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Henry Albert
State University of Iowa

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THE INHERITANCE OF SYNDACTYLISM.

HENRY ALBERT.

(ABSTRACT.)

An instance of thirteen cases of syndactylism (or fused or webbed fingers or toes), traced through four generations was reported. The element of heredity is obviously apparent. In view of the recent report of a family with cases of syndactylism in which the inheritance of the abnormal union of the digits apparently conformed to Mendel's law, as a dominant character, an effort was made to determine if the Mendelian law also applied to the cases in question. It was determined that although the disease was due to a factor which was apparently dominant rather than recessive it did not conform entirely to Mendel's law. That it is not due to a Mendelian recessive character is shown by the fact that in three instances the disease appeared in children, neither of whose parents were affected by it and in each instance the family history of at least one of the parents was negative for the disease in question. To have a disease due to a recessive character appear in an individual, neither of whose parents are affected by it, we must assume that both parents are hybrids as regards the condition in question.

Nor does it entirely conform to a Mendelian dominant character, since if it did, we would expect that if the disease appeared in the offspring it should be present in at least one of the parents.

It is probable that the explanation for the lack of conformity of our cases to Mendel's law is due to an inhibition of the activity of the determiner for the disease in question by some other factor, causing the disease in such cases to be latent. The absence or non-operation of such inhibiting factor may again cause the disease to appear.

DEPARTMENT OF PATHOLOGY AND BACTERIOLOGY,
STATE UNIVERSITY OF IOWA.