

drinking; but what I must again object to is drawing radically different conclusions as to the nature of eating and drinking by chicks, and even building theories of evolution on them.

As I understand Prof. Cope is to reply to Prof. Baldwin's views on Consciousness and Evolution through the medium of the *American Naturalist*, I will only remark regarding his discussion in SCIENCE, p. 438, on Heredity and Instinct, that, while I find his views very interesting as illustrations of natural selection, the Lamarckian principle, the influence of environment, etc., they seem, in the main, to fall within the range of principles already recognized by the Darwinians and Lamarckians, though perhaps not adequately. But I fail to see that a single safe step can be taken in explaining evolution either in biology or psychology, if the effects of the environment and of use be ignored; indeed, Prof. Baldwin's very facts and illustrations are, to my mind, only comprehensible by the introduction of those factors; and why there should be such anxiety on the part of many to get rid of factors so obvious, and to substitute for them the biological fatalism and reasoning in a circle of Weismann, is a puzzle to me.

I trust Prof. Baldwin will not insist on coining many new terms, or favor their adoption as far as evolution is concerned. 'Social heredity' is about equivalent, is it not, to social environment, and the entire environment is one into which, as a rule, the animal is born, so why speak of 'social heredity?' Technicalities have their advantages, but they often conduce to mental myopia, and hamper the comprehension and progress of truth by binding it up in packages, so to speak—packages which all cannot readily undo.

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FOOTGEAR.

EDITOR OF SCIENCE: Apropos of the heel quarters or heel bands on the feet of men shown on Mexican and Maya sculpture and pottery Dr. Fewkes calls my attention to the fact that among the Tusayan Indians an embroidered heel band is worn over the moccasins in all dances. In the statuary shown by Maudslay and other authors the footgear looks as though a man were wearing a gaiter from which the vamp or front had

been cut away. In this view the supposed sole is the pedestal; what appears to be a stocking is the moccasin, and the heel quarter is the decorated ceremonial heel band fastened across the instep with lacings.

O. T. MASON.

WASHINGTON, D. C.

SCIENTIFIC LITERATURE.

Greenland Icefields and Life in the North Atlantic, with a New Discussion of the Causes of the Ice Age. By G. FREDERICK WRIGHT, D. D., LL. D., F. G. S. A., author of the *Ice Age in North America*, etc., and WARREN UPHAM, A. M., F. G. S. A., late of the Geological Surveys of New Hampshire, Minnesota and the United States. With numerous maps and illustrations. New York, D. Appleton & Co. 1896. 12mo. pp. xv+407.

The immediate impulse to the preparation of this volume arose in connection with a trip to Greenland taken on the unfortunate steamer *Miranda* in 1894. It will be remembered that this steamship of eleven hundred tons' burden started out with the intention of reaching Peary's headquarters in Inglefield gulf, with a complement of fifty-one passengers. Ten days out she collided with an iceberg off Labrador and returned to St. Johns for repairs. After reaching Sukkertoppen, the largest Eskimo settlement in Greenland, the steamer ran upon a reef and received serious injuries, compelling her to stop again for repairs and to start homeward as soon as possible. In less than two days' time she foundered, and the passengers and crew were safely transferred to the schooner *Rigel*. The senior author had an excellent opportunity to study icebergs in their legitimate work of producing geological changes, and had nearly a fortnight's time to explore the edge of the ice sheet close to the Arctic circle.

The authors have improved their opportunities by giving in this book an interesting résumé of what is known respecting the glaciers, ice fields, explorations, icebergs in action, the plants, animals, the Eskimo and the early Norsemen of Greenland. Mr. Upham prepared the chapters upon the plants, animals, explorations, and the lessons taught by the Greenland phenomena in the elucidation of the Ice Age. Besides the text several excellent maps of