fact that the fœtus may arrive at the full time with ample perfection of the functions of organic life, while without any trace of brain or spinal cord. Observations also lead to the conclusion that the sympathetic enters largely as a factor into all functional and organic diseases. Dr. E. L. Fox, in his Bradshawe lectures, lately delivered, showed that Dr. Woakes' idea that the "inferior cervical ganglia is a correlating nerve centre," may be expanded thus: the influence of emotion may be seen on the cervical ganglia (blushing), on the cardiac nerves (palpitation), on the splanchnic, on the abdominal plexus, and especially on the vesical ganglia. has also shown that, although the sympathetic may not be considered as a cause, it is a chief factor in inflammation by causing dilatation of the blood vessels.

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ABORTED TWIN PREGNANCY.—The accompanying specimen, manifestly that of a human fœtus in the early weeks of its development, was passed from the vulva by a married woman, æt. 26, without pain, or other premonitory warning, at the breakfast table and unexpectedly. Seven or eight months thereafter she gave birth to a child at full term. The question arises: Is it a case of twin intra-uterine pregnancy, one of which aborted? like the small green apple falling from its fellow. The last catamenial period terminated on March 11th, 1882. Coitus occurred on March 13th, and again on March 20th and at no other time in the The fœtus was expelled April 10th-Delivery of a healthy and fully developed female child occurred on December 20th, 284 days after the last catamenia, and 254 days after the abortion. This specimen is presented by Dr. Wm. Morton, of Wellesley, who states that, having been intimately acquainted with the family for years, he can vouch for their veracity and intelligence.

## IMMUNITY FROM INFECTIOUS DISEASES.

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Review, translated and condensed, from Biologisches Centralblatt for September.

I. A New Theory of securing Immunity from Infectious Diseases.

11. The Etiological Therapeutics and Prophylaxis of Pulmonary Tuberculosis.—H. Buchner, Munich and Leipzig, Oldenbourg, 1883.

The above-named brochures of Buchner have so much in common with each other that they may be discussed together. Buchner sees in the recognition of fungi as the cause of certain diseases, the greatest triumph which medical science has achieved in our century, but finds that the practical therapeutical consequences of the theory have been so far only very incompletely deduced. The attempts in this direction have hitherto been made in false directions—they either strive after protective inoculation, or direct combating of the fungi by the employment of antiseptics. It appears to be impossible to protect against all infectious diseases by inoculation; at any rate, it would be simply instituting a lesser evil for a greater. The internal use of antiseptics again is positively hurtful, for the poisonous action of antiseptic materials affects the tissues much earlier and more intensely than it does the much more resistent fungi. The very numerous cases of spontaneous cure of infectious diseases show, however, that there are circumstances under which the progress of a fungusvegetation in the body is rendered impossible. Therefore it ought to be easy enough under favorable circumstances to prevent the beginning of such a vegetation, i.e., to secure immunity. What means does nature adopt in her struggle, so generally successful, against the invasion of fungi? According to Buchner, inflammation is the weapon of the organism in such cases. The correctness of this view is established by an experiment made in 1877, which, however, he has not since repeated: A thread, impregnated with decomposing meatdecoction, was drawn through the middle of a rabbit's ear. When in a few hours the place in question was inflamed, the carotid of the same side was ligatured, and some of the same fluid then injected subcutaneously into the upper part of the ear. The result of these operations is gangrene of the ear; the gangrene, however, extended only over that part of the ear situated above the area of inflammation—the part inflamed proved itself an impassable barrier to the bacteria, so much so that the tissue lying below it remained unaffected. The inflammation caused in the first place by the bacteria is thus a self-protective reaction on the part of the organism, and in each case the question