there were also found bodies which looked like embryos.

The material of which the cysts were composed was rather scanty. Teasing revealed only a coarsely granular material the cellular nature of which could not be clearly distinguished. The granules were of irregular size and of varying degrees of transparency. Some appeared quite black, others were brownish or colorless.

The setigerous sacs seemed to be normal in the segments in which the cysts occurred, and in many of the segments the nephridia seemed to be perfectly normal.

No one of the laboratory staff had ever encountered these cysts, and it is difficult to see what they mean. Do the setae in the cysts represent a response to the presence of the parasites? Do they represent bits of the setigerous glands which have "run wild" like tumors?

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AUTO-TRANSPLANTED GASTRIC POUCH FUNCTIONING FOR FIVE YEARS

THIS note is to record the interesting fact that an auto-transplanted pouch of the fundic portion of the stomach functioned for five years. The pouch was transplanted beneath the mammary gland in a female dog in January, 1925. The fact that the pouch secreted following the ingestion of a meal was recorded by Ivy and Farrell[1] in November, 1925, the animal being demonstrated in Cleveland at the meetings of the American Physiological Society[2] in December, 1925. This fact proved the existence of a humoral mechanism for gastric secretion. Observations on the motility of the pouch have been recorded,[2] the most important observations being that when the stomach proper manifested "hunger contractions" the pouch also manifested "hunger contractions," and that the ingestion of food not only inhibited the hunger contractions of the stomach, but also those of the pouch, which demonstrated that a humoral mechanism plays a rôle in the causation of the hunger motility of the stomach. These observations have been repeated and confirmed at intervals on this particular dog for five years. The secretory and motor functions of the pouch continued until the animal contracted an infectious jaundice and pancreatitis which resulted in death in June, 1930. A histological study of the pouch immediately after death revealed the same partially atrophic changes recorded in a previous article.[1]

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SCIENTIFIC BOOKS

Astronomy. By R. H. BAKER. xix + 521 pp. Van Nostrand Company, 1930.

A TEXT-BOOK for introductory college courses in astronomy. The author, who is professor of astronomy at the University of Illinois, has purposely eliminated mathematics where practicable, and does not presuppose any considerable knowledge of physics. With these limitations the author has succeeded remarkably well in giving a picture of the science at the present day.

This book was needed. Many good text-books on astronomy have recently appeared. Yet some of them are too easy for a course of three hours a week during a whole year, and some are too difficult. Professor Baker's book is just what one requires for such a course.

In some respects his desire to avoid mathematical treatment may have been too great. The sections which deal with solar and lunar eclipses, for instance, do not contain any algebraical formulae at all. But in order to explain the phenomena some recourse to "algebra in words" was necessary. Would not even mathematically ill-equipped students prefer some simple formulae?

The book is beautifully printed. The illustrations are well chosen and well reproduced. Figures 10.25, 10.25A on p. 418 are obviously misplaced. One wonders what these pictures of constellations have to do with "the importance of radiation pressure," the subject of the corresponding section.

Some misstatements occur in the section on the variation in the speed of the earth's rotation (p. 52). It is stated that meridian transits of *stars* exhibit fluctuations due to irregularities in the earth's rotation. This is obviously confusing, as they are just the readings on the earth-clock. We further read: "From 1660 to 1790 the earth ran fast; then it ran slow until 1898 when it became fast again." Fast and slow should be interchanged. There is an amusing misprint in the preceding sentence: ". . . sudden changes in the period of rotation, at times as much as $0.^{s}00$ . . . [occur]."

Concluding the section on tides in the solid earth (p. 173), the author states, erroneously of course,

[1] *Am. J. Physiol.*, Volume 74, 1925.
[2] *Am. J. Physiol.*, Volume 76, 1926.