

veyed his vast aggregation of facts in their purely objective relations, we are sure he also would have reached this conclusion.

D. G. BRINTON.

L' Origine de la Nation Française. By PROFESSOR GABRIEL DE MORTILLET. Paris, Felix Alcan. 1 vol. Pp. 336. With 18 maps and 158 illustrations. Price 6 francs.

In this work Professor Mortillet means to begin at the beginning, so that he passes as merely modern the classical writers and even the dispersion of the Aryans, commencing his history of the French people about 230,000 years ago, and not willingly admitting any fundamental alteration since in the racial type.

His volume is divided into several parts, the first embracing a review of what the Greek and Roman writers said about the area he is discussing. He recognizes the Ligurians as a distinct people, representing, probably, what might be called the autochthonous type. On the other hand, he believes that Gauls, Celts and Germans were a single and exotic type, one that at various remote as well as modern dates invaded the soil of France and made much noise in history, without profoundly affecting the primitive inhabitants.

His chapter on the languages is the least satisfactory of the book. He does not present accurately or even fairly the principles or the results of the best school of linguistic ethnology. His treatment of the Aryan question—one all-important in the prehistory of Europe—is quite inadequate, and is chiefly occupied with the opinions of authors now antiquated (Pictet, etc.).

A chapter on the ancient forms of writing and alphabets which have been discovered in France is abundantly illustrated and full of interest. His conclusion is that neither history, language nor etymology can solve the problem of the origin of the French peoples, so he turns toward prehistoric discoveries.

These occupy the latter half of his work. Here the author is thoroughly at home with his subject. He explains in clear and forcible language the doctrine of the development and transformation of organic forms up to the semi-human *Pithecanthropus*, and finally, to man, in the early Quaternary. This remote ancestor

is traced on the soil of France through his oldest 'Neanderthaloid' condition, when all his tools were of rough stone and his skin still hairy, down to a date when he was rudely assaulted by some people of higher culture arriving from the distant East, bringing with them more murderous weapons of polished stones and the far-killing bow and arrow. These were Neolithic tribes, brachycephali, from somewhere between Thibet and Asia Minor. They were followed in later days by another Asian invasion, from a remoter point of the Orient, who introduced bronze and the knowledge of tin.

From the commingling of these various streams on the soil of France, Professor de Mortillet would derive the present French nation, allowing, in addition, the known historic alliances. His principal point is, that from remotest antiquity, unerased by boreal glaciers or Roman swordsmen, by Semitic pirates or Allemanian war-lords, there has lived in the fertile valleys and on the green mountain sides of France the same 'patient, industrious democracy,' which, by its tenacious energy and unflagging labor has placed their nation as the leader in the van of modern civilization.

There is much in these theories of prehistoric migration in conflict with prevailing opinion in France itself—much that the author fails to support by convincing arguments. But apart from all questions of opinion, no reader can be disappointed in the remarkable amount of accurate information gathered in his pages and presented in a bright, pleasing style, which will render the volume attractive even to those who are but incidentally interested in the problems it undertakes to solve.

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SCIENTIFIC JOURNALS.

AMERICAN CHEMICAL JOURNAL, JUNE.

The Constituents of Pennsylvania, Ohio and Canadian Petroleum between 150° and 220°: By C. F. MABERY. The author refers to the conflicting statements published with regard to the composition of Pennsylvania petroleum based partly on the results of investigations on the Rûs-