

agine how taking they were. Everyone who had to do with them fell in love with them [these fierce mastiffs]. Contact with civilization had not improved the morality of the natives, but in their natural state they were truthful and honest, generous and self-denying. He had watched them sitting over their fires cooking their evening meal, and it was quite pleasant to notice the absence of greed and the politeness with which they picked off the tit-bits and thrust them into each other's mouths. The forest and sea abundantly supplied their wants, and it was therefore not surprising that the attempts to induce them to take to cultivation had been quite unsuccessful, highly as they appreciated the rice and Indian corn which were occasionally supplied to them. All was grist that came to their mill in the shape of food. The forest supplied them with edible roots and fruits. Bats, rats, flying foxes, iguanas, sea-snakes, mollusks, wild pig, fish, turtle, and last, though not least, the larvæ of beetles, formed welcome additions to their larder. He remembered one morning landing by chance at an encampment of theirs, under the shade of a gigantic forest tree. On one fire was the shell of a turtle, acting as its own pot, in which was simmering the green fat delicious to more educated palates; on another its flesh was being broiled, together with some splendid fish; on a third a wild pig was being roasted, its drippings falling on wild yams, and a jar of honey stood close by, all delicacies fit for an alderman's table."

These are things which we might suppose anybody who has eyes to see, and who is not wilfully blind, might have observed. But when we come to traditions, laws, and particularly to religion, no one ought to be listened to as an authority who cannot converse with the natives. For a long time the Mincopies have been represented as without any religion, without even an idea of the Godhead. This opinion received the support of Sir John Lubbock, and has been often repeated without ever having been re-examined. As soon, however, as these Mincopies began to be studied more carefully, — more particularly as soon as some persons resident among them had acquired a knowledge of their language, and thereby a means of real communication, — their religion came out as clear as daylight. According to Mr. E. H. Man, they have a name for God — *Pûluga*. And how can a race be said to be without a knowledge of God if they have a name for God? *Pûluga* has a very mythological character. He has a stone house in the sky; he has a wife, whom he created himself, and from whom he has a large family, all except the eldest being girls. The mother is supposed to be green (the earth?), the daughters black; they are the spirits, called *Môrowin*; his son is called *Pijchor*. He alone is permitted to live with his father, and to convey his orders to the *Môrowin*. But *Pûluga* was a moral character also. His appearance is like fire, though nowadays he has become invisible. He was never born, and is immortal. The whole world was created by him, except only the powers of evil. He is omniscient, knowing even the thoughts of the heart. He is angered by the commission of certain sins, — some very trivial, at least to our mind, — but he is pitiful to all who are in distress. He is the judge from whom each soul receives its sentence after death.

According to other authorities, some Andamanese look on the sun as the fountain of all that is good, the moon as a minor power; and they believe in a number of inferior spirits, — the spirits of the forest, the water, and the mountain, — as agents of the two higher powers. They believe in an evil spirit also, who seems to have been originally the spirit of the storm. Him they try to pacify by songs, or to frighten away with their arrows.

I suppose I need say no more to show how indispensable a study of language is to every student of anthropology. If anthropology is to maintain its high position as a real science, its alliance with linguistic studies cannot be too close. Its weakest points have always been those where it trusted to the statements of authorities ignorant of language and of the science of language. Its greatest triumphs have been achieved by men such as Dr. Hahn, Bishops Callaway and Colenso, Dr. W. Gill, and last, not least, Mr. Man, who have combined the minute accuracy of the scholar with the comprehensive grasp of the anthropologist, and were thus enabled to use the key of language to unlock the perplexities of savage customs, savage laws and legends, and, particularly, of savage

religions and mythologies. If this alliance between anthropology and philology becomes real, then, and then only, may we hope to see Bunsen's prophecy fulfilled, that anthropology will become the highest branch of the science for which this British Association is instituted.

Allow me in conclusion once more to quote some prophetic words from the address which Bunsen delivered before our section in 1847:

"If man is the apex of the creation, it seems right, on the one side, that a historical inquiry into its origin and development should never be allowed to sever itself from the general body of natural science, and in particular from physiology. But, on the other side, if man is the apex of the creation, if he is the end to which all organic formations tend from the very beginning, if man is at once the mystery and the key of natural science, if that is the only view of natural science worthy of our age, then ethnological philology (I should prefer to say anthropology), once established on principles as clear as the physiological are, is the highest branch of that science for the advancement of which this association is instituted. It is not an appendix to physiology or to anything else; but its object is, on the contrary, capable of becoming the end and goal of the labors and transactions of a scientific association."

Much has been achieved by anthropology to justify these hopes and fulfil the prophecies of my old friend Bunsen. Few men live to see the fulfilment of their own prophecies, but they leave disciples whose duty it is to keep their memory alive, and thus to preserve that vital continuity of human knowledge which alone enables us to see in the advancement of all science the historical evolution of eternal truth.

LETTERS TO THE EDITOR.

** Correspondents are requested to be as brief as possible. The writer's name is in all cases required as proof of good faith.
On request in advance, one hundred copies of the number containing his communication will be furnished free to any correspondent.

Communication with Other Planets.

I NOTICE a letter from Sir Robert Ball with reference to the recent bequest of a French lady of 20,000 francs for a method of signalling to other planets. He enumerates different methods, but he does not speak of one method which I have never seen discussed but which seems to me worthy of mention. On a moonless clear night the electric and gas lights over such a large territory as New York and its suburbs must present the appearance to a spectator in Mars of a spot of light on the dark side of our globe. If, now, on such a night, from the middle of some large dark area, for example, the Atlantic Ocean, brilliant flashes of light be regularly sent forth in certain forms, there would be a chance of its being interpreted by the inhabitants of other spheres, and they might thereby be induced to signal us in return.

But there is a bare possibility of direct communication by taking advantage of the meteor currents in the great ocean of space in which we move. If on breaking open a meteorite we should find a chipped flint or other instrument, we should conclude that the portion of space from which it came had intelligent inhabitants. If, now, we can by the aid of modern explosives project into some meteor shoal a ball of iron containing at its center some object of human design, the ball might ultimately come to some other planet and be found by its inhabitants. Such a procedure would be analogous to casting a bottle inclosing a message upon the ocean to be wafted by the currents to some intelligent eye.

The wild schemes of one generation are often achieved in the next. Jules Verne's "Around the World in Eighty Days" and "Twenty Thousand Leagues under the Sea" have been in a measure realized, and possibly his "Voyage to the Moon" is the next romance to be realized in some form. An initial velocity of seven miles a second would be required to project a body beyond the earth's attraction, and it is not too much to hope that this will soon be attainable at the present rate of progress in the science of explosives. A projectile sent from the earth would have considerable value as a direct astronomical experiment on meteorites, even if it should fail in bringing tidings from another planet.

HIRAM M. STANLEY.

Lake Forest, Ill., Sept. 26.