

of the work. The work is at best a provisional one, and one which will require constant modification and perfection in future years. On the whole, the work is of a high character and must hereafter form a part of the library of every bacteriological laboratory.

H. W. CONN.

Das Wirbelthierblut in Mikrokristallographischer Hinsicht. Von DR. H. U. KOBERT, mit einem Vorworte von PROFESSOR DR. R. KOBERT. Stuttgart, Ferdinand Enke. 1901. Pp. 118, mit 26 in den Text gedruckten Abbildungen.

The reviewer does not recall any monograph since Preyer's 'Die Blutkristalle' (1871) which presents the literature on the crystalline derivatives of the blood in the manner of this little book. In view of the medico-legal importance of the microchemical methods for the detection of blood, Dr. Kobert has given in detail numerous directions for obtaining various blood-pigment derivatives in crystalline form; many of these have originally been suggested by the well-known pharmacologist and physiological chemist, Professor R. Kobert of Rostock, to whom the author—his nephew—is largely indebted. While the monograph is intended for physicians and chemists rather than for the crystallographer, purely chemical methods of examination are only considered incidentally. Each chapter concludes with an historical summary of the literature on its subject. Among the topics treated are hemocyanin, in connection with which the reader may now consider the very recent paper by Henze (*Zeitschr. f. Physiol. Chem.*, XXXIII., 370), arterin and phlebin, to prove the independent existence of which (in distinction from oxyhæmoglobin and hæmoglobin) the author devotes considerable space; methæmoglobin and similar compounds; hæmatin and hæmin, with many (in part unpublished) data regarding the so-called Teichmann's crystals; hæmochromogen, of the crystals of which several photomicrographs are reproduced and form a useful addition to the usual textbook description; hæmatoporphyrin, melanins, serum-proteid crystals, hæmosterin and a few other crystalline derivatives.

Dr. Kobert's monograph may properly be studied in connection with Schulz's 'Die Krys-

tallisation von Eiweissstoffen' (reviewed in SCIENCE of November 1, 1901), which likewise deals with the blood proteids.

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SCIENTIFIC JOURNALS AND ARTICLES.

The Popular Science Monthly for December has for its first article 'A Mechanical Solution of a Literary Problem' by T. C. Mendenhall, this being the noting of the relative frequency with which words of a given number of letters occur in the writings of various authors as compared with Shakespeare. The results were plotted in curves, and the curve derived from the plays of Marlowe was almost identical with that derived from the plays of Shakespeare. Sir Robert Giffen discusses 'The Importance of General Statistical Ideas,' showing the application of Statistics to the solution of such questions as the probable increase of population, food supply, commerce or manufactures. R. T. Glazebrook describes 'The Aims of the National Physical Laboratory of Great Britain' and under the title 'Cement for a Modern Street' S. F. Peckham treats of the progress that has been made in the manufacture of good cements. In 'The Influence of Rainfall on Commerce and Politics' H. Helm Clayton shows that there is a certain periodicity in years of abundant rainfall and consequent plentiful food supply and general prosperity. The political party which chances to be in power during these seasons of plenty assumes the credit for them which is really due to weather conditions. William L. Poteat tells of 'Lucretius and the Evolution Idea' and D. T. MacDougal briefly describes 'The Sensory Mechanism of Plants.' Finally, under the caption 'The Reception of the Origin of Species,' we have a reprint of some of the more noted reviews which appeared shortly after the publication of that work.

Bird Lore for November-December completes the third volume of this magazine, and contains the index for the past year. The number comprises 'Recognition Marks of Birds,' by Ernest Seton-Thompson; 'A Bird of the Season,' by

C. William Beebe; 'Mocking-bird Notes,' by Lucy Gould Baldwin; 'A New Device for Securing Bird's Pictures,' by Frank M. Chapman; 'Bird Life in the Klondike,' by Tappan Adney, and a poem 'On Hearing a Winter Wren Sing in Winter,' by Lynn Ten Sprague. 'Birds and Seasons' now gives place to 'How to Name the Birds,' studies of the families of Passeres, by Frank M. Chapman, the first of a series of papers on identification. In the Department for Young Observers, E. W. Sinnott tells of 'My Bird Restaurant,' while many notes and reviews and an account of the New York meeting of the American Ornithologists' Union complete a large and well-illustrated number. The frontispiece of a ptarmigan on its nest deserves particular mention as a fine example of protective coloration.

The Museums Journal of Great Britain contains a brief but suggestive article by F. W. Rudder 'On the Registration of Type Specimens by Local Scientific Societies,' showing the desirability of having published records of types in the possession of societies or individuals. E. M. Holmes contributes a paper 'On the Arranging and Indexing of Scientific Pamphlets in Museum Libraries,' a subject which has been pretty well worked out in the United States. D. P. H. discusses 'Hygiene as a Subject for Museum Illustration' and there are a large number of notes from many museums in various parts of the world.

SOCIETIES AND ACADEMIES.

CALENDAR.

The American Association for the Advancement of Science. A meeting of the council will be held at the Quadrangle Club, University of Chicago, on the afternoon of January 1. Section H (Anthropology) will meet in the Field Columbian Museum, Chicago (December 31 and January 1 and 2). The next regular meeting of the Association will be held at Pittsburg, Pa. (June 28 to July 3). A winter meeting is planned to be held at Washington during the convocation week of 1902-3.

The American Society of Naturalists will hold its annual meeting at the University of Chicago (December 31 and January 1). In conjunction with it will meet the Naturalists of the Central States and several affiliated societies, including the American Morphological Society (beginning on January 1); The American Physiological Society (December 30 and 31);

The American Psychological Association and the Western Philosophical Association (December 31 and January 1 and 2); The Society of American Bacteriologists (December 31 and January 1), and The American Association of Anatomists (December 31 and January 1 and 2).

The Astronomical and Astrophysical Society of America will meet in Washington (beginning on December 30).

The Geological Society of America will meet at Rochester, N. Y. (December 31 and January 1 and 2).

The American Chemical Society will meet at the University of Pennsylvania, Philadelphia (December 30 and 31).

The Society for Plant Morphology and Physiology will hold its fifth annual meeting at Columbia University, New York City (December 31 and January 1 and 2).

WINTER MEETING OF SECTION H, ANTHROPOLOGY, OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

THE Secretary has received the following titles of papers for presentation at the meeting to be held in Chicago, December 31, 1901, and January 1-2, 1902:

'The Beginnings of Anthropology': W J MCGEE.

'Twenty Years of Section H': GEORGE GRANT MACCURDY.

'The Exhibit of Hopi Ceremonies in the Field Columbian Museum': GEORGE A. DORSEY.

'On Some Painted Stone Slabs from the Graves of the Ruins of Walpi': C. L. OWEN.

'Basketry Designs in Northern California': ROLAND B. DIXON.

'Pueblo Indian Settlements near El Paso, Texas': J. WALTER FEWKES.

'Field Work in Arizona, 1901': WALTER HOUGH.

'The Anthropological Work of the Hyde Expedition': ALES HRDLICKA.

'Some Observations concerning the Navaho Blanket Industry': FRANK RUSSELL.

'Certain Forms of Winged-Perforated Slate Objects': WARREN K. MOOREHEAD.

'The Variability of Anthropometric Types': FRANZ BOAS.

'A Voice Tonometer': C. E. SEASHORE.

'The Psychological Elements of Visual Space Orientation About a Horizontal Axis': ROBERT MACDOUGALL.

'The Sherman Anthropological Collection, Holyoke, Mass.': GEORGE GRANT MACCURDY.

'The Significance of the Cross': PAUL CARUS.