

and constitution of the animal and the state of health immediately preceding its contraction. Young cattle stand the disease well, from two to five years old; younger and older than again they have not the same capacity of resisting it. Cows of a medium size, weight, and well proportioned bone and flesh, such as the Ayrshire, stand well, while the other hand I have generally observed poor, ill-conditioned cross-breeds, and large-bodied cattle sink rapidly. The incubation stage is said to extend to the sixth week; and those who believe in its contagious or infectious character, do not consider their cattle until that time has expired; indeed they show symptoms before that time, counting the period when they were known to be in vicinity of diseased stock, often just about the sixth week, but rarely after it, unless from another cause not recognizable. The active stage rarely lasts over eight days, as the disease becomes early hepatized, typhoid fever sets in, followed by collapse and death, from a fortnight to a month from the time the cow is first observed ill. Those cases blast out through all the stages generally to recover tone and appetite in about two days, and some not as late as till the tenth or twelfth week.

The duration and comparative fatality of the disease is also influenced to a great extent by the amount and situation of the lung tissue involved; thus if both lungs are attacked at once, the disease is very bad. At other times, one lung is affected near the centre of it; this also is bad, but not so much so as the other. Sometimes it is the lower edges of the lungs, and propagates upwards and forwards. Such cases often alter, even although the whole lung becomes useless for respiratory purposes, provided the opposite lung does not become involved, and as known many cases get better where even both lungs were affected from the first, their anterior and posterior edges being chiefly implicated. After much observation I have come to the conclusion that the danger is increased mainly as the disease nears and involves the anterior and posterior portions of the lungs, and especially if the investing membrane of the lung becomes implicated. Also the lung on the right side is the one which is most frequently affected.

Next I will follow up this subject, treating of its nature, post mortem appearance and treatment, &c.

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Late of St. John, N. B.
burgh, Scotland, June, 1862.

What Horses we Need.

Agricultural Editor of the Cincinnati Times is furnishing that paper with a series of articles upon the horse. In regard to the kind

of horses needed in the United States, he says:

The United States is pre eminent for its trotters. But there is no breed of trotters except the Morgans, and the many names which have signalized the trotting courses belong to the common stock of the country. They are accidental trotters, and their qualities developed by superior training. The moral sentiment of the people is so hostile to the gambling of the race course, that running became unpopular. The carriage and buggy having taken the place of riding on horseback, trotting was a useful gait, and trotting races have been tolerated on account of it. Hence our sports of the turf are shown in these, and the training skill of sportsmen directed on trotting horses. We need skillful breeders to establish a trotting stock. It is true that the Morgans have much to claim our admiration. For general usefulness they have no superiors. Their fast gaits, medium size, endurance and excellent disposition, point them out as the best for family purposes. But still, the more showy carriage horse, such as Consternation, Messenger, Hamiltonian, Highlanders, etc., will often command a more ready sale, and the breeding of these should command greater attention than they do. Our fault is too much mixing and it is too habitually setting at defiance the adaptation of the points of the mare and stallion to each other. This evil is facilitated by the numerous classes of horses that are here. Our importations embrace every valuable kind for every valuable purpose, and their numerous crosses on the common stock have given a diversity of forms and blood that make breeding for especial purposes, such as for the carriage and buggy, no easy matter. The forms and blood of stallions generally have so little to do with each other, that a Highlander begets a Diomedé colt, and a Morgan shows an undersized offspring without the qualities which are characteristic of the breed. Even good diverse qualities neutralize each other, and the progeny exhibits either none of the qualities of the parents, or so much modified as to be of little value.

For farming purposes, heavy horses are not needed. A fast walk in the plow is the most useful gait, for experiments show that the draft of the plow is not increased by speed; hence it may be run at the same depth at three miles an hour, as at two miles, without any additional strength from the horse. A horse therefore, that will walk three miles an hour in the plow is worth a third more than one that walks but two.

A farmer, too, wants a horse that will trot his buggy eight miles an hour; and fast walking and trotting, with endurance, easy keep and kind disposition, are the qualities that all want. A slow, poking plow horse is not desirable for any purpose, save when the farmer is in new ground with the plow, and oxen are better there. Our general breeding should look to the higher qualities—to fast gaits, gentle disposition, nervous energy and intelligence; for there is as great dif-