

to suffer? Common sense and every day's experience prove the fact. Infection, and infection alone, seems to be the leading cause—nay, the exclusive principle—referred to by Professor Simonds, to the neglect of every other cause, in explaining the origin and propagation of the Rinderpest. Almost nothing is said as to the kind of food on which the cattle he saw were fed, or the kind of exposures to which they had been subjected, or the fatigue they had undergone—in short, nothing like a description of the local circumstances under which the Rinderpest seemed to originate. He seems to have relied too implicitly on the opinions of the people as to its cause. No doubt he admits that the disease is said to be of spontaneous origin in the steppes of Russia, from whence it is spread all over the east of Europe; but in which steppe, or whether in all the steppes, he does not state. In the *Encyclopædia Britannica* it is stated, that in the steppe called Baraba, or Barbinska, a peculiar disease prevails, called the Siberian plague. In this steppe some lakes are salt, and occasionally the surface of the ground is covered with saline efflorescence. This is a peculiarity which would account for the spontaneous origin of any disease with which the bowels of a herbivorous animal may be affected: the superabundance of saline matter “occurring occasionally” would, as a matter of course, so impregnate the food, or would be taken in such quantities as to cause an epizootic with all the symptoms and effects on the bowels described by Professor Simonds: and hence, not improbably, the spontaneous origin in the steppes—if such a condition exists in the other steppes; but this, it may be said, will not account for its spread over the other countries of Europe. There are, however, evidently many other causes, and among these especially, the kind, quality, and quantity of the food must be considered as exercising an important influence in producing the disease. It is said to have followed the tracks of armies, and naturally so, not less from the destruction of food than the exhausting marches of a destroying invader. Without adverting to its effects, Professor Simonds gives a fearful account of the destitution in Kamienica. He says: “In consequence of the occurrence of this case, and of No. 1 in the same quarantine station, the commissioners determined to slaughter the rest, consisting of five head of cattle, reserving only the animal in question for our special purposes. This resolve was taken on May 8th, and was somewhat hastened by the circumstance that *all the animals were in a very low condition, and of little value.*” “The greatest difficulty also existed in procuring sufficient food for the animals; and poor women, the wives of the proprietors, could be daily seen standing in the mountain streams for hours together up to their knees in water, with scarcely clothing sufficient to cover their persons, washing couch grass which had been picked from off the land in order to feed these cattle. The step was doubtless

rendered necessary by the circumstances; it was nevertheless most painful to witness the lamentations of the poor women on its being carried into execution.” What were the circumstances? I say the *want of proper food!* Remove the cause and the effects will cease. Had the authorities ordered and enforced the importation of proper food, and given it to the animals, I have no doubt the disease would have subsided. No attempts, however, are made to effect a cure: it is considered so highly contagious that it is thought that the only way to prevent the spread of the disease is to kill all the cattle that come in contact with a diseased one, and hence the number of victims are enormously increased: but it is evident that if the disease depends on the food, the destructive remedy, while it may prevent the spread of the disease by the great reduction of the number of its victims, is an absurd and erroneous policy: for, if the views have taken of the nature and causes of the case be correct, it may both be prevented and cured.

I have already observed that one of the symptoms of the disease, as generally understood, is an impactment of the third stomach, the “*los durre*” of the Germans, as described by my correspondent at Memel, but of which Professor Simonds seems to have met with no well-defined case, and the causes may be accounted among the steppe cattle which are brought from Russia. My opinion is, that those cattle which have been fed upon saline pasturages, and brought to other countries, where that kind of food does not exist, suffer from the entire want of the condiment that they have been accustomed to, the change causing indigestion and deficient secretion in the third stomach, the chief feature of the disease. There is succeeded, in consequence, irritation of the various organs of digestion, with the inflammation and slight ulceration described. In the same manner, such indigestible matter as couch grass, other over ripe and woody herbage, cannot act upon the digestive organs of cattle upon them, either by their acrimony, producing diarrhoea and dysentery at once, as appears to have been the case with the cattle Professor Simonds saw; or, if they possess a less acrimonious property, by simply drying up the contents of the stomach; and this dry condition, after a short time, will begin to act as a stimulant, producing diarrhoea and dysentery, the ultimate effect being nearly the same. The impactment of the third stomach frequently takes the same course in other diseases, as in red fever, depending upon the particular kind of herbage and the plants mixed with it destroying their action on the kidneys and digestive organs, and in which a diarrhoea almost invariably prevails in the early stages of the disease, while the third stomach will be found, on dissection, to present the true “*loser durre.*” But other cases occur, in which the omasum is found affected, and where most of the sympt