colloidal chemistry, i. e., the questions of surface tension, adsorption, etc., which are of such fundamental importance to the whole subject, are first discussed toward the end of the book. In the opinion of the reviewer this is an unfortunate arrangement, for to take one example, a treatment of the coagulation of colloidal solutions without a knowledge of the adsorption laws, must necessarily be handicapped to say the least.

For the professional worker in the field of colloidal chemistry, the book has little to offer, first because of its brevity and second because of the fact that although dated January, 1915, many of the results of recent research are not to be found in the book.

However if one is interested in obtaining a statement of the principal facts of colloidal chemistry unencumbered with too much theory, the book is to be recommended.

WALTER A. PATRICK

Handbook of Colloidal Chemistry. By Wo. OSTWALD. Translated by M. H. FISCHER. 278 pp. Blakiston's Son & Co. \$3.00 net. The above book is a translation of the third German edition of Wo. Ostwald's "Grundriss der Kolloidchemie." Wo. Ostwald's name has been so intimately associated with the development of colloidal chemistry, that it needs no introduction even to American readers. His broad general knowledge of his subject reminds one very forcibly of the attitude of his father, Wilhelm Ostwald, toward physical chemistry. Following the footsteps of his father, the son also endeavored to write an authoritative text-book in his own chosen field. The above book is the result, and while the reviewer can not agree with the translator in saying that Wo. Ostwald in colloidal chemistry occupies a position analogous to Wilhelm Ostwald in physical chemistry, or J. Liebig in agricultural chemistry, nevertheless one must agree that his text-book is most stimulating and interesting.

The book is divided into two parts, a general and special study of colloidal chemistry. The first part is devoted largely to classification and systematics, being the particular field in which Ostwald excels. The treatment is very general, indeed in many cases it seems as if the spirit of generalization was carried too far. This is well illustrated in Ostwald's "negative" surface tension, the existence of which is not supported by experimental evidence and which would indeed be contradictory to our fundamental ideas of surface tension.

The second part of the book dealing with the properties of colloidal solutions is the most interesting. This is especially true of that portion which treats of the viscosity of colloidal solutions.

The book is made very attractive with its abundant photographs and tables. On the whole the translation is acceptable, but the frequent use of the ugly word "dispersionmeans" in the place of dispersion medium strikes one as inexcusable.

## WALTER A. PATRICK

The House Fly, Musca domestica Linn., its Structure, Habits, Development, Relation to Disease and Control. By C. Gordon Hewitt. Cambridge: University Press.

The house fly has been an illustration of the fact that it is concerning the most common animals that we often know the least. Though associated with man through all ages, and doing him incalculable injury, this insect, until recently, was either viewed with complete indifference or rather with favor as a paragon of industry. To any one who desires to see how all of this has been changed and how fully the menace which the house fly forms to public health has been established, the book by Dr. Hewitt is highly recommended. It is not a popular treatise in the usual sense but, as the author states in the preface, it complements the work by Dr. L. O. Howard, "The House Fly: Disease Carrier." Although primarily intended for entomologists, sanitarians and physicians, it contains much matter of general interest.

The various parts of the book deal with the structure and habits of the house fly, its breeding habits, natural enemies, various related species frequenting houses, relation to disease and control. The strongest parts of the book appear to be those dealing with the anatomy and with the dissemination of dis-