

One of the most interesting matters presented at these meetings was the paper of Mr. Charles D. Walcott on the discovery of undoubted fish-remains in strata of Ordovician (Lower Silurian) age, near Cañon City, Colorado. The occurrence of fishes in Upper Silurian beds has long been known in Europe, and in a few cases in this country; but it was a novel, and almost startling, change in our ordinary ideas to see these specimens of abundant ichthyic remains,—chiefly small granoidal plates and scales,—from a horizon corresponding to the Trenton limestone of the East.

The library of the Columbian University was converted into a room for geological exhibits, in which were arranged a very large number of specimens and appliances of much interest. The United States Geological Survey furnished a host of maps, reports, reliefs, photographs, etc., illustrating important features of American geology and the extensive character of the work in progress therein. Numerous maps and volumes were likewise displayed by State surveys, and by individual geologists; while many remarkable specimens and suites of specimens occupied table-cases throughout the room. Among these may be mentioned an extensive series of American rocks, brought by the representatives from that country; the Ordovician fish-remains above referred to, by Mr. Walcott; a most beautiful suite of the Tertiary insects from Florissant, Colorado, named and described by Professor Scudder; and, of peculiar interest, what appeared to be unquestionably glacial groovings from a Silurian rock-surface, exposed on removal of overlying strata,—thus indicating a glacial epoch far back in early Paleozoic time. These specimens, with views of the spot, were from a Scandinavian locality. Most of this interesting material was recorded in a pamphlet "Catalogue of Exhibits."

The general plan of the Geological Congress was to take up, for each day of the session, some one comprehensive subject, and after a full treatment of it by one or two members, to discuss it broadly and compare views, but not to attempt to decide upon mooted questions. This method was the result of experience in past meetings of the Congress, wherein it has come to be seen that little is gained by the attempt to pass judgment or formulate rules. Another interesting point was that, by general consent, the lead was taken by, or rather given to, our own geologists,—the foreign delegates, while participating largely in the discussions, coming to see, and hear, and learn.

The first subject was the classification of Pleistocene (Quaternary) deposits. The opening paper was by president T. C. Chamberlain, and was a comprehensive and exhaustive scheme of genetic classification of all the forms and types of superficial deposits immediately preceding the present period. The second day was given to the topic of correlation of sedimentary rocks, and was opened at length by Professor G. K. Gilbert of the United States Geological Survey, who described the several methods, both physical (by structure) and biotic (by fossils) available in identifying and correlating rocks. The discussion on this topic became very extended, going over into the next day, and was of great interest, in that many specialists in different departments presented their methods of work and their estimates of various means. Thus Professor von Zittel dwelt on the advantages of marine invertebrates, as compared with higher forms, or correlation; Professor Cope took up the gauntlet in behalf of vertebrata; and Dr. Lester F. Ward for fossil plants; while the physical methods of correlating and classifying strata were discussed by Professor McGee in an exposition of what is sometimes termed "the new geology," as applied to the coastal region of the Atlantic States, and by Professor Van Hise in a discussion of the great pre-Columbian series, now coming to be recognized and traced in the United States, under the name of Algonkian. The general view, however, emphasized the fact that all methods of correlation vary in value inversely as the geographical distance of the beds.

The next day was given to map-coloring and cartography. Here Major Powell, the head of the United States Geological Survey, naturally led the discussion, presenting a full account of the scheme adopted for the work of the survey, which is quite different from that proposed in 1885, at the Berlin meeting of the Congress. In the subsequent discussion, one fact, very strikingly developed, was the vastness of the scale on which the work of the American survey is conducted, as compared with those of Europe.

Indeed, this same aspect came often and strongly to view during the summer,—the immense field of geology in America, the vast areas to be connected and compared, the possibility of both methods and results, when "the whole boundless continent,"—of simple structure, and under a single government,—is to be dealt with, that are different from those of the Old World,—broader, grander, and more comprehensive.

D. S. MARTIN.

New York, Nov. 14.

#### Fifth International Congress of Geologists.

IN the current number of your journal (Nov. 6, 1891) is an article presenting Dr. Persifor Frazer's views upon the recent meeting of the International Congress at Washington. Dr. Frazer is of course at liberty to entertain such opinions with regard to the congress as he pleases, but in presenting an elaborate statistical table, as he has done here, he should at least endeavor to obtain accurate data.

Printed lists of names and addresses of members who had registered up to the fourth day of the congress were freely distributed to all who took part in the meetings. Some few belated foreigners registered after that date. Dr. Frazer's table ostensibly gives the comparative attendance at the five congresses, although he himself admits that no statistics have been given showing the actual attendance at the Paris congress. For the Washington congress he gives an attendance of 148 natives and 53 foreigners, as against 172 natives and 75 foreigners given by the printed lists above mentioned. Hence, of the four conclusions which he draws from his table, in point of fact all are incorrect, with the possible exception of the last, which I have not yet had time to verify.

S. F. EMMONS.

Washington, D.C., Nov. 12.

#### AMONG THE PUBLISHERS.

EARLY in 1892 Houghton, Mifflin, & Co. will publish under the title of "The Spirit of Modern Philosophy," the lectures given by Dr. Josiah Royce of Harvard in Cambridge last winter. The lectures were listened to with great interest, and, having been carefully revised, will form a work of remarkable value.

—Little, Brown, & Co. have nearly ready a new edition of Nuttall's "Hand-book of American Ornithology," brought down to date by Montague Chamberlain.

—A "Supplement to the Hand-Book of the American Academy" has just been published. It contains a list of the accessions to membership in the American Academy of Political and Social Science from Apr. 15 to Aug. 15, 545 names in all.

—Dextrine is the best substance for gumming labels. It may be purchased of almost any wholesale manufacturing chemist. It is mixed and stirred with boiling water until it obtains a consistency like ordinary mucilage, then applied to the back of the printed matter with a wide camel's-hair brush (care being taken to use paper that is not thin or unsized); after it becomes dry it is fit for use, being rendered exceedingly adhesive by a slight wetting.

—C. A. Starke, Görlitz, Prussia, has just published, says *The Publishers' Weekly*, the first number of *Ex-libris*, a journal devoted to the interests of collectors of book-plates in particular and to bookish matters in general, to be issued as often as the material in hand warrants making up a number. The first issue is almost entirely devoted to the subject-matter which gives the journal its title. It is a small quarto and handsomely printed.

—To extract grease spots from books or paper, gently warm the greased or spotted parts of the book or paper and then press upon it pieces of blotting-paper, one after another, so as to absorb as much of the grease as possible. Have ready some fine, clear essential oil of turpentine, heated almost to a boiling state; warm the greased leaf a little, and then with a soft, clean brush wet the heated turpentine both sides of the spotted part. By repeating this application the grease will be extracted, according to *The Publishers' Weekly*. Lastly, with another brush dipped in rectified spirits of wine, go over the place, and the grease will no longer appear, neither will the paper be discolored.