pseudo-proliferation and subsequent partial denaturization. If 5% horse serum is added to 0.1% commercial trypsin in Ringer's solution, for example, or to 0.1% commercial pepsin in acidulated (n/100) Ringer's solution and the mixture is incubated at 37.5° C. for several hours, precipitin graphs show from the first a rapid and consistent decrease in horse-protein titer, without flattenings or distortions of the precipitin graph. We interpret this as meaning that in gastro-intestinal proteolysis none of the lytic products retain their original horse protein specificity.

This study represents selected data from 20 titrations of test-tube lytic products. Each titration was accompanied by parallel tests of from 2 to 4 non-lytic controls.

* In discussing the above paper, it was suggested by Prof. C. L. A. Schmidt that the term "depolymarization" be substituted for "immunologically symmetrical proteolysis."

4725

Precipitin Variants.

J. L. AZEVEDO AND W. H. MANWARING.

From the Laboratory of Bacteriology and Experimental Pathology, Stanford University, California.

Anti-horse precipitin withdrawn from a rabbit 10 days after injection of the final immunizing dose of horse proteins gives precipitin graphs[1] suggesting a 100% 17th-day retention of intravenously injected horse proteins in the canine circulation, with marked denaturization of these proteins.[2] Parallel tests with precipitin withdrawn 23 days after the final immunizing dose, give graphs suggesting but 1% horse protein retention with no horse protein denaturization.

Our conventional assumption that the specific precipitin is biochemically identical at all stages of sensitization and immunization with the same antigen evidently requires further study.

This report gives the maximum difference observed in 12 parallel titrations of parenteral horse protein derivatives with about 20 different rabbit antisera.

[1] Azevedo, J. L., PROC. SOC. EXP. BIOL. AND MED., 1929, xxvii, 14.

[2] Sox, H. C., and Manwaring, W. H., PROC. SOC. EXP. BIOL. AND MED., 1929, xxvii, 110.