

We, however, are of the opinion that most students of prehistoric archeology look at the facts of their science in a very different spirit from this. They assert their existence, but wait until a sufficient number has been accumulated before attempting their explanation. Nevertheless, we must do the author the justice of admitting that he has been very severe and critical in his examination of the evidence of these facts, and will only allow its validity in the cases upon which he has founded his three species, rejecting all the many other alleged proofs of the existence of 'the tertiary man.' He largely relies upon the recent discovery by Professor Bellucci of Perugia, in the presence of several witnesses, of a flint flake *in situ* in a deposit alleged to belong to the upper miocene, at a place called the desert of Otta, not far from Lisbon. It would take more space than we have at our command to point out the weakness of this piece of evidence, which has been done elsewhere.¹ We will merely repeat, that "prudent investigators must hesitate to base the proof of a fact pregnant with such startling consequences upon no firmer foundation than a mere 'bulb of percussion.'"

The other disputed point in the new science, upon which the author takes decided ground, is in favor of the so-called 'hiatus' between the paleolithic and the neolithic periods. He believes, not only that a long space of time, during which great changes were effected in the climate and the fauna of Europe, elapsed between the two periods, but that the second is marked by the appearance upon the scene of a new and more advanced race of men, who with better tools and weapons, and aided by a knowledge of the cereals and the use of domesticated animals, gained the mastery over the autochthonous population of the earlier period. The contrary opinion maintains that the later race were developed from the former by a slow and gradual process. For our own part, we agree with the author's conclusion, believing it to be sustained by the preponderance of evidence.

As both a general statement and a minute account of the present state of knowledge in regard to prehistoric subjects, we know of no work superior to this. It is a complete storehouse of information, gathered by a master of the new science, who assisted at its birth, and has dwelt within its very penetralia. His statements in regard to facts can be relied upon most implicitly; it is only to some of his conclusions that we take exception.

¹ International review, September, 1882.

PINNER'S ORGANIC CHEMISTRY.

An introduction to the study of organic chemistry. By ADOLPH PINNER, Ph.D. Translated and revised from the fifth German edition by PETER T. AUSTEN, Ph.D., F.C.S. New York, John Wiley & Sons, 1883. 19+403 p. 8°.

CHEMISTS who are already familiar with Professor Pinner's *Repetitorium der (anorganischen und) organischen chemie* need not be informed of the peculiar excellences of that successful text-book, and will welcome Dr. Austen's translation, which makes it available to English-speaking students. This work presents, in a systematic and comprehensive manner, a review of the enormous number of substances derived from carbon, and especially indicates their mutual theoretical relations. Beginning with the compounds of the group C₁, the author describes, first, the simpler bodies, then their hydroxyl-derivatives, sulpho-derivatives, nitrogen-derivatives (amines, amides, urea, cyanides, etc.), phosphorus, arsenic and antimony compounds, and the so-called organo-metallic bodies; next follow the simpler substances of the group C₂, with their derivatives; and so on. The space given to any one body or topic is necessarily small. American students, with their utilitarian views, would probably prefer more descriptive matter in many cases, as in alcohol, sugar, starch, petroleum, etc. Practical matters are made subordinate to theoretical considerations.

The translation is clear and generally satisfactory, but not always free from traces of the original language. The translator follows the rules issued by the London chemical society as respects spelling, arrangement of constitutional formulae, and terminology. The work is exceedingly well printed, and very free from typographical errors. As a compendium of the present actual state of organic chemistry, for use in classes having a good foundation of inorganic chemistry, this work is well adapted, and deserves general acceptance.

REPORT OF THE CONNECTICUT SHELL-FISH COMMISSION, 1883.

Second report of the shell-fish commissioners of the state of Connecticut to the general assembly, January session, 1883. Middletown, Pelton & King, 1883. 44 p., map. 8°.

IN natural accordance with the reputation of its inhabitants for sound common sense applied to business matters, the state of Connecticut enjoys the distinction of being the first to appoint a commission to supervise its interests in the fisheries of economic mollusks. The