

SCIENTIFIC PROCEEDINGS.

ABSTRACTS OF THE COMMUNICATIONS.¹

Thirteenth meeting.²

Physiological Laboratory of Columbia University, at the College of Physicians and Surgeons. October 18, 1905. President Wilson in the chair.

1 (93).³ "**A fatigue wheel**": **FREDERIC S. LEE.**

The author demonstrated a wheel designed for fatiguing mammals by means of voluntary muscular work.

2 (94). "**Mutation in the evening primrose, *Onagra biennis* (L.) Scop.,**" with demonstrations: **ELIZABETH BILLINGS** and **FREDERIC S. LEE.**

Culture experiments by the authors confirmed MacDougal's discovery of a narrow-leaved mutant of this species. From purely pollinated seed obtained by MacDougal and Britton from a wild plant growing at the New York Botanical Garden, 499 seedlings were obtained, of which 3 belonged to the narrow-leaved type. It is possible that a second mutant was found, but further observations are needed to confirm this. The species used by the authors is not *O. biennis* studied by de Vries.

3 (95). "**On the influence of thyroid feeding and of various foods and of small amounts of food upon poisoning by acetonitril**": **REID HUNT.** (Presented by **ALFRED N. RICHARDS.**)

One of the current theories of the functions of the thyroids is that these organs neutralize certain poisons occurring in the body; these poisons are purely hypothetical, and, so far as the author is aware, no one has yet reported experiments in which it has been shown that the thyroid can render a poison harmless. In the present experiments it was found that mice, to which thyroid had

¹The authors of the communications have written the abstracts. The editor has made a few abbreviations and minor alterations in some of them.

²*Science*, 1905, xxii, p. 635; *American Medicine*, 1905, x, p. 911; *Medical News*, 1905, lxxxvii, p. 1143.

³See preface.

been fed for a few days, were markedly resistant to acetonitril; such mice recovered from the effects of ten to eleven times the ordinarily fatal dose of acetonitril. No such increased resistance to hydrocyanic acid or nitroprussiate of soda was caused by the thyroid feeding. Thyroidectin had an effect opposite to that of the thyroid, *i. e.*, it increased the susceptibility of mice to acetonitril, but this effect was not greater than that of dry normal blood and was less than that of peptone. Feeding with parathyroids had an effect opposite to that of thyroid, *i. e.*, it caused the mice to become more susceptible to acetonitril; the effect, however, was much less marked than that of the thyroid. Potassium iodid increased the resistance of mice to acetonitril, but the extent of this action was not at all comparable with that of thyroid.

In other experiments it was found that a protein diet (ham and cheese) caused an increased susceptibility of mice to acetonitril; a carbohydrate diet (rice and dextrose) increased the resistance to this poison. As a rule it required about four times as large a dose to kill the animals that were fed on a carbohydrate diet as it did to kill those fed on a protein diet. Animals kept on a very limited diet also showed a marked resistance to acetonitril; in most of such experiments it required about three times as much acetonitril to kill as was necessary to accomplish the same result on animals which had been kept on a normal diet.

The experiments are being continued.

4 (96). "**A case of spirochetal infection in man,**" with microscopical demonstrations: **CHARLES NORRIS.**

The author's object in presenting this case was to give the members of the society an opportunity of seeing spirochetes under the microscope. He did not discuss the clinical history of the case, which occurred in the service of Dr. Carlisle, of Bellevue Hospital.

In July, of this year (1905), the patient shipped as an assistant steward on the steamship *Denver*, of the Mallory line; he stayed five days in Galveston, sleeping on board, and returned on the same steamer to New York. Two days later he was taken with a chill, accompanied by fever, prostration, and pains in the bones. On admission he had a temperature of 102.4°. The fever continued for