

although it was more dilute than the original filtrate. A repetition of the experiment duplicated the results.

Before using the dialyzing tubes they were tested with distilled water and apparently did not leak.

From these experiments it would appear that this particular mushroom contains a very active soluble tyrosinase which is either not colloidal or is so decidedly on the borderland between the crystalloidal and colloidal states as to invalidate a general application of the Willstätter conception.

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### THE SECRETION OF ADRENALIN

THERE has been a great deal written on the subject of adrenalin reviving people after death. Dr. W. H. Schultz, of the University of Maryland, read a paper at the recent Physiological Congress in Boston showing that the factors ordinarily controlling the normal growth of adrenalin-secreting cells may be defective, in some instances, in a way that will make the gland capable of storing up adrenalin. Even thirty to fifty times the normal amount may be stored and if it is suddenly released can poison and even kill. Should one thousandth of the amount be suddenly released it would cause high blood pressure, whereas one hundredth of the amount would cause death.

It was chemical and biological studies that laid the foundation for the hospital treatment of hyperthyroidism—a dangerous disease involving questions of metabolism. Similarly this work lays a scientific foundation for hospital treatment of certain types of blood pressure.

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### SIMON'S "LES ARACHNIDES DE FRANCE"

ALL students of the Arachnida will welcome another instalment (Part 3) of the long-awaited sixth volume of Eugene Simon's "Arachnides de France." This is a posthumous work carefully edited by his devoted colleagues, L. Berland and L. Fage. Simon began the publication of this great work in 1874, and the fifth volume was completed in 1884, volume 7, devoted to the Pseudo-scorpions and Opiliones,

having been published in 1879. It was originally intended that volume 6 should treat of the families not considered in the previous volumes, but with the passing of the years while the author was busied with the preparation of his great work on the genera of the spiders of the world, this plan was abandoned. Instead, volume 6 was projected as in reality a new edition of the series; the earlier work was to be revised and brought down to date while the families which had been omitted were to be treated. Part I of the volume was published in 1914; the war intervened and at the time of Simon's death in 1924 no more had appeared. Fortunately, the manuscript was complete and the task of seeing the work through the press had been delegated to the present editors. By carefully executing this mission they have won the gratitude of all students of spiders throughout the world.

The present instalment, pages 533-772, completes the treatment of the family Argiopidae. The publisher is L. Mulo, Paris.

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### HERMAPHRODITISM IN DENDRASTER

HEILBRUNN<sup>1</sup> has very recently reported in this journal two hermaphroditic specimens of *Arbacia* from Woods Hole. This increases the list of hermaphrodite echinoderms to five, two of *Paracentrotus* having previously been described by Herlant<sup>2</sup> and by Drzwina and Bohn,<sup>3</sup> respectively, and one of *Sphaerechinus* by Viguier.<sup>4</sup> While engaged in physiological investigations on the eggs of *Dendroaster eccentrica*, we found a hermaphroditic sand-dollar, the gonads of which were symmetrically divided into testicular tissue on the right of a diameter passing through the anus, and ovarian tissue to the left of it. The eggs were in better condition than the spermatozoa, and self-fertilization did not seem to be possible. As the first instance of hermaphroditism in the clypeastroid echinoderms, this circumstance may be worth record.

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## SCIENTIFIC APPARATUS AND LABORATORY METHODS

### DECEREBRATION OF THE DOMESTIC FOWL

THE domestic fowl has been little used in laboratory decerebration experiments because of the exceptionally high mortality that has accompanied such operations. Since there are obvious advantages in the use of the larger-sized bird, the following summary of procedure is presented in the belief that the method would be of interest. Domestic fowls

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<sup>1</sup> SCIENCE, 69: 427, 1929.

<sup>2</sup> *Archives de Zool. Exp. et Gen.*, 57: 28, 1918.

<sup>3</sup> *Comptes Rend. Acad. Sci.*, 178: 663, 1924.

<sup>4</sup> *Comptes Rend. Acad. Sci.*, 131: 63, 1900.