A large number of comparative tests are called for, before a definite statement can be made as to whether the increased resistance of the blood corpuscles of immunized animals is due to a change in tonicity of the blood as a whole or simply to a variation in the resistance of the corpuscles.

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Further observations on the precipitation of inorganic colloids by sera.

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At the meeting of this Society last June, I recorded some facts which seemed to show that in rabbits the precipitating effect of their sera was greater for collodial platinum and collodial silver, after they had received injections of these two substances. Further work since that time on rabbits and on various sera from horses has shown that there are wide variations in the agglutinating or precipitating value for these colloids; not only in various animals but the value differs in the same animal at different times.

In a few cases in which I have been able to test the electrical conductivity of the sera, I have found that some of those which gave the highest conductivity gave the highest agglutinating effects, and, therefore, I believe that the variations in the agglutinating or precipitating effect of the sera is due to variations in the concentration of electrolytes. These inorganic colloids are, as is well known, extremely susceptible to the influence ef electrolytes and a very slight increase in the concentration of univalent kations and even more especially of the di- and trivalent kations, would cause wide variations in precipitating value. For instance, there might be a greater concentration of one divalent kation and a lessened one of some univalent kation and yet the total concentration of all electrolytes remain nearly the same.