favorable effects on the protein metabolism is less than .5 gram per kilogram.

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Inheritance of plumage color in poultry.

By **C. B. DAVENPORT.**

[*From the Carnegie Institution of Washington, Station for Experimental Evolution.*]

The experiments of Dr. C. C. Guthrie who transplanted hens' ovaries to foster mothers of different plumage color from their own and was led to the conclusion that the engrafted ovaries became functional and their eggs gained certain characteristics from the foster mothers' are not at all convincing to the student of normal heredity of plumage color in poultry; indeed, they justify the opposite conclusions. To test these experiments, I transplanted ovaries from a cinnamon-colored, heavy-boot, pea-combed, four-toed, low-nostriled hen which breeds true to a white, non-boot, V-combed, five-toed, high-nostriled hen, and mated her with a cock whose characters resembled those of the hen from which the eggs had been borrowed. Had the engrafted ovary been functional, the chicks must all have been like the cock. Actually, they were exactly what expectation calls for when such a cock is mated to a hen like the so-called foster-mother. The engrafted eggs are not functional; the ovary had regenerated.

Six experiments of this sort were made altogether and in no case was there evidence of a functional graft; far less of an influence on the eggs of the foster mother's soma.

109 (519)

A new and comparatively rapid method for the detection of liquefying bacteria.

By **JOHN C. TORREY.**

[*From the Department of Experimental Pathology, Cornell University Medical School.*]

The results obtained by Feldstein and Weil[1] with Ostwald's viscosimeter in an investigation of the interaction of ferment and

[1]*Proc. of the Soc. for Exper. Biol. and Med.*, 1910, vii, 61.