

CAMPER ON CATTLE DISEASE.

TRANSLATED BY ROBERT MORROW, ESQ.

[Our farmers and farmers' sons would better appreciate the immense advantages of Nova Scotia as an Agricultural country if they knew more fully the discouragements and difficulties with which the farmers of Manitoba, Australia, Britain, California, the Western States, the Solid South and the United North, have each to contend. Here, with a soil naturally fertile, we have a seaboard studded with harbours into which fertilizers to make it still more fertile may be freely brought from the ends of the earth. We have markets at every shipping place, and the whole commerce of the world is open to us. Our climate is genial and capable of ripening all the most profitable crops of temperate countries, those which form the staples. There are few labour difficulties, no socialistic combinations. The grasshopper comes only in the fall, and in quantities sufficient to fatten our turkeys for Christmas. Last, but not least, we enjoy perfect immunity from every form of contagious and epidemic cattle disease.]

At the present time, when the commerce in cattle is so seriously clogged by the prevalence of disease in various countries, it is of the first importance that the Agriculturists of those countries upon which the shadow of the vulture has not fallen should acquaint themselves intimately with the symptoms and treatment of the disease, as a precautionary defence against its advent, and that they should likewise think out in detail the various means that may be adopted to render its introduction impossible. We have reprinted a timely article from the *Scientific American* in the present number, and now proceed to give the first of a valuable series of papers by the old philosophic Dutch Zoologist Camper (a contemporary of John Hunter), for which we are indebted to the great kindness of Robert Morrow, Esq., whose own contributions to Nova Scotia Zoology are well known to the members of the Institute of Natural Science.—Ed. J. OF A.]

FOURTH LECTURE.

History, nature, symptoms and cure of the distemper now prevalent, (last century.)

The difficulties which the subject of these lectures naturally offers, and the small experience which I have obtained of this painful disease, frighten me when I think of the hope and expectation which is painted on the faces of my auditors! It was more easy for me to satisfy your curiosity in dissecting and in showing the affected parts of horned cattle, which gives to you the exact history of the origin of this devastating plague. However, the indulgence which you have so often shown to me, the kindness with which you have always deigned to appreciate

my zeal and the uprightness of my intentions, embolden and warrant me even in this painful task.

In the introduction to the first lecture, I have already observed to you, how difficult it is to write the history of the distemper, because the ancients rarely, or better to say, never opened the veins which died of it; at least they speak only in their writings of the external symptoms, consequently from those only which, being also common to other diseases, cannot serve to give an idea of the nature of the distemper as exact as one might desire. Their superstition and idolatry put besides great obstacles to the discovery of the causes and the symptoms of this disease, as we can chiefly see by the writings of Porcius Cato* the elder, who died about one hundred and forty-eight years before Christ. This Roman teaches us in his admirable work upon agriculture, that we ought to offer every year, in the woods, honey, lard and wine to Mars Sylvanus, in order to prevent the mortality of the cattle, with the ridiculous prohibition to women and slaves of being present at these kinds of offerings.

However, if one had reason to fear the distemper, he must give to the healthy cattle a mixture of salt, of laurel † leaves, onions, cloves of garlic, incense, flour, rue, wild vine (black bryony?), of live coals with a little wine; but for this it was necessary according to the superstitious ideas of the ancients, that the person who administered this remedy was not only fasting, but also that he stood up in the same way as the ox.

If the animal becomes sick, adds Cato, make him eat a hen's egg whole, which must be newly laid, and the next day give him a clove of garlic softened in wine. You will see by this, that the advice which is given now-a-days to make use for this object of onions and fresh eggs is anything but new.

Columella, who lived under the reign of Claude, about 42 years before the Christian era, gives the description of a contagious disease which he calls "cruditus," which differed little, by its symptoms, from the present distemper; this is what he says of it: ‡ "Crebri ructus, ac ventris sonitus, fastidia cibi, nervorum intentio, hebetes oculi, propter quæ bos neque ruminat, neque lingua se deterget;" that is to say: "The eyes become weak, the animal from time to time trembles, food is repugnant to him, he breaks wind upwards and downwards; the ox consequently ruminates no longer, and does not lick itself with its tongue." He advises that they open the vein which is underneath the tail, that they draw the excrement from the rectum with the hand, after having anointed it with tallow, and that they give the animal some salt, honey and onions, as well as injections which he calls "collyria." If this is not done in time, he says, the belly distends, the colic of the intestines increases and the animal groans very much.

If the disease becomes contagious he orders (Cap. IV., pg. 577) that they separate the sick cattle from those which are healthy: "Segregandi a sanis moribidi;" and that they ought to put them in the meadows where there are no other cattle, &c.

*Gæner, Auct. de Re Rust., chap. 83, pg. 79.

†Anciently the laurel was regarded as an excellent preservative against contagious diseases, as we see in Horodan, liv. 1, chap. 30.

‡Lib. V., Cap. 6, page 578.

Vegetius, who describes the disease in the same manner as Columella (ibid, lib. III, cap. 2, page 1105), gives to it the name of "cruditus" and of "mullens;" he then points out the same remedies, particularly the fresh eggs administered whole with some honey; but he recommends above all to mix a great deal of salt with the food: "Expedit tamen salum pabulis misceri." He attributes the distemper to the dung of the pig which the cattle may have eaten; but I think that this is wrong. His advice is much more material when he requires that they separate from the other cattle those which they suspect are attacked with the disease: "Statim omnia animalia, quæ levem suspicionem habuerint, de possessione tollenda."

In the same manner he advises that they carry away those which have died of the distemper far from the farm, and bury them at a great depth under ground: "Mortua cadavera ultra fines villæ projicienda sunt, et altissime obruenda sunt subterris."

He will have above all that in the distempers they take the greatest care to separate the sick cattle from those which are well, "in order that the negligence of the owner should not be wrongly attributed to the anger of the Supreme Being; as thus do fools." It might be wished that they also always made use in this country of the same discretion and of the same wise reasoning. Our farmers, although Christians, have upon this subject the same ideas as the cow-herds of antiquity, or rather they accuse the Supreme Being of an evil which they might often prevent by their care.

The virtuous and celebrated Outhof has given at the end of his "Judicia Jehovæ Zebaoth," in 8 vo., 1721, the "Severi Sancti," idest Endeleich: Rhetoris, de mortibus Buom Carum." Although we have different separate editions of this last work, I think it ought to be mentioned here, because Outhof has been very precise in citing many distempers which have taken place. This poet lived at the beginning of the fifth century, or as others claim at the end of the third century, particularly in 395. He gives the description of a distemper which does not differ much from that which is now prevalent. It occurred in Hungary, Austria and in Dalmatia, and had penetrated by Brabant into the Low Countries:

Hæc dira lues serpere dicitur
Prædum pannonicos, illyricos quoque
Et belgas graviter stravit, et imple
Cursu nos quoque nunc petit.

That is to say, to the French, for the author was from Aquitaine, situated in the southern part of the kingdom of France. This disease was analogous with that of the present time; nevertheless it appears to have been much more terrible: "Sic mors ante lumen venit;" "Scarcely were the cattle attacked by this pestilence when they died." Then he says:

Hic fontibus renuens, gramini immemor
Erat succiduo jucula poplito.

page 827.

Infantur tumidis corpora ventribus
Albent lividulis lumina nubiis
Tenso crura rigent pede.

page 835.

Which I translate: "Here the young heifer refuses to drink, and not having ruminated for a long time, it staggers; its stomach is distended; its eyes seem covered with purple membranes; its hind legs become stiff and immovable." All symptoms which we meet in the present distemper. The idolatrous