move the weight back to the left and weigh a sample into a bottle on the right pan, weighing alternately into bottles on the right and left pans until all bottles contain samples. The four-bottle scale is used in the same manner as the twelve-bottle scale, except that nine (9) and eighteen (18) gramme weights are used on the pans of the scale instead of the weight on the notched beam. With the one-bottle scale (fig. 14) after balancing the scale with the bottle placed on the left pan a nine (9) gramme

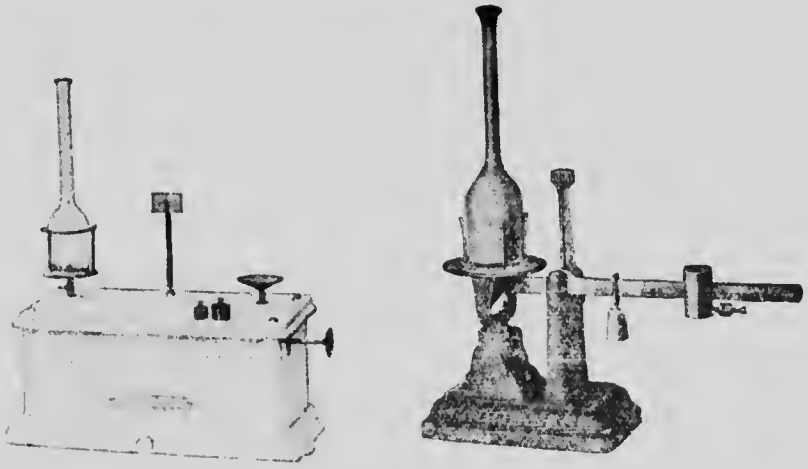

Fig. 14.

or eighteen (18) gramme weight is placed on the right pan of the scale and the sample is then weighed into the bottle.

Sampling Cream for Testing.

In sampling cream for testing special precautions must be taken to secure a sample which represents the average quality to be tested. It is more difficult to get a representative sample of a quantity of cream than it is to get a representative sample of an equal quantity of milk, since the cream does not mix as readily. If circumstances permit it is best to pour the quantity of cream from one vessel to another several times. If pouring is not practicable, the cream should be thoroughly stirred by means of a stirring rod (Fig. 15) constructed for the purpose.

Fig. 15.

If the quantity of cream is thoroughly mixed a small dipper (Fig. 10) will be quite satisfactory for taking the sample. Owing to the difficulty of thoroughly mixing a can of cream, several special devices have been recommended for taking the sample. Of these the "McKay Sampler" (Fig. 11) is probably the most satisfactory. This is constructed with two slotted tubes, one inside the other. The tubes are turned to close the slot and the sampler inserted in the cream to the bottom of the can. The slot is, then, opened to admit the cream to the tube, after which the slot is closed and the tube withdrawn. The sample thus taken is a small column of cream extending from the bottom of the can to the surface of the cream, and is representative both of the *quality* and *quantity* of the cream sampled.