Nineteenth Meeting.

Schermerhorn Hall, Columbia University. December 19, 1906. President Flexner in the Chair.

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An experiment on the localization problem in the egg of Cerebratulus.

By NAOHIDÉ YATSU.

[From the Zoological Laboratory of Columbia University.]

In the egg of Cerebratulus marginatus Zeleny found, in separating at the 8-cell stage the upper animal blastomeres from the lower vegetative ones, that the third cleavage plane cuts off the basis of entoderm from that of ectoderm. I repeated the same experiment on the egg of Cerebratulus lacteus and found that the condition is somewhat different. In this form the third cleavage does not always separate the entodermic stuff from the ectodermic, so that the embryo from the animal-half sometimes invaginates and sometimes does not. But in shifting the third cleavage plane to the equator by compressing the egg immediately after the first division (in doing this, the second cleavage is suppressed until pressure is relieved, the third cleavage of the normal egg appearing next to the first) and in separating the animal-half from the vegetative, the former always gave rise to the embryos without gut, anenterons. From this it may be concluded that in the egg of Cerebratulus lacteus, a little before or at the time of the third cleavage, the entodermic basis extends farther above than that of Cerebratulus marginatus.

18 (161)

Experiments upon the total metabolism of iron and calcium in man.

By H. C. SHERMAN.

[From the Havemeyer Laboratory, Columbia University.]

Each of the experiments was of three days duration and the same healthy man served as subject throughout. On a diet of