

gave at once on the addition of strong ammonium sulphide the characteristic dark green reaction of ferrous sulphide, and when the reagent was added to the dry powder, the reaction developed in a few seconds.

It is indeed a fact that if the reagent is very dilute the reaction which may be obtained on adding it to the ferratin powder, or to an ammoniacal solution of it, does not develop as readily as when the reagent is added in a concentrated form, but neither in this, nor in the fact also that acid solutions of potassic ferrocyanide first precipitate the dissolved ferratin and afterwards give the precipitate the Prussian blue colour, can one find decisive indications that the iron compound is an organic one. It is true that in respect to these reactions there is between ferratin and hæmatogen of egg-yolk some resemblance, but it is one which is partly caused by physical conditions. Just as in the case of hæmatogen, the precipitate caused by the acid ferrocyanide solution in the solution of ferratin renders the iron in it less liable to be attacked by the reagent; on the other hand, the interval between the moment when dilute ammonium sulphide is added to a solution of ferratin and that when the reaction appears is so short that I cannot attribute any importance to it. It may be that ferratin is an organic iron compound, but the facts mentioned do not in any case decide this.

It is not alone of ferratin that one may make this statement. Carniferrin is a manufactured preparation which is claimed to be an organic iron compound, on evidence which is but slightly, if at all, stronger than illustrated in the case of ferratin.

There are also iron compounds in animal cells whose organic nature is uncertain. These, which may be found in the fetal liver and spleen, in the placental villi of the rabbit, cat and man, as well as in the spleen, liver and kidney of the adult vertebrate, give not immediately a dark green reaction with ammonium sulphide, but if the latter is dilute, the appearance of the reaction is longer delayed. In the case of the placental villi of the human subject at the sixth week the reaction is slowly developed, but if the preparation containing the reagent and the villi is slightly heated, the reaction develops at once. Sections from the placenta of the cat treated in the same way require time for the development of the reaction, but this is shortened to several seconds on the application of heat to the preparations. Similarly with sections of the liver, spleen and kidney of *Necturus lateralis* and the frog. In the sections of the spleen of *Necturus*, especially of those