

years in the possession of Mr. Vail of Troy, and many valuable animals have been imported by that gentleman *direct from Mr. Bates*. Mr. Vail knew Mr. Bates well, and I am confident he will readily confirm my assertion, that it was upon the *Duchess* blood Mr. Bates always piqued himself, and that the introduction of *Belvidere* (a very noble bull) by Mr. Bates into his herd, was more to escape the evils of *in and in*, too long continued, than for any new qualities which he expected that bull to impart. Old *Ketton*, by *Favourite* (see B. Herd Book), was the animal which gave value to Mr. Bates's herd, along with the *Duchess* blood; and that same tribe of improved short horns may now be had, in the greatest purity and perfection, from Mr. Vail. I hope, sir, that no one will misunderstand me, or suppose that I desire for a moment to depreciate Mr. Sherwood's importation. Mr. Sherwood has been long distinguished for his zeal, skill and success as a breeder of short horns, and (I may add) not more so, than for all the qualities which characterize an honourable and an excellent man. I know that he has long been satisfied of the superior qualities of Mr. Bates's blood, and has introduced it into his own herd. I have myself a heifer purchased from him, got by *Symmetry*, of Mr. Bates's blood, for which I would not accept any ordinary price; and I am well convinced, that the bull which Mr. Bates has now sent to him, will prove an animal of the highest value. All this may be quite true, and yet it may be unfair, and may mislead the public to assert, that from Mr. Sherwood, and from him alone, the *Duchess* blood can be procured.

I am aware that these remarks will, by some candid friends, be ascribed to a source not altogether disinterested, and it will be announced, as a sufficient reason for laying them aside, that the writer is known to have partly derived the blood of his own herd from Mr. Vail. Let this go for what it is worth, and I shall content myself with expressing a hope that every man striving to improve his stock, may have the like satisfaction, as my friend, Mr. Weitenhall, and I both enjoy, in the bull which we have been so fortunate as to procure from Mr. Vail, got by *Meteor* out of *Lady Barrington*.

I have the honour to remain,
Gentlemen,
Yours very truly,
ADAM FERGUSSON.

INSECTS DESTRUCTIVE TO HOPS.

To the Editors of the Agriculturist.

GENTLEMEN,—The valuable hints I have received from your paper, and the zeal you have evinced in the cause of agriculture, induce me to address you upon a subject of the utmost importance to the "hop growers" of this part of Canada, for I feel assured it will meet at your hands with that attention which the graveness of the case requires.

A few years since, an animal, called here "the measuring caterpillar" (from its striding mode of progress) made its appearance in the early part of July, upon the hops. By close observation, I have been able to trace this destructive little ani-

mal to the egg, which is deposited upon the under part of the leaf by the miller moth; in the latter part of June: at a quarter of an inch long it commences its destructive peregrinations, and in the course of a few days arrives at its full length of one inch,—of a pea green colour, with the power common to the tribe, of forming a web. For the first year or two it did not affect the crop much, but their numbers have lately increased to such a degree, that a hop grower, with whom I was speaking on the subject, told me he would not have 12 cwt. off five acres; and I have heard of one grower whose crop is totally destroyed.

Burning sulphur to windward of the hop-yard, and casting lime amongst the vines when wet, have been tried, but without effect.

Shaking them off, by jarring the poles, and killing them upon the ground, is the only plan now adopted in order to save what is left of the crop,—400 have dropt at a shaking from one pole.

Even this expensive and tedious proceeding is not attended with success, three generations having appeared in one season. If means are not discovered of destroying this insect, hop culture must be given up in this part of the country.

Hoping you will excuse the liberty a stranger takes in trespassing on your time by requesting an answer to this,

I have the honour to remain,
Gentlemen, your ob'dt servant,
WM. MAGRATH.
Credit P. O., C. W.

[We shall be obliged if such of our hop growers as have had practical experience in the matter contained in our correspondent's letter, would favour us with the result of their observations.—The caterpillar referred to we have seen on the hop plant in England, but never heard of its doing any serious injury—perhaps from the fact of its being unfrequent. The *aphis*, or "fly," is the great pest, and it is often destructive to the plantations in England. We will keep this subject in mind.]

MARKS OF A GOOD WORKING OX.—Mr. Asa G. Sheldon, of Wilmington, who has great experience in cattle, particularly in working oxen, and is regarded as the best authority, gives the following:—

Long head, broad and oval between the eyes; the eye full, keen and pleasant. Such marks denote ability to receive instruction and a readiness to obey. The short-faced ox starts quick at the whip, and soon forgets it. The black-eyed ox is inclined to run away. An ox with very large horns near the head is apt to be lazy, and he cannot endure heat well.

Forward legs straight; toes straight forward; hoof broad, not picked; the distance short between the ankle and knee. These properties enable an ox to travel on pavement and hard ground. If the ox toes out, the strain comes on the inside claw, and when travelling on a hard road, he will be lame at the joint between the hoof and the hair. When the toes turn out the knees bend in. An ox with crooked knees is apt to become lame by holding heavy loads down hill.

Breast full; straight on the back; round ribs, projecting out as wide as the hip bones. These are indications of strength and a good constitution.