

ABORTION among cows must be very prevalent in the Northern States at the present time, if the numerous letters on this subject in the *Country Gentleman* and other papers are correct indications of painful and expensive experiences. During the last twenty years I have carefully watched the alternative ups and downs of this disease or distemper in Central New York, especially in Herkimer, Oneida and Madison Counties. In the issue of the 5th of April, 1866, of the *Country Gentleman*, can be found a communication from me upon this subject, in which I took the ground that the primary cause of abortion in cows, was the fact that the lands in the oldest dairying sections of those counties were deficient in the phosphatic elements of a true soil, induced by reckless cropping of hay, grain and pasture, without any return to the soil in the shape of manure or rest; consequently it is lacking in certain ingredients necessary to the health of the cow, and the natural development of the fetus. I also named secondary causes, such as allowing steers, when yearlings, to run with forty or fifty cows; feeding whey and slops, producing atrophy; sympathy between the cows; so that one aborting brings on the same evil in all that are thus predisposed; and milking cows too long, and not giving them sufficient chance to recuperate and supply nutriment to the fetus, especially where the cows are not well fed. To remove the primary cause of abortion in cows, I recommended to the land a dressing of bonedust and superphosphate of lime, on account of the effectiveness of such practice in Cheshire, England.

CAUSE AND EFFECTS OF ERGOT.

On the 13th of January, 1870, I heard President Prentice address the American Dairyman's Convention at Utica on the subject of ergot. He pointed out its effects upon animals, but he did not state the primary cause of ergot or smut. Immediately after this I wrote a very long article on abortion in cows, which was published in the *Utica Weekly Herald* of Feb. 15, 1870, in which I took the ground that a lack of certain elements in the soil, especially the phosphates, was the cause of the lack of similar elements in the plants, and that this lack was the cause of ergot, or smut, and they became the primary cause of abortion among cows, and I have not changed my opinion since that time. To be enabled to produce a natural animal, you must provide naturally complete plants or foods from a complete soil. It is a fact that cows are attacked with atrophy, or wasting of frame and flesh, on the same lands on the Black River, near Forestport and Beltingestown, in Oneida County, where the spring water, soil and subsoil are free

from lime, the bed-rock here being the Adirondack Laurentian.

I have followed dairying for 35 years, and for the last twenty years have kept from 40 to 60 cows. I never had an attack of abortion among my cows except in January, 1875. In one barn there were 12 abortions in three weeks, out of 30 cows. These were produced from feeding hay cut, rather late from an orchard, where the trees shaded two-thirds of the surface of the ground. The leaves of the timothy grass of this hay were nearly all brown with dark bars of smut, which I examined through a microscope. Those cows which had aborted I kept over, and have some of them at this time, but they have not aborted since. My cow stable is 56 by thirty feet, with 12 feet posts, well ventilated overhead. The sills rest upon stone pillars, from 2 to 4 feet from the ground, and the cows are tied with a chain around the neck attached to a ring, sliding up and down on an inch rod 3 feet long, with a short partition between every two, and the partitions are 7 feet apart from centre to centre. Two bolts through the partitions at a stud hold the two sliding rods firm. This method of fastening allows a cow the free use of her head and neck, and the partition is short enough to allow a milker all the room he needs.

I know, if I know anything, that this smutty hay was the cause of abortion among my cows in 1875. When four of these cows had aborted, I went overhead and inspected the hay, and found it as above described. I told my sons not to feed that hay till the cows had all come in. They then commenced feeding from my early cut hay, and the abortion stopped. In two weeks time they thought that they could feed the hay from overhead easier than the early cut hay from the big mow at one end of the barn, and did so, when the abortion re-commenced in earnest. I could have aborted the whole dairy of 30 cows, and certainly should if I had not again fed the early cut hay.

When the grass of meadows is principally timothy, and mowed year in and year out without being manured, the timothy roots exhaust the soil within their reach, and the leaves begin to turn down and "brand" over before the head is in flower. *Hay from timothy in this condition is unfit of itself to afford sufficient nourishment to a cow in calf; but if it is supplemented by proper ground food, they may pull through in a fair condition; although I think it would be wiser to feed the meadow than to extract the cows.* Good, sound meadow hay, timothy or clover, will keep a cow or an ox in fine condition all winter, without any extra food. But corn fodder grown anywhere, and hay or straw grown upon

land partially exhausted, must be supplemented with bran, oats and corn meal, or some other meal.

Your practical correspondent R. G. D., Pittsford, Mass., will see that I have answered his query in the affirmative; that is, according to the light given me by my experience and observations. I have oftentimes been struck with the justice of Agassiz's remarks upon observing. If practical men like R. G. D. would give their observations publicly through suitable mediums, the world would become wiser in less time than otherwise—*John R. Chapman, Madison Co., N. Y., in Country Gentleman.*

ST. ANDREW'S AGRICULTURAL SOCIETY, ANTIGONISH CO.

At a special meeting of the officers-bearers of this Society held to-day at the Secretary's Office, the following resolutions (with others) were passed unanimously.

Resolved, That two thorough-bred Short-Horn Durham Bulls be imported from Ontario in April next.

Resolved, That Allan McDowell, Esq., Alex. McDonald, and the Secretary be a Committee to purchase said Bulls.

When this importation is made the people of such fine districts as Upper South River, Marydale, Beauty, and Caledonia, will have a chance of enrolling themselves members of our Society, and such an action on the part of our efficient officers-bearers peaks volumes for them and shows that they have the interest of those people at heart. Through Allan McDowell, Esq., our delegate to Ontario last spring, and who has won laurels for himself and our Society in the selection made, we will be enabled to make the importation with better advantage to our Society. Com.

March 1, 1881.

A COMPANY has been organized in Windsor, and propose to apply for incorporation as the "Maritime Reaper and Mower Company," with a capital of \$100,000 for the manufacture of mowing machines, horse rakes, reapers, steel ploughs, and other agricultural implements. It is estimated that the annual cash value of these goods imported from Ontario and the United States, amounts to \$150,000. Windsor possesses undoubted advantages for such a manufactory. The large and increasing demand for this class of goods warrants a direct and ready sale, which must constantly increase, and the necessity for manufacturing them within our own Province must be apparent to all, as the American and Ontario manufactories have already monopolized the trade in the past and will continue to do so to our loss, by taking