

at once proceed to change the mechanical condition of the soil. Seeing that the Creator has constituted the atmosphere a common carrier of ammonia, carbonic acid, oxygen, water, and the like constituents of vegetable growth, they give the soil such a preparation as will secure the absorption of such manurial properties. The instance of the man who bought a plain, on which no crop could be made to grow for years, and who, by simply ploughing that land thoroughly in the dews and rains, till it yielded good crops, is a case in proof of the wisdom of this class. A deepening of the soil to the extent of eighteen inches or two feet, the bringing to the surface gradually a portion of the hard subsoil, where it will be subjected to the dissolving and enriching influence of frost and heat, air and rain, is a method of rendering land wonderfully productive. On Croton Point, a narrow neck of land that reaches far out into the waters of the Hudson, one of these enlightened farmers has constructed a plow which penetrates the earth two feet in depth, making it as mellow as a garden. It is on such land he grows the best grapes, the fairest fruits, the largest vegetables, and the most paying crops. Others have done the same thing, both in that vicinity and in other places. If it pays them, it will equally remunerate others.

—Country Gentleman.

Communications.

To the Editor of the Farmer's Advocate.

GRAVEL WALLS.

Dear Sir—A correspondent in the April No. of your very excellent paper, asks for information as to the value of gravel walls for foundations and underground apartments, and as I consider this a subject of general importance in view of the high price of bricks and lumber, I propose to offer a few remarks thereon.

Mr. O. S. Fowler, the celebrated American phrenologist, built an octagon house at Fishkill, N. Y., a number of years ago, four stories and a basement, entirely of gravel and lime, and after several years claims that it is better and stronger than when first built.

In Janesville, Wis., there are many houses built on this plan, which have stood the test of years and so far as I heard, improve with age, becoming in time, as hard as stone itself.

Mr. Fowler claims that walls made in this manner are far ahead of brick, stone, or wood, is easier built, cheaper, more durable, not liable to decay, warmer in winter, cooler in summer, dryer, free from vermin, and within the reach of every man who has a desire to build.

As to the proper proportions, opinions vary. But one bushel of unslacked lime to

about twenty bushels of sand, coarse gravel and stones, is what has been used by various parties who have built after this manner. If there is much fine sand, more lime will be required, if more gravel and stone less lime. The thickness of the wall would depend upon circumstances, but should not be less than eleven or twelve inches—more according to size and height.

If mixed with water lime, faced with one row of brick on the outside, to guard against frost, this material would be likely to answer well for the foundations of houses, or for any of the purposes about which your correspondent desires information.

In roofing over these gravel walls, it is better to have the eaves projecting at least a foot, as this carries the water clear of the lower portion, where they are most liable to take injury from being wet, until, at least, they are sufficiently hardened to resist the action of water. "Nature's building material," gravel and lime, abound everywhere, and I believe if this plan of building was generally known, it would be adopted by many who cannot otherwise afford to build, or who live in rented houses, paying in a few years, double the cost of building on this economical plan.

Yours truly,

GRAVEL.

London, May 18, 1868.

For the Farmer's Advocate.

CULTIVATING FALL WHEAT.

Mr. Editor—As you ask for communications and I approve of your undertaking, and would be wishing to assist your paper in any way, I will give you my mode of cultivating Fall Wheat, which may be of some advantage to your readers. I seed my land well with clover, pasture my wheat land till haying, then draw my manure on it as soon as haying is done, then plow my land deep, and harrow it well; as soon as grass begins to show itself, I cultivate it; at seeding, I sow by hand, cultivate twice, then harrow. I consider this the most advantageous way in farming. By this means I have the pasture, and plow but once. Some may condemn this mode, but my crops have proved satisfactory since I adopted this method. For the past three years, I have taken the prize for my wheat, at both the County show and seed fair. Should you consider this worth inserting use it, if not burn it.

MOSES KOFT.

Waterloo, Ont., May 14th.

To the Editor of the Farmer's Advocate.

HINTS TO NEW SETTLERS

For persons commencing in the woods with some capital, and having teams and men to get on with their work, it is a good plan to plough once at least before seeding down, as it breaks a good many roots, and destroys a great many small underbrush and stumps, which makes it easier to mow, and rake your hay at the time of seeding. It is also a good plan to roll your ground. For this you can cut a nice straight log, and make a roller short enough that it can be got through among the stumps without trouble. The rolling leaves the surface smoother, and makes

your seed more sure to grow. I would advise any person intending to purchase a farm, to buy a wild or unimproved lot, provided he can get a good one, because you can buy a wild lot and clear it for about the same money that you will buy a cleared farm, and then you have the land new and good. You are sure of good crops and if it gets full of thistles and bad weeds it is your own fault, and by the way I have seen men take a very good plan to introduce weeds on their farms, by being so narrow-minded, that they will leave the logs and trees on the road allowance, along the side of their farm, and when they burn their fallow the fire kills the trees and leaves it to breed burs and thistles. Now, to all who are commencing on a new place I would say clear up the road as you clear your farm, and seed it with grass, and by so doing you forestall the weeds, besides it affords pasture for any young cattle you may have running out. The man who clears the road is the gainer over his more mean and niggardly neighbor, who thinks if he clears the road to the centre of the line he must have his fence there for five or six years, and then is not pleased if he has to move it.

RUSTIC.

To the Editor of the Farmer's Advocate.

RAISING CALVES.

Mr. Editor—As you are asking for communications, I consider this may be of some use to your readers. I raised a calf last summer, by allowing it to suck a cow; my neighbor raised one by feeding it on meal. The two calves at first could not be distinguished apart at 20 yards distant. My neighbor fed two quarts of meal daily. The meal was chopped in Summers' Patent Feed Mill, which, by the way, is altogether the best mode of having grain chopped for feed, as the stock will prefer it to grain chopped in a grist mill. It never heats or turns sour. The calf that was fed on chopped feed, stood the winter better than the other.

SAMUEL SMITH,

Vaughan, Ont.

To the Editor of the Farmer's Advocate.

THE MAMMOTH SQUASH.

To raise this squash successfully, the seed should be planted on very rich soil, probably the best way would be to dig a hole three feet broad, and three feet deep, and fill with stable manure, making the hill on this with good loamy soil six or eight inches deep, planting two or more seeds. When the plants are up a week, or ten days, remove all but the strongest, keeping the soil hoed in as the hill sinks down by the decaying of the manure. When the vine has grown to the length of six or eight feet, pinch off the side branches and keep them shortened in to three feet, letting the fruit form on the leading vine, if you wish to grow a very large squash. After the first has become eight or ten inches in diameter all others must be removed, and the leading vine should be kept pinched back to about five feet beyond the squash.

RODNEY.

I have a new-kind of potato, and do not know the name, perhaps you could tell me by my description. The color is white, grow very much like the kidney in shape, only full and round at the ends; three weeks earlier than the kidneys; good to use at any time of the year; when cooked they are almost as white as flour; do not rot, great yielders, and grow with small vines.—J. F.