For instance, from my own respectable grocer I lately had fine, high-priced granulated sugar that I knew to be adulterated with bluish starchy matter. I sent it back with complaints, and they said it was an accident. Some weeks after it happened again, and I again returned it. They told me they had sent the last to the public analyst, and it was certified as "pure." I replied, "Put a teaspoonful in a tea-cup or saucer, add a tablespoonful of hot water (not boiling), and you will *see* the blue cloud separate!" It is needless to say that I have not been served with such sugar again.

The adulteration of beer, wine, and spirits has long gone on, and is probably partly the reason that it is so rare now that doctors order stimulants. Adulteration is known to be a fraud, and is so treated in the Food and Drugs Act, but, by some extraordinary oversight, beer was left out of the simple rendering of this statute, which led to the terrible disclosures of the "Arsenic in Beer" scandal. So many adulterating drugs were shown to have been used by some brewers that, though even used in small quantities, their action was shown to be complex. In the same way the action of one adulterant in one article of diet may combine injuriously with that of another article, to the detriment of the consumer. Mr. Henry Stopes has long advocated in the columns of the *Mark Lane Express* and before the Royal Commissions on the question that the Food and Drugs Act should be strengthened, making it penal to sell as food any article contaminated with poisonous matter, whether to a dangerous extent or not; and I am glad to see that at the British Medical Association meeting at Manchester, last week, August 1st, Dr. Tattersall, the Medical Officer of Health for Salford, brought this forward in an excellent paper on "Arsenical Beer."

Meanwhile, however, mothers and nurses ought to be awake to the ever-present danger, which is, of course, greater in the case of invalids and infants.

II. But there is another source of danger from ingredients introduced into food, not as adulterants, but as antiseptics or preservatives, a danger which has not yet been touched by any legislation in this country, though it has been enacted and stringently enforced abroad.

To prevent milk "turning," especially in warm weather, the dairyman frequently introduces *formalin* or other preservatives. But to infants' or other delicate stomachs these preservatives are practically poisonous. Not only do they neutralise much of the food-value of the milk, but attacks of sickness and vomiting, which are sometimes treated as a sign of the state of the patient's stomach, are, occasionally at least, the sign of what has been introduced into that stomach, unknown to doctor, nurse, or patient. Nurses ought to ask doctors to tell them some simple test of the various antiseptics used in milk and cream, in particular.

There is a question, even more difficult, concerning animal food, for, up till now, though butchers have been prosecuted for selling meat "unfit for human food," the rapid stages of decomposition in "hung beef" make prosecution difficult. In order to prevent prosecution, butchers make large use secretly of antiseptics. My own experience on this point has been long and painful. Always dealing with the best butchers, and paying the highest price for meat, I can rarely get such cuts as rump-steak, gravy-beef, or chops absolutely free from antiseptics. We cannot always determine this by the eye, but we can always distinguish the consequence. The use of these antiseptics destroys alike the flavour, the natural juices of the meat (and consequently some of its nutritious value), as well as taking away the palatableness of the food to a delicate stomach. Much of the modern repulsion to animal food arises from the sophistication of the article. Some simple test ought to be discovered by which the misfortune might be avoided of the patient unnecessarily being made to feel that "he has gone off his food."

That such things are done I can prove. In a high-class establishment where I dealt for some time, they repeatedly assured me that they "never used borax, or any antiseptic." But one afternoon I required a small piece of gravy beef, and went for it myself. At this unusual time, the young assistant took up a shin of beef from a deep tray. He flushed all over, and, before he could lay it down again, I had seen that it was all sparkling over with large crystals of some chemical. "That is of no use to me now. Beef treated in that way cannot make beef-tea," said I; and I had to go and get something else. Another day, at the wholesale chemist's, I was buying some alum, for no dietetic process. I remarked how cheap it was now. "We must keep a low-priced kind," he said; "it is so largely used by the butchers here."

Now, besides the deprivation of nutrition involved in this process, borax, alum, sulphate of zinc, and other preservatives, even in the small traces left in the cooked meat, may, especially in connection with strong medicines, become active poisons to delicate digestions. I have known many "bring up" such sophisticated beef. For this I can only bid mothers watch, and advise them never to *order* meat for beef-tea or invalid broth, never to take an outside cut, always to bring it home by a private messenger and not by the ordinary butcher's boy. Notice the taste and flavour of beef-tea, as you would that of wine, and you will come to distinguish by-and-by what I may be presenting to some as new.

III. By extreme cold. The great Lord Bacon is known to have been widely interested in science. But it is not so generally known that he was the practical discoverer of the effect of frost on food,

previous page next page