ally being attacked, sometimes openly, sometimes insidiously. It is all-important, therefore, that medical men and women should band themselves together for the common protection of themselves and the profession to which they belong, and to this end join the British Medical Association. For the objects of this body are to promote the progress of medical science and the interests of the medical profession, and its past history shows that it has well fulfilled them.—*The British Medical Journal.*

SCIENTIFIC BOOKS

The Wings of Insects. By J. H. Comstock. Ithaca, N. Y., The Comstock Publication Company. Pp. xviii + 423, 9 plates and 427 figs.

In these days of distraction from pure science it is a pleasure to note the appearance of Professor Comstock's book on the wings of insects. The whole book is devoted to an exposition of the uniform terminology of the wing veins of insects, a field of scientific research in which Professor Comstock has long been preeminent. The book is founded upon the now well-known theory that the wing veins of insects can only be homologized by a study of the tracheæ which precede them. The historical phases of this theory are discussed together with the general features and development of the wings of insects. A general chapter that ought to be appreciated is the one on paleontological data. Professor Comstock's conclusion after reviewing the various fossil forms is: "A study of the paleontological data confirms to a remarkable degree the conclusions drawn from the study of the ontogeny of living insects as to the probable primitive type of wing venation."

Following the general chapters are special chapters devoted to the wings of the various orders of insects. In these chapters the author has not only used the results of his original investigations but has also used the results of various workers who have given special attention to the different groups. These two sources of information have been welded into a concrete whole that taken together with the illustrations both of wing tracheation and venation can not help but convince entomologists not only of the desirability of a uniform terminology but also of the firmness of the foundation upon which the Comstock system is based.

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THE PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES

The fourth number of Volume of the *Proceedings of the National Academy of Sciences* contains the following articles:

Dynamical aspects of photosynthesis: W. J. V. Osterhout and A. R. C. Haas, Laboratory of Plant Physiology, Harvard University. *Ulva,* which has been kept in the dark begins photosynthesis as soon as it is exposed to sunlight. The rate of photosynthesis steadily increases until a constant speed is attained. This may be explained by assuming that sunlight decomposes a substance whose products catalyze photosynthesis or enter directly into the reaction. Quantitative theories are developed to account for the facts.

Mobilities of ions in air, hydrogen and nitrogen: Kia-Lok Yen, Ryerson Physical Laboratory, University of Chicago. Extensive experiments, the rusults of which are in perfect accord with the "small-ion" hypothesis, as contrasted with the "cluster" hypothesis.

Thermo-electric action with dual conduction of electricity: Edwin H. Hall, Jefferson Physical Laboratory, Harvard University. A continuation of previous papers. The hypothesis of progressive motion by the "free" electrons only has been extended to the case of dual electric conduction.

Terrestrial temperature and atmospheric absorption: C. G. Abbot, Astrophysical Observatory, Smithsonian Institution. The earth's surface sends out 0.50 calorie per cm^2 per minute on the average, and of this only a small part escapes to space. Hence, the atmosphere is the main radiating source, furnishing three fourths of the output of radiation of the earth as a planet.