

SCIENCE

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FRIDAY, APRIL 23, 1897.

THE INHERITANCE OF ACQUIRED CHARACTERISTICS.*

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MSS. intended for publication and books, etc., intended for review should be sent to the responsible editor, Prof. J. McKeen Cattell, Garrison-on-Hudson, N. Y.

PROFESSOR COPE'S defense of the doctrine of the inheritance of acquired characters was selected from the evidence contained in his book, 'The Primary Factors of Organic Evolution.' He referred especially to the history of the moulding of the articulations of the vertebrate, and especially of the mammalian skeleton, of which such complete series has been furnished by paleontology. The forms of the articulations he believed to be the result of their movements, for the reason that they could be formed artificially, as the result of experiment, or in consequence of luxations. He believed that the resulting forms have been inherited, because they are found in the embryo before the animal has had an opportunity of developing the structure for himself by interaction with the environment.

He admitted the justice of Dr. Minot's demand for an explanation of this phenomenon. He stated that the preformationists offered no explanation, and, indeed so far as he could see, none was possible from their point of view. The epigenesis-ists could, on the contrary, appeal to the

* Abstract of Professor Cope's part in the discussion by Professors Minot, Macfarlane, Cope and James before the Boston meeting of the American Society of Naturalists, prepared at the request of the editor by the late Professor Cope.