

AGRICULTURAL

MULCH FOR PASTURES AND MEADOWS.

That the yield of product in pastures and meadows can be greatly increased by mulching is now pretty generally conceded by practical men who have given the question due consideration, and yet we do not find that much effort is put forth as a rule to secure the benefits of mulching to either pastures or meadows, writes Thos. Shaw in Ohio Farmer.

The materials for mulching may be obtained from two sources, viz., the material grown upon the fields in the autumn, and farm-yard manure. The former is especially useful as a mulch for meadows, and the latter for pastures, although protection for both may be obtained from either source. We can imagine much being brought from other sources, as for instance, from muck swamps and marl pits, but usually the labor of drawing costs so much, that mulching from these sources cannot be practiced to any great extent under existing conditions.

The aftermath of meadows forms the cheapest and most profitable mulch that can be given to them. Practical men have noticed that when newly sown meadows are not pastured the same season, they are much less likely to fail the following winter. When they are cropped closely, the covering which should protect them in winter is removed, hence the more tender plants perish where the winters are stern and cold. But even after meadows have become well established, they are much benefited in winter by the partial exclusion of the frost. Of course many grasses and clovers will endure much cold, but if the temperature falls below a certain point, and if the exposure is sufficiently prolonged we can easily imagine a degree of exposure before which many varieties will succumb.

But the aftermath of meadows is usually even more helpful to them after they have passed the winter than while they are passing it. It is helpful to them in the moisture which it brings to them. When snow falls the long grass will hold much of it, so that it will not drift away. When the snow thus held melts, it is very helpful to the meadows, unless in sections where the rainfall may be over-abundant. It is peculiarly helpful in sections of country where the precipitation is light, as in some sections of the northwest, and it is also helpful in furnishing protection in winter in addition to that which is furnished by the aftermath. When the rains of spring fall upon meadows thus protected, a less proportion of the water escapes, either by running away over the surface or by evaporation, hence when the time of dry weather comes, such meadows have a sufficiency of moisture to continue a vigorous growth.

And the growth of early spring will commence sooner. The self-supplied mulch will break the force of the cold winds of early spring which so much retard growth. Such protection, combined with the greater vigor of the plants through the shelter given in winter, will give these meadows a long lead in the spring over those which have been eaten bare the previous season.

And all these benefits will equally apply to pastures, but for reasons, that will be apparent, it is not nearly so easy to provide a regular covering for pastures that will equally protect all parts of the field. Animals will not feed off a field evenly. They will crop some parts more closely than others.

We can imagine some instances where a mulch would prove a damage to meadows in winter. If the growth has from any cause been particularly luxuriant in the autumn, and if in the following winter an unusually heavy fall of snow comes down and lies long, the entire meadow may perish through smothering of the grasses. When fears are entertained on this score, it may be well to pasture off the aftermath before the advent of winter.

Meadows may also be protected by top dressing with farmyard manure. When the material is available, if the manure can be applied in the early autumn, the entire results will be more favorable than if applied at a later period, as when thus applied it will first provide winter protection and will then greatly stimulate the growth of the grasses by enriching them. But when farmyard manure is applied to meadows in the un-reduced form there may be some trouble in raking the following summer, as portions of un-decayed manure are liable to be gathered in with the hay.

But for pastures manure makes an excellent mulch. It may be applied in the autumn, if on hand, but it is usually more convenient to apply it in winter. It may be drawn fresh from the stables, and much straw in it is no objection. When drawn in winter it should be spread at once. We can imagine localities where it could not be thus applied in winter because of the absence of frost, or because of the presence of too much snow. But by exercising due thoughtfulness opportunity will generally be found to engage in this work with advantage at certain intervals during the winter. In places where there is much snow-fall it may be well to mark the line of application from day to day by the use of stakes. Where this is not done a fresh fall of snow may quite obliterate the line which divides the manured from the unmanured portions of the field.

A mulch thus applied from the barnyard in the winter season will be found peculiarly helpful to pastures. With every rain that falls the juices from the manure will go down into the ground and stimulate the growth of the grasses. The manure will also furnish a mulch which will greatly add to the degree of the moisture in the ground, and in consequence the growth of the grasses will be still further enhanced. I know of a few methods of applying manure which will bring a better return, and when I speak thus I do so from the stand-

point of experience. When manure is thus applied it is no objection though it should be fresh and composed largely of litter, for it is not easy to say whether the benefits from the manure as a mulch or as a fertilizer will be the greater. And it is easy to see that when the manure has much litter it can be applied with much more profit as a mulch while it is yet bulky and un-reduced. In the dry sections of the country the value of manure when thus applied cannot be easily overestimated. If men who live in regions where fresh manure will not decay quickly in the soil would thus apply it, they would find that they can put the same to no better use.

STARTING AN ORCHARD.

The ground for an orchard should be well and deeply cultivated, and free from weeds, well drained, if the soil requires it, and moist soils are better for draining except sandy or light gravelly soils with a light sub-soil. Such land may not require draining, but in every case it should be well worked and pulverized and enriched. The work of preparation must be done during the summer so as to be ready for fall or spring planting. Planting in the spring is preferred, which will enable the trees to take firm hold of the earth and to resist the frost of next winter; but planting may be done successfully in the autumn by protecting the trees so as to prevent the frost from heaving or displacing them.

Select your healthy and vigorous trees, and from a reliable nurseryman, and if possible from a soil similar to that in which you intend to plant your orchard. The different kinds of apples will depend upon your own choice and the suitability of soil and climate. I advise that the selection be made from the old tried and reliable kinds.

The distance apart should not be less than 30 feet, so as to allow the trees room to spread their branches and to form a low and spreading head. Close planting has a tendency to force trees to run up, and preventing the fruit from obtaining its proper color from the sun, and making it more difficult to gather the fruit. At the distance of 30 feet apart it will require 29 trees to the acre. Before planting the tree, remove all bruised and broken roots by cutting clean with a sharp knife. Lay out your ground in straight lines, so that your trees will be in line each way and at equal distances, 30 feet apart.—William Gray.

IMPROVEMENTS IN TANNING.

Old Methods in Which the Time Has Been Shortened From Months to Hours.

One of the great objections in tanning has always been the enormous time occupied in the production of really good leather. Hence, inventive talent has for many years been seeking to devise means for quickening the process. A method has just been brought into notice for producing good marketable leather in a comparatively infinitesimal part of the time involved in ordinary tanning. Leather is made by tanning hides or skins, after being treated with a certain preparation, with different reagents having a base of tannin. This operation used to be carried on exclusively in tubs or pits, where the hides or skins remained for months in contact with solutions of tannin, at first very weak, and then a little stronger. Various means of hastening the operation were tried, founded either on a species of working or drumming, or mechanical furling, in order to re-enforce the action of the tannin by constantly renewed contact, or upon the addition of various substances to the tannin solutions to increase their activity, or, lastly, upon the passage of a current of electricity through the mass. So far, tanners, from fear of burning or damaging the hides, have used solutions of tannin altogether too weak, commencing with a strength of, say, 1 degree, or at most 2 degrees Baume, in order to come gradually to the maximum of from 3 degrees to about 4 degrees Baume.

The new process is based upon the simultaneous employment of violent drumming or furling solutions of tannin, having a degree of concentration very far above that hitherto sanctioned by theory and custom. A barrel large enough to hold 10 or 12 cwt. of hides, and holding a solution of tanning of about six and a half degrees Baume, is rotated on its axis. It is not necessary to add any other substance or reagent, such as sulphur or other acid, turpentine and the like, as the highly concentrated solution of tannin acts with great promptness and effectiveness upon the hides. The barrel is rotated at a velocity of about 10 revolutions per minute. The hides need no preliminary preparation beyond the ordinary unhairing, fleshing and scouring. From time to time the motion of the barrel is stopped for taking samples of the liquid, which is brought back according to requirement not only to the initial density, but to a slightly higher stage, by the addition each time of a suitable quantity of concentrated tannin. So that when the first batch of hides are finished the solution is ready for the next. The time occupied varies, of course, with the quality and nature of the hides. From two to four hours are sufficient for small hides or skins, such as, for example, those of sheep and the like; and from 20 to 30 hours are needed for the heavy or thick bull or ox hides, such as those of the calf, cow and similar animals. When the skins are removed from the barrel they are ready for the currying and finishing operations of leather manufacture.

PAPER OF CIGARETTES.

The British Medical Journal says that the paper used in many brands of cigarettes made in England contains arsenic. When arsenic is inhaled in small quantities it causes a chronic cough and other symptoms usually associated with consumption.

THE HOME.

DON'TS.

I might have just the moosest fun, if 'twasn't for a word, I think the very worstest one 'At ever I have heard; I wish 'at it 'd go away, But I'm afraid it won't; I s'pose 'at it'll stay— 'That awful word of "Don't."

It's "Don't you make a bit of noise," And, "Don't go out of door;" And, "Don't you spread your stock of toys About the parlor floor;" And, "Don't you dare play in the dust," And, "Don't you tease the cat;" And, "Don't you get your clothing mussed;" And, "Don't do this and that."

It seems to me I'd never found A thing I'd like to do, But what there's some one close around 'At's got a "Don't" or two, And Sunday-'at's the day at "Don't" Is worst of all the seven. Oh, goodness! but I hope there won't Be any "Don't" in heaven!

TOMATOES FOR WINTER.

Tomato Jam—Peel and slice a quantity of ripe tomatoes, put with them an equal weight of granulated sugar, and cook an hour; when half done put in a sliced lemon tied in a thin cloth with a teaspoonful of ginger, and lift it out when the jam is done. Put in jelly-cups and cover with paraffine paper.

Canned Tomato.—Pare ripe tomatoes that are just large enough to slip easily into a can. Drop them into a kettle in which there are a quantity of tomatoes peeled and cut fine. When the pulp boils up well over them, put them in cans and cover with what remains in the kettle.

Tomato Pickles.—I'are small not quite ripe tomatoes, and weigh them, cover them with cold vinegar and let them stand three days. Pour off the vinegar, add five pounds of sugar to seven of tomatoes, spice to taste with cinnamon, cloves, etc. Heat the vinegar, put in the tomatoes and let them simmer slowly seven hours.

Tomato Mangoes.—Cut a slice from the top of large green tomatoes, scrape out the inside, replace the tops, and tie together. Let them lie in strong brine one day, then wash them well in cold water. Season chopped cabbage to your taste with salt, pepper, mustard, and a little grated horseradish. Fill the tomato shells, replace the tops and tie, place in a jar, and cover with cold vinegar.

Piccilli that Will Keep Well.—Chop separately a peck of green tomatoes, a large head of cabbage, a dozen green peppers, half a dozen red ones, and a dozen average-sized onions. Mix them, and put layers in a cloth, sprinkling each with salt. Tie up, and let hang over night to drain; then squeeze as dry as possible with the hands. Cover with cold, diluted vinegar, let stand six hours, then drain and squeeze as before. Mix together a scant teaspoonful of mustard seed, three tablespoonfuls of ground all-spice, and two teaspoonfuls of grated horseradish. Add a pound of sugar to sufficient vinegar of full strength to cover the chow chow, and cook it in the sweetened vinegar half an hour, then add the mixed spices, cook ten minutes and can while hot.

LITERATURE IN THE HOME.

It is not always the man who has attended schools and colleges for the greatest length of time that is the most learned and intelligent. Many of the greatest men both in science and politics, who have attained fame, and fortune through their own efforts, have been self educated. Very often the school is not adequate to give the children the taste for good literature which may be acquired in a home where there is some intellectual life. If the children are accustomed to read good books and hear intelligent conversation on subjects reported in books and papers, they will form a taste for going to such sources as interest and amuse them.

The habit of reading, the acquaintance with good literature, and the love for it may be acquired in the home if the atmosphere is at all favorable. A training in this direction commences as early as four years, and good influences at this time will often determine an honorable and useful life.

"THE STAFF OF LIFE."

While about the house to-day catching up the odds and ends of fall work and summer visiting, the subject of how to provide the family with good wholesome bread, daily, came uppermost in mind. While not wishing to discriminate in choosing from the many (doubtless good) brands of flour now upon the market, we would yet like to make known the Lenefsty brand, to be had at the Fair, in Chicago—both graham and white. The graham is furnished fresh from the mills the first and the fifteenth of every month, as we can gladly testify. This flour is not the common, plastered graham, usually sold in groceries and full of bran and siftings, but is a clean, mealy flour, nutty to the taste and making up excellently in pancakes; with sweet milk and baking-powder, or sour milk and soda; mixed thin, and having one egg beaten in. It can be used with yeast in the ordinary manner. The white flour is designed principally for pastry use and biscuits, and is to be relied upon for excellence.

By heating the gem pans sissing hot before commencing the breakfast—less than a half hour before—the gems can be baked nicely by the time the meal is ready. Nothing in the way of bread can be more healthful or palatable. Having in it no special leavening, eaten warm or hot it will not harm the little ones, nor injure dyspeptics. Gems.—For one dozen gems use the following receipt: One cup sweet milk,

two cups cold water, one egg beaten in, two and one-half or three cups Lenefsty's Graham, a little salt. Beat all together thoroughly. Do not sift the flour. Have the gem pans sissing hot; grease with a little butter. Drop the batter evenly into the cast-iron gem pan, filling each cup full. Set the pan for eight minutes on the shelf in the hot oven. Remove to the bottom, and bake the gems to a dainty brown. Serve warm with butter or jam. The whole process of making and baking should not take up but an hour's time. Cold gems can be made as fresh as new by dipping them lightly in cold water and warming quickly in a hot oven. Success in making these gems lies mainly in having the pans sissing hot and the batter firm enough to drop cleanly from the spoon.

Excellent Crackers.—Put a little good butter into the Lenefsty graham flour, stirring in well to taste, and make in soft dough all with sweet milk. Roll the crackers a half inch in thickness. Cut out rather small—say with an empty spice box. Place crackers on a sheet of stiff wire, and bake quickly in a hot oven. When done on one side, turn the crackers over and finish; take them, crisp and brown, from the oven to the table. These can be made extra nice by stirring in currants, chopped raisins, or stoned dates. Eaten warm in milk there can be had no better food for man or child; good whole wheat nicely prepared furnishing all the necessary elements for making good bone, brain and muscle.—Aunt Ellen.

HOUSEHOLD HINTS.

To prepare a floor for dancing have it well washed, and when the boards are thoroughly dry scatter borax in powder all over them and rub it in well with the feet. If there are children in the house get them to slide on the boards lengthwise, and you will have a perfect surface for the most exacting dancer. Instead of the powder as above you can rub the floor over, after it is washed and dry, with milk.

To clean brown shoes, take a pint of skimmed milk, half an ounce of spirits of salts, half an ounce of spirits of lavender, 1 ounce of gum arabic and the juice of two lemons; mix all together and keep in a bottle closely corked. Rub the shoes with a piece of sponge dipped in this preparation, and when they are dry polish them with a soft brush or a bit of clean flannel.

WHERE HEART DISEASE IS UNKNOWN.

A Beulah Land in Contrast with this Age of Fret and Fume.

Where this Beulah Land Thousands will enquire, for Heart Disease is striking down its victims in every corner of the land, and its terrors grow apace. Beulah Land to the victims of heart disease is to be found in the use of that remarkable medical discovery, Dr. Agnew's Cure for the Heart, which is miraculous in its effectiveness. In desperate cases it gives the quickest relief—really within 30 minutes after first dose is taken—and in a short time banishes the disease. Where the symptoms are less pronounced every wise man and woman will take this medicine as a certain means of freeing the system of any elements of heart trouble. Only one positive statement does this medicine justice—it is an absolute cure for heart trouble. Sold by W. E. Richardson.

"What is your business, sir?" "I am a political carpenter." "A political carpenter?" "Yes, sir; I nail campaign lies."

SUFFERED UNTOLD MISERY FOR TWENTY YEARS.

At Times Unable to Walk—Totally Cured of Kidney Trouble by South American Kidney Cure.

Perfect relief from intense suffering is as the contrast between the darkness of the dungeon and the bright sunlight of the heavens above. This was the experience of Mr. John Snell, a well-known retired farmer, of Wingham, Ont. Let him tell his own story:—"For two years I suffered untold misery, and at times I could not walk, and any standing position gave intense pain, the result of kidney diseases that followed a severe attack of la grippe. Local physicians could not help me, and I was continually growing worse, which alarmed family and friends. At this critical moment I saw South American Kidney Cure advertised and resolved to try it, as a dying man will grasp at anything. Result:—Before half a bottle had been taken I was totally relieved of pains, and two bottles entirely cured me." Sold by W. E. Richardson.

"Flee!" cried she. "You mean fly, don't you?" he asked. "Never mind what insect I mean; just git. Pa's coming."

AFTER FIVE YEARS OF AGONY

From Rheumatism Mr. John Gray, a Pioneer of Wingham, Ont., Secures Perfect Relief in Four Hours, and is Cured in a Few Days.

Mr. John Gray, 35 years a resident of Wingham, Ont., requests us to publish the following:—"About five years ago I contracted rheumatism, owing to an accident; and since that time have suffered great agony. At intervals I have been completely laid up and unfit for any kind of work. A friend strongly recommended me to go to Mr. Chisholm's drug store and secure South American Rheumatic Cure. I did so and received perfect relief in four hours. It enabled me to sleep which I had not done for years, satisfactorily. I used in all six bottles and am completely cured. I have recommended it to many and it always cures in a few days." Sold by W. E. Richardson.

"Willie you mustn't mock people when they speak. It's very impolite." "I didn't mean to be impolite, mamma. I was just playing I was the echo."

Piles Cured in 3 to 6 Nights.—Dr. Agnew's Ointment will cure all cases of itching Piles in from 3 to 6 nights. One application brings comfort. For Blind and Bleeding Piles it is peerless. Also cures Tetter, Salt Rheum, Eczema, Barber's Itch, and all eruptions of the skin. 35 cts. Sold by W. E. Richardson.

Pure

Blood means sound health. With pure, rich, healthy blood, the stomach and digestive organs will be vigorous, and there will be no dyspepsia. Rheumatism and neuralgia will be unknown. Scrofula and salt rheum will disappear. Your nerves will be strong, your sleep sound, sweet and refreshing. Hood's Sarsaparilla makes pure blood. That is why it cures so many diseases. That is why thousands take it to cure disease, retain good health, and prolong life.

Hood's Sarsaparilla

Is the One True Blood Purifier. All druggists, and the Ald of a 56c. cure Liver Ills; easy to take, easy to operate.

DUNN'S BAKING POWDER

THE COOK'S BEST FRIEND
LARGEST SALE IN CANADA.

A VICTIM OF SCIATICA.

Unable to Work Though Strong and Willing.

The Sufferings of a Well Known Guelph Citizen—Could Not Move About Without the Aid of a Stick—Again as Strong and Healthy as Ever.

From the Guelph Mercury.

There is perhaps no business or occupation that any man could follow that is more trying to the health—particularly in the winter—than that of moulding. A workman leaves the shop with his clothing wringing wet from perspiration, and a cold wind chills him to the marrow, making him a ready mark for lumbago, sciatica and kindred troubles. A moulder requires to be a man of more than ordinary strength, and to continue at his work must always be in good health, for the moulding shop is no place for an invalid. Sciatica is by no means an uncommon affliction for men of this craft, and once the dread disease has lanced a victim he seldom shakes himself free from it again. In fact some people declare that it is incurable, but that it is not we are able to testify by a personal interview with one once afflicted with the trouble, but who is now in perfect health, thanks to his timely use of the famous remedy. There are few workmen better known in Guelph than Chas. W. Waldren, perhaps better known as "Charley Waldren," for he has lived in Guelph almost continuously since he was three years of age, and he has now passed the 38th mile post, Mr. Waldren is a moulder, and has worked at that business for 22 years; and besides being noted as a steady workman, he is a man whose veracity is unquestioned. It is a well known fact here that Mr. Waldren had to quit work in January, 1896, on account of a severe attack of sciatica, and for eleven weeks was unable to do a tap. Knowing that he was again at work a Mercury reporter called at his residence one evening to learn the exact facts of the case. Mr. Waldren, when spoken to on the subject, replied quite freely, and had no hesitation in crediting Dr. Williams' Pink Pills with his remarkable recovery. "I am not one of those people who are seeking newspaper notoriety," said Mr. Waldren, "neither have I been snatched from death's door, but from the day when I quit work, until March 30th, when I started again, I was confined to the house with sciatica. It was located in my hip, and would shoot down my leg to my foot and was very painful. I could not move about the house without the aid of a cane, and then only with great pain. I was totally useless as far as doing any work was concerned, and I never free from pain, and it made me feel very much depressed, for beyond that I felt strong and anxious to be about. I am a member of three benefit societies, from which I drew pay, viz.: The Three Links, The Iron Moulders' Association, and the Raymond Benefit Society. People came to see me, and of course everybody recommended a sure cure. I didn't try half of them. It was not possible, but I tried a great many—particularly remedies that I had been in the habit of using for lumbago—but I found no relief. I tried Dr. Williams' Pink Pills. After using two boxes I noticed an improvement, and I kept on using them. When I had used six boxes I was back at work again. I kept on until I had finished the 8th box, and I never felt better in my life. "Have you noticed any recurrence of trouble since?" queried the reporter. "I have not," he replied, "suffered a single twinge since." Mr. Waldren has worked in all the moulding shops in the city, and was never in his life laid off sick as long as he was from the attack of sciatica. He hardly knew what it was to be sick, and is of that tough wiry nature that he can stand much greater physical strain than most people would imagine. Almost any person in the city can verify his story. Mr. Waldren said, as the reporter got up to leave, "I only hope some good fellow who has suffered as I did may notice my case and get relief as I did."

Dr. Williams' Pink Pills create new blood, build up the nerves, and thus drive disease from the system. In hundreds of cases they have cured after all other medicines had failed, and thus establishing the claim that they are a marvel among the triumphs of modern medical science. The genuine Pink Pills are sold only in boxes, bearing the full trade mark, "Dr. Williams' Pink Pills for Pale People." Protect yourself from imposition by refusing any pill that does not bear the registered trade mark around the box.

HER MEANING.

Angry Father—What do you mean by being engaged to half a dozen men at once?

She—Nothing.