HOME AND FARM.

Ought Shingle Roofs to be Painted?

If it is an economical practice to paint any other part of an architectural strucers have persisted in advocating not to paint shingles, except we judge them to be influenced by mercenary motives. Every intelligent builder is aware of the fact, that shingles and siding, when not painted, will wear out very much sooner than if they had been protected by a generous covering of paint. Hence, reasoning from a selfish policy, it is better not to paint shingles, because the paint will promote their durability, and whatever promotes their durability tends to diminsh the labors of the craft, and thus curtail the revenue of civil architects.

The house in which the writer was born was covered with shaved pine shingles in the year 1805, at which time the roof received a generous coat of oil-paint, made of linseed-oil and Venetian red. After or inseed-oil and Venetian red. After twenty years elapsed, another coat of paint, nearly black, was applied. Since that period no paint has been applied, and it is now a good roof for an old one. It does not leak, and the only repairs on it have consisted of a shingle added here and there, where a portion of a poor shingle was worn out. If the roof had not been painted the butts of most of the courses would have been worn entirely away; and if such long periods had not been allowed to intervene between the times of painting, the roof would have been a good one even after the lapse of a hundred years.

Some one once suggested that, if the roof is painted, the paint will cause the water to back up beneath the next course of shingles above, which will thoroughly saturate the two courses, and thus the decay of the roof will be hastened. That is unmitigated nonsense. There is not a word of truth in the assumption. On the contrary, when the surface is painted, the water will glide away so quickly that it it will not be drawn back between the courses of shingles half as readily as it will be when no paint has been applied.

The true way to paint a roof is to apply paint of some kind to both sides of the shingles. It is quite as important that the under side of every shingle be covered with paint as the surface, to prevent the water from being drawn up between the courses by capillary attraction. If good shingles are painted on both sides, and good paint be applied to the roof once in ten years, it will continue leak-tight for more than a hundred years.

When it is not desirable to save the water for drinking, coal-tar is an excellent and cheap paint for preserving shingles, and it will pay well to smear a roof with this material once in four or five years. When roofs are not painted, moss is liable to collect at the butts of every course of shingles, which promotes their decay more rapidly than alternate rain and sunshine. When oil-paint is used for painting shingles it is always better to employ some light color rather than black, as the apartments of the attic story, beneath a black roof, are liable to be uncomfortably hot in the summer, and, more than this, as black paint absorbs more heat than any other color, neither the paint nor the shingles will endure as long as if the roof had been covered with some light-colored paint. A metallic roof covered with light-colored paint will last much longer than if it had been painted with a black paint. most economical paint for the roof is a generous coat of coal tar once in a few years; but coal-tar will color the water for Lamb's Chinaman. But yet, with all this, five years after a coat is applied to the roof. - Industrial Monthly.

An agricultural writer furnishes the following conundrums for farmers to con-sider: Farms and farm hands, with the present prices, are poor property, and return a small interest; but, remembering Portland, Chicago, and Boston, and remembering that there is not a town of 16,000 inhabitants that may not be swept out of existence in a night, and remembering there is no absolute and everlasting investment but in the soil, is not three per cent, in perpetuity better than six or even ten per cent, in the unstable commo dities of brick and mortar, bonds and mortgages, insurance policies, and war ranty deeds, which warrant nothing at all

POULTRY YARD.

Feeding Fowls.

Where there is a family, and consequent consumption, there are many auxiliaries, such as bread crumbs, groats that have been used for gruel, etc. But it must be borne in mind that these are in the place of other food, and not in addition to it. When this can been had, other food should be diminished. I am not an advocate for cooked vegetables, except potatoes. Boiled cabbage is worse than nothing. In fact it must be borne in mind that corn, either whole or cracked, is the staple food, and the others are helps. Do not give fowls meat, but always have the bones thrown to them after dinner; they enjoy picking them and perform the operation perfectly. Do not feed on raw most; it makes fowls quarrelsome, and gives them a propensity o pick each other especially in moulting time, if the accustomed meat be withheld.

be longer and healthier employed and not hurriedly make way with, in a few minutes, that which should occupy them for hours. For this reason every sort of feeder or hopper is bad. It is the nature of fowls to take a grain at a time, and to pick grass and dirt with it, which assist digesany other part of an architectural struc-ture, most assuredly it is a commendable practice to paint shingles. We never could understand why certain build-ers have persisted in advocating not that attends the discomfort caused by it lays the foundation of many disorders. While speaking of food, it may be observed, that when, from traveling or other cause, a fowl has fasted a long time—say 30 or 48 hours—it should not be allowed any hard food. For the first three hours it should have only a small portion, say a teacupful of sopped bread, very wet, so much as to serve for food and drink. If the bird appears to suffer much from the journey, instead of bread and water give bread and ale.—Cor. Mich. Farmer.

Asiatic Fowls.

Having devoted much time during the past twenty-five years to the careful breedng of poultry, experimenting with nearly every known variety, I am fully convinced that the light Brahmas and Partridge Cochins excel all others in the production of eggs and as market-fowls. In keeping a very few birds for family use, the smaller varieties may do well; but for the smaller varieties may do well; but for breeding extensively for profit, I find them too fastidious, weakly when young and too small for profitable market-fowls. The Asiatics are very hardy, great winter layers, and when properly bred are broadbreasted, compact, solid fowls for the market, and can be kept on the same food that a hog will eat. I feed principally on pumpkins, small potatoes, cabbage and pumpkins, small potatoes, cabbage and all unsalable vegatables grown upon my farm. My twenty gallon boiler, if filled with vegetables at night, and after boiling ten minutes is thickened with eight quarts of corn-meal, feeds my 300 fowls the next day at a trifling expense. Our chickens hatched in March, sell readily in Boston market in June at \$1 each.

If properly managed there are no animals kept on our farms that are so remunerative as a well-bred flock of domestic fowls.—Cor. Ger. Tel.

TALLOW AS A CURE POR GAPES. - One day noticed a flock of eleven pure bred Creve cour chickens very bad with what is called 'gapes." I remarked to the man who had them in charge that he would not have many chickens out of that lot. "Oh! never mind," said he, " I have got a cure for them from a neighboring woman, which is a common half-penny tallow can-dle melted and mixed into about a quart of out-meal stirabout." The remedy was resorted to and the Creveccours have every one recovered and grown into finely developed chickens. I have since tried this cure, with invariable success, on Brahmas, Dorkings, &c.—Cor. London Field.

THE SHEEP FOLD.

Mutton Sheep.

The taste for mutton is growing among

American consumers of meat. Farmers,

oo, are learning that a fat sheep is a very convenient source of meat during the summer season instead of the hitherto inevitable salt pork or bacon. Besides, spring lamb with green peas and asparagus makes a dish for the farmer's table equal in delicacy to the roast pig of Charles worth investigation by those who make a business of keeping flocks. On the face of it there are two good reasons for this state of things. First, the Canadians raise wholly mutton sheep, grade Lincolns, Leicesters and Cotswolds. These are there specialty. Second, they raise roots. This is the key to their position. Without roots they could not raise that class of sheep. of sheep productive wholly of wool. nesh of the merino and grade merinos is not worth calling mutton. From them we marketable early; but their earliness and fatness are their only conspicuous the worth calling mutton. The merinos is not worth calling mutton. From them we marketable early; but their earliness and fatness are their only conspicuous and ties. We found the like and select those that are the most perfect and plump. We know that the like are the most perfect and plump. We know the like corn, squash, melous properties are carefully dried, pick over such of them, like corn, squash, melous properties are carefully dried, pick over such of them, like corn, squash, melous properties are carefully dried, pick over such of them, like corn, squash, melous properties are carefully dried, pick over such of them. ties. We feed these sheep on hay and corn; a sort of food which fattens them, but causes a disordered condition of body which shows itself very often by cutane-ous affections and premature shedding of the wool. "So bad begins, but worse remains behind," for the proverbial care-lessness and poor business tact of farmers leads them to permit their ewes intended for market to run with the rest of the flock and become with lamb. This is an unpardonable error and tends to disgust a mutton eater with the name of "native sheep."

If our farmers would raise mutton that deserves the name all this should be changed. They must raise roots as well as corn. The corn stubble should be prepared for a root crop by a fall plowing, or at least a double plowing early in Hundreds have purchased birds, above all Cochin Chinas, on account of their great weight, which being the result of meat feeding, has proved a real disease, incapacitating them for breeding. Where proper food is provided, all is not accomplished; it must be properly given.

No plan is socatravagant or so injurious as to throw down heaps once or twice a day. They should have it scattered as far and wide as possible, that the birds may

MARKING SHEEP .- For marking, any good linseed oil paint will be permanent, but on the dark surfaced Merinos the principal color should be "Venetian red." This will show at all seasons of the year. It is better to mix Japan varnish with the paint, as it will wear better. Cast iron ing the sheep gives the breeder a chance to weed out the most unprofitable animals with unerring certainty. One successful breeder informed me that as soon as he began to shear unwashed, and to number and register the yield from each animal, his flocks increased four ounces of wool to each sheep per annum, until he reached ten pounds per head.—Stock Journal.

STATISTICS show that there were in 1871 about 32,000,000 sheep in the United States, yielding an average of four pounds of wool each, or 128,000,000 pounds in the aggregate. In addition, the annual importation of wool amounts to about 70,-000,000 lbs., at a cost of \$10,000,000. Then we import woolen goods to the amount of nearly \$44,000,000 per annum. There is room, therefore, for an increase of 17,000,000 more sheep in the country to supply the home demand for wool, and for about 12,000,000 to displace the importation of woolen goods. But this can never be done effectually until we adapt the different breeds of sheep to different lands and latitudes in order that we may produce all the grades of wool required in our manufactures.

THE VEGETABLE GARDEN.

Potato Culture in the Mountains.

The Amador Ledger puts forward po-tate culture as worthy the attention of those who want profitable employment. It savs:

If men are disposed to labor, a true source of revenue will result from intelligent mountain cultivation. To illustrate our proposition, let us inquire what can be produced say on ten acres of mountain land. Potatoes being of prime necessity and never a drug in the market, we will inquire what the labor of one man may be made to produce in that article alone. In the first place the land will cost him nothing; his own labor will clear it of underbrush, and fence it with brush fence, which will answer all purposes the first season. His outlay would be:

Breaking up ten acres @ 86 \$ 60 Water for irrigation 20

Outlay before crop matures......\$250

From careful inquiry of men who have had experience in the cultivation of potatoes in the mountains above us we are assured eight tons to the acre can be rea-sonably calculated upon with fair labor and necessary irrigation. Taking this as correct, ten acres would yield 80 tons. Mountain potatoes have never sold in our market for less than \$50 per ton, and most generally at \$60; and we would be safe in saying all that could be produced would bring two cents per pound, or \$40 per ton. Now as to the result, if we are correct in our opinion, 80 tons at \$40 per acre, \$3,200.

Cost of production in the beginning. \$250 Hired help in getting in crop and

Conveying to market, at \$5 per ton . 400

Total cost, exclusive of the labor of

Lamb's Chinaman. But yet, with all this, our fat sheep and spring lambs are not successes. Occasionally we raise a few might deem the above result to be greatly green fly." show that the Canadians beat us in the quality of the sheep they send to market.

The best mutton and the heaviest lambs

Save Your Own Seed.

Every gardener has experienced the same rouble with seeds put up for sale. is beyond dispute, but so great is the demand upon them that it is almost impossible for them to supply the home demand. The ony way to avoid the disappointment occasioned by a failure of seeds to germin-Every Canadian farm has its field of roots ate is to save your own supply. Save only as we have our of corn. We keep a class those from perfect—not overgrown—fruit or plants of the finest flavor.

boys sort over every kernel of corn he put in the ground, choosing only the most perfect from the middle of the ear, and always to his own advantage, as his crops proved. As many seeds, like onions, parsnips, carrots, salsify, etc., will not always germinate when two years old, label the boxes or bags containing your seed with the name and year of growth. Place them in a dry, cool place, where neither rats or mice will break through and steal them. - Ohio Furmer.

PLANT OPTEN.-A good rule to insure success in getting a good stand of tender crops is to plant often. Take, for example, melons, squashes, cucumbers, Lima beans, and such other products as may be desirable to start early, and which often fail when planted early, and apply the rule at the head of this article, and snecess would be certain. Fit your ground early; make broad, rich flat hills, slightly erowning, to insure dryness and gain warmth. Then plant early in the season, and one week later put down a few more seeds in the hills with the thumb and fingers; a week later repeat the planting, and, if the season be particularly cold and backward, and the first planting do not appear, a fourth may be necessary.

THE FLOWER GARDEN.

Saving Flower Seeds.

Though the gathering of seeds reminds us that the beauty of the flower is gone, it is a pleasing occupation, because it promises us pleasure for another year. As a usual thing it is better to depend you have very fine flowers, choose two or three plants and pick off all the side buds, sending the whole strength of the plant into two or three blossoms at the most; frequently one is quite enough. Tie up the plants with colored yarn, so that no one will pick them; pull up all the single flowers that might mix with them, and you may be quite sure of saving good seed. Gather them on a dry day, when the seeds are thoroughly dry. Seeds preserved in the seed vessel are more clumsy to pack away than those which are cleaned, but they are said to keep fresher. When ready to sow them, clean them by passing through sieves, having holes large enough to let the dust escape and retain the seeds. Small sieves can be made of a thin bit of pasteboard cut in a circular form, and the edges turned up; then pierce the bottom of it with holes made with a pin or a darning needle. Make several different sized sieves, and rub the seeds through the different ones.

A lady can make a small cabinet of pasteboard, with as many drawers in it as there are letters of the alphabet, and as she ties up the packets, each can be put into its corresponding drawer; or a paper bag with each letter of the alphabet marked upon it, can hold the seeds until desired for planting.—Every Woman Her Own Flower Gardener.

PLANTS FOR THE WINDOW.—The selection of plants for winter window vases depends essentially upon which side is to be the point of view. If chiefly from the outside, large leaves and large colors show best, such as bulbs, or well grown foliage plants, as begonias, etc., kept under glass shades to preserve the necessary air moist-ure, with the warmth which they require. But if the vase is seen chiefly from the inside, the case is very different. Colors will not show well against the light, but neatness of outline and graceful wantonness of spray will show with great elegance, especially if seen against the sky with only the panes of glass intervening. The pretty curis of the Coliseum ivy (Linaria cymbalaria), or the ringlety smilax, (myrsi-phylium), or the fine tufts of Gypsophila and some Saxifrages, Sedums, Galiums, and other Alpine plants and grasses are graceful in every turn, like the unstudied movements of a joyous child, and color will not be wanting. Leaves thin enough to show their tints transparently show them against the sky to great advantage. Most of these plants endure dry air very well .- Country Gentleman.

CARE OF HOUSE PLANTS - A lady in Kansas gives her plan of caring for house plants as follows: "I live in a frame house and last winter kept fifty pots of different kinds of geraniums, roses, fuchsias, and remontant pinks, all of which received the same kind of treatment, and in the spring my plants were more healthy and the leaves a dark green color. Many come to me for slips in preference to the greenhouses. Every two weeks all the winter I would take a handful of tobacco stems and steep them by pouring boiling water over them until it looked like strong tea, then, when the tea cooled enough to bear erop would leave a margin to the producer, moments and then straighten out and have for about six months' labor, the sum of that bright fresh look they have in sumfor about six months labor, the sum of that bright fresh look they have in sum-\$2,450. Those who are not conversant mer after a shower. Then I would weak-

TRAINING PETUNIAS.-A writer in the London Garden says that a fine effect is well bestowed labor, we do not think we obtained by this method of training petu-have overestimated what the yield would be under favorable culture. like hoops, and drives both ends into the bed, placing them at suitable intervals all over it. On these he ties and trains his petunias, which blossom more abundantly than usual under this treatment. Petuthere are honest dealers in garden seeds mas have been successfully treated as if sweet pea vines, and trained on a slanting trellis. The trailing habit of this plant, especially late in the season, is not always sufficiently considered.

> DIAMOND SAW .- At the American Institute Fair a diamond saw is at work in the machinery department, in the form of a neatly built iron model, one-fifth the size of the more cumbrous wooden apparatus. The blade, it will be remembered, cuts through the stone by means of carbons or black diamonds which are securly set along its edge. There is an ingenious feed motion for moving the saw, and another device motion for moving the saw, and another device to lift the latter, consisting of an excentric on the crank pin communicating with a knuckle joint and levers, so that it is allowed to cut only in drawing. The small machine exhibited, we are told, penetrated brown stone at the rate of foresteen inches and marble at saven inches of fourteen inches and marble at seven inches per hour. A novelty about this invention is its oplication to the cutting of window moldings, evels are made by suitably turning the stone, and rounded edges by gradually moving the latter under the saw. The work exhibited to us was very smoothly cut, and especially noticeable for its clean and sharp angles. The apparatas, the inventor thinks, does the labor, in moulding, of from twelve to fourteen stone cutters.—Scientific American.

An examination of the amount of gaseous constituents in samples of deep sea water obtained during the Porcupine expedition of 1869-70, showed that both surface and bottom water contain more carbonic acid and less oxygen in the more southern than in the more northern latitudes, the examinations thus made embrac institutes, the examinations thus made embrac-ing samples take from localities extending from the Farce Islands to Lisbon. Contrary to the general supposition, however, there is found to be no greater quantity of dissolved gaseous constituents in the bottom than in the surface of the water, although it is admitted that the power exists of pressure at great depths to re-tain gases in solution if once evolved there.

THE ORCHARD.

The Cracking of Fruit by Rain.

Almost every one, says an exchange, has noticed that juicy fruits such as plums, peaches, grapes, tomstoes, etc., will be cracked by a rain. The phenomenon has been of painfully frequent occurrence the past season, and the losses to some growers have on this account upon the seedsmen for your supply, but if been heavy. The cracking has been explaind in various ways, but we think it is properly attributed by Bousingault to osmose. If a bladder filled with syrup be immersed in a vessel of water, the water will after a while become sweet; the syrup passes through the membrane of the bladder into the water, and correspondingly the water passes into the interior of the bladder. But this interchange is not an equal one; the lighter liquid, the water, passes in one; the lighter liquid, the water, passes in many times more rapidly than the heavier liquid, the syrup, passes out. The consequence will be that the bladder will be distended to its utmost, and at length burst. This is a general law, that where two liquids of unequal densities are separated by a membrane, whether animal or vegetable, they will interchange, the weaker liquid passing more rapidly than the denser one, and this will be kept up until the liquid upon both sides of the membrane is of the same density. A ripe toward or plane the same density. A ripe tomato or plum may be considered in the condition of the bladder of be considered in the consistent of the final error of syrup. The rich juices of the fruit correspond to the syrup, and the thin membrane which forms the skin of the fruit represents the bladder. When the ripe fruit is kept constantly wet with water by a rain, osmose takes place, wet with water by a rain, osmose takes place, and the water passing through into the fruit distends the skin, which not being very strong is soon ruptured. If the fruit were to be surrounded by a liquid denser than its juices, it would, instead of expanding and breaking, shrink, and the skin become shriveled. When strawberries or currants are sprinkled with sugar, a syrup is soon formed by some of the juice of the fruit, and this being considerably denser than the juices of the berries they are soon flabby and shriveled.

For Canning Fruit.

I use mostly glass cans, says A. R. Rogers. knowing they are cheapest and best; cheapest because the cost at first is but little more than for tin ones, and they can be used for a succession of years just as good as the first, while tin cans can be used with safety but one year. The glass cans are better, because we can see every day just how the fruit is keeping; and if any show signs of not keeping good, we can use them first. We often hear people say if the top of the fruit in the can moulds, and the top of the fruit in the can moulds, and forms a thick, solid coating over the fruit, the fruit will not ferment or work, as it is often called, but the flavor of the fruit is injured very much. Two years ago I read in the Rural New Forker how to can peaches in cold water. I thought it would be a very nice way if the peaches would keep good; but being a little fearful, I only filled one can that way, and did it exactly as directed. My peaches did not go up; they looked all right; but when I opened the can, the juice or water was as thick as jelly and tasted very bad. The rest of my fruit kept good, and I think it a better way to cook the fruit just enough to heat it boiling hot all through; put in the cans while hot, and seal. We think fruit of all kinds retains its natural flavor better without adding sugar till ready for the table.

Keeping Apples.—A correspondent of the Cultivator states that he kept 1,200 bushels of apples, mostly Baldwins, through the past winter and spring in his cellar. He claims that by his mode apples may be kept the year round, without losing their juiciness or crispuess. His theory is that the early rotting and decay of apples is due, to a great extent to a vegetable miasma in the air, which is communicated to it by vegetable evaporation under certain con-ditions. The effect of this miasma is first seen in a minute speck; sometimes as many as a doz-en may be counted on the same apple. His remedy is a daily airing of the cellar or place where the apples are stored, arranging so as to where the apples are stored, arranging so as to have a brisk circulation, until all the stagnant air is expelled, and its place occupied by pure, healthy air. His success proves that his views are at least worthy of consideration. A farmer in the eastern part of Connecticut, last fall, packed some apples in plaster, filling up all the interstices with this material. Opening the barrels on the 14th of June, he found the fruit in a wonderful state of preservation. There was not an eighth as many decayed ones as in barrels put up in the ordinary way, while the fruit was almost as fresh as when

Care or Scions.—A writer who is a grafter by profession, says the most successful meth-od he has found to keep scions in a fresh, healthy state is, to layer them down in good, clean sawdust, slightly damp. He says they do far better than placing the ends in the earth or layering in the sand.

The Tetorski.—The early bearing habit, hardiness, early ripening, beauty and fair quality of the fruit, are thought sufficient to render the Tetofski worthy of being more exensively planted than in time past.

WRITING MACHINES.-After all, we are inclined to think that the real solution of this problem of rapid and easy writing will be mechanical rather than alphabetic. It is the pen that is inadequate to the work that needs to be done. As an instrument the pen may be perfect of its kind, as the common sewing-needle is perfect. Neither pen nor needle is likely to be ever done away with wholly; yet both fail alone to meet the increasing demands of our quick-moving civilization. The sewing-machice has come in to do the great bulk of our stitching. We must have a machine to do the same for our writing. The letters must be struck with a metal type instead of being traced by hand; and the writer's part must be confined wholly, or chiefly, to the touching of appropriate keys. With such a machine the distinctness of the writing will no longer be at the mercy of unsteady or undisciplined nerves and muscles; the characters may be as complex and significant as those of Bell's pen that is inadequate to the work that needs to complex and significant as those of Bell's Visible Speech, or even the Chinese, without increasing in the least the labor of writing, and the "copy" will correspond exactly with print. The degree of success already attained by several inventors of writing-machines gives every assurance that the manual labor of liter. several inventors of writing-machines gives every assurance that the manual labor of liter-ary workmen is certain to be greatly dimin-ished. May we hope that the quality of their work will be correspondingly improved.—Ex.

MILE for butter-making should be handled gently, and put at rest as soon as possible. A reduction of temperature is desirable as soon as the milk is drawn; this should be effected with the least amount of stirring. The more it is stirred the less will be the yield of cream. When set it should be protected from even the least in.