as before. Some laxative draught should be given if the state of the bowels require it. *R. Pulp. Tamarind. mannæ, ana ʒiij. solve in decoct. althææ, Hj. one third part to be taken every two hours, or laxative enemas may be employed. Cold water, if much craved, should be given. Cold bathing, when the skin is parched with heat, or tepid when the surface is uncomfortably moist, may be used with benefit. When the pores of the skin are obstinately constricted, frictions with olive oil over the whole body, and afterwards bathing, will often be found to promote the flow of perspiration.*

The erysipelatous inflammation should be moderated by cupping and scarifying over the parts of the abdomen most suffering; also emollient decoctions must be employed for fomenting the skin and for enemas and semicupium. For drink, gum water or the Decoct. corn. cerv. ust. will be proper, and a few drops *Spt. æth. nitri.* may be added occasionally.

For the spasmodic affections, antispasmodics must be taken every 4th hour: as, *R. Gum. opii. gr. j. f. pil. j. vel. R. Assafoetidæ ʒij. aq. com. ʒvi. m. dose ʒi. vel. R. Moschi gum Arabic sac. pur. ana ʒj. aqua rosæ ʒvj. m. dose ʒss. to ij.* During the occurrence of convulsions, give half a drachm, or a drachm of sulphuric æther, every hour. The tumors that may arise behind the ears or elsewhere, should, when they appear, be brought to suppurate with warm fomentations and cataplasms. If repelled, they prove fatal. In general, all tonic and stimulating drinks and medicines, even in this passive stage of the fever, have proved detrimental in most instances where they have been employed. So soon as light aliments can be taken without loathing, the patient should be allowed milk, sago, panada, or broth made of chicken or veal, as he may like best, and toast water and refreshing beverages for drink.

The same should be observed in other periods of the disease, in respect to tonic medicines and to food and drinks, at the commencement of their recovery, for the preventing of relapses. By the cautious use of light food and of nothing stronger than weak claret and water or beer, the convalescents soon find themselves perfectly well.

The writer will here subjoin, as he thinks it his duty, after thirty years of almost uninterrupted practice and observation in West India ports, that when other views have been pursued, materially differing from those above taken, defective as they will be found, for the treatment of this disease, one in ten of the patients have been lost; of whom 49 out of 50 might otherwise have been saved.

CASES OF POISONING, PROBABLY FROM THE USE OF NEW CHEESE.

BY STEPHEN W. WILLIAMS, M.D., ETC.

[Communicated for the Boston Medical and Surgical Journal.]

ABOUT 11 o'clock in the night of the 7th of July, 1835, I was called to Mrs. E. N., who was complaining of excruciating pain and distress in her stomach and bowels. Her stomach was extremely tense and sore to the touch, and there was much febrile excitement in the system. She had been taking an infusion of thoroughwort (*eupatorium perfoliatum*),

which had excited vomiting, and she had also been using enemata of the same, which had procured some discharges from her bowels. I inquired of her what she had eaten for supper, and she said, "nothing but a little bread and butter, and some new cheese" which she had that afternoon purchased of a pedlar, and a cup of tea. As she had heretofore been subject to such attacks of pain and soreness in the stomach, I hardly thought of its being excited by the cheese. I gave her a dose of calomel, to be followed by castor oil, and directed fomentations to her stomach and bowels. I left her relieved between twelve and one o'clock.

About an hour after, I was called from my bed in haste, to visit Mr. N. and wife who were both complaining of extreme sickness at the stomach, violent pain in the stomach and bowels, and great soreness in those regions. Mr. N. was puking and purging excessively, and was very much exhausted. Mrs. N. was also vomiting continually. She was very much cramped. As she was in a state of pregnancy, I feared it might bring on premature labor. She was also considerably reduced. I inquired of them what they had eaten for supper. Mr. N. informed me that with other things, such as he usually eat at night, he had eaten freely of new cheese which he got at his mother's that evening, which was the same with that which produced his mother's sickness the same night. His wife took tea two or three hours before, but just before bed time she eat a large slice of the same cheese. They were both attacked with sickness and pain at the stomach about an hour after. I prepared for them the compound chalk mixture with a large addition of laudanum, and directed fomentations to the bowels and injections for Mrs. N. Mr. N. was able to be about the next day, although much exhausted. Mrs. N. remained quite sick several days. In passing up street the next morning to visit these patients, I was accosted by several people, who informed me that the night before they had been attacked with violent pain in the stomach and bowels, and some of them with cholera morbus. They all stated to me that they had eaten freely of the cheese which had produced the sickness in the N. family. I learned that the whole number who had been thus affected, was at least sixteen. One man who had no belief that the cheese was poisonous, eat a large piece of it in bravado, and paid dearly for his folly. He was attacked with violent and excruciating colic, which continued several hours. A dog, which eat freely of some of this cheese, which Mr. Wells, a pupil of mine, was macerating in water for experimenting, was taken violently sick and vomited a long while. Soon after these cases occurred, I sent the following notice to the editor of the Franklin Mercury, which was published in his paper of July 14, 1835. About sixteen persons were seriously affected in Deerfield, with violent pain and inflammation in the stomach and bowels, on the evening of the 7th inst., in consequence, it is believed, of eating new cheese, purchased from a farmer from Guildford, Vermont. Soon after eating it the patients were violently affected with pain and sickness at the stomach, with great distention of that organ and of the bowels, with obstinate vomiting, and in one or two instances with symptoms resembling cholera morbus. None of the cases terminated fatally, although some of the patients were seriously sick and have not yet recovered.

It ought to be generally known, that owing to the sophistication or adulteration of arnotto (or, as it is usually called, otter), which is used for the purpose of giving a high and rich color to the cheese, many people have been heretofore poisoned by eating it. A few years since, it is understood, a family in a neighboring town was poisoned by eating new cheese, highly colored by this substance. Many other instances of a similar nature are on record. Genuine arnotto is a vegetable extract, and harmless, but as it is somewhat expensive, it is often adulterated with *red lead*, which costs less, and when thus adulterated and applied to butter and cheese, it renders them a deadly poison. Arnotto should never be used about butter and cheese. It merely heightens the color of these articles, without improving the quality, and in many instances it renders them pernicious poisons. In proof of this, I send you the following statement from Accum on Culinary Poisons, a work of standard merit.

"Poisonous Cheese.—Several instances have come under my notice in which Gloucester cheese has been contaminated with red lead, and has produced serious consequences on being taken into the stomach. In one poisonous sample which it fell to my lot to investigate, the evil had been caused by the sophistication of the arnotto employed for coloring cheese. This substance was found to contain a portion of red lead, a method of sophistication which has been confirmed by the following fact, communicated to the public by Mr. J. W. Wright, of Cambridge (Repository of Arts, vol. 8).

"As a striking example of the extent to which adulterated articles of food may be unconsciously diffused, and of the consequent difficulty of detecting the real fabricators of them, it may not be uninteresting to relate to your readers the various steps by which the fraud of a poisonous adulteration of cheese was traced to its source.

"In the instance now alluded to, and probably in all other cases, the deleterious mixture may be caused ignorantly, by the adulteration of the arnotto employed for coloring the cheese. This substance, in the instance I shall relate, was found to contain a portion of red lead; a species of adulteration which subsequent experiments have shown to be by no means uncommon. I shall relate the circumstance which gave rise to the detection. A gentleman who had occasion to reside for some time in a city in the west of England, was one night seized with a distressing but indescribable pain in the region of the abdomen and of the stomach, accompanied by a feeling of tension, which occasioned much restlessness, anxiety and repugnance to food. He began to apprehend the access of an inflammatory disorder; but in twenty-four hours the symptoms entirely subsided. In four days afterwards he experienced an attack precisely similar; and he then recollected, that having, on both occasions, arrived from the country late in the evening, he had ordered a plate of toasted Gloucester cheese, of which he had partaken heartily; a dish, when at home, regularly served him for supper. He attributed his illness to the cheese. The circumstance was mentioned to the mistress of the inn, who expressed great surprise, as the cheese in question was not purchased from a country dealer, but from a highly respectable shop in London. He therefore ascribed the before-mentioned effects to some peculiarity in his constitution. A few days afterwards he partook

of the same cheese ; and he had scarcely retired to rest, when a most violent colic seized him, which lasted the whole night and a part of the ensuing day. The cook was now directed henceforth not to serve up any more toasted cheese, and he never again experienced these distressing symptoms. Whilst this matter was a subject of conversation in the house, a servant maid mentioned that a kitten had been violently sick after having eaten the rind cut off from the cheese prepared for the gentleman's supper. The landlady, in consequence of this statement, ordered the cheese to be examined by a chemist in the vicinity, who returned for answer, that the cheese was contaminated with lead ! So unexpected an answer arrested general attention, and more particularly as the suspected cheese had been served up for several other customers.

" Application was therefore made by the London dealer to the farmer who manufactured the cheese. He declared that he had bought the arnotto of a mercantile traveller, who had supplied him and his neighbors for years with that commodity, without giving occasion for a single complaint. On subsequent inquiries, through a circuitous channel, on the part of the manufacturer of the cheese, it was found that as the supplies of the arnotto had been defective and of inferior quality, recourse had been had to the expedient of coloring the commodity with vermilion. Even this admixture could not be considered deleterious. But on further application being made to the druggist who sold the article, the answer was, that the vermilion had been mixed with a portion of red lead ; and the deception was held to be perfectly innocent, as frequently practised on the supposition that the vermilion would be used only as a pigment for house painting. Thus the druggist sold his vermilion in the regular way of trade, adulterated with red lead to increase his profit, without any suspicion of the use to which it would be applied ; and the purchaser who adulterated the arnotto, presuming that the vermilion was genuine, had no hesitation in heightening the color of his spurious arnotto with so harmless an adjunct. Thus through the circuitous and diversified operations of commerce, a portion of deadly poison may find admission into the necessities of life, in a way which can attach no criminality to the parties through whose hands it has necessarily passed."

Test.—I procured a quantity of the cheese which was eaten from by the N. family, and subjected it to the following experiment. The cheese was covered with a thick yellow coat, and the whole body of it was of a yellow color.

1. I macerated a quantity of it in warm water for three or four days, and added to the macerated solution a few drops of sulphuretted hydrogen, which is one of the most delicate tests of lead yet discovered, as it will detect the minutest portion of it. The macerated cheese was immediately blackened by it, showing incontestibly the presence of lead in the cheese, and probably in sufficient quantity to induce the symptoms enumerated above in my patients.

2. Upon applying a few drops of nitric acid upon the macerated cheese, which had been blackened by the sulphuretted hydrogen, it removed the black color, and restored it to its original color. This is considered by Dr. Lamb a further proof of the presence of lead.

Deerfield, Mass. Aug. 17, 1835.