

an organized Bureau of Measures, where astro-photographic researches can be carried out for other astronomers who have not the facilities or the means of doing the work themselves.

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CURRENT NOTES ON ANTHROPOLOGY (XIII.)

ANCIENT METAL INDUSTRY IN THE CAUCASUS.

A VALUABLE monograph has lately appeared, by Professor Rudolph Virchow, in the Proceedings of the Prussian Academy of Sciences under the title, 'The Culture-Historical Position of the Caucasus, with special reference to the ornamented bronze girdles obtained from Trans-Caucasian graves.'

It appears that from the oldest burial sites in Trans-Caucasia specimens of metal-work are exhumed, remarkably beautiful in design and proving a highly developed technique. Careful studies have shown that this was not an indigenous industry. The artists had learned their trade elsewhere, or had immigrated from other lands. They were not in close relation with the contemporary art of Armenia; nor is the Assyrian or Babylonian influence especially pronounced, though at times visible. The art motives are unlike those which prevailed in Europe. Perhaps the connection should be sought with the prehistoric culture of Persia; but of this we have at present too few examples to speak of it positively. This much Dr. Virchow makes clear: That the Caucasian art was not developed *in situ*; that it was unexpectedly rich; that it is Oriental in inspiration; and that it points to some older center of culture not yet located.

ALLEGED WESTERN ORIGIN OF CHINESE CULTURE.

READERS acquainted with the voluminous writings of the late Terrien de La Couperie will recall the zeal with which he expounded and defended the theory that the origin of Chinese culture should be sought in Meso-

potamia, among the Elamites of Susa. A number of them, he claimed, migrated eastward, carrying with them an advanced civilization, and appear in Chinese history as the 'Bak' tribes, those now referred to as the *Pe Sing*, 'the hundred-named.' He further explained that *Pe*, *Pek*, or *Bak*, was in origin a *nomen gentile*, non-Chinese in derivation, but assigned a meaning later in that language. These opinions he defended with much vigor.

They have, however, been completely demolished by M. de Harlez, in the October number of Schlegel's *Archives de L'Orient*. His exhaustive discussion of the etymology of *Pe Sing* leaves no doubt of the incorrectness of de La Couperie's assumption; and the theory of the extension of the Mesopotamian culture into China, as well as that of the imagined presence of the true Mongolian race in the Euphrates Valley in prehistoric times, are both rudely shaken. In a paper on 'The Proto-historic Ethnography of Western Asia,' which I published last spring in the Proceedings of the American Philosophical Society, I pointed out how frail was the foundation of both assumptions.

A NEW THEORY ABOUT THE MEDITERRANEAN RACE.

PROF. GIUSEPPE SERGI is well known for his extended anthropological studies, and especially for his novel craniological methods. Quite recently he has published a volume of 144 pages with a map and outlines of skull forms, to make known his conclusions on the origin of the Mediterranean race (*Origine e Diffusione della Stirpe Mediterranea*, Roma, 1895).

After clearing the ground of a number of opinions contrary to his own, he proceeds to demonstrate that the ancestors of the Egyptians, Aryans, Libyans, Pelasgians and Etruscans migrated from a 'center of diffusion' in Africa, near the headwaters

of the river Nile. He believes that he is able approximately to trace their early wanderings and to some extent their admixtures, by a comparison of skull forms. At this time, when there is so little unanimity among craniologists as to the value of their science in ethnography, it seems rather daring to select it as the corner stone of any hypothesis of ancient relationship; and it may be regarded as very doubtful whether Prof. Sergi will find many to accept his conclusions.

PREHISTORIC TREPHINING IN RUSSIA.

AN article by General von Krahmer in the *Globus*, Bd. LXVII., No. 11, describes an amulet obtained in 1883 from a neolithic burial in Russia. It was of bone, and on examination proved to have been taken from a human skull. Ten years later the archaeologist Bieljachewski, in exploring a deposit on the banks of the Dnieper, exhumed a human skull from which just such a fragment must have been removed. Careful inspection showed that the trepanation had been performed after death, the spot selected being the right frontal bone. The instrument must have had a sharp cutting edge, but a lack of skill is manifested in the use of it. The skull belonged to a comparatively young person, probably a woman. From objects collected in its immediate vicinity, it may be assigned to the twelfth century.

Such examples are extremely rare in Russia. Among the crania at the anthropological museum in Moscow there is but one which shows ancient trepanation; but it is catalogued as from the Caucasus. However, the evidence brought forward by General von Krahmer, showing that this operation was occasionally practiced in order to obtain amulets from the parietes of the skull, is valuable as illustrating a primitive superstition which prevailed in several widely separated tribes.

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CURRENT NOTES ON PHYSIOGRAPHY (XIX.).

A LIMESTONE DESERT IN THE ALPS.

MUCH has been written about the barren and weathered limestone areas known as Lapiés, Lapiaz, or Karrenfelder, in the Alps. An interesting and well-illustrated account of the peculiar rock forms occurring on one of these areas, the 'Desert of of Platé,' in the Alps of Savoy, is lately presented by E. Chaix, of the Geneva cantonal school of horticulture (*La topographie du desert de Platé*, Le Globe, Genève, xxxiv, 1895, 67-108, excellent plates, map, 1:5,000). The desert occurs at an elevation of from 1,900 to 2,000 meters, an inextricable chaos of angular limestone ledges, a labyrinth of curiously sculptured rocks and deep worn crevasses. The surface chisellings are in the form of little troughs, varying in size in different strata, but always leading down the slope of the rock; these are ascribed to post-glacial wasting and washing. The crevasses, or open joints, are of older diastrophic origin but of modern weathering; they intersect successive strata, varying in width of opening as they pass from one bed to another, sometimes single and simple, sometimes very confused in their arrangement. A good review of previous writings on this subject is included in the essay.

MORAINIC AMPHITHEATER OF IVREA.

BESIDES the existing lakes enclosed by moraines at the Italian base of the Alps, there are certain extinct lakes—now alluvial plains—similarly enclosed; that of Ivrea, where the valley of the Dora Baltea opens from the mountains upon the great fluvial plain, being the most remarkable. Agostini describes this great amphitheater in connection with its peat deposits (*Le torbiere dell' Anfiteatro morenico d' Ivrea*. *Rev. geogr. ital.*, ii, 1895, 278-294, map). The best peat is found in the comparatively small basins that occur in the irregular