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 Blutkrystalle' (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the author devotes considerable space; methæmoglobin and similar compounds; hæmatin and hæmin, with many (in part unpublished) data regarding the so-called Teichmann's crystals; hæmochromogen, of the crystals of which several photomicrographs are reproduced and form a useful addition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 text-book 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 Krystallisation 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