not in several large clots, but in minute portions, which are more easily attacked by the digestive fluids. In other words, they act as a mechanical diluent.

Rotch, in the *Boston Med. and Surg. Jour.*, 1889, took up this very subject, and from a series of experiments came to the conclusion that the views concerning the various diluents used for this purpose are not only theoretical, but incorrect. He started out with the fact that the total amount of nitrogenous matter in human milk is from 1 to 2 per cent., and in cow's milk about 4 per cent. A portion of this is coagulable, and a part of this coagulable portion consists of a chemical combination called casein. The non-coagulable portion in human milk is greater than in cow's milk. The reverse of this is true of the nitrogenous portions of cow's milk. This difference in coagulable quality has induced observers to attempt to break up the larger curd of cow's milk with diluents and attenuants; but he believes that since these nitrogenous matters are two to four times as great in cow's milk as in human milk, it is more practical to dilute these matters until the dilution corresponds to that found in human milk, when the coagulum will be found to correspond to that of human milk and will not need to be broken up. It is claimed that the curd of human milk is small, soft, and friable, and that of cow's milk is large, tough, and tenacious; but Rotch found that where the percentage of albuminoids in human milk reaches that in cow's milk, the curd resembles that of cow's milk. In support of this, he instances the case of a wet nurse whose milk on plain food contained 2.59 per cent. of albuminoids. After a three weeks diet of greater amount and richer quality, with less exercise, the percentage reached 4.61 per cent., and the babe vomited thick curds. On a return to plainer food and skimmed milk, the percentage fell to 2.9 per cent. and the babe ceased vomiting. He gave in detail ten experiments with cow's milk, twenty-four hours old, each treated differently by boiling, sterilizing, lime water, barley water, etc., and then digesting artificially; in nine, curds were found in different sizes, the size decreasing as the proportion of diluents was increased, until in the tenth, in which the proportion was one part milk and five parts plain water, no curd was found—in this respect resembling woman's milk tested at the same time. These results show that a diluent is of service, not so much for any particular chemical quality or ingredient it may contain, as for its power of diluting the milk.

In the "Cyclopedia of Diseases of Children," this same experimenter gives a formula for making a preparation which has the same chemical constituents as human milk. It is as follows:

Milk	℥ii.
Cream	℥iii.
Water	℥x.
Milk Sugar . . .	2 measures.

Place in a flask in a steamer and steam for twenty minutes; then remove the flask from the steamer, and, when slightly cool, add

Limewater ℥i.

Place on ice and give proper amount at proper times. The measures mentioned above are of tin, and hold ℥iii.$\frac{3}{5}$

Rotch claims that this is an improvement on the Meigs' mixture which many have used for several years. Meigs' mixture is:

Milk . . .	℥ii.
Cream . . .	℥iv.
Limewater . .	℥iv.
Sugar water . .	℥vi.

The sugar water is of the strength of ℥i 73¾ to a pint of water. The limewater here is ¼ of the whole amount, and distinctly alkaline to the taste; while in Rotch's preparation it is $\frac{1}{10}$, and not at all suggestive of alkalinity.

I have prescribed the former preparation very frequently during the last two years for children under, as well as those over a year, suffering from malnutrition, and found it to be nearly always well digested.

Arthur V. Meigs, at the meeting of the American Pediatric Society held in Washington in 1889, suggested an improvement in the preparation of the mixture named after his father. He thought that the cream, as ordinarily obtained in cities, is kept so long that it is very liable to become sour; and therefore directs now that the mixture be prepared as follows: One quart of ordinary milk is placed in a high pitcher and allowed to stand in a cool place for three hours; then one pint is slowly poured off, care being taken that the pitcher is not agitated, the object being to obtain the upper layer of