

dicating the gradual trend of opinion towards a large substitution of the Müllerian interpretation for that of Bates.

A word must be added on a subject of some delicacy. Prof. Poulton's introduction, in which he deals with certain of the assertions and pretensions of the English school of Mendelians, is undeniably controversial, and even in places personal. The author has in several quarters been taken to task for his polemics. This reminds us of the old complaint:—

Cet animal est très méchant;
Quand on l'attaque, il se défend!

Controversy is necessary for the progress of science. Personalities, we think, are, as a rule, better avoided; but there are cases when the tone adopted by the assailant makes it impossible to offer an effective resistance except by the employment of methods which would at ordinary times be left unused. Prof. Poulton shows that he warmly appreciates the interest and value of Mendel's discovery, and the keenness and industry with which it is being followed up, but we think that he is justified in his protest against an attitude necessarily tending to discourage the younger workers in a field which, since the ground was first broken by the great naturalists lately commemorated and honoured, has proved the most fertile of all within the wide realm of the sciences of life.

The book is fitly dedicated to Prof. Meldola, to whom all Darwinians owe an immense debt of gratitude. It is furnished with an admirable index, and both paper and printing are worthy of the traditions of the Clarendon Press.

F. A. D.

ARCHÆOLOGY IN GREECE.

The Annual of the British School at Athens. No. XIII., Session 1906-7. Pp. xi+488+plates. (London: Macmillan and Co., Ltd., n.d.) Price 25s. net.

IN this volume of the "Annual" the director and students of the British School at Athens describe the excavations at Sparta during the year 1907. The work at the temple of Artemis Orthia was carried on very successfully, and the results are most important for our knowledge of Laconian art of the early period (eighth to sixth centuries B.C.). Taking all in all, the early Spartans seem to have been much more civilised than one would have expected; and if, as is supposed by Mr. Droop, the so-called Cyrenaic style of vase-painting is really Spartan, they seem to have been originative artists.

The temple of Athena of the Brazen House, where, as we read in all our Greek histories, the renegade victor of Plataea, Pausanias the king, was walled up and died miserably, has also been excavated, with interesting results. We do not note that any particular conclusions as to possible date of foundation, &c., are drawn from the orientation of these buildings.

The two most interesting articles other than these are the continuations of Mr. Dickins's very able critical article on the sculptor Damophon of

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Messene, and of Dr. Mackenzie's on Cretan Palaces. Dr. Mackenzie now completes his argument against Prof. Ridgeway on the one side and Prof. Doerpfeld on the other as to the precise signification of the great discoveries in Crete. He is doubtless right against Prof. Ridgeway in maintaining that the people who built the palaces of Knossos and Phaistos were not Indo-Europeans, and did not speak any kind of Greek, and against Doerpfeld in denying that they had any Achæan blood, or that their work shows any Achæan influence. In fact, the Achæan theory was knocked on the head by Prof. Ridgeway's trenchant criticism in his "Early Age of Greece," and Prof. Doerpfeld's Achæanised Carians have been knocked on the head by Dr. Mackenzie.

The "Minoans" may have been akin to the Carians, but not to the Achæans, who were Aryan Greeks, which the Carians, Lycians, and others were not. Where Prof. Ridgeway went wrong was in making his "Pelasgians" (=Minoans) Aryans. Whether the Minoans were Pelasgians or not we cannot say; Prof. J. L. Myres has lately shown how very useless for practical purposes this elusive ethnic name is. Prof. Ridgeway made the Pelasgi a pre-Achæan wave of Aryan invaders. But if so, they cannot have been the builders of the Cretan palaces, who came from the south, not from the north. Dr. Mackenzie makes them non-Aryan like the Minoans, but thinks that, driven from Greece by the Aryan Achæans, they fell back upon their Minoan kinsmen in the islands and Crete, and overthrew the Minoan culture, building amid the ruins of the labyrinthine Minoan palaces their own halls of the Mycænæan and Tirynthian type, which we have hitherto regarded as Achæan. Thus the Minoans would be pre-Pelasgic as well as pre-Achæan. Dr. Mackenzie regards the well-known "Warrior Vase" from Mycænæ as Achæan, no doubt correctly, and the geometric pottery of the Dipylon as Dorian, a view which, although it was generally accepted a few years ago, has its difficulties. Perhaps it was Achæan too. If it was Dorian, why is it found in Attica? Are we to suppose that the Athenians of set purpose deleted from their history the fact that their land had at one time been Dorized?

H. R. HALL.

SYLVESTER'S MATHEMATICAL PAPERS.

The Collected Mathematical Papers of James Joseph Sylvester. Vol. ii. (1854-73). Pp. xvi+732. (Cambridge: University Press, 1908.) Price 18s. net.

AMONG the 110 papers contained in this volume there are five or six which represent the author at his best. First of all there are three on Newton's rule for the discovery of imaginary roots of equations; here we see Sylvester working his way from a laborious and partly tentative method to the simple and beautiful proof which is reproduced in Todhunter's "Theory of Equations." (It is not impossible, by the bye, that there may be a series of cubic functions of the coefficients which would give information supplementary to that afforded by Newton's