5. The artificially increased natural resistance in the peritoneum of animals caused by previous injections of such fluids as bouillon is probably due to similar changed osmotic conditions which allow the passage of complement from the circulating blood.—F. P. G.

The Relationship Between Human and Bovine Tuberculosis.—J. G. ADAMI (*Manchester Medical Chronicle*, March, 1902) has confessed himself to be of an open mind on many of the points involved in this discussion, which was brought to a height by Koch's rather startling paper before the London Congress of Tuberculosis in 1901; but after a full and judicious review of the work of others, and from his own experience, he ventures pretty definite conclusions on the more important points in question.

Bovine tuberculosis can be and usually is transmitted from cattle to cattle by inhalation or contamination of the various discharges. Human tuberculosis is likewise transmissible to cattle, but is not markedly virulent except as a mixed infection. Certain breeds of swine seem to show more marked susceptibility than others to this form of infection.

Human tuberculosis is usually transmitted from man to man, and the organisms of human tuberculosis vary somewhat culturally and pathogenically from the bovine variety, but not to the point that we should be justified in regarding the two as different species.

Bovine tuberculosis may be transmitted from cattle to man either through wounds or through the alimentary canal by food, the latter form of infection being almost entirely limited to children. Milk infections probably take place only in cases of advanced disease in animals in which large numbers of bacilli are present. Animals showing either physical signs of tuberculosis or reaction to tuberculin should be killed.—F. P. G.

Agglutination in Mixed Infections, and Their Means of Diagnosis.—CASTELLANI (*Zeitschrift für Hygiene*, 1902, Band xl. p. 1) has experimentally shown the coexistence of several specific agglutination properties in the blood of mixed infection, and has indicated a method which may prove of great value in the diagnosis of infections due to more than one micro-organism. The work has been done principally on rabbits, and the organisms chiefly used were the *B. typhosus*, *B. coli*, and *B. pseudodysenteriae* (Kruse). He finds in experimental mixed infections brought about by the inoculation of subminimal lethal doses of living bouillon cultures that the blood of the animal acquires agglutinative properties for each of the organisms—properties equal in onset, intensity, and duration to such properties as existing in an infection caused by any single organism. When a second infection follows the first after a lapse of time, the agglutinative power for the second organism follows the regular course, and the agglutination for the first organism is in nowise affected. In mixed infections in man the several specific agglutination properties are found to be present. This would readily serve for the diagnosis of mixed infections if it were not for the fact that normal agglutinative properties may exist in the blood for organisms other than that causing the infection. To obviate this the author has devised the following scheme: He finds that when 2 or 3 c.c. of serum of an animal infected with a single organism are placed for twenty-four