

casein was heated at 80° with 20 per cent. hydrochloric acid. In this case, hydrolysis was complete in ten hours, the amino nitrogen having reached its maximum, 71 per cent. of the total.

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A demonstration of Krogh's micro-tonometer for the determination of gas tensions in fluids.

By **M. M. SCARBROUGH.** (By invitation.)

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The advantages of Krogh's apparatus are, first, the small amount of fluid required; second, the large specific surface obtained; third, the rapidity and accuracy of determinations. The bubble of gas used is about 2 mm. in diameter, having a specific surface of 30 as compared with a specific surface of 3.3 in Pflüger's aërotonometer, 5.2 in Bohr's hemataërometer and 3.7 in Fredericq's. A fine spray of the fluid to be examined is played on the bubble for a few minutes; the bubble is then drawn into a capillary burette where it is measured before and after the absorption of oxygen and carbon dioxide. For carbon dioxide alone in fluids, a very simple vessel is used; the tonometry is accomplished by shaking a small bubble of air with a relatively large amount of fluid. The bubble is then transferred to the capillary burette and analyzed. The limit of error can be brought down to + 0.2 per cent.¹

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Breeding experiments in poultry.

By **H. D. GOODALE.** (By invitation.)

A. Note on the Results of a White Leghorn by White Plymouth Rock Cross.

The cross was made in only one way, viz., white Leghorn females × White Plymouth Rock males. The chicks were white with sometimes a few black spots. They developed into white birds, with a few black spots. Later the surface color became

¹For full description of apparatus and methods see Krogh's articles in *Skandinavisches Archiv für Physiologie*, 1908, xx, 259-288.