

had procured thirteen different kinds from different houses. He had put one grain of each into a bottle and had added to each bottle eight ounces of acidulated water (hydrochloric acid and water of one-half per cent. strength). Twelve hundred grains of white of egg, coagulated by boiling and passed through a sieve and very finely comminuted, were added to each bottle. For comparison the first bottle had received only a charge of acidulated water and albumen without any pepsin. The bottles were exhibited. The results were very different from what might have been expected. Most of the pepsin seemed entirely inactive. He was very much surprised with the result obtained with the article made by Parke, Davis & Co., one grain of which had completely digested twelve hundred grains of albumen. Fairchild's was second best, but had not done quite as well. The rest manifested little or no power. It is claimed that this is not a fair test; that a more bulky precipitate may weigh less than one that is less bulky. But the speaker saw no difference in the physical characters of the respective residues, and it was very evident that in these experiments the more bulky invariably were the heaviest. He had used water enough for all the albumen to go into solution. Having ascertained the time required for digesting the entire amount of albumen, he had added some of the medicines we were in the habit of giving in summer diarrhoea, to see whether retarding effects were present or not.

Salicylate of sodium stops it absolutely. Somebody says it does, so by fixing the hydrochloric acid: The quantity used was 20 gr.; even so small a quantity as 3 gr. retarded the process about two hours. Salicylate of sodium is very sparingly soluble in hydrochloric acid.

Quinine, 20 gr., there was no digestion; 3 gr. had no effect.

Mariani wine stopped the digestion.

Acetate of lead does not retard or interfere with the action of the pepsin.

Tincture of chloride of iron, 30 drops, hardens the albumen and clumps it up, and retards about two hours; 5 drops retard about 15 minutes.

Salol retards the action about one hour.

Antifebrin only slightly delays the action.

Antipyrin had no effect.

Chalk mixture completely arrested the action (quantity added, a teaspoonful).

Calomel, no effect.

Bismuth sub carb., 20 grs., no effect.

Tincture of kino, copious precipitate of the pepsin and arrest of action.

Tincture of catechu, same effect.

Dr. CAILLÉ said he had several times expressed his opinion, and did not wish to take up the time of the section. He was well aware that milk is not scientifically sterilized by the boiling usually practiced. It was a well known fact that one child will thrive on undiluted milk, another on diluted. In view of the intricacy of the whole subject, he thought collective investigation would be a good way to solve the problem.

Dr. HUTCHISON thought Dr. Fowler would not get the same results if he were to repeat the same experiments. He had made six experiments with the best pepsins in almost the identical way Dr. Fowler had done, but his results had been very different in order of their merits. Parke, Davis & Co.'s was far below any experimented with. Fairchild Bros. & Foster's was found satisfactory. Pepsin is a very variable product, and little reliance should be placed on such experiments. No two specimens of the same manufacturer would give the same results.

He expressed his appreciation that different observers could come to similar results, referring to Dr. Baruch's statement as to the chemical analysis, showing the difference between human and cows' milk, and we know that it will nourish our babies in winter. But in summer our milk commences to ferment, and trouble begins. The boiled milk should be filled into a number of small vials, each of which is to contain only enough for one feeding. His experience would corroborate all that Dr. Meigs had said about adding cream to the milk, and he had carried it out for a number of years.

Dr. HARWOOD had been very much interested in the papers read, and very much surprised that in reference to artificial food nothing had been said about condensed milk. It was his experience and belief that of all the foods procurable none could equal condensed milk, for the reason that it had been heated to a temperature destroying any bacteria. Sugar has also been added. It has not been subjected to the churning process on the railroad that would render it unfit for continuous and regular feeding. In all his practice, extending over a number of years, all the children he had become responsible for had been nourished with condensed milk, and in his own personal experience and family, when the mother's milk failed, the baby was brought up on condensed milk. He had never failed to recognize the value of the addition of an alkali to milk, lime water being the one added, and the quantity used for diluting one-third that of the milk, and boiled. He had taken the trouble to visit Putnam County to learn the process of condensing before using it.

Dr. JACOB said he would strenuously object to condensed milk. Those who had done him the honor of reading his writings would agree with him.

In reference to the pepsin experiments he thought no one present at the meeting had ever given 30 drops of tincture of iron. Muriate of iron in small doses, though in large quantity during the day, does no harm. Whoever had given it in diphtheria would appreciate that fact.

One more point was of the greatest possible importance. Dr. Fowler had stated that the digestive process was interrupted by the carbonate of lime. That is important to know, though it is quite natural that it should do so and does it in the stomach. We give it to a sick child which does not secrete the normal amount of lactic acid, later