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On the refractive index of the serum in a guinea-chicken hybrid.By **RAYMOND PEARL** and **JOHN W. GOWEN.**

[From the *Biological Laboratory of the Maine Agricultural Experiment Station.*]¹

In connection with some biochemical studies on heredity now in progress in this laboratory we desire to record certain results regarding the refractive index of the blood serum of a genus-hybrid produced from the mating Cornish Indian Game ♂ × Guinea Fowl ♀. The measurements were made with a Zeiss Eintauch Refraktometer on the unmodified serum of freshly drawn blood, expressed from the clot by centrifugation.

Our results show that (1) there is a definite, characteristic, and permanent difference between the refractive index of the serum of the fowl and that of the guinea; and (2) that in the hybrid the guinea parent is dominant in respect of the physico-chemical constitution of the blood as measured by the refractive index. Some figures on the point follow:

Source of Blood.	<i>n_D</i>
Fowl (<i>Gallus</i> sp.).....	I.34537
(Mean of data from 10 birds of different hereditary constitutions)	
Guinea (<i>Numida meleagris</i>).....	I.34184
(Mean from 6 birds)	
Hybrid (<i>Gallus</i> ♂ × <i>Numida</i> ♀).....	I.34179

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Application of the serum-skin test to the diagnosis of pregnancy and different pathological conditions.By **J. BRONFENBRENNER.**

[From the *Pathological and Research Laboratories of the Western Pennsylvania Hospital, Pittsburgh, Pa.*]

As it was shown in previous communications,² the dialyzable substances in the Abderhalden test appear as a result of auto-

¹ Paper No. 77.

² See last number of PROC. SOC. EXP. BIOL. AND MED.