

LIQUID MANURE FOR FRUIT TREES.

It is a fact satisfactorily established with me that there is nothing connected with a farm in the line of fertilizers, that appears to produce a greater effect on fruit trees than liquid manure. Thousands of gallons of this invaluable fluid are wasted on farms annually, which, if applied to the trunks and roots of trees, would benefit them ten times more than it would cost to make an application of the liquid. No one need apprehend any danger in applying it, for it bites not, nor does it cause any serious derangement in the olfactory region. Where trees have been injured by drought, and have been set out heedlessly, it produces a most striking effect, causing a circulation of the sap at once astonishing. It is unquestionably preferable to solid manures, for its effect is almost immediate. It penetrates the pores of the earth and comes in contact with the roots and fibres as soon as an application is made; whereas, in applying coarse manure, such is not the case, it requiring several showers to wash the strength of it out.

The manner in which I have applied it is to dig a cavity around the body of the tree, and then fill up with the liquor. In a few moments, it will be absorbed ready for replacing the dirt; thus preventing evaporation. The introduction of a paifull around the trunk of a tree, at an interval of a month during the growing season, is sufficient to produce the most astonishing results. An extraordinary growth immediately commences and shoots are forced out in a few weeks, truly astounding both in length and size. I have tried soap suds and am convinced that they do not contain all the invigorating and enriching powers common to liquid manure. It must be acknowledged, however, that soap suds are efficient, causing a rapid growth when judiciously applied, but not equal in my opinion to the liquid.

Now, without being considered wayward in advancing ideas, I would suggest that those who have the fluid on hand, and are not backward in coming in contact with dirt, would try the liquid and see if the effects are not satisfactory.

W. TAPPEN.

Baldwinsville, N. Y. August, 1851.

KILNS.—Joseph Christian Davidson, of Yalding, Kent, Brickmaker, for improvement in lime and other kilns and furnaces. Patent dated November 2nd, 1850. "1. Mr. Davidson's improvements have relation to lime kilns, in which, as usually constructed, the fire has been lighted in the kiln underneath an arch built of the limestone to be calcined. According to this method, a great waste ensues from pieces of the stone chipping off by the action of the heat, and falling into the fire, from which they have necessarily to be removed. It is now proposed to have the fire-place alongside of the kiln, and to conduct the flame and products of combustion through the side of the kiln, to act upon the limestone, which is to be piled in the kiln on an arch built in the usual manner and so as to act as a reticulated flue. 2. The same principle is applied to the kilns used for baking bricks, the fire-places being arranged at the side of the kiln, in such position as to make the openings in the wall thereof the throats of the furnaces."—*Mechanics' Magazine*.

PARSNIPS.—This root has long been an inmate of the garden, and was formerly much used. In the times of Popery, it was the farmer's Lent root, being eaten with salted fish, to which it is still an excellent accompaniment. "In the north of Scotland," Dr. Neill observes, "parsnips are often beat up with potatoes and a little butter; of this excellent mess the children of the peasantry are very fond, and they do not fail to thrive upon it. In the north of Ireland, a pleasant table beverage is prepared from the roots brewed along with hops. Parsnip wine is also made in some places; and they afford an excellent ardent spirit, when distilled after a similar preparatory process to that bestowed on potatoes destined for that purpose." It is an excellent food for cows, and its fattening qualities I have already noticed.—*Farmer's Guide*.

MONSTER BEANS.—We have twice lately noticed the extraordinary growth of some specimens which have been shown to us, of the Rocky Mountain bean, recently introduced into this country. We believe, if we recol-

lect aright, the former specimens measured respectively 24 and 22 inches; but yesterday we were informed by Mr. John Warcup, gardener, of Laprairie, that he has a bean growing in his garden 27 inches in length. He says that the Rocky Mountain bean is an excellent and very succulent vegetable, fully equal in flavour to the common scarlet runner of this country.—*Montreal Transcript*.

MACHINE FOR GATHERING CLOVER-SEED.—Mr. George A. Smith, of Winchester, Randolph County, Indiana, has invented and taken measures to secure a patent for a machine for cutting and gathering cloverseed. This machine exhibits a great deal of ingenuity, although its construction is very simple. A wooden roller is constructed with thick, spiral-shaped projections, at a short distance apart, running on it lengthwise with the axis. On these spiral projections are secured knives or blades set in such a way that the cutting edge of each projects over the concave part of the wooden spiral of the cylinder. A rake is placed on the carriage below, like that of a grain reaper, and a straight knife extends across the rake behind, to hold up the clover, so that as the spiral cylinder revolves, the knives of it cut off the heads of the clover, and the receptacles under the knives carry the heads of the clover round, and thus deposit the seed in a proper receptacle at the turning vertical point. There is also an arrangement for securing the wheels on the axle of the carriage, which is a very good improvement. The collars of the wheel-boxes have ratchet teeth, whereby the axle is made to turn when moving forward, but not when moving back, thus throwing the wheels out of gear with the cutters, by a spring, when necessary.—The rake can also be adjusted to any required distance to or from the revolving cutters.—*Scientific American*.

HORSE-POWER DITCHING MACHINE.—Mr. Charles Bishop, of Norwalk, Ohio, has invented and taken measures to secure a patent for a good improvement in Ditching Machines, whereby the old spade method of ditching by manual power is entirely thrown into the shade. His machine is worked by horse-power, and is provided with a revolving excavator, the shaft or axle of which, lies in the direction of the length of the ditch. The excavator is of a screw form, and is operated by an endless chain. The ditch is cut of a semi-circular form, and it deposits the cut clay of other kind of excavated earth in a box, from whence it is delivered at one side of the road, by scrapers attached to the endless chain, the machine being propelled forward by a friction wheel or roller, moving in the ditch and operated by the excavator shaft.—*Scientific American*.

MEDITERRANEAN WHEAT.—The damage done to the wheat crop this season, by the weevil, has excited a good deal of apprehension in the minds of our farmers for the future, and attention has been turned to securing some earlier variety which shall ripen sufficiently early to escape the ravages of this insect, which in so many parts of the country has completely destroyed the wheat crop. The Hallowell Agricultural Society held two meetings on the subject, and finally concluded to purchase some Mediterranean wheat for seed for the use of its members. This wheat has been tested two years in some parts of the adjacent County, and has escaped the ravages of the weevil in localities where the Soules, Rasp, and Flint wheat have been seriously injured.—The Mediterranean is not so fine a variety of wheat as some others, but is very hardy, standing the winter well, and very productive. The person from whom the Society purchased their seed raised 300 bushels from seven acres. It weighed 61 lbs to the bushel.—*Pictou Gazette*.

Never keep your cattle short; few farmers can afford it. If you starve them, they will starve you.

☞ Making salt by solar evaporation, at Key West, it is said can be profitably carried on. The salt is claimed to be of superior quality, and the solar heat, joined to the trade winds, possess great evaporative powers. The business is now carried on to a small extent, but could be easily increased a thousand fold, as the natural salt ponds are sufficiently extensive for that purpose.—From 30,000 to 40,000 bushels are made yearly.



The Literary Gem.

THE STUDENT'S DREAM.

Methought in a dream on a mountain high,
I gazed in thought on the deep blue sky,
When an angel of light came fitting by,
And stood by my side and wept.

Upon my cheek was the bloom of youth,
And in my heart a thirst for truth,
With varied knowledge I'd tried to soothe,
The cravings of a restless mind.

My soul was full of earthly lore,
This world I'd travell'd o'er and o'er,
On genius' wings my thoughts did soar;
But alas! I craved yet more,—yes more!

True happiness in wealth I'd sought,
A transient hour of pleasures caught;
In Science' dreams to catch it thought,
But all, yee all, were empty shadows.

I wondered long that an angel sprite,
Should visit me from the realms of light,
And gaze in love with eyes so bright,
On a poor and feeble man.

I thought on me the angel smiled,
With countenance like a new born child;
And with voice of music sweet, oh, so mild!!
Pointed to the sunlit sky.

Oh, son of man, then of truth the threshold scarce
Hast trod;
Oh! still thy doubts—no longer in earthly darkness plod;
Lo, there's a way of life that leadeth up to God,
In this alone the mind can rest.

Behold there is a love, that fills the soul;
This love will last whilst countless ages roll;
Eternity its cycle and God its goal;
From the fountains of His love 'tis fed.

The glory of that dream too blest to last,
Steals o'er my soul like the shadows of the past,
Yet on my mem'ry a truth has cast,
That nought can o'er efface.

Swift the angel fled on a wing of fire,
And as he soared higher! Oh, still higher,
Methought I heard an angel's glorious choir,
Tell me of faith! Oh,—Faith in God.

C. M. D.

IMMORTALITY.

"I know that my Redeemer liveth, and that he shall stand at the latter day upon the earth: and though after my skin worms destroy this body, yet in my flesh shall I see God."—*Job, chap. 19, v. 25, 26.*

The Book of Job, one of the most sublime, philosophical, and poetical books ever written on earth, throughout its whole pages maintains the wisdom, glory, and goodness of God, and the immortality of the soul.

It was written either by Moses, or by some wise and eminently pious man, upwards of, or