

Jones' tenants in the parish of Llandinam, Montgomeryshire, I have to speak more fully of the nature of the affection, and the causes which produced it; as also of the means which were adopted to arrest its progress, together with the result. In the previous report it was stated that upwards of fifty animals, of various ages, had died up to the time of my visit, and that others were being attacked almost daily. For the first few days after my investigation, the disease continued to prevail with unabated fatality, but it then ceased, and no more cases have since occurred. This sudden disappearance of the affection I believe to be entirely due to the preventive measures which were adopted, and I am warranted in giving this opinion, because all the local causes were still existing.

**Causes.**—Under this head we must class the kind of weather which prevailed during the existence of the disease, the nature of the soil, the character of the food, and the management pursued towards the animals.

The cases occurred principally during October—a month remarkable for its humidity and warmth. The state of atmosphere which then prevailed was accompanied with heavy fogs, and particularly in the district in question. The fogs often hung over the fields excepting for an hour or two throughout the entire day, and were so dense as frequently to hide the animals from observation, although but a few yards distant. Constant exposure to weather of this kind would of itself prove detrimental to health, by impeding the process of respiration, and also the decarbonization of the blood; but besides this it would have an indirect effect on the animal economy no less injurious.

Speaking in general terms of the entire parish, it may be said to have a character of soil described as a clayey loam overlying slate shale. The soil is necessarily very retentive of moisture, and as much more rain had fallen in the district than, as may be said by way of contrast, had done in the vicinity of London or elsewhere, so the land was more than ordinarily wet. I was particularly struck with this, for many of the roads leading to different farms were literally mid-leg deep in mud, and perfectly impassable except on horseback.

The warmth of the atmosphere necessarily induced under such circumstances an abundant growth of grass, and it was stated, in answer to my inquiries, that more keep existed in the pastures than was often to be found in the month of June. The grass however produced under these circumstances would of necessity be not only surcharged with moisture, but proportionally deficient both in albuminous and other proximate principles which are imperatively necessary for the making of pure and healthy blood. Hence

we have another powerful cause in the food itself in inducing the disease.

The abundance of grass likewise led the proprietors of the cattle to leave the animals out night and day without any other provision, with a view of saving their winter keep.

These several things being combined brought about a state of the blood by which it was unfitted for the purposes of life, and as an immediate consequence, local hæmastasia resulted—in other words, the contaminated blood became partially stagnant in the vessels. Sometimes this stagnation took place in one part of the system and sometimes in another. The affected structures became swollen, hard, and painful. The head and throat were the principal seat of the local symptoms, but occasionally the fore or the hind extremities would be attacked. Nor were the external organs exempt, as the lungs were now and then primarily affected.

The duration of the malady varied a little, but was rarely longer than 24 hours; while many of the animals, apparently unaffected in the morning, were dead before night.

In several respects the local symptoms were closely allied to those seen in hæmatosepsis, "black leg," but no gaseous matters were evolved into the cellular tissue, as is the case in that malady. Cattle also of all ages were its victims, and that without respect to their being milking or fattening animals, or store stock.

It was not to be expected that curative means would be of much avail in such a disease and therefore I learned, without surprise, the little or no advantage had resulted from their application. A case occurring while I was staying with Mr. Powell, Mr. Jones's agent and the chief occupier in the parish, afforded me the opportunity of giving trial to curative measures, but without much relief, as the animal died in about twenty-eight hours from the time of the attack.

**Preventives.**—It was self-evident that benefit could only result from the application of prophylactics, and especially from removing the causes of the disease to as great extent as possible. With this view I ordered that the animals should no longer be kept in the pastures at night, but be brought into the yards and fed on hay, hay chaff, and bran, and also crushed corn. It appeared to me to be a matter of minor importance what kind of corn was given, and therefore this varied in different instances according to the convenience of the occupier. The chief thing was to limit the amount of succulent diet, and to substitute food rich in the elements of blood. Instructions were also given for the animals to be kept entirely in the sheds and yards on foggy, but especially on wet days.

Besides this alteration in the diet, location and management of the animals, orders were