

plates, contained in Mr. Scudder's monumental work upon the Butterflies of New England.

The book is a very convenient manual for use on the part of beginners residing in New England and the Middle States, the species treated being for the most part the butterflies commonly found in these sections of our country. The instructions for collecting, rearing, and studying butterflies are brief, but most excellent.

The interest in the study of natural science is rapidly increasing, 'nature study,' so-called, having found a prominent place in the work of our common schools. Such brief compends as these, which are strictly accurate, and adapted to the wants of the ordinary teacher and pupil, are therefore certain to receive favorable attention, and more and more to attract a widening circle of readers and purchasers. The book has already proved its worth, as have all the writings of its learned author, and the issue of this second edition should be cause for congratulation alike to author and publishers.

W. J. HOLLAND.

#### SCIENTIFIC JOURNALS AND ARTICLES.

*The Popular Science Monthly* for August has for its frontispiece a portrait of Professor R. S. Woodward, President of the American Association for the Advancement of Science, while the first article, 'Rhythms and Geologic Time,' by G. K. Gilbert, is the address of the recent President of the Association. R. W. Wood describes 'The Photography of Sound Waves,' Havelock Ellis discusses 'The Psychology of Red,' Simon Newcomb continues his 'Chapters on the Stars,' and James Collier has the third of his papers on 'Colonies and the Mother Country.' Carl H. Eigenmann discusses the 'Causes of Degeneration in Blind Fishes,' stating that all indications point to use and disuse as the effective agents in moulding the eye. William Baxter, Jr., treats of 'The Evolution and Present Status of the Automobile,' and A. W. Greeley summarizes the 'Scientific Results of the Norwegian Polar Expedition.' The Departments of Discussion and Correspondence, Scientific Literature, and The Progress of Science are well filled.

*Bird Lore* for August opens with the first instalment of a paper on 'The Orientation of Birds,' by Capt. Gabriel Reynaud, of the French Army, who takes the ground that there is a 'sense of direction.' William Brewster contributes 'A Study of a Lincoln's Sparrow,' and Harry S. Warren treats of 'The Birds that Pass in the Night.' There are numerous notes and book notices. The Editor discusses the proposed agreement with the Millinery Merchants' Protective Association regarding the use of American birds, and Mabel Osgood Wright treats of the same subject under the reports of Audubon Societies, taking the ground that no compromise can be made, that unless all birds can be protected none should be. It is to be feared that we are, on a smaller scale, to have a repetition of the differences existing between prohibitionists and advocates of high license on the liquor question.

HERR BARTH, Leipzig, has begun the publication of a journal entitled *Zeitschrift für Tuberkulose und Heilstättwesen* edited by Professors Gerhardt Frankel and von Leiden. The first number contains a series of important articles, including contributions in French and English.

DR. J. C. ARTHUR, Purdue University, has retired, owing to ill health and pressure of work, from the position of responsible editor of the *Botanical Gazette* which he has filled for the past fourteen years. The journal is now edited by Professor John M. Coulter and Professor C. R. Barnes, with other members of the botanical staff of the University of Chicago. Professor Arthur becomes an associate editor, the other American associate editors being Professor Robert A. Harper, University of Wisconsin; Professor Volney M. Spalding, University of Michigan; Professor Roland Thaxter, Harvard University, and Professor William Trelease, Missouri Botanical Garden.

#### DISCUSSION AND CORRESPONDENCE.

##### INTERNATIONAL CATALOGUE OF SCIENTIFIC LITERATURE.

TO THE EDITOR OF SCIENCE: I am authorized by the Secretary to bring to your attention the fact that, after a number of discussions by scientific representatives of nearly all nations,

it was decided at an International Conference held in London in June, 1900, to publish, beginning with the year 1901, an International Catalogue of Scientific Literature, which is to be issued only in the form of annual volumes at first. The Catalogue is to include both an author and a subject index. It will comprise the following subjects: Mathematics, Mechanics, Physics, Chemistry, Astronomy, Meteorology (including Terrestrial Magnetism), Mineralogy (including Petrology and Crystallography), Geology, Geography (Mathematical and Physical), Paleontology, General Biology, Botany, Zoology, Human Anatomy, Physical Anthropology, Physiology (including Experimental Psychology, Pharmacology and Experimental Pathology), and Bacteriology; in all 17 subjects. At least one volume will be given to each subject, and it is proposed that not all the volumes shall be issued at once, but in four groups, as soon as possible after the first of January, April, July and October respectively. The subscription price for a complete set of the whole Catalogue in 17 volumes is £17, say \$85.00.

The Smithsonian Institution has provisionally undertaken to represent the interests of the Catalogue in the United States, and will receive promises of subscriptions. The publication of the Catalogue cannot be undertaken unless subscriptions for about 300 complete sets a year (equivalent to about £5000) for *five years* be guaranteed beforehand. Germany has guaranteed subscriptions to the extent of 45 complete sets (or £750), and the Royal Society of London has guaranteed the same for Great Britain and Ireland; it is hoped that at least an equal number of subscriptions will be guaranteed in the United States. It is most important that the necessary guarantee for subscriptions should be completed before September 30th, at the very latest, hence it is desirable that promises of subscriptions in the United States should be sent in before September 15th.

The prices of individual volumes will be eventually fixed by the Central Bureau, and will vary, but so that the aggregate of the individual volumes will amount to £17. In England the Royal Society is making arrangements by which, in the case of special institutions de-

siring only parts of the whole Catalogue, the subscription for a complete set may be divided among them. It is learned that subscriptions to about 90 sets are yet required, and of these, besides the 45 sets guaranteed by the Royal Society, a Fellow of that Society has guaranteed 45 additional sets on condition that the United States would subscribe for a like amount. It thus appears that the success of this undertaking now depends upon the subscriptions received in this country.

Very respectfully yours,

RICHARD RATHBUN,  
*Assistant Secretary.*

SMITHSONIAN INSTITUTION, August 6, 1900.

#### THE BUFFALO EXPOSITION.

TO THE EDITOR OF SCIENCE: I should be glad if you would let me call the attention of your readers to the Department of Ethnology and Archæology of the Pan American Exposition.

The exposition has provided a circular building 128 feet in diameter, and has also arranged for a 'Six Nation' Indian exhibit on the grounds, with a representation of the typic 'Long House' of the Iroquois and an attendance of some 60 Indians, who will be engaged in such industries as basket-making, woodwork, etc. As these Indians are pagans, and have preserved to a great degree their ancient customs, they will celebrate in appropriate seasons their various thanksgiving festivals, dances and other rites.

Every precaution will be taken to protect exhibits against fire or theft and loss in packing and unpacking. It is expected, therefore, that a large amount of valuable archæologic material will be placed at the disposal of this department by museums and individual collectors. In fact, it is not too early to assure the public that the promises of such institutions as the American Museum of Natural History, The Peabody Museum, University of Pennsylvania, University of Chicago and the Buffalo Society of Natural Sciences as well as the friendly co-operation of the Ministers of the South American Republics, guarantee the success of this department. At the same time, there is always room for more, and as the aim