

the filtrate rendered alkaline and agitated with ether. The residue, on the evaporation of the ether, was dissolved in a little water and given to a kitten about two months old. Immediately the kitten manifested the symptoms of poisoning by tyrotoxin, which have already been described. I began the analysis of this custard in the morning before having my breakfast, and getting a little on my finger, in carrying the jar, I tasted of it. Within a very few minutes I was nauseated, and ten minutes after taking it I vomited. The prompt action of so large a quantity was probably due to the condition of the stomach. At 2 p.m. of the same day I took one teaspoonful of the custard. Within thirty minutes there was marked nausea and some violent retching, but no vomiting. At 3 p.m. the symptoms having abated, I took a tablespoonful more of the custard. At about 3.30 I began to vomit freely. The nausea continued about an hour. After this there would be passing sensations of sickness. At 8 p.m., while visiting a patient, I was taken very suddenly and sharply with nausea and griping pains in the abdomen. I again vomited, and had one watery stool. After there was no further trouble. The occipital headache, mentioned by Dr. Moffitt in his letter, was very marked for some hours after taking the custard. It consisted of sharp lancinating pains, which were confined wholly to the occiput. The nausea was peculiar. I cannot say that there was pain in the stomach. A sickening taste would be felt in the mouth, and a peculiar very sickening odour—which I recognized as that of the isolated poison—would intensify the nausea. The throat and mouth seemed filled with a sticky tenacious mucus. In short, the effects on these parts resembled those which I have experienced from an over-dose of atropia.

I think that this experiment explains the poisonous nature of the vanilla cream. The fermentation going on in the custard, and probably begun in the milk, was arrested in the part flavoured with lemon by the freezing which began immediately, but while the lemon cream was being frozen, that part of the custard which was to be made into vanilla cream continued to ferment, and before the freezing process was begun enough of the poison was generated to seriously affect those eating of it.

The maker of the cream does not give us any exact information concerning the length of time which elapsed between the making of the custard and the freezing of that portion of it flavoured with vanilla. He only states that the lemon cream was frozen first. Recently I have received from Lawton a letter giving me more exact information on this point, also some valuable knowledge concerning the conditions under which the cream stood. I take from this letter the following extract:—"The cream was frozen in the back end of an old wooden building on Main street. It is surrounded by shade, has no underpinning, and the sills have settled into the ground. There are no eave-troughs, and all the water falling from the roof runs under the building, the streets on two sides having been raised since the building of the house. The building had been unoccupied for a number of months, consequently has had no ventilation, and what is worse, the back end (where the cream was frozen) was last used as a meat market. The cream which was affected was that portion last frozen; consequently it stood in an atmosphere more like that of a privy vault for upwards of an hour and a half or two hours before being frozen. It seems to me that anything so sensitive to surroundings as milk could not escape being affected by such an atmosphere."