

According to Fleming, the first perceptible signs are general dullness and indifference, and less activity and energy; with heightened sensibility of the skin, especially over the withers, back and loins, manifested by marked shrinking of the animal if these parts be pinched. There is exaggerated sexual desire. They rarely breed, however, though they may now fatten or yield as much milk as if quite well. The milk soon becomes more watery, of a bluish tint, and less rich in nitrogenous matters, fat and sugar, but containing a larger proportion of alkaline salts. There is a dry, deep, though feeble cough, especially on exertion of the animal or on sudden change of temperature of the atmosphere, or on compression of the wind-pipe. There is not generally expectoration or nasal discharge, though at a later period exertion causes a flow of glairy mucus streaked with thick flakes. The walls of the chest become more sensitive on percussion, or thumping, and there is a duller sound. By placing the ear on the chest one may often hear, instead of the smooth respiratory murmur of air passing in and out the lungs, as in health, a harsh, rasping or loud blowing sound, especially in some parts of the chest. The heart's action is at times quicker and stronger; the skin, particularly toward the base of the horns and ears, is hot and dry; intermittent bleeding from the nose may take place; lameness too, and enlargement of the glands about the neck and elsewhere. These symptoms may continue, with little change, for months.

Ultimately, however, in all cases, if the malady has the opportunity of developing further (i.e., where the animal has not been killed in a well-nourished condition at the commencement of the disease), the emaciation becomes very marked, the milk previously abundant, though poor in quality, becomes still poorer, and also diminished in quantity. All the symptoms become intensified, and what is called the second stage of the disease is reached, and finally the third stage. "There is evident emaciation, and the animals are heavy, apathetic, and sluggish in their movements; while the countenance is without animation and dull, and the eyes are retracted in their orbits. The skin is harsh and dry, and adheres closely to the ribs, and the hair covering it is lustreless and staring and frequently damp. Exertion produces abundant perspiration and labored respiration, and so much lassitude and distress that the animal seeks to relieve itself by carrying the head close toward the ground." The appetite is poor and digestion weak, with diarrhoea, perhaps alternated with constipation. The cough becomes worse, and the breathing more frequent and difficult, and great emaciation and finally death follow.

#### PREVENTION OF TUBERCULOSIS.

This is the ultimate aim of this pamphlet,—the *prevention* of tuberculosis, more especially of that most common form of it termed consumption.

I feel that I can hardly say too much on this point—that prevention is still of by far the first importance. I would ever strongly urge this, and endeavor to impress it strongly upon the reader. While physicians are seeking out cures, as well as prophylactics, let all others give their thoughts only to the prevention of the disease.

The principles of the methods of preventing the development and spread of consumption may be inferred from what has been already written herein of its causes. The aim must be to remove or destroy the causes:—to destroy the bacilli, the infective agent, by disinfection, with the one hand, while with the other, as some of the bacilli or their spores will long continue to escape the destruction of the best methods of disinfection, we must as far as possible fortify and invigorate the body of all susceptible creatures among the lower animals as well as mankind, that thereby they shall not furnish a suitable soil for the bacilli—that they shall not be predisposed to the tubercular infection—but be able to repel any of these organisms that may in any way obtain access to the body.

By thus invigorating the body we fortify it not only against the inroads of tuber-