

editor's preface that a good many errors and omissions were found in the original indexes, and to correct these and to provide a general index it was decided to issue the present work as a "Supplement" to the "Hand-list." It contains about 22,000 entries, and its usefulness will be greatly appreciated by those using the "Hand-list," or, in other words, by all systematic ornithologists.

The preface to the volume is by Dr. Sidney F. Harmer, keeper of zoology in the British Museum, and contains a tribute to Dr. Sharpe's long period of distinguished service as curator of birds at the museum.

J. A. A.

Heredity and Society. By W. C. A. WHETHAM and C. D. WHETHAM. Longmans, Green and Company. 1912. Pp. 190.

Of late years the attention of all who have at heart the welfare of mankind in this country has been attracted by two main facts: first, the reduction of the birth rate in the more progressive and effective part of our population to half or less than half of what it was formerly, and the great increase in the number of inmates of institutions. Indeed, the proportion of our population that receives state care has nearly doubled in the ten years from 1890 to 1900, and shows an increase much larger than that of the population from 1900 to 1910. This increasing care of the defectives is a heavy burden. One seventh of the income of the state of New York goes to maintain and enlarge the state institutions for insane and other defectives—in some recent years the proportion has risen to one fifth, and it tends to increase. In view of these facts the inquiry has naturally been raised: What is the cause of this increase and what is the way to stop it? And the answer has come back from the students of heredity, carrying with it overwhelming conviction: the defectives are *bred*, and the way to stop the rising cost of their care is to stop breeding them. We are brought to our present pass by the care we have taken to protect, rear and let breed, the worse elements, while discouraging the reproduction of the better.

In England the same general phenomena that strike us here are evident, and a eugenics movement has gained great headway there. Among the leaders in this "movement" have been Mr. and Mrs. Whetham whose "Family and the Nation" has had a great influence. The present work is destined to play an equally important part. It consists of a series of thoughtful and interesting essays touching the biological aspect of the family. One can not summarize the essays, and most of them are beyond criticism. They must be read.

In the chapter on variation and heredity some of the well-known cases of family genius are cited and some new ones, based on studies of a Biographical Dictionary, are given. The authors point out that the explanation of why some men of distinction have sons of distinction and some do not depends on the kind of marriages the men make. It might have added that the reason why geniuses are rare is because, depending on recessive conditions, they will reappear in the next generation only when two strains with the tendency to like genius are brought together.

In the essay on natural selection the disastrous consequences to the race of extensive sanatoria for consumptives and of eliminating the death penalty are suggested; but there is far more to be said on this subject than the authors say in this chapter. In the essay on the biological influence of religion, the authors point out that the hardship that the Jews have undergone in the past has given them racial strength and that in face of a more humane treatment they may be killed off by kindness. In how far may the keenness and shrewdness of the Jew be due to the elimination of those who were not shrewd enough to escape their persecutors?

The two essays on the position of women contain much food for thought. The incursion of women into the industrial field as wage earners coincides in time with the fall in birth rate. And in so far as the best women are lured into professional and political life, or fail to become mothers, the best bearing branches of the racial tree are being cut off—

flowers of the most precious strains in the garden of life are being plucked before they produce seed.

The essay on heredity and politics is one of the best in the book. A successful nation is a powerful nation, and the authors conclude: "A 'theory of power' which takes account of modern biological knowledge in a strenuous effort to improve the physical, mental and moral state of the race, by both environment and heredity, and by their interaction one on the other, seems to us a good basis for political endeavor." Increasing the men of genius will make possible improved environment, but if racial efficiency fall civilization must decline. And the civilized nations spend their substance in caring for the unfit for whom the fit are taxed to such an extent that they can not carry the added expense of children. So it has come about that only the weakling can afford to have children in unlimited numbers, since the state will care for *their* children. The handicap on the fit is too heavy; it is they, and not the unfit, who are, in effect, being sterilized. A governing class becomes such and maintains itself by virtue of its inherent strong traits. Even in democratic America the opportunities afforded by business have lured the strongest men into it, and so "big business" has come to constitute the governing class. And as between nations, that which breeds the most of the best blood, while taking advantage of the advances of science and sanitation, will eventually surpass the others and inherit the earth.

C. B. DAVENPORT

THE INHERITANCE OF SKIN COLOR

THE mulatto is frequently instanced as a "blend"; and an exception to the Mendelian scheme of inheritance in that he is supposed to breed true. This position, I believe, represents an off-hand judgment based on insufficient evidence or faulty observation. I have seen a number of unquestionable cases of "reversion" to grandparental skin color among the fraternities of mulatto crosses. In numerous instances one of the third gen-

eration is either darker or lighter than either parent, *i. e.*, he has the skin color of his negro grandmother or his white grandfather, this being the invariable nature of the cross.

A man is a combination of thousands of characters; skin color is only one of these. When one considers the offspring of mulattos one must remember that such may have a negro skin associated with a European nose, or negro lips with white skin. One meets with plenty of mulattos that from the standpoint of skin color alone are white, brunette or blond; but one is not deceived as to their extraction since negroid features appear in combination. The probable explanation of the general opinion that mulattos breed true, contrary to the Mendelian principle of segregation, is due to this fact of failure to dissociate skin color from other facial characteristics. The Davenports¹ cite five cases of undoubted segregation of skin color in the third generation. Such families are fairly common in the south. I have shown, moreover, that histologically there is no difference between the skins of blonds, brunettes, mulattos and negroes, except in the abundance of identical pigment granules.² Histologically, many mulatto skins can not be told from brunette skins.

The heredity of skin color in crosses between negroes and whites unquestionably follows Mendelian laws. The mulatto shows the dominance (frequently imperfect) of the deeper pigmented condition. In the next-succeeding generation there is again a segregation of negro and white skin colors.³ The fact, however, that the first generation of

¹ *Am. Nat.*, Vol. 44, 1910.

² *Am. Nat.*, Vol. 45, 1911.

³ The same is true with respect to an extensive Indian-negro cross which occurred in Amherst and Nelson counties, Va., resulting in the loss of an entire Indian tribe. I am told that in many families one or several of the children are distinctly more Indian or more negro than the prevalent type of the cross. Here again the negro skin color seems dominant to the Indian; on the contrary, the Indian type of hair apparently dominates over the kinky negro hair.