

vigor of the mother at the time of birth of the first child and the greater care bestowed upon the first child during its early childhood may be the cause of the phenomenon. The cares of the increasing household tend to weaken the mother and to decrease the amount of motherly attention devoted to later-born children. It is remarkable that the relation of size existing at the time of birth should be reversed in later life; it having been shown that the weight and length of new-born infants increases from the first-born to the later-born children.*

A comparison between the above table and others shows that the children of Oakland exceed those of all other cities of the United States in which measurements have been made, in height as well as in weight.

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CURRENT NOTES ON ANTHROPOLOGY (V.).

SUBDIVISIONS OF THE STONE AGE.

THOSE students who make use of Mortillet's excellent manual '*Le Préhistorique Antiquité de l'Homme*,' now a little out of date, will be glad to learn the subdivisions of prehistoric time as taught this winter in his courses at the *École d'Anthropologie*, of Paris.

He divides the Stone Age into three 'periods,' covering six 'epochs.' The oldest is the eolithic, beginning with the 'Thenaysienne,' referring to the rather doubtful flints from the station of Thenay. Above this is the 'Puycournienne,' based on the finds at Puy-Courny. The palæolithic epochs remain the same as given in his manual, to wit: beginning with the oldest, the Chelleenne, the Acheuleenne, the Moustérienne, the Solutrénienne and the Magdalénienne. Then follow two epochs which fill in the 'hiatus' which he formerly taught existed between the palæolithic and neo-

lithic periods. They are the Tourassienne and the Compignyenne, referring to stations on the upper Garonne and the lower Seine. These bring us to the Robenhausienne, of Zurich, and so on.

The changes indicated are significant. I have before referred to those of similar character in the scheme of M. Salmon (see SCIENCE, p. 254). A leading question has been whether we can trace the oldest historic population of Europe in an uninterrupted culture-development back to the rough stone age (*pace*, Messrs. McGuire & Co.). This would seem now to be the case; and this carries with it the increased probability that the cradle of the Aryan or Indo-Germanic peoples was in western Europe.

THE ORIGIN OF LANGUAGE.

SOME years ago the Society of Anthropology of Paris passed a resolution to reject all papers written to show the origin of language; believing that all discussions of that subject are fruitless and time-wasting. One has but to look over the historical sketch of the hypotheses advanced, written recently by Professor Steinthal under the title '*Die Ursprung der Sprache*,' to become convinced how much nonsense has been poured out concerning this theme. Among others, he represents a full analysis of the theories of Ludwig Noiré, showing at once their acuteness and the vicious circle of reasoning, arriving nowhere, in which the author involves himself.

Nevertheless, Noiré has found admirers in this country, and the Open Court Publishing Company of Chicago has printed a pamphlet of 57 pages, '*On the Origin of Language and the Logos Theory*, by Ludwig Noiré.' It will be found an excellent presentation of his views for those who wish to learn them.

There is but one scientific method of approaching this problem, and that is not the *a priori* style adopted by most writers, but

* H. Fasbender in *Ztschr. für Geburtshilfe und Gynäkologie*, Vol. III., p. 286. Stuttgart, 1878.

by a patient analysis of the structure (morphology) of the languages of savage tribes. These reveal to us human speech on its lowest terms and it will be found something quite different from what we expected. Noiré's examples, on the contrary, are taken from the highly developed Aryan languages, and from their vocabulary, not from their morphology. Nearly all writers follow the same false trail, and consequently reach no results worth naming.

RECENT STUDIES IN CRANIOLOGY.

THE pathological effects of cretinism on the form of the skull have received inadequate attention. For this reason, a brief paper by Dr. Harrison Allen in the *New York Medical Journal*, for February 2, 1895, on the influence exerted by this condition on the shape of the nasal chambers and other cranial elements, is a welcome contribution.

The distinguished Roman craniologist, Professor Giuseppe Sergi, has added another to his many interesting studies of Mediterranean craniology by a paper of sixty pages in the *Bulletin of the Medical Academy of Rome*, 1894-1895, entitled 'Studi di Antropologia Laziale,' in which he discusses a number of skulls derived from cemeteries of ancient Latium. His conclusions are as we might expect, that the *populus romanus* of the Empire was decidedly mixed in blood and cranial types.

The island of Engano adjoins Sumatra, and little has been known about the physical type of its inhabitants, who, moreover, are rapidly dying out. For that reason, additional value is attached to a study of the skulls and bones brought from there by Dr. Modigliani, prepared by Dr. I. Danielli, and published in the 'Archivio per l' Antropologia e l' Etnologia,' Vol. XXIII. They appear to have belonged to a Malaysian people, with a dash of Negrito blood. A mixed population, at any rate,

occupied the island, for the precise genealogy of which we must await further researches.

AFRICAN FOLK-LORE AND ETHNOGRAPHY.

IMPORTANT additions to the ethnography and folk-lore of the Bantu tribes have been recently made by Mr. Heli Chatelain, late U. S. commercial agent at Loanda, West Africa. First to be noticed is a volume of 315 pages, published by the American Folk-Lore Society, entitled 'Folk-Tales of Angola.' These are fifty tales, faithfully recorded from the lips of the native speakers, with the original Kimbundu text, a literal English translation and an instructive introduction and notes. It is an excellent and original study of these prominent tribes from the point of view of the folklorist.

An article broader in scope, by Mr. Chatelain, entitled 'African Races' is published in the *Journal of American Folk-Lore* for December last. In it the author undertakes to present the result of his observations and theorizing on African ethnography in general. The main point which he endeavors to prove is that there is no true racial or linguistic difference between the Bantu and the Sudanese negroes. The reasons for this, advanced in the note to page 207, are far from satisfactory. Mr. Chatelain, though a most competent linguist, clearly does not appreciate the value of linguistics in ethnography; and it is slightly preposterous to forbid any ethnologist to have an opinion about the affinities of a tribe unless he has lived with it. At that rate, that class of scientists would find their field limited indeed. There are many reasons, not discussed by Mr. Chatelain, for holding the Sudanese of pure type to be as different from the Bantus as, say, the Sibiric tribes of Asia are different from the Sinitic peoples; and that is all that has been maintained.

DR. EMIL SCHMIDT'S RECENT WORKS.

DR. EMIL SCHMIDT, of Leipzig, is favorably known to anthropologists by his many practical contributions to their science. His text-book on physical anthropology is the best manual extant. Quite lately I referred to his investigations into the pre-Columbian history of the United States (see *SCIENCE*, p. 256). These were a chapter of his large volume, 'Vorgeschichte Nord-amerikas, im Gebiet der Vereinigten Staaten' (pp. 216, Braunschweig, 1894). This is divided into four parts, one on the very oldest relics of man in the area of the United States; the second on the prehistoric copper implements of North America; the third on the prehistoric Indians of North America east of the Rocky Mountains; and the fourth on those in the southwestern portions of the United States. These topics are treated with a thorough knowledge of the best authorities and a calm judgement. The book will, I hope, have a translation into English.

In another work, 'Reise nach Südindien' (pp. 314, Leipzig, 1894), Dr. Schmidt gives the results of his own observations and investigations into the native tribes of southern India. It is written in popular style, abundantly enriched with illustrations of the natives and of the scenery, and replete with valuable information.

THE ANCIENT ETHNOGRAPHY OF WESTERN ASIA.

THERE is no other portion of the globe of equal area the ancient ethnography of which is so interesting to the history of human culture as western Asia, in the land area included between the four seas, the Black, the Caspian, the Persian Gulf and the Mediterranean. This embraces Palestine, Mesopotamia and the upper Euphrates valley, eastern Asia Minor, Armenia, Mount Ararat and many other wondrous sites of old. Here lay the Garden of Eden, the

holy cities and the earliest centers of civilization.

A most valuable contribution to the study of its earliest geography and ethnography, as understood by the ancient Egyptians and preserved in their writings, appeared a little over a year ago from the pen of Professor W. Max Müller, now of Philadelphia (*Asien und Europa nach altägyptischen Denkmälern*, pp. 403, Leipzig, 1893). It is very abundantly illustrated with copies of the ethnic types found on the Egyptian monuments and with texts in the hieroglyphic script of the Nilotic scribes. As the author is one of the most accomplished Egyptologists living, his translations of the hieroglyphs are peculiarly valuable to the ethnographer, since few students of that specialty have paid attention to ethnic descriptions. A map appended to the volume locates from Egyptian sources those troublesome people, the Hittites, this time, in Cappadocia, as well as the Mitanni, the Kilak, and other little known tribes. The numerous drawings of the faces, costumes, armors, etc., of these former inhabitants, as well as the profound linguistic analysis of texts, render this volume one of exceptional value.

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