four photographs, and in one of these at least the instrument was shifted. But an able seaman was able this year to get six perfect exposures with it. Professor Copeland also used the big telescope, 40 feet long, which he had employed on other occasions.

Mr. J. Evershed presented a preliminary report on his expedition to the south limit of totality. His reason for choosing a site at the limit of totality was that the flash spectrum was there visible very much longer. Unfortunately, he accepted the guidance of the Nautical Almanac Office, and found himself outside the line of totality—about 200 metres according to his informants, who said a small speck of sunlight was visible all the time. He was successful in obtaining some fine photographs of the flash spectrum.

## THE THIRD INTERNATIONAL CONFERENCE ON A CATALOGUE OF SCIENTIFIC LITERATURE.

Professor Henry E. Armstrong contributes an article to the current number of *Nature* from which we take the following facts regarding the recent Conference on a catalogue of scientific literature:

In view of the proceedings of the Conference there can be little doubt that the ultimate execution of this important enterprise is now assured.

Every one was of opinion that if a fair beginning can once be made, the importance of the work is so great, it will be of such use to scientific workers at large, that it will rapidly grow in favor and soon secure that wide support which is not yet given to it simply because its character and value are but imperfectly understood. Therefore, all were anxious that a beginning should be made.

It has been estimated that if 300 sets or the equivalent are sold, the expenses of publication will be fully met. As the purchase of more than half this number was guaranteed by France, Germany, Italy, Norway, Switzerland and the United Kingdom, the Conference came to the conclusion that the number likely to be taken by other countries would be such that the subscriptions necessary to cover the cost of the catalogue would be obtained.

The resolution arrived at after this opinion had been formed, "That the catalogue include both an author's and a subject index, according to the schemes of the Provisional International Committee," must, in fact, be read as a resolution to establish the catalogue.

A Provisional International Committee has been appointed which will take the steps now necessary to secure the adhesion and co-operation of countries not yet pledged to support the scheme.

Originally, it was proposed to issue a card as well as a book catalogue, but on account of the great additional expense this would involve, it is resolved to publish the catalogue, for the present, only in the form of annual volumes.

From the outset great stress has been laid on the preparation of subject indexes which go behind the titles of papers and give fairly full information as to the nature of their contents. Both at the first and the second International Conference this view met with the fullest approval. Meanwhile the action of the German government has made it necessary to modify somewhat the original plan. In Germany, a regional bureau will be established, supported by a government subvention, and it is intended that the whole of the German scientific literature shall be catalogued in this office. In such an office it will for the present be impossible to go behind titles; consequently, only the titles of German papers will be quoted in the catalogue. In England the attempt will be made to deal fully with the literature, and the cooperation of authors and editors will be specially invited. A full code of instructions for the use of the regional bureaux is now being prepared under the auspices of the Provisional International Committee.

The catalogue is to be published annually in seventeen distinct volumes. The collection of material is to commence from January 1, 1901. As it will be impossible to print and issue so many volumes at once, it is proposed to publish them in sets of four or five at quarterly intervals. During the first year, parts covering shorter periods will be prepared, so as to make the subsequent regular issue possible of volumes in which the literature published during a previous period of twelve months is cata-

logued. Unfortunately the United States and Russia were not represented at the Conference.

## SCIENTIFIC NOTES AND NEWS.

Professor Henry F. Osborn, professor of zoology, at Columbia University, and curator of vertebrate paleontology of the American Museum of Natural History, has been appointed paleontologist in the United States Geological Survey. Professor Osborn's special field of work will be to take charge of the vertebrate paleontology of the Survey, especially with reference to the completion of the monographs for which the illustrations were prepared under the direction of the late Professor O. C. Marsh.

It is reported by cablegram from London that Professor E. C. Pickering of Harvard University has been in conference with Sir David Gill with a view to a survey of the east coast of Africa, in which it is said American men of science will participate.

The Society for the Promotion of Engineering Education, on July 5th, elected the following officers for the ensuing year: President, Professor C. O. Marvin of the Kansas State University; Vice-President, Professor Albert Kingsbury of the Worcester Polytechnic Institute; Secretary, Professor H. S. Jacoby of Cornell University; Treasurer, Professor C. A. Waldo of Purdue University.

Dr. Thomas H. Norton, lately professor of chemistry in the University of Cincinnati, who was recently appointed by the President to establish a United States Consulate at Harpoot, Turkey, in Asia, has sailed on the steamship Archimede, of the Italian line, for Constantinople.

Dr. W. C. Stubbs, director of the Louisiana Experiment Station, has been selected by the Secretary of Agriculture to visit the Hawaiian Islands and report upon the most feasible plan for the establishment of an agricultural experiment station there. Dr. Stubbs will spend the month of August in the Islands investigating the locations best adapted to a station, the lines of work which should be undertaken, and matters relating to the necessary equipment and expense of maintenance.

Dr. S. A. Knapp, of Louisiana has gone to Porto Rico on a similar mission. These preliminary investigations are in accordance with the recent acts of Congress making appropriation for the office of Experiment Stations of the Department of Agriculture, providing for the establishment of agricultural experiment stations in these island possessions.

Dr. J. Walter Fewkes of the Bureau of American Ethnology has returned to Washington after eight months absence in the field devoted to a further study of the Hopi Indians in Arizona.

Dr. CLEVELAND ABBE, Jr., of Winthrop College, is spending the field season in Western North Carolina and Virginia as special assistant to one of the hydrographic parties of the U. S. Geological Survey. He is engaged in special study of the physiography of this district while also assisting in the hydrographic survey that is being made by the co-operation of the N. C. State Geological Survey and the U. S. Geological Survey.

PROFESSOR JOSIAH ROYCE, of Harvard University, has been invited to give a course of lectures at Dublin University.

Professor George Lincoln Goodale, of Harvard University, will be absent on leave next year, and Dr. Rodney H. True has been appointed lecturer in botany for the year.

A CONVERSAZIONE was held at the London Medical Graduates' College and Polyclinic on July 4th, when the museum was inaugurated, and Professor Osler, of Baltimore, gave an oration on 'The Teaching of Practical Medicine.'

AT a dinner given on June 24th, in honor of the yellow fever expedition of the Liverpool School of Tropical Medicine, Mr. A. L. Jones subscribed £1000 towards the erection of a hospital for tropical diseases in Liverpool. In addition to smaller gifts, two subscriptions of £500 from Mr. Blaize, of Lagos, and Mr. John Holt, of Liverpool, were announced.

THE annual visitation of the Royal Observatory at Greenwich, which was this year, owing to the solar eclipse, postponed for a month, took place on June 26th. Among those present were Sir David Gill, from the Cape of Good Hope, Sir William Huggins, Sir George Stokes