the subjective consciousness to which the term inspiration is applicable" (491). As a piece of acrobatic audacity, excellent! Yet we may well doubt whether a thinker standing with one foot firmly planted on the Rock of Ages, the other pointing heavenward, has struck the attitude most conducive to progress. Of course, he is so interesting that we should dearly love to secure his photograph to show to our scientific friends, who would be tickled rather than impressed.

To make an end; this book constitutes one of the freshest and most stimulating contributions to philosophical inquiry that we have had for many a day. It represents an enormous advance on Ormond's earlier work. And if the author could but shake himself free from the hypnotic suggestion now exercised over him by the 'transcendent,' he might very easily, in that further discussion hinted in his Preface and looked for with lively expectation by the present writer, produce a book as superior to this as this is to 'Basal Concepts in Philosophy.' In short, Ormond stands on the very edge of the pathway to really constructive leadership.

It remains to say that the publishers have executed their part admirably. Printed at the famous Glasgow press, the book, despite its 540 pages, is light to hold and easy to read. In another edition the usefulness of the index might be much enhanced.

R. M. WENLEY.

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Chemie der Eiweisskörper. Von DR. OTTO COHNHEIM. Braunschweig, F. Vieweg und Sohn. 1900. Pp. 315.

In recent years no book dealing with the proteids and their derivatives has appeared which is so comprehensive and satisfactory as Cohnheim's 'Chemie der Eiweisskörper.' The references to the literature of the subject are unusually exhaustive and include practically every important contribution made prior to 1900. The work of American physiological chemists is cited mostly from abstracts, and some of the more recent papers have not yet found their way into the book; it is to be hoped, however, that the time is approaching when American papers will be studied at first hand in all European laboratories. Cohnheim's 'Eiweisskörper' is something more than a mere compilation of the results of the chemical investigation of the proteids. The author's critical study of the voluminous literature on the subject is indicated by the discriminating judgment with which he has treated many controversial topics and by the succinct manner in which many of the unsolved problems are pointed out. The book is essentially a critical review, and the mode of presentation (for example, of heat coagulation and other physical modifications of the proteids) is decidedly more suggestive than that of most recent writers. In the classification of the proteids Cohnheim follows the latest edition of Hammarsten's 'Textbook,' without claiming for this grouping anything more than a temporary usefulness. The author has proposed, as an innovation, to class those proteids usually termed nucleoalbumins, of which casein is the best defined type, with the simple proteids (Eiweisskörper) under the name of phosphoglobulins; the latter would thus be differentiated more clearly from the true nucleoproteids (in the sense of German writers) to which they bear resemblance only in a few superficial characters. The vegetable globulins (Phytoglobuline) are also treated in the old group of nucleoalbumins, although in the light of our present knowledge they compare more closely with the globulins of animal origin, and many of them, at least, are free from phosphorus.

Without giving a detailed survey of Dr. Cohnheim's book, a few of the better features may be referred to. The analogy in chemical behavior between the proteids and the 'pseudobases' of Hantzsch is pointed out, and a very complete account of the decomposition products of proteids is given, especially of the carbohydrate groups lately identified by various investigators. The sulphur content of the proteids is discussed in detail; and the literature regarding the nitro- and halogen compounds—almost entirely the outcome of very recent work—is collected and reviewed for the first time. In his treatment of the albumoses and peptones the author follows the classification introduced by Hofmeister and his pupils, although the

older worker is by no means overlooked. The more thoroughly studied substances, such as egg- and serum-proteids with their crystalline forms, are taken up at length; and the muscle proteids are presented in the light of v. Fürth's work. To the physiological chemist who has occasion to refer frequently to recent investigations on the nucleoproteids and their derivatives, the careful summary of research in this field of work will be found most helpful. Thirty pages are devoted to the chemistry of hæmoglobin, and the chapter on the albuminoids is fairly exhaustive.

The volume is appropriately dedicated to the memory of W. Kühne.

Lafayette B. Mendel.
Yale University.

Treatise on Hygiene. By J. Lane Notter. Second edition. P. Blackiston's Sons & Co. 1900.

This is the second edition of the well-known book of Notter and Firth, which itself was founded on the still earlier treatise of Dr. A. E. Parkes.

It is a very comprehensive work, containing nearly eleven hundred pages, and treating of a very wide range of topics, such as, for instance, water, air, food, heating, ventilation, clothing, exercise, construction of houses, vital statistics, and military and naval hygiene.

The book as a whole is excellent, the material is well selected, and the views thoroughly modern. Treating such a wide range of subjects as the authors do, they must necessarily give frequently the opinions of others rather than their own, and this causes at times, where opinions differ, a lack of authority. In a few places remains of earlier editions crop out; thus under malarious soils no mention is made of the mosquito, but in another portion which is devoted to malaria the relation of the insect to the disease is fully stated.

In some places important omissions occur: thus in the preservation of milk cold is hardly alluded to, yet it is almost as important as cleanliness. The number of bacteria considered suitable in milk, 400,000 per cc., seems very high. Taking the book as a whole, it is one that can be thoroughly commended to those who have either a general or a special interest in the study of hygiene.

W. H. Park.

Scientific Journals and Articles.

The *Journal of Comparative Neurology* for December contains the following articles: 'The Giant Ganglion Cells of Catostomus and Coregonus,' by J. B. Johnston, West Virginia University. The author figures and describes successful Golgi preparations of these transient nerve cells and compares them with the sensory cells in the spinal cord of *Amphioxus* and *Petromyzon*, whose fibers reach the periphery without effecting relations with cells of the spinal ganglion. It is suggested that they are belated neural crest cells which failed to migrate into the spinal ganglia. 'Arrangement and Terminations of Nerves in the Œsophagus of Mammalia,' by Lydia M. DeWitt, University of Michigan. Investigations on the cat and rabbit by the *intra vitam* methylene-blue method. The following types of nerve termination are described: typical motor and secretory fibers from sympathetic ganglia of Auerbach's and Meissner's plexuses, motor fibers from the ventral horns of the spinal cord for the striated muscle fibers of the œsophagus, sensory termini in the mucosa from cells of spinal ganglia, and other sensory fibers, apparently wholly confined to the sympathetic nervous system. 'The Vibrissæ of certain Mammals,' by J. Franklin Messenger, University of New Mexico. The innervation of the hair follicles is figured and a peculiar erectile vascular pulvinus is described. 'The Ophthalmic and Eye Muscle Nerves of the Cat Fish (*Ameiurus*),' by I. S. Workman, Denison University. The cat fish is shown to resemble other teleosts in the absence of a *r. ophthalmicus profundus*. The nerve so named by some anatomists is the *r. ophthalmicus superficialis V*, to which are added facialis fibers for terminal buds on the top of the head. The eye muscle nerves show a ganoidean arrangement. 'On the Homologies of the Chorda Tympani in Selachians,' by H. A. Green, Denison University. The selachian types examined exhibit a pre-spiracular nerve, in addition to the *r. palatinus* and the true pre-trematic ramus for the pseudobranch, which runs down between the