

the Captain, who still persisted that the calculations of the mathematician were wrong. The latter, confident of the correctness of his results, resolutely demanded that the course of the vessel should be changed; and at length, by resorting to threats, induced the Captain to yield. The vessel was turned aside, and soon after they passed in sight of the danger they had so narrowly escaped.

But to return to the spider's web. I will add one more illustration to show what it is capable of accomplishing. Those who attended the lecture of Professor Mitchell, delivered in this city on the 10th inst., will at once know upon allusion, in this connection, to that exceedingly interesting discourse, what this illustration is. Professor Mitchell, after stating that the great obstacle in the way of determining the parallax of the fixed stars, and from it their distance, is the difficulty of noting the precise time when a star crosses the meridian, proceeded to describe the usual method, that of counting the beats of the clock during the time of observation, by which means the most practised observer cannot obtain the time nearer than within two-tenths of a second. The lecturer then explained to his audience how, by an invention of his own, he is able to divide a second into a thousand appreciable parts. To do this he converts time into space, seconds into inches, by causing the beats of the clock to be recorded, (by means of a little magnetic telegraph,) on a revolving disc, so that the distance between the marks thus made represents a second. Now the instant a star crosses one of the spider-lines in the telescope, the observer touches the telescope-key with his finger, and thus causes a mark to be made on the same revolving disc. The position of this mark among those made by the beat of the clock, gives the time of the observation; and, as its distance from the preceding second's mark can be very accurately measured, the time is obtained with corresponding accuracy. Now, the great difficulty in this arrangement was to break and connect the galvanic circuit, at every giving of the pendulum, by an apparatus so delicate as not to interfere with the regularity of the clock's motions.

A very delicate wire lever was constructed, which, by being made to vibrate, alternately broke and completed the circuit.—How to connect this with the clock without interfering with its rate of motion, was the question. A very fine human hair was tried; but, as the Professor told us, it was "too rough, too coarse, too cable-like," to answer the purpose. A fibre of silk was next tried, with no better success. At length a SPIDER'S THREAD was selected; and it worked to entire satisfaction. For twenty months that slender line has been moving to and fro in the Cincinnati Observatory, measuring off second after second on the revolving disc, and in this way exhibiting accurately the time of a multitude of astronomical observations, thus connecting, as it were, as the distinguished lecturer remarked, the heavens and the earth.

Reader, when next thou brushest the cobweb from the wall, or thine eyes light upon the circular web glittering with pearly dew-drops on the hedge-row and the grass by the way-side, remember what the spider's thread has accomplished.—*Phila. Friend.*

## For Farmers.

### Work for the Month.

Planting being over, there will be a little respite, a brief breathing place to look into all the affairs of the farm more leisurely, and attend to the smaller, but not minor, matters which the haste to get in the seeds has prevented. And first, let him who has had the forecast to plant a tree either this season or before, extend his care to it and extirpate his enemies.

**THE BORERS.**—They will make sad havoc with your fair orchard unless your own eyes, and knife, and wire and hand are active. Now is the time to dislodge them; by scraping the earth carefully away from the base of the tree and closely examining it, the spoiler may be discovered either by his hole, his castings, which resemble saw-dust,

or by some peculiar appearance of the tree. By inserting a small wire with the smallest possible hook upon its end, they may generally be drawn out; but if not brought to light the wire will kill them.

Thistles, mulleins, dockrocks, burdocks, and all such rank herbage, will constantly spring up, especially about the buildings, unless the farmer is in the habit of destroying them. By neglect they sometimes cover large patches of excellent ground and render it worthless, beside disfiguring the premises and scattering their seeds over the farm. An hour or two at the right season will arrest them and save crop and character. The cure is to cut them off just below the surface and drop a handful of salt upon the bleeding wound; or sink the spade and start their roots and pull them up bodily. These, and the ox-eye daisy, or white weed, which is becoming so prevalent all over New England, should be weeded out of the grain and grass fields upon their first appearance.

**HOEING.**—No implement on the farm is in more demand than the *Hoe* in the month of June. Get a good one and keep it smooth and bright. Let it be of the right weight, remembering that he "who makes with a common hoe, two thousand strokes an hour, should not wield a needless ounce. If any part is heavier than necessary, even to the amount of half an ounce only, he must repeatedly and continually lift the half ounce, so that the whole strength thus spent would be equal, in a day, to twelve hundred and fifty pounds, which ought to be exerted in stirring the soil and destroying the weeds." It is important, also, to see that the hoe stands just right, neither out nor in too much, but in that position which will enable the person to stand in an easy attitude while using it. Hoeing is of the utmost importance in farm husbandry. It keeps the ground in fine tilth, which is its proper condition to receive light and heat, and the important atmospheric influences.

**WEEDS.**—These are merely grasses out of place. They get a great many kicks, cuts, and perhaps curses, from the indolent and thoughtless,—but they are really "blessings in disguise." How many fields and gardens would feel the plow and hoe, if no weeds appeared? and would present a hard, impervious crust, resisting all efforts of the genial sun or cooling dews to enter and feed the starving roots. But the weeds spring up as faithful monitors to prompt us to duty! calling us from field to garden, as each demands attention. Look no longer, then, upon the weeds as pests and plagues, but by careful industry exclude them from the crops which you prefer to them.

**WATERING.**—Water copiously and rarely; a constant drizzling cakes the ground, and is of little service to the roots.

**THE GARDEN.**—Pass through the garden once a day, at least; give it an hour in the morning and another in the evening, if possible; no part of the farm will pay you better than the garden crops. Coop some of the hens near and allow the chickens to go at will over the garden; and they will be able to obtain what meat they require with their vegetable diet.

Sow melons and cucumbers towards the last of the month for pickling.

**GRASS.**—In rich, moist spots, grass will grow rank, and sometimes lodge before the end of June. This should be cut early, and another crop may be taken from the same ground.

**CATTLE.**—The stock still needs the master's eye. A little extra attention keeps the animals healthy and thrifty, and that is the only possible condition in which a profit can be derived from them.

**MANY THINGS.**—The merchant watches the daily fluctuation of his prices in his business, and calculates the loss and gain on them with eagle eye. So should the farmer watch every minute innovation, whether by insect or weed, upon his crops, and carefully attend to each at the particular season when they demand it. Promptness, as well as neatness and order, should prevail in every department of the farm.

Always do as the sun does—look at the bright side of everything; it is just as cheap, and three times as good for digestion.

*New England Farmer.*

### The Rhubarb.

This excellent garden plant should be set in a rich soil, and cultivated with great assiduity. Stable manures should be frequently strewn about each root during the whole summer, to ensure a luxuriant growth of stalks, which is the principal object of its cultivation. These stalks, with proper attention, can be grown to a very large size, and are an excellent substitute for the apple, for pies, sauce, preserves, &c. They are much improved, and by shading them as much as possible from the sun, which may be done by sawing old barrels asunder and placing the halves about each plant, allowing the leaves to protrude through the opening at the top. I have seen a whole barrel, topless and bottomless, completely filled with the long, stout stalks. The seed stalk, which springs up in the centre of the bunch, should be broken down as soon as it appears, it being hollow and useless, and injuring the growth of the other stalks. The root of the rhubarb, (*Rheum Palmatum*.) contains medicinal properties, and should be cut up in strips and dried for use. A learned botanical physician says, "it possesses the property of contracting the animal fibres, while it operates as a thorough cathartic; its operations, therefore, for weakly constitutions, that cannot bear more drastic physic, in cases of diarrhoea and debility of the bowels, is particularly useful. In small doses it will invigorate the stomach." All should either raise or buy their own root and grate it, and then they will know what they have. I have seen rotten-worm-eaten rhubarb ground up with a yellow kind of root, to give it colour. The man who was grinding it informed me that it was for a wholesale dealer in drugs in a neighbouring city. There is much uncertainty about all medicines that are ground.

### The Farmer who had Nothing to Learn.

There are, in every community, farmers who conceive it impossible to add any thing to their already acquired stock of knowledge. We met one of this class a few days since, who in answer to our inquiry whether he was a subscriber to an agricultural paper, indignantly replied that "book-farming was a humbug, and that he knew more of farming than any body could tell him." We did not urge the point with him, conceiving it to be worse than useless; but as we left him, we took a few notes of the condition of this model farmer's premises, which we present to the readers of the Journal, with the hope that they will prove of service.

The paling fence enclosing the house-yard was broken down in several places; one of the hinges was torn off the gate, and directly in front of the kitchen door several lank-looking swine were wallowing in the mud-hole, where, for dear knows how long, the slops of the kitchen had been carelessly thrown. We thought, were he really as wise as he conceived himself to be, that that fence would have been repaired, that gate hinge fastened; a good breed of swine would have replaced those lank-looking ones, and the rich slops of the kitchen would have been applied to a better use than to create an unwholesome and unpleasant wallowing-place for swine.

The barn stood on an eminence, and directly in front of it a small stream flowed. From the manure-heap to this stream, the rich manure-water was flowing, in a silent but steady stream; and some cherry trees that skirted the lawn, I observed large quantities of the excrements of the fowls exposed to the action of the weather, and aided materially the growth and vigour of the wilderness of weeds around. Had he been so very wise, he would have checked the waste of that precious manure; and instead of permitting his fowls to roost upon the cherry trees, (and thus not only expose them to the inclemencies of the weather, but lose in addition their very valuable manure,) he would have given them a place of shelter; and by that means secured their comfort and productiveness, as well as their excrements.

An orchard of young apple trees was almost entirely destroyed by the borer; the fences that enclosed his meadow were in a ruinous condition; several hogs were actively engaged in turning up the sod; and as

we attempted to close the gate that led from the main road to the house, we found it wholly impracticable, one hinge completely torn off, the other so twisted as to render the effort vain. Want of time prevented further observations; but we had seen enough to satisfy us that the careful perusal of any good agricultural journal, and a practical application of some of the hints contained in it, would have been hundreds of dollars's value to our over-wise farmer.—*Pa. Farm Journal.*

## Obituary Notices.

For the Wesleyan.

### Mrs. Elizabeth Brown, of Lower Horton.

Mrs. Elizabeth Brown was the daughter of Samuel and Mary Avery, of Lower Horton. She was born September 17th, 1787, and married to Mr. Abiel L. Brown in March, 1807. Her husband died in the faith of Christ about eight years ago. She was the mother of twelve children, nine of whom survive to mourn their bereavement. She lived what is called a moral life, but did not realize the necessity of a change of heart to constitute her truly religious and fit for heaven, until the autumn of the year 1834, when she and three of her daughters were converted to God under the ministry of the Rev. John McMurray, then stationed on the Shubenacadie Circuit. Some of her family had professed experimental godliness previously to this time, but the conversion of the mother and three daughters formed a memorable era in their family history, and brought sources of enjoyment to their social circle which they had not expected in religion when they were pursuing the pleasures of the world. They were of one heart and mind, determined, by Divine grace, to serve God in newness of life. Mrs. Brown always lamented that she was so late in turning to God, and that she had lived so many years destitute of the joys of salvation. After she had experienced a change of heart, knowing that she needed help in the divine life, she met in a band consisting of four persons.—About this time she saw and felt the necessity of a further work of grace in her heart, and she soon found, in seeking for more power to serve God, that there is virtue in the blood of Christ to cleanse from all sin. She testified in a band meeting of twelve persons that the Lord had blessed her with a deeper work in her soul, and that she could love God with all her heart. Mrs. Brown was a consistent christian, evincing the truth, depth, and purity of the religion she professed by holy conduct. She loved the precious name of her Redeemer, his house, his Ministers, and his people. She always attended the public means of grace, unless prevented by sickness, or the inclemency of the weather. She never forgot the day or the hour her class met. She felt for sinners much, and prayed earnestly for them at the family altar.

Two years ago she began to complain of pain occasioned by a tumour in the breast, but was not confined to her bed until last Christmas. I visited her during her protracted illness, and always found her not only patient on the bed of sickness, but apparently cheerful. She conversed much as she had been wont to do in health, affably, and seemed to have her mind not occupied solely with her own sufferings, as is often the case with afflicted people, but free to feel interested in the welfare of others,—and especially intent on the prosperity of the cause of God. A revival of religion took place in the chapel near her residence, a few weeks before her death, in the progress of which she evinced much interest. Although she could not attend the place where the hallowing influence was felt, she got a blessing to her soul by hearing of Zion's prosperity. She was a person of an excellent spirit, possessed of those qualities of mind and heart, regulated by christian graces, that constituted her an affectionate and agreeable friend. Her family, all, I believe, professors of religion,—mourn the loss of an affectionate, tender mother, but they mourn not as those without hope. Having requested Miss M. Brown to give me some account of her mother's illness and death, I subjoin it in her own words:—

"It is about two years since she first complained of pain occasioned by the tumour. I