced bring many to follow them, nearly as often in a wrong path as in a right one; where the entire pack even has been known to move off bodily on a false scent; for this, if a less dignified illustration, would be one which had the merit of hav-

¹ Address before the American Association for the Advancement of Science, at Cleveland, O., Aug. 15, 1888, by Prof. S. P. Langley, the retiring president of the association.