

new home. It makes a part of the furniture of his rude cabin, and supplies a topic of useful and pious conversation for himself, his wife and little ones.

Scientific.

Milk Paint.

A foreign correspondent of one of our exchange papers says, that a paint has been used on the Continent with success, made from milk and lime that dries quicker than oil paint, and has no smell. It is made in the following manner: Take fresh curds, and bruise the lumps on a stone, or in an earthen pan or mortar, with a spatula or strong spoon. Then put them into a pot with an equal quantity of lime, well slacked with water, to make it just thick enough to be kneaded. Stir this mixture without adding more water, and a white coloured fluid will soon be obtained, which will serve as paint. It may be laid on with a brush with as much ease as varnish, it dries very speedily. It must, however, be used the same day it is made, for if kept till next day, it will be too thick, consequently no more must be mixed up at one time than can be laid on in a day. If different colours are required, any of the ochres, as yellow or red ochre, or umber, may be mixed with it in any proportion. Prussian blue would be changed by the lime. Two coats of this paint will be sufficient, and when quite dry it may be polished with a piece of woollen cloth, or similar substance, and it will become as bright as varnish. It will only do for inside work, but it will last longer if varnished over with the white of an egg.—*Sci. Amer.*

To Make the Best Copal Varnish.

Take one pound of gum copal, and melt it in a flask over a brisk fire of charcoal; at the same time, in another flask, boil or heat to the point of boiling one pint of linseed oil; as soon as the gum is melted, take it from the fire, and add the hot oil in small quantities, at the same time stirring or shaking it till they are thoroughly incorporated. Allow the mixture to cool below the boiling point of water, and then add nearly a quart of the spirits of turpentine: cork the flask slightly, and expose it for a few days to the rays of the sun, which will make it more smooth and shining. If a large quantity is to be made, a copper boiler that is small at the top will answer to melt the gum in. For ordinary or coarse work a larger proportion of oil and a little rosin may be added. If oil is used, in which red lead and litharge (in the proportion of half a pound of each to a gallon of oil) have been previously boiled, the varnish will become sooner dry.

To Give Wood a Gold, Silver, or Copper Lustre.

Grind about two ounces of white beach sand in a gill of water, in which half an ounce of gum Arabic has been dissolved, and brush over the work with it. When this is dry the work may be rubbed over with a piece of gold, silver or copper, and will in a measure assume their respective colours and brilliancy. The work may be polished by a flint burnisher, but should not be varnished.

A REMARKABLE instance of the divisibility of matter is seen in the dyeing of silk with cochineal; a drachm of which gives an intense colour to a pound of silk, containing eight score threads to the ounce, each thread seventy yards long, and the whole reaching about one hundred and four miles.

The addition of a small quantity of rosin to lamp oils greatly increases their illuminating power, and renders them less liable to coagulate.

Purifying Water.

A table-spoonful of pulverized alum, sprinkled into a hogshead of water, (the water stirred round at the time,) will, after the lapse of a few hours, by precipitating to the bottom the impure particles, so purify it that it will be found to possess nearly all the freshness and clearness of the finest spring water. A pailful, containing four gallons, may be purified by a single teaspoonful.

Glass.

It is difficult to foresee to what perfection the manufacture of glass may be brought, and to what purposes the article may yet be applied. The balance spring of a chronometer is now made of glass, as a substitute for steel, and possesses a greater degree of elasticity and a greater power of resisting the alternations of heat and cold. A chronometer with

a glass balance spring was sent to the North Sea, and exposed to a competition with nine other chronometers, and the result of the experiment was a report in favour of the chronometer with the glass spring.

Damp Walls.

A correspondent of the *Builder* has communicated a very simple method of preventing damp walls, by the mere outside application of a lather of soap and hot water, and then, as soon as dry, sprinkling the wall with a saturated solution of alum. He states that he prepared several places in this way, and water poured on the wall ran off as from a duck's back, without producing the least effect.

To Render Paper Incombustible.

Pound a quantity of alum in a mortar, add to it a small quantity of gunpowder, and dissolve the whole in three times its weight of water over a slow fire. Paper dipped two or three times while warm, and then dried, will be incombustible.

Cure for the Bite of a Rattlesnake.

The most simple and convenient remedy, says a correspondent of the *Macon Messenger*, I have heard of was alum. A piece of the size of a hickory nut, dissolved in water, and drank or chewed and swallowed is sufficient. I have good authority for saying it has been tried many times, on men and dogs, and that they have invariably recovered. I know of some planters whose hands are exposed to be bitten by rattlesnakes, who always have themselves provided with it in their pockets, and they have several times found use for it. We have no doubt of its efficacy.

The Farm.

Cleansing the Bark of Fruit Trees.

This operation should be performed in early spring, as well as in mid-summer. The rough, loose parts of bark should be scraped off, as well as moss and other parasites. The bark should then be covered with the following mixture, as high as the operator can reach, with an ordinary long handle whitewash brush.

Five pounds whale oil soap; one pound fine salt; one pound fine sand; two pounds potash; two ounces nitrate of soda, dissolved or mixed with water to the consistency of cream, and thoroughly rubbed upon the bark.

Many kinds of insects are kept from trees by a solution of whale oil soap alone, and many such as are resident in the crevices of the bark, are destroyed by salt. The fine sand is intended during the rubbing to scratch the outer coating of the bark, and thus assist the other ingredients for more perfect action. The potash and nitrate of soda will decompose or soften the dead parts of the bark, so that during the summer they will be thrown off by the healthy action of the growing bark. If the above mixture be applied in dry weather, it will become so hard as to remain during several showers, and thus have time to perform its office. Trees with smooth bark, such as the plum, many of the cherries, &c., should be rubbed with a wet rough woollen cloth in a few hours after applying the mixture; this rubbing will cause the sand to clean the surface so perfectly as to give the bark an improved and more healthy surface. Trees so cleansed are not as likely to be revisited by insects as those left with their natural surfaces, nor are they as likely to become bark-bound. Indeed we have never known a tree to exhibit the disease called bark-bound, the surface of the trunk of which had been softened by a soap wash in early spring. The cherry, apricot, peach and nectarine are subject, when left to their natural state, to this disease, and it has usually been attributed to too rich or too moist a soil; and under-draining and slitting the bark lengthwise with the knife are the usual remedies. The one is expensive and often impossible where choice trees are planted, and the other is barbarous and unsightly, causing exhalation of gum and consequent canker. In any case, a few applications of soap to the surface of the part hide-bound will remove the difficulty, and the mixture before recommended may be applied, slightly warmed, when required to soften the bark of a hide-bound tree.—*Prof. Mapes.*

Trimming Fruit Trees.

As soon as planting is done there may be leisure for trimming a little—not a great deal, provided the trees were attended to last summer. And if they were not we cannot advise

to the cutting of large limbs when there is no prospect of their healing over before the rot affects them.

May and June are the best months to trim, for the wounds heal sooner and the stumps are not so apt to crack as in winter or March. A fine saw is a good tool for cutting the limbs, though a chisel with a long handle will do when the limb is small. The operator stands on the ground and with a mallet strikes the end of the long handle. This can be done on pretty high trees without climbing.

But in either mode there should be care to cut in such a sloping direction that no water shall stand in the cavity which will soon be formed by the growth of the sap wood around the wound. Water standing here is like water on the shingles of a house. The sooner they become dry after a rain the longer will the roof last.

Most people are apt to trim too much when they set about it. Our written rules about trimming were imported from England and are not exactly suited to our hot summers. The notion of "heading down" apple trees to let the sun in to ripen the fruit has prevailed too far and many trees have been injured greatly by the practice. In our climate the trunks and limbs of trees need to be shaded in hot weather. What else was the shade made for?

Limbs should be cut before they have grown so large that the wound will not readily heal. When young trees are trimmed annually none of the limbs need to be more than about one inch in diameter when they are cut off. But an unskilful hand will cut too many. It should be considered that trees generally increase in growth in proportion to the quantity of leaves they bear. Leaves elaborate the sap and aid in drawing nutriment to the tree. Therefore all the limbs should be left to help the tree except such as must be cut this year to prevent interference with each other and such as might be too large to cut if left to another year.

We consider this to be the best general rule, though it is admitted there is a difference in apple trees in regard to the formation of a top. Good judgment and some taste are requisite to form trees well. Our object now is to caution young farmers against thinning out the limbs too much in their young orchards. We protest against cutting all the limbs this year that are ever to be cut. Leave some to be taken off next year and let the trees have the benefit of them one year more in case they may be cut another year as well as this.

It is quite certain that our hot suns often burn the bark on the exposed side of the tree and injure it beyond redemption. On this account therefore, as well as to aid the growth of the limbs, spare the tree when you trim it.

In young nurseries all the leaves that grow on the trunks should be left to aid in the growth through the summer. Why strip them off as many do? They help to make more stock for the tree and they should by all means be left to cover the trunks. Yet we have seen all such leaves stripped off by the hand.

We advise fresh hands to be cautious and not cut the limbs very close. They heal over the sooner when the stump is left to project a little.

Speedy Cure for a Foundered Horse.

As soon as you find your horse is foundered, bleed him in the neck in proportion to the founder. In extreme cases, you may bleed him so long as he can stand up. Then draw his head up, as is common in drenching, and with a spoon put back on his tongue strong salt, until you get him to swallow one pint.—Be careful not to let him drink too much.—Then anoint round the edges of his hoofs with spirits of turpentine, and your horse will be well in one hour.

A founder pervades every part of the system of a horse. The steam arrests it from the blood, the salt arrests it from his stomach and bowels; and the spirit of turpentine arrests it from the feet and limbs.

I once rode a hired horse ninety-nine miles in two days, returning him at night the second day; and his owner would not have known that he had been foundered if I had not told him, and his founder was one of the deepest kind.

I once in a travel of seven hundred miles foundered my horse three times, and I do not think my journey was retarded more than one day by the misfortune, having in all cases observed and practised the above prescription.—I have known a foundered horse turn in at

night on green feed; in the morning he would be well, having been purged by the green feed. All founders must be attended to immediately.—*S. W. Farmer.*

YOUNG FRUIT TREES.

It is a mistake to suppose that these can take care of themselves after they are set out.—Mulching is needed to protect them from droughts. Another injury to which they are exposed, is the scalding of the bark from the intense rays of the sun. If they had foliage sufficient to shade their trunks, they would need no other protection. But this they have not—and in consequence of this want, the bark assumes an appearance like copper, and the tree languishes, and not unfrequently dies.—Now a wash of clay, lime and cow-dung, applied before hot weather sets in, would seem to answer an excellent purpose as a coating, to protect young trees from this evil. It will also kill all insects and moss, and give a healthful, glossy look to the bark—the sap will flow the livelier under such a covering.

MONEY MAKES THE MARE GO.

So says the old proverb, but is it not equally true that the mare sometimes makes the money go? When a farmer has two or three old horses—mere apologies for horse-flesh—and can keep them on their legs only by stuffing them with oats and meal, he is spending money a great deal faster than if he kept one good horse, who will thrive and be in working order on no other feed but English hay or grass.

MOLASSES FOR THE UDDERS OF COWS.

We have been advised by a neighbor to bathe with molasses the udder of a young cow that was much swollen and feverish. We have tried it and find it has been of service. We have bathed the udder thoroughly three or four times and have never found anything that has given more ready relief. Cold water is said to be good when the bag is feverish, and we have first washed with cold water when the udder was dirty.

PINE TREES.

Pine trees grow well when transplanted in June. Probably the fore part of the month is best. We set a good number last year, near the middle of June. Nearly every one of them lived and flourished. A good sod should always be taken up with the roots. If the trees are pulled up they will not live.

The Cheese Room.

Cheese is animal matter, and it is difficult to attain a sufficiency of fresh air for its curing, and at the same time secure other objects.—A cheese room should be cool, dark, and well ventilated. It should be cool for the gradual ripening of the cheese; well ventilated to secure a good flavor to the cheese, and dark to keep out the flies. Cheese, butter, or cream will contract whatever bad taste there may be in the atmosphere about it, and in the ripening of quantities of cheese, a vast deal of effluvia will be given off, which will soon taint the air.—*Prairie Farmer.*

SCRAPS FOR THE ECONOMICAL.

If you would avoid waste in your family, attend to the following rules and do not despise them because they appear so unimportant—"many a little makes a mickle."

When ivory-handle knives turn yellow, rub them with nice sand paper or emery; it will take off spots and restore whiteness.

Silk pocket handkerchiefs and deep blue factory will not fade if dipped in salt water while new.

Spots in furniture may be easily cleaned by rubbing them with a flannel wet with the same thing that took the color—if rum, wet the cloth with rum, &c.

Lamps will have less disagreeable smell if you dip the wick yarn in strong hot vinegar and let it dry.

Clean a brass kettle before using it for cooking, with salt and vinegar.

If you wish to preserve fine teeth, always clean them thoroughly, after eating your last meal at night.

Linen rags should be carefully saved; they are useful in sickness; if dirty or worn, wash them or scrape them into lint.

Vials which have been used for medicine should be put into cool ashes and water, boiled and suffered to cool before rinsed.

Cotton, wet with sweet oil and paragonic, relieves the ear-ache very soon.—*Mrs. Child.*