

Science has found by experiment which articles of common consumption are most susceptible to the reception and increase of disease germs; and in research, these articles of diet are employed as culture fields for various forms of life during investigation.

It is common in practice to use sliced vegetables, gelatine, and eggs, as solid and semi-solid propagating material. We should be cautious where we place such food as boiled vegetables, rice, sago, corn starch, macaroni, soup, meat, etc., because they can become greatly damaged, and even dangerous to health by the addition of germs, from sewer gas or other atmospheric surroundings. In a certain house, a small lead pipe from the sewage system was connected with a refrigerator to carry away the water from the melting ice; the result being that the family residing there, contracted a bad type of diphtheria, on account of the contamination of their food. The gas from the sewer pipe rose into the refrigerator, and the cold condensed the moisture which held this gas, thus depositing the germs of disease.

Bacteria need for their production a certain amount of nutritive substance, a certain degree of heat, and a proper amount of moisture. Meat, if perfectly dry, and kept so, will remain in a perfect state for any length of time, because one of the conditions of growth of microbes, is not present. Jerked meat by its keeping qualities corroborates the above statement.

The solid foods are not so likely to be contaminated when they pass into the consumers' hands, as the semi-solid and liquid ones; although meat from a diseased source is productive of evil results.

Sanitarians have given much time to the study of water and milk, regarding the part they play in the transmission of disease.

The subject of milk cannot be investigated to any extent without including the examination of water; because normal milk contains about eighty-seven per cent of that fluid.

In composition milk is very closely allied to blood; in fact, it is elaborated blood; and although it is fluid, practically and chemically it is a tissue. Milk, from its nature and composition, is an excellent medium for the development of contagium.

It has been known to convey typhoid fever, diphtheria, scarlet fever, scarlatina, aphthous fever, tuberculosis, anthrax, and small-pox. The microbes of the above diseases, have different means of entry into the milk:—1st. The germs, of tuberculosis (phthisis), scarlatina, and aphthous fever, (foot and mouth disease), are transmitted from the diseased cow. 2nd. The typhoid zymoid often enter the milk by adulteration with specifically tainted water. 3rd. Typhoid fever, scarlet fever, tuberculosis, small-pox, and cholera, are conveyed to milk by the handling of dairy utensils by persons who have attended on the sick, or by dropping epithelial scales into the milk, in its transmission from the stable to the consumer.

It is some satisfaction to know the cause of the different phenomena going on about our path; but is there any practical issue from this knowledge?

"Where ignorance is bliss, it is folly to be wise." We are feed-cows on cheap unwholesome food (refuse of distilleries, or town swill). We are not supposed to know it is unwholesome; the product sells. "Ignorance is bliss."

The well in our barn-yard has not been cleaned out for ten years. A little pig fell in two months ago; and the position of the well is such that the soaking from the manure heap has a natural tendency to drain that way; but the water is good enough for cattle. The milk sells all right. We are not supposed to know that the cow in her "make up" is defective as a filter for micro-organ-

isms; and that consequently impure material (food and water) give resultant impure product. Yes! It sells all right. "Ignorance is bliss."

We have sick cows in our herd. We don't know that there is any actual disease; but one coughs badly, (a kind of stomach cough); another has a sore mouth, and is a little lame also; another has sore teats, and the milk is ropy. We don't know that it indicates anything particular. The milk sells all right. "Ignorance is bliss."

There is a cow in our herd that has consumption; but the milk sells all right. We are not supposed to know there is danger ahead. "It is folly to be wise."

There is scarlet fever over at Smith's. Mrs. Smith milks some of our cows. We are not expected to know that fever can be conveyed by milk. "It is folly to be wise."

We wish to utilize all the room in our basement cattle stable, so we have the cows as close together as they can lie down. In regard to the presence of carbonic acid and the absence of oxygen, it is a modern "Black Hole of Calcutta;" but the milk sells. "It is folly to be wise."

"Milk was important as well as manure. The objection to them was when they got together. Farmers would find they made a poor mixture."—*Let. ix.*

"I have seen filthy cows in a filthy stable, and milk drawn into filthy pails by a filthy milker, and the milk I have regarded as the perfection of filth."—*Let. vii, 1875.*

On account of facts similar to the above, laws have been enacted to regulate the production and sale of milk. Switzerland has always held a high place in regard to her condensed milk and other dairy products; and our attention is therefore naturally drawn to her for a stringent and effective milk law. Some idea of this law may be obtained from what takes place in Berne, the capital of the country:—Here it is necessary to obtain permission of the constabulary before opening a shop or premises for the sale of milk. A person who fails to make a declaration, and obtain consent, who uses dirty cans, pails, utensils, or milk carriage, who permits the milk room to be dirty, or in any way inappropriate for the keeping of milk, is liable to a fine varying from a small to a large amount." Each milk-man's milk must be analyzed at least once a month, and the inspector is permitted to enter into any shop and take samples when he chooses.

This is certainly as it should be. We have laws in Canada as rigorous as those in Switzerland; but the benefits are not as great as they should be, on account of the laws not being enforced. Visits from inspectors are, fortunately for the milk trade, not very numerous; and they are not as yet quite terrified by the fear of his constant appearance.

In those cities of the adjacent Republic, where inspection is enforced; the cities are charged by the legislature to appoint inspectors, who test the milk daily.

In the city of Boston, Mass., from fifty to sixty samples are submitted daily to the inspector, and the result in the improvement is very marked.

There are health officers in all the townships of this Province, who receive notification of all cases of contagious diseases, in their sections. It would be a simple matter to prohibit the sale of milk from all farms, upon which there were any such cases of sickness, until a doctor's certificate was forthcoming, guaranteeing safety from all infectious influence.