

body weight of the vitamin D deficient group is approximately 60 per cent. of that of the normal group, the average weight of the gall bladders of the former is slightly more than twice that of the latter.

Whether the enlarged gall bladder is characteristic of the vitamin D deficient condition or whether it is found in chicks deprived of other dietary factors is not known.

WALTER C. RUSSELL  
DONALD F. CHICHESTER

DEPARTMENT OF AGRICULTURAL  
BIOCHEMISTRY  
NEW JERSEY AGRICULTURAL  
EXPERIMENT STATION

#### A TREMATODE FROM THE CLOACA OF THE GULL

RECENT experiments at the Marine Biological Laboratory, Woods Hole, Massachusetts, have shown that the oyster drill, *Urosalpinx cinereus*, is the snail host of *Parorchis avitus* (Linton 1914),<sup>1</sup> the adult trematode having been originally described from the herring gull, *Larus argentatus*. The cercaria was found by Stunkard in the summer of 1930 and a complete description of it has been submitted for publication. On account of the resemblance of this larva to *Cercaria purpurae*<sup>2</sup> which has been reported by Lebour and Elmhirst<sup>3</sup> to be the cercaria of *Parorchis acanthus* (Nicoll),<sup>4</sup> it was suggested that the present species might be the cercaria of *Parorchis avitus*.

Most of the larvae encyst on the bottom of the dish within forty-eight hours after escaping from the snail. They have not been found to encyst in the mantle of *Mytilus edulis*, as reported by Lebour and Elmhirst for the cercariae of *Parorchis acanthus*. This gives another specific difference between *Parorchis avitus*

and *Parorchis acanthus*. The cysts were fed to tern nestlings which were brought into the laboratory shortly after hatching. Twelve flukes were obtained from the cloaca of a single bird which was killed ten days after the infestation was established. Although the worms recovered were not sexually mature, they were readily identified as *Parorchis avitus*, and this identification has been confirmed by Dr. Edwin Linton. Experiments are now being made in order to obtain mature worms and to complete the life history by infesting the snail. A detailed account of this work will appear at a later date.

RAYMOND M. CABLE  
HORACE W. STUNKARD

NEW YORK UNIVERSITY

#### HYBRID WORDS

"SHAPOMETER" is a good expressive word, and Messrs. Tester and Bell are to be commended for disregarding pedantic conventions to secure a good word that suits their purpose. If such words are "obvious hybrids, interdicted by good usage," as stated by Mr. Dayton in the issue of June 26 (73: 704), it is time for scientists, who live in the present and face the future, to change the usage. Our language contains far too many words like "morphometer" or "psephometer" formed with undue consideration of a dead language and too little consideration of the needs of a living language and a progressive people. The English language would be in better shape if some people knew less Greek and Latin.

G. S. FRAPS

CHIEF DIVISION OF CHEMISTRY,  
TEXAS AGRICULTURAL EXPERIMENT  
STATION

## REPORTS

#### GRAVITATIONAL AND ELECTROMAGNETIC FIELDS

PROFESSOR ALBERT EINSTEIN has recently completed a part of his work (in collaboration with Dr. Walter Mayer) on the "Unitary Theory of Gravitation and Electricity." It will be published in the near future probably in Pasadena in connection with Professor Einstein's investigations of last winter. Meanwhile Professor Einstein has prepared a preliminary announcement for the Josiah Macy, Jr., Foundation, under a grant from which the work was done. The statement was prepared by Professor Ein-

stein in German, and the publication in English has been authorized by him. It reads:

Ever since the formulation of the general relativity theory in 1915, it has been the persistent effort of theoreticians to reduce the laws of the gravitational and electromagnetic fields to a single basis. It could not be believed that these fields correspond to two spatial structures which have no conceptual relation to each other. Thus arose the theories of Weyl and Eddington, which, however, have been abandoned by their authors, the theory of Kaluza and also the theory of distant parallelism. After we both had worked more than a year on the further development of the last theory, we reached the conclusion that we were striving in the wrong direction and that the theory of Kaluza, while not acceptable, was nevertheless nearer the truth than the other theoretical approaches.

Kaluza's theory rests on the assumption that the

<sup>1</sup> *Proc. U. S. Nat. Mus.*, 46: 551-555, 1914.

<sup>2</sup> *Trans. Nat. Hist. Soc.*, Newcastle, n. s., 1: 437-454, 1907.

<sup>3</sup> *Jour. Mar. Biol. Ass'n*, Plymouth, n. s., 12: 829-832, 1922.

<sup>4</sup> *Quart. Jour. Mic. Sci.*, 51: 345-355, 1907.