

flax will not be well coated, nor his grain properly filled out; his corn will be shortened for want of being well hood; and his grass will become dead, and dry away in the field. Let every kind of labor, therefore, be performed in due season. A complete farmer is also a man of great carefulness and solicitude; without care, the severest labor on the best of farms will never produce riches nor plenty. If the farmer will not milk his cows in season—see that they are properly tended—go to the male in the right time for the next year's profit—and that his dairy is neatly and carefully managed,—he may labor without ceasing, will have a small, poor breed of cattle, and never enjoy a fulness of good butter and cheese. It is care which makes a flock increase and grow to a good size, which brings forth the profits of a dairy, and which fills the house of the farmer with good things. If he will not carefully inspect his fields and meadows, and see that his fences are in good order, his grass and his corn will be cropt by his cattle; and if he will not gather and put them up carefully and in due season, he will have a short and mouldy crop. If he mows, rakes, and fodders his cattle, in a careless slovenly manner, his flock will be pinched through the winter, and become poor and lousy in the spring—poor oxen too poor to do the labor of the season—poor cows, with little or no milk, and wretched calves—and poor horses, too feeble to draw, and too weak to ride with safety. If his swine, poultry, and stock in general, and if his carriages, rakes and tools of all kinds, are not carefully attended to, the farmer never can grow rich and respectable. It is attention which gradually collects from various sources, and covers the soil with manure; it is attention which causes the hills, fields and vallies, to yield their increase, and advances and completes the most beneficial improvements.

There is a third virtue, without the practice of which the farmer can never attain to wealth and independence: I mean economy. Without this, both labor in raising and care in preserving the fruits of the earth are absolutely thrown away. Economy is an excellent virtue in any man: it is indispensable in the affairs and profession of a farmer. And of this he should never be unmindful when he looks into his barn, his cellar, or his garret, or even his pastures—to say nothing of his fields, mowing lands and meadows. But farmers, as well as other men, are too apt to forget that, in their pursuit after riches, almost every thing depends upon economy, joined with care and industry.

A frugal, industrious man, blessed with but a common share of understanding, will undoubtedly succeed and advance his interest beyond whatever he expected, when he first set out in life, provided no singular providential evil should overtake him. More is gained by saving than by hard labor. A farmer, therefore, whose utmost profits are small and slow, as he cannot grow rich suddenly from his profession, should be a rigid and steady economist. He should consider the saving he may make in every thing: in his fuel, tools, clothes, meat, drink, and pocket expenses—above all, in his time, which is equal to so much money in hand. Every day that his neighbor runs down to market on his horse, with a pound or two of butter and a few eggs, if he stays at home and keeps steady to his labor, he gets two, if not three days the start of him. While his neighbor wastes his time and spends his money by this imprudent and trifling pursuit, he saves both time and money in dressing and improving his lands, and which demand all his attention. There is no leisure hour to be found on a farm from early in the spring till late in the fall. Through all that whole period, a good farmer knows how to spend every hour profitably on his lands. He can have no time to pass in idleness—in chatting with people as they pass by—in making needless visits—in attending courts, horse races, taverns, and the like. By these means the public is annually deprived of many thousands of bushels of potatoes, corn, tons of hay, &c. and individuals themselves become poor; and fall into the worst of habits—into idleness, gaming, drinking, &c.

There is no kind of economy in the farmer which will not be well rewarded. Early rising will contribute to his health, and preserve his fields from the inroads of unruly creatures, which commonly begin their trespasses just as the day begins to dawn. Close mowing and careful raking will enable him to winter one cow extraordinary. Feeding his hogs by weeds and other vegetable substances, will enable him to pay his shoemakers. Scraping his door and barnyards after rains and showers, will clothe his boy. Saving his early apples, and which are commonly lost entirely, will pay his tailor. His poultry well attended, will pay his maid. His calves will pay all his taxes, and some part of his hired labor, if

proper care be taken of them. In fine, let a farmer who possesses only fifty acres of good land—who owes no man—and who has a common blessing on the labors of his hands—strictly attend to the management of his affairs, live a life of patient industry, and practise agreeably to the principles of economy, and I think he may live well—may be excused the hardest of labor—and leave his hoe and spade to the next generation by the time he has been fifty years, when most men begin to think of comfort, ease, and independence.

[From the American Farmer.]

THE WEEVIL.

VIRGINIA, October 19, 1832.

Mr. Smith:—It is a curious fact, that no weevil have made their appearance in the wheat in this part of Virginia, the present season. In stacking my own little crop I sprinkled it with salt, in pursuance of a practice that had been successfully adopted on the Ohio river, and which I wished to test. Finding no weevil in my wheat when it was thrashed, (nor up to this day, for it is unsold,) I inquired of some of my neighbors, who informed me, that they had neither seen nor heard of any weevil during the season. My inquiries have extended to several counties, and the same answer has been uniformly given. How far this is a general thing throughout the state, or even throughout lower Virginia, I know not. We all know the very destructive ravages of that insect, and that, unless our crops are gotten out quite early, they are liable to be greatly reduced in quantity and quality by it.

The extent of the present exemption from this serious pest of the wheat grower, ought to be made known through the American Farmer, and otherwise. The cause of that exemption will, of course, be matter of investigation and speculation. It is worthy of our closest attention, and most painstaking inquiries. For, in the wheat growing portion of Virginia, the industrious farmer is liable, some years, to lose from one-fourth to one-third of his wheat, by a single fortnight's delay in getting it out, and sometimes after it has been gotten out, the injury is nearly as great. I think this ratio of loss is not too high in most cases, in unfavorable seasons. When the weevil perforates, and comes out of the grain, it has consumed the flour of it, and leaves but the rind, with the germinating bud, and a parcel of excrementitious dust and matter. The miller too, loses by such wheat. He has to pay for the weight of the worthless grains, and for that portion of the grains in the several stages, from the first hatching of the insect to its entry into winged existence. It is true, that he runs the wheat through strong blowing mills, and through rubbers, which mash the empty rinds, and the fat, plump, living grains: but the young, half-grown insect is apt to escape, and go into the mill-stones, and give richness and flavor to the flour. In fact, the essences of the fat worms and hatching flies that must be crushed in countless numbers, and must stick to the sound and half sound grains, that have solidity enough to resist the wooden rubber, and specific gravity enough to drop thro' the wind of the blowing machine, is sufficient to make flour rich enough for the palate of an epicure. Keep me from eating such cakes, however fair they may look!

Within my recollection there was not a weevil west of the Blue ridge; but they have become numerous there, though not generally so destructive as with us, from the colder nature of the climate, I presume.

The millers in our town of Richmond have as good mills as can be found in the world; and I believe they are nice and particular in their business.—They make family flour that cannot be surpassed—but they make it out of wheat that is brought to market soon after being cut; and grind it before the weevil appears in any shape. They have, heretofore, been in the habit of purchasing inferior wheat, out of which they made confessedly inferior flour, on which they would not put their brands, although much of it was fair enough to pass the inspector, who is a very clear sighted and exact man. But they do not purchase this description of wheat now, in consequence of a controversy with the legislature, relative to their brands, which I have not time to explain, if it would interest your readers. If the millers have not already triumphed, they will finally do so; for, it is useless to attempt to regulate by law the industry and pursuits of men. Every thing must be left to itself. Industry will work in the most profitable shop, and men will consult their own interest and happiness without legislative instruction: at the same time they will readily pocket bounties and premiums, if poured into

their laps. But this is no insect subject, like that which is the theme of my letter.

I trust, that your numerous and intelligent correspondents will take up the subject of the weevil; inform us what portions of the United States are subject to it? How far the exemption I have spoken of extends? What remedies have been adopted to prevent its ravages? In what manner its eggs are introduced into the grains? In short, what are the history and habitudes of the insect?

It is proper that I should mention a fact, which I did not know until a few years since, and which may not be known to all of your readers. When wheat heads out, the grain has scarcely begun to form, and the head grows rapidly. The formation and growth of the grain are singular, and, as far as I have noticed, unlike any thing else in the history of vegetable growth. When the head comes out of the boot, it is not quite so long, nor so thick as it will be; but the shuck for the reception and covering of the grain is complete in form. When the grain begins to appear it is not a small grain, formed by nature to be enlarged by regular growth, but the bottom or heart end appears of full size, with a flat surface on top, out of which proceed to the extremity of the shuck numerous small fibres. As the grain grows it maintains this full size below, and flat surface above; so that when half grown, if you take it out of the shuck, it looks like a grain cut in half, except that where it seems to have been cut, it is covered with long white down, perceptible to the eye, and that may be taken hold of by the fingers. It continues to grow up in this flat form, until it is perfected, when all the silky fibres are brought to a point, and form a fuzz at the upper end of the grain. In this fuzz, after the grain is formed, some speculators think that the eggs of the hessian fly, of the weevil, and the farina of the rust, are deposited. But it is not my object to go into these speculations. I have satisfied myself that the grain of wheat grows lengthwise, and of full size as I have described.—The shuck by which it is protected is open on two sides, and is accessible to the insect tribe, and to fine pollen when nearly ripe. I take it for granted, that the fibres I have mentioned receive the farina of the bloom. Those who have not noticed this peculiarity in the growth of wheat will look into it during the next spring, if they have curiosity enough or doubt this representation.

Some of your readers may not have seen the remarks of Mr. Jefferson, written in 1781, on the subject of the weevil. I copy them from the 20th Enquiry, in his Notes on Virginia. Speaking of the culture of wheat he says:

"The weevil indeed is a formidable obstacle to the cultivation of this grain with us. But principles are already known which must lead to a remedy.—Thus, a certain degree of heat, to wit: that of the common air in summer, is necessary to hatch the egg. If subterranean granaries, or others, therefore, can be contrived below that temperature, the evil will be cured by cold. A degree of heat beyond that which hatches the egg we know will kill it.—But in aiming at this, we easily run into that which produces putrefaction. To produce putrefaction, however, three agents are requisite, heat, moisture and the external air. If the absence of any one of these be secured, the other two may be safely admitted. Heat is the one we want. Moisture then or external air, must be excluded. The former has been done by exposing the grain in kilns to the action of fire, which produces heat, and extracts moisture at the same time: the latter, by putting the grain into hogheads, covering with a coat of lime, and heading it up. In this situation, its bulk produced a sufficient heat to kill the egg; the moisture is suffered to remain indeed; but the external air is excluded. A nicer operation yet has been attempted; that is, to produce an intermediate temperature of heat, between that which kills the egg, and that which produces putrefaction. Threshing the grain as soon as it is cut, and laying it in its chaff in large heaps, has been found very nearly to hit this temperature, though not perfectly, nor always. The heap generates heat sufficient to kill most of the eggs, whilst the chaff restrains it from rising into putrefaction. But all these methods abridge too much the quantity which the farmer can manage." &c. &c.

We have had two uncommonly cold winters following each other, the effects of which may have been felt by the weevil. But my communication has filled my sheet, and I leave the subject for the discussion of more experienced farmers than myself.—Its great importance will be acknowledged by all who have experienced the evil of the weevil.

HENRICO.