

BOOKS RECEIVED.

ANTHROPOLOGY: An Introduction to the Study of Man and Civilization, by EDWARD B. TYLOR, D. C. L., F. R. S. With Illustrations. D. Appleton & Co., New York, 1881.

The present volume is one which will be very acceptable to a large class of scientific readers, for it places before them within the compass of a book of three hundred pages, the principles on which the science of Anthropology is based, and a synopsis of the mass of facts collected and arranged by Anthropologists, which are scattered in some fifty standard works and hundreds of independent papers on the subject.

As an introduction to the science of Anthropology, Dr. Tylor's work is a great success, and if carefully studied will save a vast amount of desultory reading on the part of the student, and as strictly technical details are carefully avoided, the author has succeeded in bringing the subject within reach of readers who have received or are receiving the ordinary higher English education.

The work opens with a brief but sufficiently comprehensive survey of the varieties of men, their language, their civilization and their ancient relics, thus showing by vestiges of man's early existence, what proofs we have of his first appearance and ultimate development.

The most common observer cannot fail to notice the broad distinction among races of men, but it is only within modern times that these distinctions have been worked out by scientific methods. One of the first questions which arise in tracing the history of mankind, is, did man originate from one stock in some primitive centre, and afterwards spread far and wide, or are the Negroes, Mongolians, Whites and other races distinct species, each sprung from a separate origin.

Dr. Tylor favors the views propounded by modern zoologists, which is against the several origins of mankind, for two principal reasons. First, that all tribes of men, from the blackest to the whitest, the most savage to the most cultured, have such general likeness in the structure of their bodies and the working of their minds,—as is easiest and best accounted for by their being descended from a common ancestry, however distant,—and secondly, that all the human races, notwithstanding their form and color, appear capable of freely intermarrying and forming cross races of every combination, which appears to point to a common ancestry. The author therefore advises the acceptance of this theory of the unity of mankind as best agreeing with ordinary experience and scientific research.

Any decision on this subject, however, must be considered provisional only, as our means of judging what man's progenitors were like, both in mind and body, before the forefathers of the present negroes and Tartars and Australians were separated into distinct stocks, is at the best most imperfect. Nor is it yet clear by what causes these stocks or races passed into their different types of skull and limbs, of complexion and hair.

We find no aid from the study of ancient inscriptions and figures, as to the condition of races at the beginning of historic times.

Figures of Egyptians drawn more than 4000 years ago, describe features very similar to those found in Egypt at the present day. The celebrated inscription of Prince Una, dating back 2000 years B. C., makes mention of the *Nahsi* or Negroes who were levied and drilled by ten thousands for the Egyptian army; and on the tomb of Knumkhet of the 12th dynasty there is represented a procession of *Amu*, who are seen by their features to be of the race to which Syrians and Hebrews belonged. In fact all the evidences derived from ancient monuments, geography and history, prove that the great race-divisions of mankind are of no recent growth, but were already

settled before the beginning of the historical period. We must then look to the prehistoric period as the time when the chief work was done of forming and spreading over the world the races of mankind.

We might expect that "language" would tell of man's age on the earth, but the reader of this work will find that although there is evidence that all recent language was derived from one primitive language, the most patient research shows that all trace of that primitive language is lost.

The first chapter of Dr. Tylor's work includes a history of the civilization of man and his gradual development in the appreciation of Art. The first traces of man in the stone age is described, dating back from twenty to a hundred thousand years, presenting evidence that, even at that remote period, man possessed all the attributes of humanity in a savage and rude condition.

In the second chapter man is compared with the brute creation. To show how man may have advanced from savagery to civilization is a reasonable task and is worked out to some extent by the author. But the evidence is wanting for crossing that mental gulf that divides the lowest savage from the highest ape.

The general conclusion advanced by the author in this branch of the subject is expressed by Dr. Tylor as follows: "On the whole the safest conclusion warranted by facts is that the mental machinery of the lower animals is roughly similar to our own, up to a limit. Beyond this limit the human mind opens out into a wide range of thought and feeling which the beast mind shows no sign of approaching. If we consider man's course of life from birth to death, we see that it is, so to speak, founded on functions which he has in common with lower beings. Man, endowed with instinct and capable of learning by experience, drawn by pleasure and driven by pain, must like the beast, maintain his life by food and sleep, must save himself by flight, or fight it out with his foes, must propagate his species and care for the next generation. Upon this lower framework of animal life is raised the wondrous edifice of human language, science, art and order."

To the many who have yet to master the principles of this, the latest of sciences, "*Anthropology*," we commend this book as one which will be read with much satisfaction and profit, for the study of man and civilization is not a matter of scientific interest only, but at once passes into the practical business of life. We have in it the means of understanding our own lives and our place in the world, vaguely and imperfectly, it is true, but at any rate more clearly than any former generation.

The knowledge of man's course of life from the remotest past to the present, will not only help us to forecast the future, but, says the author, guide us in our duty of leaving the world better than we found it.

CORRESPONDENCE.

[The Editor does not hold himself responsible for opinions expressed by his correspondents. No notice is taken of anonymous communications.]

FIRE BALLS.

To the Editor of "SCIENCE":—

The interesting instance, narrated in a recent number of "SCIENCE," of the descent of fire balls as observed by Henry O. Forbes, calls to mind two occurrences which I have witnessed under circumstances favorable for accurate observation.

One sultry summer day, at sea, I was lying on the deck of a small schooner, watching in the sky the gathering clouds of a sudden and violent thunder shower. I was looking over the main mast, whose top was in the centre of my field of view. As the first scattered drops of rain began to fall, and in advance of any lightning or thunder, there appeared upon the top of the mast a brush of fire