admirably selected and well executed, except for their tendency toward schematization. The original figures are not numerous and are chiefly diagrams.

In conclusion, it may be said that any student who, with the aid of practical laboratory work, masters Hertwig's book will have mastered the general subject of human embryology from the comparative morphological standpoint, and will be qualified to pursue more advanced study, but he must remain ready to modify many of his general theories and to fill out a number of important gaps in his knowledge. His chief gain will be insight into the very spirit of morphology, through the guidance of one of the very ablest of morphologists.

C. S. MINOT.

A Handbook of the British Macro-Lepidoptera. By BERTRAM GEO. RYE. With hand-colored illustrations by MAUD HORMAN-FISHER. London, Ward & Foxlow. Parts 1–4, Jan.–Oct., 1895.

The four parts issued give a fair idea of the scope and execution of this addition to the already large number of works relating to the butterflies and moths of Great Britain. Each part contains eight pages and two plates.

In the introduction the changes that take place during metamorphosis and the principal characters used in classification are briefly described. Eight families of Rhopalocera are recognized, namely, Papilionidæ, Pieridæ, Nymphalidæ, Apaturidæ, Satyridæ, Lycænidæ, Erycinidæ and Hesperidæ. A table separating these is given, and the genera and species can be readily distinguished by means of similar tables. The species are fairly well described, and the notes on the early stages, haunts, times of appearance, and abundance are clear and concise.

The plates are excellent, and the distinctive value of Mr. Rye's work consists in the description and illustration of the varieties and local races, apart from the consideration of the species, of the Macro-Lepidoptera of Great Britain. Beginning with 1896 the parts will be issued bi-monthly, instead of quarterly. The price per part is 2s. 6d.

SAMUEL HENSHAW.

Mollusca and Crustacea of the Miocene Formations of New Jersey. By R. P. WHITFIELD. Monograph U. S. Geol. Survey. Vol. XXIV. 1894.

This latest contribution of Professor Whitfield to the paleontology of New Jersey is most opportune, since the detailed mapping of the coastal plain formations of the State has recently shown an extensive development of Miocene strata. The character of the deposits is such, however, that determinable fossils have only been detected at a very few points, the great majority coming from the marl beds in the vicinity of Shiloh and Jericho and from the deep well-borings at Atlantic City. These forms Prof. Whitfield has evidently studied with great care and has presented in a most acceptable manner.

Prior to the publication of this report by Prof. Whitfield, little systematic work had been done upon the fossils of the Miocene of New Jersey. Meek's list, published in the 'Smithsonian Miscellaneous Collections' in 1864, contains reference to only seventeen species. Prof. Heilprin in his 'Tertiary Geology of the eastern and southern United States,' published in 1884, gives twenty-seven species, seventeen of which he regards as peculiar to the State. Later, from time to time, the same author added to this list, until in 1887, in an article on 'The Miocene Mollusca of the State of New Jersey,' he enumerates eighty-two species, describing three new species and one variety.

In his monograph Prof. Whitfield recognizes one hundred and four species, but states that there is no doubt that many more species might be obtained were the beds more thoroughly examined and other localities explored. Of the species described thirty-six are regarded as peculiar to New Jersey.

Besides the molluscan remains enumerated, Mr. Anthony Woodward gives a list of twelve species of foraminifera found in the marls at Shiloh and two at Jericho.

Prof. Whitfield, from a study of the fossils, would correlate the deposits with the Miocene of the States to the south, which is fully substantiated upon physical grounds as well. The writer of this review has traced the strata across Delaware into Maryland so that there can be no doubt but that the New Jersey Miocene is