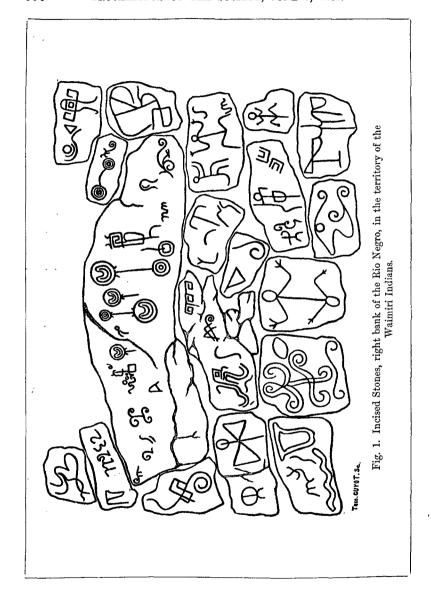
VIII.

NOTICE OF PHOTOGRAPHS OF INDIAN ROCK-INSCRIPTIONS, AMAZONAS, BRAZIL. By Professor DUNS, D.D., F.S.A. Scot.

The fourteen sets of photographs now on the table, together with a work entitled Do Rio Janeiro ao Amazonas e Alto Madeira, were recently presented to the Society, through R. H. Gunning, Esq. M.D., F.S.A. Scot., by Dr Morsing, M.I.C.E., member of the Instituto Polytechnico Brasilino—a gentleman who has recently been elected a Corresponding Member of the Society. The collection of photographs was made by Dr Morsing, as engineer-in-chief of the Commission for the Survey of the proposed route for the Madeira and Marmore railway. In forwarding them to Dr Gunning, Dr Morsing says:-- "By looking carefully at the photographs, you will see that the names of the Brazilian naval officers, Schaw, Bessa, Laurindo, and Barbosa appear The reason is that they made the drawings of these inscriptions when they were by Government orders sent up these rivers on scientific explorations. As a general rule, the inscriptions have a depth of $\frac{1}{4}$ of an inch, by $\frac{1}{2}$ an inch in width, with the edges rounded, showing great age." The mode of copying them was, by one man holding a paper firmly against the rock, while another followed the inscription with the tip of the forefinger of the left hand, and with the other hand used a piece of charcoal in tracing the depression made, "obtaining in this way an exact copy." The draftsman and photographer of the Survey party, Camillo Vedani, then made drawings from the rubbings, and with the utmost care and exactness reduced the drawings to a small scale, and afterwards photographed them. "These details account for the fineness of the lines in all the figures. During seven months of the year these inscriptions are under water, and the Indians during the floods keep in the forest, and only come to the river banks when the waters are low, and fish, &c., have left the large lakes and lagoons in the interior." It is to be hoped that the original rubbings have found a place in the Rio de Janeiro Museum, as it would be interesting to

see the effects of water-wear and weathering in connection with the exceptional position of these incised sculptures. Much, of course, will depend on the lithological character of the rocks. In Franz Keller's able work, The Amazon and Madeira Rivers, London, 1874, references are made to rock-inscriptions in the same localities, and details are given which shed some light on these now before us. He says:—"On one of these islands (in the Madeira river), with the aid of a lantern, I discovered, when preparing to take astronomical observations, some flatly incised designs, some of them spiral lines and others semicircular, on the dark brown polished surface of several vertically poised slabs of rocks, the largest of which was 2 metres in height, with a breadth and thickness of 11 metre. The figures, two or three centimetres high, were excised only 3 or 4 millimetres deep." Again, farther up the river— "I found in climbing over the rocks of the right shore another writtenrock covered with spiral lines, and concentric rings evenly carved in the black gneiss-like material, and similar to those of the Caldeirão. A dark brown coat of glaze, found everywhere on the surface of the stones laved by the water, covers the black so uniformly, as well on the concave glyphs as on the parts untouched by the instrument, that many ages must have elapsed since some patient Indian spent long hours in cutting them out with his quartz chisel." Keller asks, Can these inscriptions have been made by the ancient Incas of Peru in some conquering expedition? He thinks it little probable that a rude nation of hunters, like the forefathers of the Caripunas, would spend months in incising these figures. It will be seen that the drawing from Keller, now shown, gives a much better idea of the appearance in situ of these sculptures than the photographs. Twelve of the photographs are devoted to the rock-inscriptions. These may be arranged under seven groups--A, including sets 1 and 2; B, 3 to 6; C, 7 and 8; D, 9; E, 10; F, 11; and G, 12. Six of these, A to F, refer to individual localities; G contains examples from several different places (see the accompanying figs. 1, 2, 3, 4, 5, 6, for examples from these groups).

¹ The references are to illustrate *groups* of specimens of these rock-inscriptions, rather than single examples. When particular objects are noticed they will be found in the group referred to.



The literature of this subject is yearly growing. Recent anthropology recognises the value of materials for which it is increasingly being indebted to archæology, even as the latter does the value of the records

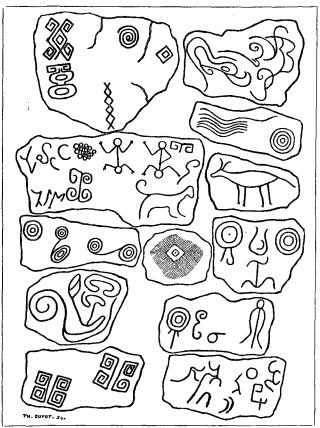


Fig. 2. Incised Stones, right bank of the Rio Negro, in the territory of the Waimiri Indians.

of travel, with their rapidly accumulating references to the industrial and other remains of extinct savage tribes, and to the weapons, implements, utensils, and habits of existing tribes. Under the terms,

"written-rocks," "pictographs," "picture-writing," "rock-inscriptions," "rock-ideographs," we have much material—materia rudis, chaos informe—waiting for differentiation. Any attempt to face this, even though it



Fig. 3. Incised Stones, right bank of the Rio Negro, in the territory of the Waimiri Indians.

gets no farther than the recognition of its existence, is not without use. The very wide geographical distribution of these inscriptions is seen, when it is remembered that they occur in Continental Europe, the

393

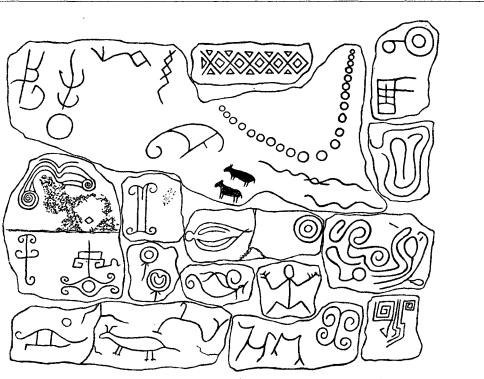


Fig. 4. Incised Stones, right bank of the Rio Negro, in the territory of the Waimiri Indians.

British Isles, Palestine, Arabia, India, Ceylon, the Andaman Islands, the Nicobar Islands, Japan, North and South America, Africa, Australia, New Zealand, New Guinea, Fiji, &c., and that all have some figures common to each. What is the significance of this? Does it shed light on the question of the unity of the human race? Will it help the anthropologist in tracing the leading tribal differentiations of the race

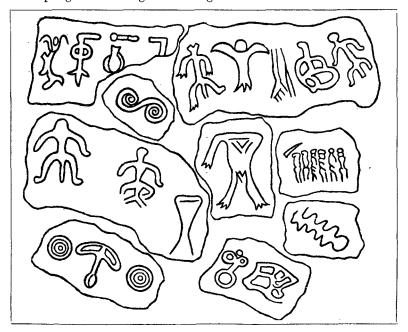


Fig. 5. Incised Stones from Tavarete, Rio Waupes.

up to one great group? Does it point to migrations of the chief families of mankind, and does it help to track the path of these? Do the pictographs of New Zealand, the cave-pictures of the Bushmen, or the written-rocks of North and South America, countenance the theory that their authors were men whose fathers had been in contact with a higher condition of civilisation? And when to these questions we add others, even more formidable, touching the age of the writing and

its alleged developmental stages, we can understand how wide the sphere is within which hypothesis may have free and unlimited sweep. Nevertheless, a comparative view of the materials even now within

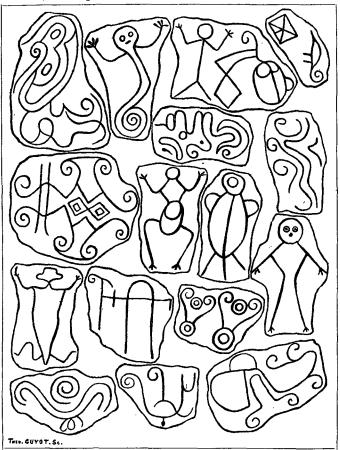


Fig. 6. Incised Stones of Moura.

reach, reveals data which warrant inductions of great anthropological interest. As, for example, that the gift of language does not lie in the language formed, but in the power to form it: that where within

one area, as say Brazil, the dialects are as numerous as the tribes, if the same root elements are found in all, there is *prima facie* evidence of original family unity: and that while the characteristic forces which led to the formation of special tribes may be lost, they may yet have been similar to those of which we have historical proofs in other areas.

Ascribing a linguistic value to the pictographs and incised characters in rocks, they are appealed to in support of two theories-the autochthonic theory of origin and the theory of immigration from distant centres—which opens a wide field of discussion. them only as they are linked with the rock-inscriptions. The former regarded from a purely scientific point of view seems to me reached by a process which itself is purely speculative. The occurrence of figures of animals on the rocks, or of representatives of sun, moon, stars, clouds, rain, &c., and last, of signs clearly derived from them (figs, as above), is held to point to three stages of development—animal-worship (zoötheism), nature-worship physitism), and spirit-worship (polytheism leading to monotheism), which finds expression in written language. The scheme violates the first principles of scientific method, and ignores a multitude of facts where historical authenticity is beyond question. The immigration theory is the favourite one in Brazil. In forwarding the photographs, Dr Gunning remarks:--"Dr Morsing's letter to me, and the book will help members of the Society to understand the inscriptions which seem to support the theory of an Oriental immigration to Mexico, Peru, and the Amazon region." No doubt, this theory can appeal to many facts, but it is doubtful if these warrant any sharply defined inferences as to the starting-point and ultimate course of the migra-Should the rock-incised figures of animals, natural objects, and signs be ultimately found to have a true linguistic value, it might come to be possible to determine the centre from which the Redskins started, and the course by which they reached their present areas; but materials are not yet in hand for this, though many hold that these signs and symbols bear the clearest resemblance to letters in eastern and north-eastern Asiatic alphabets. Some even find the starting-point of the early western civilisation in the South American continent. the Abbe Brasseur de Bourbourg points to the Maya alphabets of

Yucatan and the Quiché of Guatemala as containing the primitive forms of Greek and Latin letters! Light, however, is gradually gathering round the matter. American ethnolgists are making good use of intelligent members of existing Indian tribes, by getting from them the meaning of pictographs and inscriptions still current among them, and by employing their knowledge of these as keys to more ancient forms. Much has already been done by such men as Eliot (1666), Schoolcraft, Squier, Stephens, Ludwig, F. Müller, Hind, Powell, Holding, Mallery, A. H. Keane, and others. The names imply a division of labour, by the continuance of which alone we may hope for substantial scientific points in the future. The field is so very wide that no one's life would be long enough for an exhaustive survey. Keane gives a list of 1700 historical Indian tribes, each of which has its own linguistic idiom ("Appendix to Bates' Central and South America," in Stanford's Compendium of Geography and Travel, 1882). In addition to all this the polysynthetic character of many if not all of the dialects presents formidable difficulties from which monosyllabic and polysyllabic languages are free. Polysynthesis implies the presence of several ideas, and even, perhaps, the association of several shades of meaning with the same ideas, all thrown into one polysyllabic term pronounced as one word. And this system enters into symbol writing. Keane gives an example from the Iroquois. Their word for wine is "oneharadeschoengtseragherie," the ideas included being "a liquor, made of the juice of the grape," whose symbol might have been a linear finger and thumb pressing a vine berry, only the indication of man's agency in the preparation would have added several syllables to the word! Now it is here that some of the difficulties of the Oriental immigration theory emerge. For example, the Eskimo dialects present such words as "sanigiksiniariartokasuaromaryotittogog," where polysynthesis, as Keane remarks, links the Eskimo with purely American tribes. But the Innuit dialects of Asia are closely related to the Eskimo, and Keane (ut supra) thinks they "imply rather an Eskimo migration westwards than an Asiatic migration eastwards." Over and above all this, it is now known that, as with the Egyptian homophones, the same idea may be represented by more than one symbol. This introduces other elements of uncertainty.

The fruits of a painstaking examination of the Brazilian photographs, and a careful comparison of the figures with those of written rocks and rock pictographs in other localities, are not very substantial, unless, indeed, some value be attached to the feeling that in the face of much temptation to theorise the temptation has been resisted. the spirals (fig. 2), circles (figs. 2, 5), maze-like figures (figs. 2, 3, 4, 5), spectacle-like ornaments (fig. 1), cups, arrows, lines waved, twisted, straight, or oblique, it was hardly to be expected that there would be none to remind one of the pictographs of South Africa and New Zealand, the incised stones of North America, the Sinaitic inscriptions, and even the rock sculptures of Northumberland and Fife. And so in regard to letter-like characters (figs. 1-4), if we keep firmly in mind that resemblance more or less marked is not identity, we might point out the likeness of many of the forms on the Brazilian rocks to those on the rocks of the Wady Mukatteb, on Punic and Himyaritic coins, on the Moabite stone, or among the Egyptian hieroglyphs, without postulating an Oriental immigration for all the South American Indian tribes—just as the resemblance of several of these to Runic and to English characters is not sufficient to warrant the theory of an immigration from North Europe. With regard to the figures from Keller, the same remarks might be made. Corresponding circles occur in Punic inscriptions, the oblong figure with the perpendicular bar is met with in the enchorial, or writing of the common people, at Nimroud, the double eyeglass-like object is often represented in the Wady Mukatteb inscriptions, and the three strokes on each side of the segment of the circle have a strong resemblance to hieroglyphic numerals. according to which each three would represent 10,000 and 2. even a very feeble fancy, interpretations of this sort are easily within reach.

To return to the photographs. Three priest-like persons (fig. 3) are figured in flowing robes and with a glory round the head. One of these has five fingers on the left hand and four on the right. The other has the normal number on both hands. But in all the other hands shown in the different groups, the number of fingers is three. Examples of geometric ornamentation are represented in figs. 1, 2, 4.

In set 8, group C, there are sixteen rude representations of human heads formed by straight lines; and in set 10, group E, there are about thirty, but these are all formed by curved lines. In set 11, group F, there is a figure with round human head, and long, trailing, worm-like body (fig. 6). Is this the fabulous Minhocão (big-worm), the Lorelei of the Rio Negro? The representatives of animals include three or four of the peccary (?) (figs. 3, 4)—one of the jaguar (fig. 2), monkeys (fig. 1), one bird, serpents, beetles, mantis, and walking-stick But there are no ant-eaters, no sloths, alligators, insects (*Phasma*). turtles, nor fishes. With only two doubtful exceptions, there are no figures of plants. Perhaps these omissions tell in favour of the symbolwriting hypothesis. A similar eclecticism was practised in Egypt. Many of the best known animals of that country have no place in the Egyptian monuments. But while giving full expression to all the elements of the uncertainty indicated above, there yet seems to be data for assigning to the South American Indian "rock-writing" a literary And if so, we may cherish the hope, that by the discovery of a key to them, like what the Rosetta stone was to the hieroglyphics of Egypt, the beasts and birds and material objects will yet be found to represent "the sounds of language and the expression of thoughts."