

It is evident from this analysis that the principal proteid extracted by water, is the same as that extracted by saline solutions, and as this substance is precipitated from the aqueous extract by dilution, it is undoubtedly dissolved by aid of the salts contained in the beans. It is not probable that the acid contained in the seed causes this solution, for in that case the proteid would not be precipitated by dilution, a considerable excess of acid being necessary to effect its precipitation. The meal after extracting with water, as just described, was treated with one per cent. sodium chloride solution, the extract filtered, largely diluted with water, and charged with carbon dioxide. Only a trifling precipitate resulted which, when prepared in the usual manner, weighed 0.52 gram. This preparation, 17, ash-free, contained 16.29 per cent. of nitrogen. These results show that nearly, if not quite as much of the globulin is extracted by water with help of the salts of the seed, as by use of stronger salt solutions.

[TO BE CONTINUED.]

A NEW AUTOMATIC PIPETTE.¹

BY EMIL GREINER.



WHEN taking a great number of samples in succession of the same volume of the same liquids, it is quite desirable to have a measuring instrument which will automatically take up the exact volume of liquid, without having to draw the same by mouth and watch for the mark, as is done when using the ordinary volumetric pipette. Therefore, I have devised an automatic pipette for such purposes, which is at present successfully employed in connection with the Babcock milk test. A glance at the accompanying cut will explain the practical value of this instrument, and as the pipettes can be made in all sizes required up to 50 cc., it can be adopted in many instances, where pipettes are used often and where accuracy is desired.

¹ Read before the New York Section, March 9, 1894.