## TYPHOID FEVER DURING PREGNANCY.

By BENSON A. COHOE, M.D., Assistant Resident Physician, Johns Hopkins Hospital, Ealtimore.

THE rarity with which typhoid fever was found to occur during pregnancy led the earlier teachers of medicine to believe that the impregnated woman possessed an immunity against typhoid infection. When in the light of statistics this view became no longer tenable, it was still asserted by many, that while pregnancy did not confer an immunity, it at least prevented a severe attack. Gradually, however, as the evidence accumulated, it became apparent that the fate of the pregnant woman, exposed to typhoid infection, was in no great measure unlike that of her non-pregnant sister, either in regard to susceptibility to infection or in severity of attack. The occurrence of several cases of typhoid fever in pregnancy during the past year, in the Johns Hopkins Hospital, stimulated an interest in a study of all of the cases which have come into the wards of the hospital, together with a resumé of the literature bearing upon the subject, in order to test the authenticity of the more modern conception.

Prior to the middle of the last century, when the subject first found a place in the text-books on obstetrics, scanty mention was made in the literature concerning the association of typhoid fever and pregnancy. The earliest recorded observations are those of Louis in 1829. Towards the close of the century, the growth of bacteriological methods gave an impetus to the study of the placental transmission of the typhoid bacillus, and numerous observations began to appear in the literature.

Incidence: The occurrence of typhoid fever during pregnancy in hospital practice is comparatively rare. In the reports of Guy's Hospital covering a period of twenty-eight years only seven cases were noted. Ziegler, in Vienna, reported twenty-four cases from a series of 1,852 (1.3 per cent.); Liebermeister, twenty-four in a series of 1,420 (1.2 per cent.). The statistics of these observers make no distinction between typhoid occurring in men, women and children. Curschmann found forty-five cases associated with pregnancy in a series of 1,817 of typhoid fever in females at Leipzig and Hamburg (2.5 per cent.); Martinet noted sixteen cases in a series of 460 in females (3.5 per cent.); Galtdammer, twentysix in 640 cases (4 per cent.). These figures, however, include young and old women as well as those of the child-bearing period. In the Johns Hopkins Hospital up to the time of writing there have been 1,914 cases of typhoid fever admitted to the wards. In only eighteen of these has the disease been complicated with pregnancy The greater number of cases of typhoid fever, as shown by the hospital records, have occurred in males in the proportion of 2.4: 1. Of this lesser number of cases in females, about 77 per cent. occurred between the ages of 15 and 40, which may he