ties which become active upon the addition of normal blood serum. In the peritoneal cavity of a normal (*i. e.*, not immunized) animal the same phenomenon is observed when cholera vibrios enter the same in conjunction with such "passive" immune serum. These phenomena become intelligible by the acceptation of Pfeiffer's application of Ehrlich's theory, according to which the "side-chains" of the molecule of immune serum contain two groups of atoms, one of which enters into chemical union with a corresponding atom-complex of the cholera vibro and the other attaches to itself the ferment contained in all normal sera. If this ferment then, is added to the "passive" immune serum in the presence of cholera vibrios, these, or *mutatis mutandis*, certain other organisms undergo bacteriolysis.

Bordet* has shown a series of investigations that the laws which obtain in the case of the specific bacteriolytic action of immune sera are also applicable to certain specific lysogenic phenomena concerning the red blood corpuscles. Bordet treated guinea-pigs with repeated subcutaneous injections of defibrinated blood of rabbits. The blood of guinea-pigs thus treated dissolves in the test-tube the blood of rabbits quickly and with great intensity, while serum of normal guinea-pigs produces no solution of rabbit blood. Previous to the dissolving process, a strong agglutination of the erythrocytes takes place. Heating to 55° C. deprives the guinea-pig serum of its hemolytic function, while its agglutinating action is thereby not destroyed. The serum which has been made inactive by the heating process regains its hemolytic property by the addition of a small quantity of normal guinea-pig serum, or normal rabbit serum. The "active" guinea-pig serum is inactive with regard to dissolving the blood corpuscles of guinea-pigs and pigeons; it is active, but in a much smaller degree toward the blood corpuscles of rats and mice. The active guinea-pig serum has a strongly poisonous action when it is injected into the ear-vein of the rabbit. The analogy of these processes with the phenomena of bacteriolysis is far-reaching as Bordet points out, and Ehrlich† states that the mechanism of hemolysis and bacteriolysis appear to be very similar, and the study of hemolysis consequently gains a not unimportant theoretical significance. Ehrlich‡ has experimented with the blood of a goat which had been for eight months subcutaneously injected with sheep

* Annal. Instit. Pasteur, Vol. XII, No. 10.

† Ehrlich und Morgenroth, "Zur Theorie der Lysinwirkung," Berlklin. Wochenschr., No. 1, 1899.

‡ Ibidem.