first time. Since the first two volumes of the monograph (published in 1901) have long been out of print, the appearance of the present instalment is opportune, and the tables for the determination of genera and species, with which it is copiously provided, will doubtless prove useful to many. The figures are clear and well executed, and misprints are few.

The author's English, however, not infrequently makes the sensitive reader shudder; for instance, the first sentence of the book includes the words, "they tabulate as follows," and this remarkable phrase, in which "tabulate" is used as an intransitive verb, is repeated again and again in the course of the volume. As additional examples of faulty phraseology we may quote:—"It probably comes in *Myzomyia*" (p. 22); "it cannot be said as to what *pictus* really is" (p. 25); "A number of allied genera come around it and they keep on increasing in number" (p. 151). More serious than this is a flagrant error in terminology. Diptera, as is well known, have a five-jointed tarsus, but Mr. Theobald not only employs the objectionable, because etymologically incorrect, term "metatarsus" for the first joint of the tarsus, but calls the second and third joints the "first and second tarsals," and so on; this is confusing as well as wrong, and would lead a novice to suppose that in the Culicidæ the tarsus is four-jointed.

With reference to the disseminator of yellow fever, it may be noted that the author has decided to retain the name *Stegomyia fasciata,* Fabr., instead of regarding the specific designation as preoccupied and substituting for it *calopus,* Mg., as is the practice in the United States. On the ground of common sense as well as expediency, the course adopted in the British Museum monograph, though not in accordance with the accepted rules of zoological nomenclature, is undoubtedly the best. Mr. Theobald should not, however, perpetuate a slip made in his last volume, by stating that "Villiers described a mosquito (1789) as *Culex fasciatus,*" the original author of the name in question, which dates from 1764, being O. F. Müller, whose brief description, accompanied by a reference to the work in which it appeared, was copied by de Villers (not Villiers) in 1789.

PHILOSOPHY.

Philosophical Essays. By B. Russell, F.R.S. Pp. vii+185. (London: Longmans, Green and Co., 1910.) Price 6*s.* net.

THE subject-matter of Mr. Russell's book may be gathered from the titles of his chapters—"The Elements of Ethics," "The Free Man's Worship," "The Study of Mathematics," "Pragmatism," "William James's Conception of Truth," "The Monistic Theory of Truth," "On the Nature of Truth and Falsehood." With the exception of the last, all are reprints, with some alterations, of articles which have appeared in the *New Quarterly, Hibbert Journal, Independent Review, Albany Review, Edinburgh Review,* and Proceedings of the Aristotelian Society.

In the first essay the author states his own determinist convictions, and points out that determinism does not interfere with moral, for, as a matter of fact, people never do believe that anyone else's actions are not determined by motives, however much they may think *themselves* free.

"If we really believed that other people's actions did not have causes, we should never try to influence other people's actions." "Most morality absolutely depends upon the assumption that volitions have causes."

In the third essay there is a fine statement of the "supreme beauty—a beauty cold and austere, like that of sculpture," which the mathematician sees in his subject; also some good hints on teaching. But the largest part of the book, and perhaps the most interesting, is that in which the author combats the new philosophy—or some aspects of it—which is mainly represented by Dr. Schiller, now that its great American protagonist is gone from among us, to the regret of all students, whether disciples or philosophical enemies.

Mr. Russell is an empiricist, and therefore agrees with pragmatism's readiness to treat all philosophical tenets as working hypotheses only; but he dissents from its conception of the nature of truth. If utility is to be a criterion of truth, it is not a useful criterion, for it is usually harder to discover whether a belief is useful than whether it is true (*e.g.* papal infallibility). Therefore the pragmatist theory does not "work," and the pragmatists are hoist with their own favourite petard. As to the "will to believe," Prof. James ignores the distinction between believing and entertaining an hypothesis. If a man comes to a fork in the road, and does not know which branch to take, it is a "forced option" from the point of view of action, for he must take one of them if he is to arrive at his destination. But his *belief* is not forced. He neither believes nor disbelieves that he is on the right road, until he finds out by asking somebody, or by sign-posts, or from other sources of information. *The Will to Believe* "assumes that if we do not completely believe an hypothesis, we must either completely disbelieve it or wholly suspend judgment." But the fact is that all experiment, both in science and daily life, implies a state of mind which accepts neither alternative. Actions are based on probabilities.

There is much further acute criticism, but the author expresses his great respect and esteem for William James, and his deep sense of the public and private loss occasioned by his death.

HEREDITY.

Heredity in the Light of Recent Research. By L. Doncaster. (Cambridge Manuals of Science and Literature.) Pp. x+140. (Cambridge: University Press, 1910.) Price 1*s.* net.

MR. DONCASTER has performed a remarkable feat in condensing into so small a space such an admirable introduction to the study of heredity in the light of recent research. He writes clearly, without dogmatism, he treats fairly both the Mendelian and the biometric schools, and shows excellent judgment in what he includes and in what he omits.

The book begins with a discussion on the nature of heredity and variation, showing how the study of one is bound up with that of the other, and how both