

## OUR BOOK SHELF.

*The Melanesians: Studies in their Anthropology and Folk Lore.* By R. H. Codrington, D.D. (Oxford: Clarendon Press, 1891.)

In this book Dr. Codrington gives us the results of observations and inquiries made in the Melanesian Islands from 1863, when he first visited them, to 1887, when he left the Melanesian Mission. He does not profess to offer a complete account of the Melanesian people; nevertheless, the work is one of great value, for it is in the main a record, not of what Europeans say about the natives, but of what the natives say about themselves. The most careful of European inquirers may, of course, mistake the real significance of what natives tell them; but Dr. Codrington seems to have been at all times fully conscious of this danger, and to have done his best to guard against it.

He begins with a chapter on the discovery of the Melanesian Islands, and on their geology and zoology. The ethnology of Melanesia he does not attempt to deal with; but he discusses thoroughly the facts relating to kinship and marriage connection among the Melanesians, starting with the proposition that the division of the people into two or more classes, which are exogamous, and in which descent is traced through the mother, is the foundation of native society. He also gives a good account of the position of the chiefs. A chapter is devoted to property and inheritance, and this is followed by a description of secret societies and clubs, a knowledge of both of which is essential to a proper comprehension of Melanesian life.

The religion of the Melanesians, like that of all savage and barbarous peoples, is a subject of great difficulty; but Dr. Codrington is able to present clearly what seem to be at least its main outlines. Students of the evolution of religious conceptions will read with especial interest what he has to say about "mana," a supernatural power or influence which is supposed to act in all kinds of ways for good and evil, and which everyone tries to possess or control. The objects of worship are spirits, some of which were formerly men, while others belong to an independent and higher class. All these beings are full of "mana," and many suggestive facts about the popular belief in them will be found in the chapters on sacrifices, prayers, spirits, sacred places and things, magic, possession, and intercourse with ghosts. There are also good chapters on birth, childhood, and marriage; death, burial, and "after death."

The chapters on the arts of life, and on dances, music, and games, contain an immense number of interesting facts, well arranged; and in a chapter entitled "Miscellaneous," the author treats of several disconnected subjects, such as cannibalism, head-taking, and castaways. The concluding chapter is in some respects the best of all. It consists of stories, divided into three groups—animal stories, myths and tales of origins, and wonder tales. These stories are not only pleasant to read, but provide excellent materials for those who devote themselves to the comparative study of folk-tales.

We may note that there are some very good illustrations, especially in the chapter on the arts of life.

*Guide to Examinations in Physiography, and Answers to Questions.* By W. Jerome Harrison, F.G.S. (London: Blackie and Son, 1891.)

THE author of this little work of forty-eight pages is well known as a successful teacher, of wide experience in connection with classes recognized by the Science and Art Department. It is avowedly a guide to the art of passing an examination, the author giving it as his opinion that "knowledge of any subject is not the *only* requisite to successfully passing an examination in it."

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Unfortunately, this is, to a certain extent, true. Some candidates are apt to make an injudicious choice of questions, while others, again, spend too little time in studying them, and consequently wander from the point. Few who read Mr. Harrison's notes will fail to profit by the sound advice which he gives.

The first part gives general information about the Science and Art Department and its objects, and applies equally to all the subjects in which its examinations are held. The questions which have been given in the elementary stage since 1882 are answered in Part III. The appear to be sufficiently good to satisfy the examiners.

## LETTERS TO THE EDITOR.

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## A Difficulty in Weismannism.

WEISMANN'S theories of heredity and sexual reproduction have been criticized from many *a priori* points of view. The following remarks are an attempt to apply to his theory of reproduction a test familiar to the mathematician; and assuming its truth, to follow out the deductions from this assumption. The result is a startling one. I believe the following theses will be accepted as an impartial statement of the main points of the theory:—

I. Each primitive germ-cell, of either sex, contains a number of ancestral germ-units, the Ahnenplasmas; and this number is constant, for the species at least.

II. These ancestral germ-units are far more constant and unchangeable in character than the species itself.

III. They lie associated together in the germ-cell without loss or alteration of their individual personalities.

IV. The number contained in the mature ovum and spermatozoon is reduced by one-half; and in the fertilized ovum or oosperm the number is restored to the normal by the summation of the Ahnenplasmas of the two fusing cells. This process is comparable to the shuffling of two packs of cards by taking half from each and joining the talons or remainders to form a new pack.

V. The possible combinations under this process are so numerous as to explain the variations among the offspring of sexual union.

Accepting these statements, we next inquire, How are we to conceive of these ancestral units, the Ahnenplasmas? Two hypotheses may be given in answer to this question:—

A. Each Ahnenplasma unit corresponds to an individual of the species itself; and if put under proper trophic conditions would, singly, reproduce such an individual.

B. The Ahnenplasmas correspond to the primitive Protozoan ancestors, which, according to theory,<sup>1</sup> could alone reproduce modifications due to external causes (acquired modifications).

According to hypothesis A, the Ahnenplasmas of living man are Anthropics; those of our Simian forebears were Simian; and so we get Protochordate, and finally Protometazoan Ahnenplasmas in the germ-cells of our more and more remote ancestors. In other words, the Ahnenplasmas have varied indefinitely, and at the same rate with the race. This inference not only renders the shuffling process unnecessary to explain variation; but it is inconsistent with thesis II., the very foundation of Weismann's theory of heredity.

According to hypothesis B, the Ahnenplasmas of all Metazoa being similar and Protozoan, if the numbers are equal and the shuffling fair any two parents may beget any offspring whatever; on the plane of thesis V., a lioness might be expected to bring forth a lobster or a starfish or any other animal, which, as we know, does not take place in Nature. The only escape from this result is to assume the postulates—(1) that the

<sup>1</sup> "Hereditary variability . . . can only arise in the lowest unicellular organisms; and . . . necessarily passed over into the higher organisms when they first appeared" (Weismann, "On Heredity," English edition, p. 279). This passage would seem to render hyp. thesis B necessary for the theory.