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CURRENT NOTES ON ANTHROPOLOGY. — XII.

[*Edited by D. G. Brinton, M.D., LL.D.*]

Ligurians, Iberians, and Siculi.

PROFESSOR G. SERGI occupies the chair of anthropology in the University at Rome, and Professor G. Niccolucci that in the University of Naples; but these two scientists of eminence are far from agreeing as to the ethnic position of the Ligurians, or as to the shape of their skulls. Professor Niccolucci described some alleged Ligurian crania, which seemed to show them to have been a round-headed people, and hence, the Professor inferred, of "Turanian" origin. But Professor Sergi insists that the said skulls were only those of modern Modenese, and neither ancient nor Ligurian. His own authentic series of Ligurian skulls proves them, on the contrary, to have been long-headed, with narrow noses, orthognathic, and with no similarity to Turanians; but with a very close likeness to the ancient Iberian type, such as the brothers Siret exhumed from the neolithic deposits of southern Spain. What is more, in two series of neolithic skulls from southern Sicily he proves that identically the same peculiarities recur; so that the ancient Siculi and Secani who held that region before the Greeks came, he believes to be branches of one stock, and both of them out-posts of that same Ligurian people who in proto-historic times occupied most of the coast of the Mediterranean Sea, from the Straits of Gibraltar to the tip-end of the Italian peninsula. For him, Siculi, Sicani, Ligures, Iberi, as ancient ethnic names, all refer to branches of the same stock; and the cave men of Mentone and the Arene Candide in Italy, and of Cro Magnon in France, alike furnish us with specimens of the Ligurian cranial form. His interesting essay is in the Bulletino di Paletnologia Italiana, December, 1891.

The Meaning of Ethnography.

In the first number of a new journal, *Bibliothèque de l'Alliance Scientifique*, Tome I., Fasc. I., appears what we should call a "symposium" on the meaning and the objects of Ethnography. The writers are Jules Oppert, Claude Bernard, Jomard, A. Castaing, Leon de Rosny, Jules Simon, D. Marceron, and other well-known names.

One perceives in most of their contributions that confusion of terms which is so prevalent in France, and which is so severely and justly criticised by Topinard in his last work, "L,Homme dans la Nature," pp. 7, 8, 23, 24, etc. By its derivation and according to its early and correct usage, ethnography means a description of the actual condition of a people or peoples. So it was employed by Niebuhr and Campe early in the century, and so it is used to-day by Gerland, Ratzel, and the other leading ethnographers outside of France; and so it should be in France. A word common to science should connote the same ideas everywhere.

Jomard defines it as "the science whose final purpose is to explain the progress of humanity." C. A. Pret gives us the terse sentence, "Ethnography is the social history of humanity." Another contributor puts it, "Ethnography seeks to define the laws of the moral and intellectual evolution of man." Carnot studies it, "to discover a solid foundation for my political faith;" de Rosny, "for the new lights it casts on the grand and enigmatical problem of destiny."

These are brave words, and they tell us a great deal about the meaning and purpose of ethnology, but are wholly misapplied with regard to the term ethnography in its correct sense, either in French or English. They illustrate the need of a correct nomenclature in this science.

The Primitive History of Mankind.

A volume on this subject which is at once scientific and popular is a decided benefit to the study of anthropology; and such a one we have in Dr. Moritz Hoernes's "Die Urgeschichte des Menschen nach dem heutigen Stande der Wissenschaft" (Vienna, H. Hartleben, 1892). It is clearly printed and abundantly illustrated, and its scope may be guessed from its size — 672 large octavo pages. It takes in the whole of what is now called the "pre-history" of Europe, beginning with the alleged remains of tertiary man and extending down to the time when history proper takes up the thread of the development of the human race in that continent. Several chapters of an introductory character explain the nature and objects of pre-history, and examine into what we may understand by the earliest conditions of culture in the human race.

Dr. Hoernes is not a mere book-maker, as is so often the case with authors of popular scientific works, but is a prominent member of the Anthropological Society of Vienna, and a practical laborer in the vineyard of archæology. He has a right, therefore, to press some of its wine wherewith to treat the general public. May they quaff deeply and become intoxicated with the attractions of this new science, full of promises and full of mysteries!

Early Development of the Art-Faculty.

The development of the art-faculty is as much an ethnic as it is a personal trait. As we find among our own acquaintances some singularly gifted in this respect, and others, of equal or greater general ability, quite devoid of it, so it has been with nations and tribes in all periods of culture. In lower stages of development it is more ethnic than personal, the individual then being less free.

For these reasons the scepticism which has met the discovery of free-hand drawings on horns and bones dating from palæolithic times is not well founded. Those from the caves of La Madeleine in France representing the mammoth

and reindeer are well known; still more remarkable are those from the Kessler hole, near Schaffhausen, in Switzerland. A sketch of a reindeer feeding, now in the Rosgarten Museum, Constance, and one of a horse, in the Schaffhausen Museum, both from this locality, are so true to nature that one is surprised that they could have been drawn by a person not regularly instructed. Yet the draughtsman lived at a time when the Linth glacier covered the site of the present city of Zurich, and the musk-ox and reindeer pastured where now grow the vineyards of the Rhine.

Several curiously inscribed stones and shells have within the last few years been found in the eastern United States, regarded by their owners as the work of aboriginal artists. Two of them represent the mammoth; others, scenes from life, as battles. While not to be rejected at once, grave suspicion attaches to all such for obvious reasons, the first of which is the constant recurrence of frauds in American antiques. There is now no doubt that Professor Wright was deceived in the small terra-cotta image from a great depth in Montana which he described; and it is very easy for an enthusiast to fall into such snares.

An Aboriginal Pile-Structure.

A late issue of the Peabody Museum of Archæology is a report upon pile-structures in Naaman's Creek, near Claymont, Delaware, by Dr. Hilborne T. Cresson. It will be remembered that in *Science*, Vol. XV., p. 116, etc., there was a correspondence on the character of the structure which these pile-remains indicated. The facts as set forth in the pamphlet now published show that at the mouth of Naaman's Creek three groups of pile-buts were discovered, in a line running from north to south across the creek. In the immediate vicinity, at various depths in the mud and gravel, about 700 stone implements were found, some quite rude, of argillite, others highly finished, of jasper, slate, quartz, etc.

As the mouth of the creek where it falls into the river was evidently a favorable camping and fishing ground for the natives, these implements might reasonably have been expected in such a locality. Was their presence in any way related to that of the piles? Dr. Cresson conjectures that the piles originally formed native fish-weirs. It may be so, but a careful study of the plans which he furnishes, and an inspection of the piles themselves at Cambridge, lead me to think they were intended as supports for some structure which rested upon them. Were they the rude piers of some early Swedish bridge across the creek? Were they the abutments of an ancient wharf? Were they the foundations of dwellings? The average size of the groups, about 12 by 6 feet, would answer the requirements of the latter theory; and palefittes were by no means unknown among the American aborigines.

MEDICAL BOTANY.

BY CHARLES FREDERICK MILLSPAUGH, M.D.

IN looking over the prospectuses of the various medical colleges of the United States, one fails to find in a great majority of them anything to indicate that the important subject of medical botany is taught One wonders at the apathy of medical institutions in this respect when pausing to consider the fact that seven-tenths of the drugs in general use have a vegetable origin, and an action upon the animal economy analogous to their botanical relationship.

I fully agree with Professor Barnes[1] in his statement that, to the general public (and I am sorry to add, to the average Board of Instruction as well), the first thought arising to the mind when botany or botanist is mentioned, is a vague picture of "a sort of harmless crank," wandering about fields, woods, and bogs, picking insignificant weeds and carrying them home, principally to tear them in pieces when he gets there. I urge, with the professor, the necessity of modernizing botanical instruction in colleges and normals, and would add to the list pharmaceutical and medical institutions. Examine the text-books on materia medica used in these latter institutions, and what do you find? Simply an alphabetical arrangement of drugs. This does not meet the needs of the subject treated, for a student should be trained to study drugs in accordance with their analogy to other drugs, and not according to their indexial position in a language. In order to do this he must have, not a rudimentary knowledge of botany and vegetable chemistry, but a thorough and systematic attainment of the subject, not only as represented by the flora of the campus and surrounding woods and fields, but of the world at large. Upon opening these actual text-books we shall find atropine, an inflamatory poison, preceded by aspidium, an anthelmintic, and followed by aurantia, a simple carminative, none of these bearing the least rational relation to the others. An index would have found these drugs readily, while their disposal in this manner will teach the student nothing, nor will it in the least assist his memory to retain the uses of them.

Drugs of botanical origin are as closely allied to each other medically as the plants from which they are derived are botanically; therefore in the above illustration atropine should have been preceded by stramonium and followed by hyoscyamus. Again genera and families of plants have true and constant familial and generic drug action, and the individual species of these have idiosyncracies of action peculiar to themselves. To continue the same illustration, belladonna and atropa, with their *atropa-atropine;* stramonium, with its *datura-atropine;* and hyoscyamus, with its *hyoscyamine;* together with other Solanaceæ — to which botanical family they belong — all cause delirium, but its character differs in each drug; they all dilate the pupil, but the expression of the face under the dilation is dissimilar; they all cause spasmodic action, but the spasms are varied; and among other symptoms they all cause an eruption of the skin, but in each case the eruptions may be readily distinguished. This study may be carried through the whole range of the drug action, not only in the family here presented, but through the whole natural plant system as well. This being true, should not the medical student's first training in materia medica be a thorough course in systematic botany?

Pure science in the collegiate study of drugs has of late been set aside for the greater study of the less useful questions of etiology and diagnosis. Of what immediate care to the patient are hours of scientific and exhaustive guesswork as to what caused him to be ill, when he knows that this is followed by but a moment's thought expended upon the more vital question of what drug should be employed to make him well again? Take up the first medical magazine at your hand; in it you will doubtless find a long dissertation upon some case in practice. Column after column will be found to be devoted to the elucidation of points of diagnosis and etiology, and suppositions, perhaps, of bacterial invasion and cell disintegration, then a line or two to therapy, then the post mortem.

Careful, comprehensive, differential, and comparative study of botany and vegetable chemistry in their relation to

[1] Science, Vol. XX., page 62.