

stated that the instrument was a self-recording one, the mode of registration being graphical.) A similar aerial commotion was registered at the Tour St. Jacques; but, instead of marking an increase of pressure, the trace showed a depression of 6 mm., and of very short duration."

PREHISTORIC EUROPEAN ART.

IT is important to determine how far culture can independently arise in a given district, and how far it is dependent upon other centres of civilisation. For many years M. Salomon Reinach has devoted himself to these problems, especially in reference to the culture of prehistoric Europe. In his essays on "Le Mirage Orientale" he opposed the very prevalent idea that all our culture necessarily came from the East, and during the last three years he has contributed to *L'Anthropologie* a series of articles on "Sculpture in Europe before the Greco-Roman Influences." This long series of papers is concluded in the current number (No. 2, vol. vii.) of that journal, and it forms a mine of information which cannot but prove of immense value to archaeological students, especially as it is illustrated with 441 outline sketches culled from a vast array of authors. His general thesis comprises two arguments—the one negative, the other positive.

(1) M. Reinach tries to prove that the most primitive European artistic remains are far from justifying the view that the first models and tentative efforts came from Egypt or Babylon. One cannot trace any imitation of Assyrian cylinders or of Egyptian funereal figurines. The fauna figured by the rude artists of Europe is purely European; there is no lion, panther, or camel. An apparently very grave difficulty occurs in the series of figures representing nude females, which authors agree in regarding as imitations of the Babylonian Astarte. M. Reinach argues that this type was indigenous, and so far from owing its existence to Babylonian influence, it, on the contrary, worked its way, in all probability, towards the valleys of the Euphrates and Tigris. He thinks that Europe (*i.e.* the Balkan Peninsula, the Archipelago, the Caucasus, and the west coast of Asia Minor) only later, and to a restricted degree, became dependent upon the old civilisations of the Orient. In his opinion culture is polygamist. He admits multiple centres of creation for art, and refuses to believe that all illumination has come to us from the Euphrates and the Nile. He thinks that the Danube and the Rhine have some rights which should not be neglected, and that the future barbarians who dwelt along the borders of these rivers were not reduced to receive everything from without.

(2) M. Reinach recognises that it is not sufficient to affirm that art can be born in diverse places, and that the germ has not arisen from two or three privileged centres of the ancient world; and so he sets himself to show how the rudiment of art has been able to arise, even among peoples whose genius was for a long time in abeyance. To that purpose M. Reinach has "insisted on the evolution of the most simple decorative motives which, at a certain point, quite naturally suggested the idea of the human or animal form. In these not very numerous cases one can follow the transformations of a plastic motive down to the entirely geometric figure from which it arose. But the taste for geometric forms and the tendency to conventionalisation (*stylisation*), that is to say, to the purely decorative modification of organic lines, have been, for long centuries, so powerful in Europe, that even foreign types have not escaped their petrifying action. *A fortiori*, the indigenous types, arisen from geometrical devices, have always been constrained to return back to them again. It is not denied that in Europe, as elsewhere, the imitation of surrounding nature has given origin to some plastic attempts; but there is proof that this inspiration drawn from nature has been feeble, even in the imitation of animal forms, which represented only a very small number of the animals known to the people."

The author admits that several statuettes figured in this memoir reflect outside influences, particularly of Italy, where Ionian art early took root. But these influences were not exercised in an immediate manner, and the indigenous style appears to have always been predominant even when brought face to face with foreign objects. A similar phenomenon is noticeable in Italy itself, which was Hellenised very slowly, and was only partially Orientalised under the Roman empire.

Such is an outline of M. Reinach's position. There is no

doubt that it will open up a wide discussion, as he covers a great deal of ground, and deals with some matters which admit of diversity of opinion.

M. Reinach, in an earlier section of his memoir (*L'Anth.* v., 1894, p. 305), definitely states that "in the primitive art of Central Europe the geometric form (a triangle) has suggested the anthropomorphic form, and it is not the anthropomorphic figure which is degenerated into the geometric." Possibly some, at all events, of these flat plates had indications of features painted on their surface, and thus they may have been more realistic than now appears, and later they were made more human-like as the fabricators became more skilled, or as they valued greater realism.

The investigations of quite a number of men of science show that so-called "geometric" designs are often really highly conventionalised representations of natural objects, mainly of animals; others are suggestions of textiles, or other handicrafts. Probably relatively few "geometric" designs are purely meaningless decorations. So far as available evidence goes, there are not many (if any) examples of the evolution of human or animal forms by "suggestion" from purely geometric designs, but the reverse process is extremely common. Doubtless some of the problems involved in this memoir will be fully discussed at the forthcoming meeting of the British Association at Liverpool during the great discussion, which has been arranged for, on the culture and origins of the Mediterranean race. We understand that M. Reinach intends to be present on this occasion, when he will be able to state his views and reply to his critics.

NOTES.

THE seventh annual general meeting of the Federated Institution of Mining Engineers began, with a good attendance, at Cardiff on Tuesday last, under the presidency of Mr. G. A. Mitchell. The report of the Council showed satisfactory progress. It was announced that Mr. Lindsay Wood has been elected President of the Institution.

THE third annual congress of Sunday Societies is announced to take place at Newcastle-on-Tyne, on October 10 and two following days. Copies of the programme of proceedings may be had of the Honorary Secretary, Mr. Mark H. Judge, 7 Pall Mall, S.W.

A REUTER dispatch from Naples says the death is announced of Senator Palmieri, Director of the Vesuvius Observatory. Luigi Palmieri was born in 1807. He was successively Professor of Mathematics at Salerno, Campobasso, and Avellino, Professor of Physics at the Royal Naval School at Naples, and Professor at the University in the same town. In 1854 he was appointed Director of the Vesuvius Meteorological Observatory. He was inventor of several instruments for the observation of natural phenomena, including an electrometer for ascertaining the amount of electricity in the atmosphere, a rain gauge, and a seismometer.

PROF. J. C. BOSE, of the Presidency College, Calcutta, is at present in this country, having been deputed by the Indian Government to visit the various laboratories in Great Britain and on the continent, with a view to the extension of the Calcutta Presidency College Laboratory, and the establishment of a new magnetic observatory in connection with that College. Prof. Bose is the holder of a Royal Society grant for researches in regard to electricity. He is a D.Sc. of London University.

IT was announced at a banquet given to Dr. Nansen at Christiania, on Thursday last, that a Nansen fund had been formed for the advancement of science. Subscriptions to the amount of 210,000 kroner had already been received.

THE Russian Geographical Society has been asked by the Governor-General of Turkestan to send some men of science to Shighnan and Roshan next summer, for the purpose of making a thorough exploration of those regions.