anaphylaxis on injection of antigen. Desensitization of pregnant mother can take place in short time (2-4 days); Scaffidi (Archives Italiennes de Biologie, 1914) quoted. It is claimed also that the hereditary transmission of the anaphylactic state exists also when the mother has been sensitized before gestation. An attempt is made to explain a theory of anaphylactic transmission by gestation. Very little space is given to the actual experimental work. The author's conclusions are: (a) The sensitized mother can transmit this state to her young, whether the sensitization has been done before or during pregnancy; (b) the mother herself is desensitized by the pregnancy; (c) this desensitization is the more intense according as the pregnancy and the sensitization have coexisted a longer time; if the maternal sensitization has been done before gestation, it is effected with more difficulty; (d) the period of fetal sensitization is appreciably shorter than in the adult.

P. GRAFFAGNINO.

Berman: Auscultation of One Fetal Heart in a Twin Pregnancy Complicated by Hydramnios. Progrès Médicale, 1920, No. 45, p. 489.

Berman, in reporting a case of twin pregnancy complicated by hydramnios, points out the value of the auscultatory quality of the fetal heart as a great aid in the diagnosis of the existing condition. He claims that when the size of the abdomen indicates the existence of hydramnios, the fact that a fetal heart of marked intensity may be heard at a definite point on the abdominal wall, furnishes sufficient evidence to establish the diagnosis of a twin pregnancy. He bases this claim on the fact that the fetal heart of a single fetus in hydramnios is always weak and indistinct due to the fluid intervening between the fetus and the ear of the examiner. The foregoing complex he calls the sign of Professor Enrique a Boero.

THEODORE W. ADAMS.

Radasch: Superfetation or Superfecundation. Surgery Gynecology and Obstetrics, 1921, xxxii, 339.

After reviewing the literature, Radasch describes the product of a spontaneous abortion which contained, in a fused sac, one fetus 11.6 cm. from crown to coccyx or 16-17 weeks' development, and another 18 mm. or about 40 days' development. He considers this a case of superfetation.

R. E. WOBUS.

Ingram-Johnson, R. E.: Superfetation. British Medical Journal, July 23, 1921, p. 116.

The author reports a case of a woman who on March 2 was delivered of a five months' fetus and on March 4 had a second abortion in which she passed a sac containing a fetus of about six weeks' gestation.

F. L. ADAIR.

Wijsenbeek: Observations on Uterine Movements. Nederlandsch Tijdschrift voor Geneeskunde, 1922, i, 1263.

This observer makes use of the method first used by Katsch and Borchers for observing peristaltic movements of the intestines. Under anesthesia and appropriate aseptic precautions, a piece of celluloid is sewn into an opening in the abdominal wall. With this window *in situ*, he has kept rabbits alive as long as 87 days. In guinea pigs the method was not successful, as they always succumbed after a few days, while the uterus of a cat is so far removed from the ventral wall that it cannot be observed. To exclude the by-effects of anesthetic and shock, observations were never recorded within three days after operation.

Wijsenbeek noticed several distinct peristaltic waves in the uterus. He compares the phenomenon to the turning of a rain worm. The main peristaltic wave

travels at intervals from the end of the horn to the cervix. Occasionally it occurred in the opposite direction. An even more pronounced wave was observed in the vagina. Lesser peristaltic waves were observed traveling in an oblique direction from the round ligaments in spiral fashion towards the cervix.

In the pregnant organ the contractions become somewhat more irregular and occur at longer intervals. In the later stages of pregnancy there is a tendency towards longer periods of contraction of the entire organ, followed by longer periods of complete relaxation. In no case did he observe the so-called pendulum movements mentioned by other observers who removed the uterus partly from the organism.

After the injection of pituitrin, he observed very active contractions with deep transverse furrows. These contractions were of about one minute's duration and were followed by longer periods of rest, during which the uterus appeared cyanotic. These contractions were as severe and of the same duration 4 hours after injection of the pituitrin as at the beginning.

R. E. WOBUS.

Naujoks, Hans: *The Influence of Anatomic Changes in the Membranes upon the Time of Their Rupture.* Zeitschrift für Geburtshilfe und Gynäkologie, 1921, lxxxiv, 304.

The author made histologic examinations of the membranes in a number of cases of labor to determine whether there were any anatomic changes to which premature or delayed rupture might be ascribed. In all cases of premature rupture for which no definite mechanical factors could be held accountable, he found two in which the structure was entirely normal; in 5 degenerative phenomena were more or less pronounced, usually affecting the chorionic epithelium; amniotic epithelium and membrana intermedia were at times affected. The most varied types of degenerations were observed, disintegration of the nucleus, pyknosis, vacuolization of the protoplasm, hyaline degeneration of the connective tissues as well as marked deposition of pigment in one case. Inflammatory changes were found in 3 cases; in 2 combined with degenerations, in 1 alone. The fact that the inflammatory changes were far more marked in the decidua and chorion than in the amnion indicates that they probably spread from the uterine cavity to the membranes rather than the reverse as a secondary result of premature rupture. Delicacy of certain layers, especially the two connective tissue layers and the absence of the membrana intermedia occurred in other cases, alone or combined with degenerations.

Out of 5 cases of delayed rupture he found definite anatomic changes in 4. These consisted in increased thickness and density of the connective tissue layers, or in an increase in the smooth muscle cells in the amniotic or chorionic connective tissue.

MARGARET SCHULZE.

Lorenzen: *The Body Weight of Pregnant Women and the Influence of Impending Labor upon It.* Zeitschrift für Geburtshilfe und Gynäkologie, 1921, lxxxiv, 426.

The author calls attention to Zangemeister's conclusions concerning the weight of pregnant women: The body weight of the pregnant woman increases almost uniformly after the 27th week; after the 36th week there is a slight increase in the amount of gain. From the third day before labor until the time of birth there is a sudden decrease in weight—in these two days the pregnant woman loses on an average 1 kg. In following daily the weight of 78 pregnant women, Lorenzen was unable to confirm Zangemeister's conclusions. He found that the factors of daily variation were so great that it was impossible to follow the general tendency of the weight curve except by averages of several days or a week, and impossible to prophesy impending labor merely because of the loss of a few hundred grams in