The Uses of Clover.

It would be very difficult to over-estimate the importance of this crop to all farmers engaged in mixed husbandry. Its introduction into England produced an entire revolution in the Agriculture of that country. Clover laid the foundation of all those wise systems of rotation that have since made the Agriculture of England a model, and a marvel to the world. Nor is its importance much less in those sections of America where its values are appreciated and rightly applied,

Clover is valuable.

1. As a forage plant.
2. As a fertilizer.

As a forage crop, its special value is in the quantity and quality of the hay that it produces, and the rapidity with which it comes to maturity after being sown. Clover properly cured, is almost equal to good Timothy, for beef cattle, and much superior to all other hay, for milch stock. In pasture, the same relative values hold with the addition that, for hogs, clover is a grand specific, superior, perhaps, to all other grasses.

The specific value of Clover, however, lies in its wonderful powers as a fertilizer. In this respect it is unequaled by any crop grown on the farm. The different ways in which it adds to the fertility of land are chiefly:

1st. Shading the surface of the soil. Owing to its rapid and luxuriant growth it soon forms a close and heavy covering over the soil, that acts as a mulch in protecting it from the scorching rays of the summer sun. At the same time that the soil is protected the weeds are smothered out, and the land cleaned up.

2nd. By mellowing and disintegrating the soil. Clover possesses peculiarly long and powerful tap-roots, that penetrate deep, loosening the soil and admitting the air. Thus rapidly changing the physical condition not only of the soil, but of the subsoil also.

3rd. By effecting important chemical changes, necessary to enrich the earth with plant food. Its abundance of foliage enables Clover to gather from the atmosphere immense stores of gasses that give life to the plants, which its far reaching roots send deep down into the earth. Thus a clover field becomes, as it were, a great reservoir for plant food. And clover itself becomes a great commissary, collecting food from the earth and the air for whatever crop that may follow.

4th. By preventing washing. The Clover mulch breaks the force of the hard beating rains, while the roots hold the soil in a mat as it were, thus preventing it from washing

5th. As a green manure Perhaps no crop is so valuable for turning under in a green stage, as Clover. In addition to the immense amount of rich vegetable matter in its abundant roots, the plant itself is extremely rich in all the materials necessary to the healthful growth of succeeding crops.—*Dixie Farmer.*

How to Use an Axe.

MARK TAPLEY, in his "Home in the wilderness," thus discourseth: "To use perfectly the American wedge-shaped axe (and here let me say that it is the only axe for felling timber and doing everything with which is worth one straw), requires no ordinary degree of skill and practice.

"Strength, of course, has something to do with it, still a man of only moderate muscular power would beat a giant into being ashamed of himself, if the weaker man did, and the stronger man did not, know how to wield an axe.

"The axe I prefer for all ordinary purposes ought to weigh about 8 lb., and it should be carefully mounted or 'hung,' as the term is, on a springy, rightly curved hickory handle. * * *

"Let us suppose you are going to fell your first tree: be careful to discover how the tree leans, and always choose that side towards which it inclines to begin on; by doing this you avoid the risk of falling the tree on yourself. Stand off from the trunk, so that the edge of your axe blade can touch the centre of it, whilst both your hands are grasping the handle before the knob at the end of it, purposely made to prevent it from slipping out of the grasp in the act of chopping.

"Fix your eye on a spot about three feet from the ground on the tree trunk, plant your feet firmly, look carefully behind you, to make sure that there are no small twigs or branches to intercept the axe; then holding the handle by the extreme end, not too firmly, or it will jar your wrists, and whirling the axe at arm's length round your head, bring it obliquely down upon the spot you have fixed your eye on. If you bring the edge down on the proper slant, the blade should be nearly buried in the bark and timber; if you do not it will 'glance,' and then look out for your legs. Repeat this cut if you can; an axe-man would, twice or three times following, in the same place. Should the tree be, for example, four feet in diameter, chop in the next cut you make three feet lower down than where you made the first cut, but, this time, horizontally, always bringing the axe round at arm's length. This will give you the 'right sized chip,' to use a lumberer's phrase, or, what he means, in other words, is, that the three-feet notch will enable the chopper to make the wedge end of the tree break in the centre of the stump; if you took a smaller notch, as nine out of ten inexperienced men would do, you would find your axe jammed before you could chop half way through the trunk; hence the length of the chop is always in proportion to the girth or diameter of the tree to be felled. Cut half way through the tree, always keeping the lower surface horizontal and smooth, as if planed, then change and begin on the opposite side to that on which you have been chopping, precisely in the same way as you began the other cut, when you are nearly through, the tree will crack off, and of course fall in the direction to which it leaned, that is away from you."

The Early Rose Potato.

THE following account of an experiment with the early Rose Potato corresponds in its general tenor with many other reports which we have seen, and which lead us to form a very favourable opinion of this new variety:—

'As the 'Early Rose' is now presenting itself to the agricultural public, and is receiving, as every new source of and claimed improvement should receive, a thorough test and trial of its merits, perhaps a few words in relation to my own personal experience with it the past season would not be amiss.

Being attracted last winter by its presentation in the December number of '*The Practical Farmer*,' I was induced to purchase some of them at the enormous price of $3 per pound; and with one of these pounds I will state my treatment and success, deeming it might be interesting to some of your practical readers.

"The pound of potatoes contained nine tubers. Owing to the unfavourable spring, and not receiving them till late in the season, I did not succeed in planting them till May 26th. On the 20th I proceeded to cut them for planting; the eyes had started growth by which I was enabled to cut them in single eye pieces. Some of the middle or large eye pieces I divided, making from the nine potatoes one hundred and six plants, all of which grew; they were planted without any extra preparation of the soil, the ground being manured, ploughed down, and marked out about four inches deep, and planted with phosphate in the row, kep. the ground mellowed by frequent harrowing, and about blossoming time drew a little dirt towards the row. They occupied just one hundred feet of row.

"September 11th I proceeded to dig and weigh them, and from the one pound planted, I had just one hundred and one-half pounds of potatoes, and what was still better, ninety-three pounds of them were large merchantable potatoes, such as will bring the highest market price. Their shape accords very much with that of the *White Mercer;* their color a dull rose; inside, flesh pure white, and exceedingly starchy and fine. In short I consider them a great acquisition to the grower of potatoes and cultivator of the soil.—*Cor. of The Practical Farmer.*"

Advantages of Underdraining

WARING, in his "Elements of Agriculture," states that the advantages of underdraining are many and important, and enumerates the following:

1. It entirely prevents drought.
2. It furnishes an increased supply of atmospheric fertilizers.
3. It warms the lower portions of the soil.
4. It hastens the decomposition of roots and other organic matter.
5. It accelerates the disintegration of the mineral matters in the soil.
6. It causes a more even distribution of nutritious matters among those parts of soil traversed by roots.
7. It improves the mechanical texture of the soil.
8. It causes the poisonous excrementitious matter of plants to be carried out of the reach of their roots.
9. It prevents grasses from running out.
10. It enables us to deepen the surface soil

By removing excesses of water—

11. It renders the soil earlier in the spring.
12. It prevents the throwing out of grain in winter.
13. It allows us to work sooner after rains.
14. It keeps off the effects of cold weather longer in the fall.
15. It prevents the formation of acetic and other organic acids which induce the growth of sorrel and similar weeds.

Splitting Rails.

Almost every farmer can split rails, but there is considerable science in the work after all. One man will rive them out with apparent ease, while another will tug away and exhaust his strength in a few hours. The reason of this difference is owing to the weight and shape of tools, and the knowledge of their use. One man makes a constant outlay of strength, while another will apply it only at an essential point, and that is when the beetle is descending and near the wedge.

An experienced rail-splitter tells us that the best maul is made of a knot, and should be of medium weight, not so heavy but that a man can swing it with ease. One iron wedge, quite slim, should be kept and used for starting the split; it is not apt to rebound, and if it should, it may be easily prevented by making a few checks with an axe near together, and starting the wedge between them, or by rubbing the wedge in dirt.

It is hard enough to split rails at the best, and we believe it a sin for any man to attempt the work without proper prerequisites, for he has no right to exhaust physical powers and ruin his constitution by using poor tools, when the best can be obtained at a trifling expense. Great advantage is gained, when making rails, by opening large logs with a charge of powder.—*Ohio Farmer.*

Destruction of Stumps.

We have always objected to the use of machinery of any sort to take up large stumps in ordinary arable land, that they would take up inevitably a large quantity of earth with each, and leave a hole almost as objectionable as the stump; and moreover, that after the stumps were out there was trouble in disposing of them. The following suggestions which we take from our neighbor, the *Baltimore Weekly Leader*, may be quite practicable, while they are not liable to the same objections. They are at least worthy of trial:—

"We have heard of two methods of getting rid of stumps, which, as they appear feasible and inexpensive, we hope some reader will try and report upon. Bore with a two inch auger to the heart of the stump; fill the cavity thus made with sulphuric acid, or with crude oil of petroleum. In the first case, the acid becomes the destructive agent within a few months; in the latter, when the stump becomes saturated with the oil, it is fired, and will then burn out to the last particle like a candle."—*The American Farmer.*

BRIGHT BARLEY.—A correspondent from Wyoming Post Office, Plympton, asks "how the farmers around Toronto save and harvest their barley to get so bright a colour? The grain buyers say our barley is plumper than that raised round Toronto, but deficient in colour." We do not know of any special method pursued by the farmers in this neighbourhood in gathering this crop. During the past season no particular care has been necessary; the dry weather, with all its disadvantages, has been favourable for harvesting. Perhaps the soil may make the difference referred to, if it really exists.

NORWAY OATS.—*L'Union des Cantons de l'Est*, published in Arthabaskaville, contained the following paragraph in its issue of the 8th ult., copied, apparently, from the *Pioneer*:—

"Mr. J. P. Lee, of Stanstead, sowed, last spring, 32 lbs. of Norway oats on a piece of ground measuring 190 perches, from which he harvested 1620 lbs., or 50 bushels. The husk is small, and the straw very superior to that of ordinary oats. The ears are 12 to 20 inches long—some of them yielding 226 grains,—and there were from 29 to 50 ears from a single grain. Mr. Lee believes he would have harvested double the quantity he had if the season had been favorable. A Mr. Price, of Vermont, is said to have harvested 100 bushels of this oats to the acre.'

GO TO FARMING.—A good living is what comparatively few men succeed in making in village or city life, and yet nothing is more easy of accomplishment on the farm. Besides, there is a pleasure in cultivating and embellishing the earth, improving and increasing its products, and thus adding to the aggregate of human happiness. Why, then, should young men hesitate to be farmers? It is both profitable and honorable It is the nearest approximation to independence that man as a member of society can make. A gentleman farmer—and all farmers are, or should be gentlemen—belongs to an order of nobility that is not indebted to placeholders for installation, and may, if he chooses, be ranked among the greatest benefactors of the human race. Let all the idle young men go to work on farms, and quit seeking third and fourth rate clerkships. In short, go to farming and quit begging.—*Ex.*