The Rye Grasses in Central New York.

Says D. Batchelor in the Utica *Herald*:—There are many tons of perennial rye grass seed imported every year into this country from Scotland and England, and sold by the Seedsmen in meadow, pasture and lawn mixtures. I have tried this grass three winters in succession and find that here in Oneida county, and even in a protected garden in this city it "winter kills" root and blade—every vestige disappearing, no matter how thick the math in autumn. Now here is one of the most valuable grasses known to English agriculture, while, if I am correct, it is of no value to us, and yet this variety is constantly recommended by agricultural writers who apparently make up their lists of meadow grasses for our region, from similar or some other English authority.

Italian rye grass is quite another variety, not to be confounded with perennial rye. and is, when grown in our meadows with other grasses, quite hardy, making the best of hay.

I would urge every farmer to test and try for himself, by actual experiment, what are or what are not the grasses best adapted for his own land. How easily this can be done. A strip of clean land 50 feet long and 10 or 15 feet wide, would be ample space to test twenty or more varieties. The kinds should be sown across the strip, and well apart so that there may be a foot or more between the rows, which ought to be hoed to keep the distinction marked. To this strip the farmer and his family could come and mark the progress, early or late, of each kind, note its peculiarities of blade and flower, observe which does or which does not stand the winter, which is tall and succulent for hay, which is short and crisp and stools well for pasture. Here would be an object lesson teaching the senses in a way not likely to be soon forgotten.

Manure for Grass.

No crop gets less attention than grass. If manured at all, it is only incidently with some other crop—rarely for itself alone. Corn, wheat and barley get the manure, and when seeded, the young clover takes what is left. After that, if the field be pastured, the droppings of animals left in lumps over the field, are all that the lands get till ploughed again. This is considered improving the soil; and it is. No matter how mismanaged, clover is a benefit, and whatever else he may do, the farmer who sows and grows clover, is making his farm better. What, then, might not the result be, if the same care were taken of the clover field as of other crops? It does not need cultivating; the long, deep reaching roots mellow and pulverize the soil as nothing else can. If the colver grows thriftily, the top acts as a mulch, shading the ground and keeping it moist. A crop of two tons or more of clover, whether ploughed under or cut for hay, can hardly fail to leave the soil better than it was before. It should be the farmer's aim to grow the largest possible crops of clover. A slight dressing of gypsum—one hundred pounds per acre in early spring—often produces wonderful results. But if a farmer has a little well rotted manure, the scrapings of barnyards, fall is the time to apply it. Clover is often injured by freezing and thawing in winter, and a very slight covering of manure will afford a great deal of protection. Rich earth from corners of the fences, is well worth drawing a short distance on young clover, provided the ground is hard and firm. If the field is not to be mowed next season, coarser manure can be used.—*Country Gentleman.*

FAILING TO CATCH.—The failure of timothy seed is very often due to an impoverished condition of the soil. All plants after germination are nourished for a short time by the seeds from which they germinated; and the smaller the seed so much the sooner is this source of supply exhausted, and the plant forced to draw on the soil for its nourishment. It follows then, that if the soil is deficient in proper nourishment for young plants, they will perish from mere starvation. In a case like this, a liberal application of barn-yard manure on the surface of the soil before seeding, is the only thing that will insure a good catch of any variety of grass seed. Another and very frequent cause of the uncertain seeding of grass is drouth We have what we call good seasons and poor seasons for seeding to grass, which means that in one season a succession of warm refreshing showers after seed time, insures a good catch of grass with ordinary seed, and on the poorest soil; or that a period of dry weather after seed time, reduces the seed-bed to the condition of an ash-heap, killing the young plants immediately after germination. The careless, thriftless farmer is more apt to experience these bad seasons than the good farmer. The remedy for drouth is always a part of the good farmer's plan of operations. Good thorough cultivation before seeding, and rolling immediately after, will enable soil to withstand drouth and retain moisture to a great degree. Sow grass seed as early as possible in spring with some grain crop to shade it, and I think no trouble will be experienced from drouth.—*Cor. Country Gentleman.*

Implements.

Combined Plough and Subsoiler.

The advantages of the combined plough and subsoiler pictured on this page will be seen at a glance. In form it resembles a double furrow-plough. When used as a combined plough and subsoiler, the right hand mould-board and coultor are taken off and a subsoiler put in their place. There is no treading by horse or man on the subsoiled land, the draught is much lighter than that of ordinary subsoilers and the implement is firm while at work The

subsoil tine is carried by a joint and stud, proportionately strong. The depth is regulated by the fore-wheel, and the tine prevented from burying itself and turning over by a stay on the bracket. A lever handle, within reach of the ploughma, enables him to take the tine up, or assist its entrance into the subsoil. The tine is fitted with a shoe, 6 inches wide. As the subsoiled ground is immediately covered by the plough, the effect cannot be interfered with by the horses' pressure.

SAW SETTING.—After filing a saw place it on a level board and pass a whetstone over the side of the teeth until all the wire edge is off them. This will make the saw cut true and smooth, and it will remain sharp longer. The saw must be set true with a saw-set.

SLATING ROOFS.—In the best work, slates are secured by copper nails. Iron nails dipped in boiled oil to prevent their corroding may be used. The nails should have large heads, thin and flat, so that they may not prevent the slates from lying close. Every slate should be secured with two nails; and in fastening, care should be taken not to bend or strain the slates, or they will crack and fly under sudden changes of temperature.

BUYING HARNESS.—When you think of buying a harness, examine the leather of the hame strap and the near tuck of the throat latch, and likewise of the crupper. If these ends are of a slazy stuff, calculated to squash and plague you while trying to make them enter their loops, don't buy. The man who cut the harness did not have the interest of the purchaser in his mind. At three separate and distinct scowls for each buckling the harness would be dear as a gift. And most likely faults and oversights run through the entire rig.

FRENCH POTATO PLANTER.—The *Journal d'Agriculture Pratique* states that among the new machines which especially attracted the attention of agriculturalists at the recent meeting of the Palais de l'Industrie was a potato planting machine, invented by M. Couteau, and constructed by M. Peltier, jr. By means of an ingenious contrivance, worked by a gear, the tubers, previously placed in a box, are carried successively into a pipe which opens and shuts automatically, depositing the seed with perfect regularity in the furrow made by a share with which the machine is provided.

A NEW CEMENT.—A French chemist is said to have succeeded in preparing a mineral compound, said to be superior to hydraulic lime for uniting stone and resisting the action of water; it becomes as hard as stone, is unchangeable by the air, and is proof against the action of acids. It is made by mixing together 19 pounds of sulphur and 42 pounds of pulverized stoneware and glass. This mixture is exposed to a gentle heat, which melts the sulphur, and then the mass is stirred until it becomes thoroughly homogenous, when it is fit for use; operate as with asphalte. If needful, it may be remelted by applying a gentle heat. The whole mass melts at about 248° F. At 230° F. it becomes as hard as stone, and preserves its solidity in boiling water.—J. F. W.

CHEAP DRAIN TILES.—If you cannot get pipe tile for draining, and have plenty of pine slabs at your mill, you can saw them off into bolts four feet long, then rip them into strips half four inches and half five wide; now saw them into boards one inch thick. Now nail the five-inch piece upon the four-inch, and you have a V-shaved tile. Dig your ditches two and a half feet deep, with an even descent; place these wooden tiles in with the open side down, throw some brush on top, and fill with dirt. The tile will last, in clay soil, fifteen to twenty-five years; in a light soil somewhat less; but it makes effectual drainage, even after the wooden tile are partially decayed. But where tile can be had for a reasonable cost, say $8 or $10 per thousand, it is cheaper in the end to use them. But in case tiles are used, it is well to put a layer of brush over them to keep the dirt from packing around them.—*Live Stock Journal.*

On Turning a Faucet.

How handy it is during the cold, blustering weather of winter, when everything is frozen and the paths about the house and barns all drifted up, to have an abundance of pure water for farm stock and household purposes under cover, just when and where it is wanted. While your neighbor is bringing water from a pump six or eight rods from his door with which to do the cooking and washing, and driving his cattle forty rods to a brook which must be cut out every morning—all you have to do is to turn a faucet, and the water comes in any quantity at your bidding; or by a better arrangement still, runs through your yards or shed, keeping a tub always supplied. No, this is not all you have to do; but once go to work in a resolute manner, perform the necessary conditions, and then with a slight turn of the thumb and finger the spring water from the hillside fills your bowl in a minute. This is just the season for performing this work, and when once done it is done for a lifetime. On how many farms are these brooks and springs situated above the farm buildings, which with but a comparatively small outlay of time and money, could be conducted into the kitchen sink, or the stable yard, and be forever a source of comfort and satisfaction.

Iron pipe is now so easily obtained, so cheap, and so satisfactory a water-carrier, that there would seem to be no excuse for bringing water in pails long distances the coming winter, or driving stock to water twice a day, to a brook forty rods away. Put the whole force of the farm hands on the work of opening the ditch, purchase the pipe, get an experienced man to do the fitting, and the whole job can be done up in a week's time. And no matter what the cost, so that it be reasonable, you will never regret the outlay. Count up the steps, the time, the inconvenience, the fretting, the suffering from cold to yourself and animals in getting through one winter by the waterpail and frozen brook arrangement, and offset it against the cost of having things so fixed that the turning of a faucet will supply all the water household and stock need—not for one winter, but for twenty—and see if you would dispense with the latter for all it would cost, returning to the old system. Now is just the time to introduce the reform. Follow our advice, and make yourself and family, flocks and herds, laugh out with satisfaction.—*Maine Farmer.*

A Convenient Door Hasp.

Below is figured a simple fastening which the editor of the *Country Gentleman* says has been in use with him for many years, and is found convenient and never liable to getting out of order. It is shaped like a common hasp, with a small blunt projection from the lower side, so as

to drop into the staple. When the door is to be merely shut, as during the day, the projection is simply dropped into the staple. When a padlock is to be added, the opening in the hasp is placed on the staple, and the lock hooked in.

A CONVENIENT GLUE.—Mouth glue is made by dissolving, with the aid of heat, pure glue, as parchment, glue, or gelatine, with a quarter or one-third its weight of coarse brown sugar, in as small quantity of boiling water as possible. This, when perfectly liquid, should be cast into thin cakes on a flat surface, very slightly oiled, and, as it cools, cut up into pieces of a convenient size. When required for use, moisten one end. A piece kept in the desk or workbox is exceedingly convenient.

WINDMILLS.—Why do not farmers erect windmills on their premises? They may often be used to great advantage in a variety of purposes, such as pumping water, sawing logs, cutting chaff, slicing roots, bruising and grinding corn, etc. They eat nothing, and would save a deal of horse and manual labour, when rest would be very acceptable to both man and beast. There is true economy in this, and it would be worth not only thinking about but doing.—J. F. W.

MEND YOUR OWN TUGS.—The best way to mend your own tugs is to keep some harness leather on hand and copper rivets three-quarter inch long and caps with a good steel punch. If a tug breaks, cut two strips of leather as wide as the tug and eight inches long. Put the broken ends together with one piece on each side, punch and put three rivets on each side of the break through these strips and the tug, and head down on caps. This makes a neat and a strong mend. You can mend other portions of the harness with rivets of the proper length, and save much time in going to the harness maker.—*Live Stock Journal.*