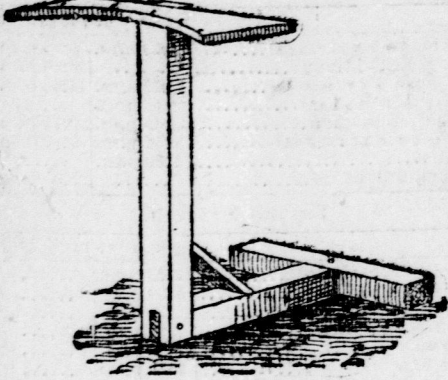


FARM AND GARDEN

A HOME MADE BAG HOLDER.
A Convenience Every Farmer Ought to Have.

By the use of a bag holder, constructed as shown in the accompanying illustration from a sketch by S. Barrington, it is possible for one man to bag and tie the grain as fast as it is run through the

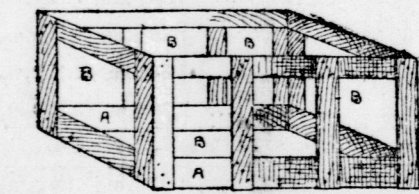


DEVICES FOR HOLDING GRAIN BAGS.
fanning-mill. This contrivance is a very easy thing to make, and will pay upon every farm. The one in the engraving explains itself. The most important point to be considered is to make the foundation blocks of 4x4 inch heavy timber to prevent upsetting. Instead of the complete arrangement, simply the bag-holding circle can be made, and hung along the side of the granary, or to the mill, or any other upright surface.—American Agriculturist.

Dehorning Profitable.
A commission of the Ontario Government to examine into the question of dehorning, reports as follows: A number of veterinary surgeons and directors of experiment stations express the opinion that disbudding or preventing the growth of horn can be performed in calf-hood with much less pain. The commissioners, although not prepared to recommend that the operation be limited by law to the period of calf-hood, express the hope that experiments will be made in this line, and that if it should be definitely demonstrated that these methods are accompanied by less pain, and that the results are equally satisfactory, farmers generally will give them preference over dehorning at a more advanced age. The difference of opinion as to the age at which the operation is best performed is so great that the commissioners do not feel disposed to recommend any limitation in this respect. That the practice of dehorning be permitted when performed with proper appliances and with due regard to the avoidance of unnecessary suffering, and that the Ontario Government should bring to the attention of the Dominion Government the desirability of amending the law relating to cruelty to animals so as to give effect to this recommendation. That the Ontario Government should direct the management of the Ontario experiment farm to experiment with chemicals on the horns of young calves, and also with cutting out the young embryo horn, with a view to ascertaining whether these methods are more desirable than sawing off the horns when they have attained their full growth. It seems to be established beyond reasonable doubt that dehorning, by effecting a change in the disposition of the animal, greatly increases the marketable value, besides enabling the owner to handle his stock with greater ease, economy and safety. In the English market the buyers give about \$5 per head more for dehorned cattle, owing to the belief that they put on flesh better. Farmers and butchers also testified that they suffered serious loss by the cattle using their horns on each other.

Manuring Fruit Trees.
All kinds of fruit trees, young and old, are benefitted if the ground is dressed with broadcast manure, extending as far on each side as the height of the tree. It softens the freezing of the ground and the manure is washed down into the soil. Caution, however, must be used not to place coarse manure against the stems of the trees, as it invites the mice which know the bark and girdle them. It is safest when manure is spread about the trees to leave a circle of bare ground within a foot of the stems, with the ground slightly raised to keep the manure away. Where bare manure cannot be had, the rakings of the lawn and orchard make a good mulching for young trees, especially protecting the ground from the severest freezing. If the trimmings of evergreen trees can be had, a thin scattering of their branches over the leaf mulching will prevent the latter being blown away.

A Simple Feed Rack.
This rack is 10 feet long, 34 feet high, and 3 feet 4 inches wide. It is open at top and has no bottom in it. It is boarded up 20 inches from the bottom



on all four sides, marked A. All the other boards are 6x12 fencing. All the spaces marked B are holes through which the cattle reach to eat, the feed being thrown inside. Hook it together with hooks and staples at each corner, above and below. Use wrought nails and clinch on the inside. Stock cannot run over and waste feed such as hay, fodder, etc.—Ohio Farmer.

A Hint Worth Heeding.
If a man will grow grass in his orchard let him keep sheep to pasture it down and fertilize it. That is many times better than to think of mowing the grass every few days and leaving it on the ground as a mulch. The busy farmer will simply omit, neglect or forget to do it.

Oil For Harness.
An easy and it is claimed a successful way to oil harness is to use crude petroleum. Add a little lamp black and apply without washing the leather. The oil will not only take off the dirt but will soak into the leather, softening it and making it waterproof.

Sheep Not Hard to Please.
Almost anything which the land produces can be used as food for sheep, and yet there are many men who feed their animals on variety of food continuously.

RAISING ONIONS.

Points on Raising a Profitable and Very Toothsome Crop.

E. T. Perkins, in Mirror and Farmer, says the character of the soil on which I plant onions is sandy. The ground is plowed quite deep early in the spring, when it can be worked easily. Then it is harrowed until well pulverized. It is very important to have it fine, for onion seeds are small and would otherwise drop down too deep. The land is then furrowed and a liberal quantity of well rotted stable manure and ashes are strewn in the furrows. I draw the earth which was thrown out back and thoroughly mix it with the manure by hand; probably should do differently if growing onions on a large scale.

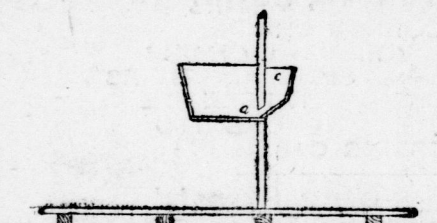
I believe in early sowing seeds for a good crop—the earlier the better—so they will germinate quickly, as the ground is then moist. Cover about half an inch. If planted late, on rather moist soil, they are liable to form thick necks and become nearly worthless. I have broken down the tops of specimens that acted in this manner, but have never seen much good resulting from the treatment as the necks will never dry up like the rest; often they grow up again if the season is wet. I used to plant in beds, but they are difficult to weed. By planting in rows there is much less work in keeping the weeds out. They must be kept free from weeds, for you cannot grow both. When the little plants appear, I sprinkle ashes over the ground. Some advise planting radishes among the onions, as the onion maggots will attack them first, then they can be pulled and more planted. By this method you can destroy many of them, and perhaps save the crop from destruction.

Hen Nests.

How shall we make our hens' nests is, nowadays, a question much discussed by poultrymen. A great many humbugs have been invented—wire and cloth, or sack nests, etc.—each one recommending his or her invention, but none as good as the old box nest. Fill well with new straw or fine hay. Keep them so they are tempting to the biddies. Wood is a great protector against uncleanness, of which cloth is not; wire is very good. No matter what kind of nests you use, always keep them clean. There is no part of the hen house worse to breed vermin than the nest is.

The hen wants warmth to the nest in winter, which is what will draw the vermin. Never allow one lot of straw to remain over two weeks, unless the hen is sitting, then it is a good plan to throw in sulphur and lime mixed equally. It is a great enemy of lice and will not hurt the eggs at all; put this in twice during the three weeks of sitting. Do not let the nest get the best of you. One hour of work now will prevent 10 days when the warmer weather comes on. When you take old straw out of the nest always burn it.—Ohio Farmer.

A Slow-Feeding Box for Voracious Horses.
Many horses are such rapid eaters that much of the oats and other grain enters the stomach without being broken and consequently passes off undigested. The feed box illustrated herewith,



FEEDING BOX FOR VORACIOUS HORSES.
says the American Agriculturist, obviates this difficulty. The improvement consists in simply attaching a small box, c, to the outside of a common feed box, a, so that the feed will fall into the feed box proper at a. It is plain that grain placed in the box c will follow the inclined bottom of the box, and gradually fall into the feed box, but only as fast as it is removed from the aperture a by the animal feeding. It is a simple and very effective arrangement, and should find a place in many stables. It saves grain by causing the animal to eat slowly, without throwing the grain as many horses do.

One Lady's Side Issue.

A lady writes us as follows: "My husband is a professional man, and I passed the early years of my life in a large city. But when we came to reside permanently upon our farm I became interested in the poultry upon the place, and now have an interesting flock of upwards of 100 Light Brahmas, White Leghorns, Spangled Polish and some exquisite little Bantams, which I attended to myself, and enjoy the pleasure vastly. I am sure that ladies whose household cares do not absolutely prevent them from giving to this rural pastime the attention required to make it successful, will find real satisfaction in this agreeable word, and I only wonder that more Canadian women do not believe this, and act upon it."

The Strawberry Bed.

An exchange gives this good advice: "Strawberries should receive an application of fertilizer now, so as to allow plenty of time for the substances to disperse and be carried down to the roots by the rains. If the rows were treated with fertilizer last fall the best substance to apply now is about 100 pounds of nitrate of soda per acre, but if no fertilizer was then applied, potash and the phosphates should be added."

A Remedy For Heaves.

A subscriber to the Farm, Stock and Home, says he has never found a remedy for heaves equal to a compound of eggs, honey and vinegar. He beats three eggs into one quart of pure fruit vinegar, and after about three days, or when the mixture is well together, he adds one pound of strained honey. In tablespoonful doses it can be given with the feed twice a day or placed on the tongue of the horse.

Live-Stock Notes.

The flesh of a well-fed guinea is equal to that of a wild duck. Give a system in feeding: give an allowance of varied food, all that they will eat up clean and yet want just a little more.

Keep the stock hogs and young pigs growing, if not fattening right along. A day passed without some grain is a day's ration lost.

Where Ashes are Valuable.

Wood ashes are especially valuable as a fertilizer when applied to fruit crops. Their action is to increase the woody growth rather than the fruiting, being the mineral remains of a woody growth. Apparently wood ashes give the best results when applied to grapes and apples. They should be spread in around the apple trees, and some distance from the trunk.

LA FLECHE FOWLS.

A Critical Estimate of the Value of These French Fowls.

A singular name for a singular fowl! Whether it means, as it has been usually interpreted, The Flash, or whether it means The Arrow, from the supposed resemblance of its comb to an arrow-head, is a matter of small consequence. The former idea, referring the fowl to the class of poultry bred with special reference to their use upon the table, seems certainly more natural, for La Fleche is a choice table breed of fowls in France and other European countries. A good many years ago Mr. Philander Williams, of Taunton, Mass., imported some specimens of this breed, but they passed out of his hands and practically ran out. I remember some years ago of learning of a remnant of the descendants of this early importation, and of riding one bitterly stormy and ex-



TRIO OF HIGH BRED LA FLECHE FOWLS.

ceedingly dark night to see them. After presenting proper credentials, and satisfying the owner that I had a legitimate purpose in view and was not a hen thief, he condescended to exhibit the fowls. They were very small, not much larger than Black Hamburgs, though even then they showed the distinctive shape of the breed. Their small size led me to wonder how they ever came to be regarded as among the leading table breeds, and this wonder did not disappear until January, 1889, I saw at the Buffalo, N. Y., Exhibition the fowls, recently imported by McPren Scotten, of Detroit, Mich. The sight of these fowls explained the mystery, for they were large, heavy, full-meated specimens, and clearly displayed the table properties which were said to possess. Since that time, at our leading poultry exhibitions, some fine specimens of the breed have regularly appeared, whether they, too, are recent importations, or descendants from the Scottish birds I am unable to say. I have suspected the latter, as Mr. Scotten, who is a game fancier, early disposed of his La Fleche; though it is by no means improbable that other and more recent importations have been made in the past three years. I have an indistinct recollection that some have been made by a gentleman in New Jersey.

The fowl is a strange looking one. It has legs of fairly good length, something of the carriage of the Black Spanish, but is more stocky in build. Its comb, probably more than anything else, gives it the peculiar expression it possesses, for the comb consists of a lump of flesh between, or just back of, the nostrils, behind which rise two red spikes. The plumage is jet black, the shanks also showing in this line. With its "suit of ink" and its two antlers, the fowl seems quite different from all others. Behind the comb there is often a small tuft of feathers, and an inch or so of the crest. This ought not to be, for exhibition purposes, but nevertheless is often there. The French breeders have not told us exactly how the fowl was produced, but its appearance indicates some, at least, of the elements of its composition. The tall, stately carriage and the plumage of black point to Black Spanish as one of its parents, and the fact that it was bred in France, the Black Spanish of France leaves little doubt of the fact. The rudimentary crest shows that some crested breed was used in its production. For a long time it was supposed that this breed was Polish, but it is difficult to reconcile this supposition with the size of La Fleche. Later, and it seems with a very good show of reason, the Crevecoeur has been suggested as the crested breed that was used. This fowl would give the black plumage and the desired size, and would indeed fit into the appearance of the breed under discussion. A cross of Spanish and Crevecoeur would produce a fowl quite closely resembling La Fleche in size, color, shape, and other characteristics. Its table qualities have already been alluded to. The body and breast are plump, the flesh is delicate and the skin white. The color of its skin and shanks handicap the breed in most American markets, as much as would a yellow skin and yellow shanks in the markets of France. I recently read an advertisement of a French poultry breeder for sale and concluded his advertisement in words to this effect, "All these breeds are especially suitable for the table as they have dark shanks and a white skin." So do trifles make a fashion, even in the poultry markets of the world. As a layer the breed may be regarded excellent for summer months, but not a safe dependence for winter. The eggs are large, and the shells are white in color. It has been generally supposed that the La Fleche is a delicate breed. The tinbred specimens were unquestionably thus affected, but I am informed by personal acquaintances, who have kept the more recent importations, that they found the fowls quite hardy, ranking about on a level with our American breeds. Still the reputation for a delicacy, derived from the degenerate descendants of the earlier importations, clings to the breed, and perhaps deters some from keeping it who would otherwise be inclined to do so.

While acknowledging the many excellent qualities of this fowl, and while further stating that I believe that it can be bred to a handsome profit whether for practical or fancy purposes, yet one would not be doing his full duty to the readers of this publication if he failed to state some reasons why it does not stand that it would attract so great popularity as some breeds enjoy. The black plumage, though very handsome to look at on the fowl, leaves black pin feathers upon the dressed poultry which are less pleasant to the sight. The white skin does not make the fowl look as fat as

yellow skin would; and Americans are prejudiced against the latter. Its dark shanks, while entirely suitable to a white-skinned fowl, are not regarded with favor by American purchasers. All this may be unreasoning prejudice—probably it is—but one who is rearing poultry for sale cannot afford to omit the effect of such prejudice from his calculations. If a man keeps fowls simply for his own consumption he can afford to rise superior to prejudice, and if he keeps one of the fowls, as I have done, he can keep the dark-legged white-skinned breed. I have done such things myself and was none the poorer for the doing. But if when I was doing this I had been intending to dispose of my stock in the market, I would have been as unwise as this prejudice may be unreasonable. A practical raiser has not the time for missionary work, to convert people to a more sensible view of such matters. He who caters to a market must provide what a market demands. The leading French breeds are good fowls, and La Fleche is one of the best among them, but—for market that tells the whole story.—H. S. Babcock, in American Agriculturist.

The Horse's Shoes.

Probably there is no one line of business in which so much bungling work is done as shoeing horses, especially for winter traveling, when frozen roads and ice abound. An hour spent in a blacksmith shop, where a dozen or more horses are operated upon, reveals a great deal of ignorance and quackery. Invariably the toe and the heel calks are made high, and generally too broad. They are made thus so they would wear longer; when the fact is, the opposite is the case. It should be borne in mind that, as a rule, the shorter, stouter and smaller the calks are, so long as they answer their purpose, the more effectual they will be, the longer they will last and the easier they will be for the horse. On ice, with high calks, no other part of the shoe touches; and it gives the animal a partial awkwardness as if walking upon stilts, while small sharp calks enter their length into the ice, and the horse stands squarely on his shoes. Most of the first-class shoeers with large calks come upon the one at the toe; but with small calks, a share of this wear comes upon the rim of shoe; hence sharp, small calks will last longer than large ones. High calks, while they confer no firmer foothold—and on very hard roads not so firm—are a potent means of inflicting injury on both the foot itself and the limb also, says Dr. Wilson in Practical Farmer. It is only from that portion of the hold which enters the ground surface that the horse derives any benefit in foothold; and it must be apparent to the most ordinary observer, that long calks which do not penetrate the hard ground are so many levers put in his possession to compel him to wring his feet, rack his limbs and inflict untold tortures upon himself.

When to Breed Animals.

It is customary to have mares served on the ninth day after foaling. This may be well if the mare is strong and healthy, and if there appears sufficient reason for it. Young females that have been put to breeding too young, before their physical powers have become developed should have rest. Such should pass over one, two or three periods of heat. Bitches, whose offspring it is desirable to procure, cannot be thus treated. With small animals it is a matter of less consequence, though the periods of breeding should be regulated by the seasons. Pigs and lambs coming in winter should have proper provision made for the protection and preservation of their young. Grass-eating animals should come in when such food is abundant upon after the due period of lactation of the mothers comes from economy or from the habits of nature. As a rule, the progeny of domestic animals would do better during their entire lives, could they receive natural nourishment for periods for longer than it is the general custom to permit. Cows that are drained to the last drop of milk possible cannot properly nourish a fetus at the same time, unless the system has some rest between the periods of gestation. Many animals are annually sacrificed from the unyielding burdens of maternity. The popular mind is satisfied because death is attributed to tuberculosis, or other ailments. But debilitated animals are in a state that renders them especially liable to take on disease, because they have not the strength to resist the attack.—A. T. Sibley.

Training Colts.

A colt's education should begin the first week of its life. Then its disposition is formed better than at any other time. It is most easily impressed, and has not acquired a tendency to resist. Whatever is taught then, the colt falls direct into, and it becomes, in a manner, instinctive. The young animal has nothing to unlearn afterwards, if this education is begun in time, and is kept up constantly. Young colts trained for the track are put to work at two years old, and run races; a sort of work that requires much more difficult management than the ordinary work of the road, or the field. The farm horse may be taught anything the owner wishes before this age, and may earn its living at light work before it is two years old. A regular course of gentle and kind training is indispensable. The first lesson is the use of the halter and the bridle. Thus by gradual teaching, its duty and business are learned, and it understands what is required of it. It is naturally willing to obey, and is pleased to work when it has never been hurt by it. But when its education is considered complete, it should not be suspended, for, like that of a man, it goes on continually, some new experience coming up at times that calls for the good management of the horse's owner.

An Ever Present Object Lesson.

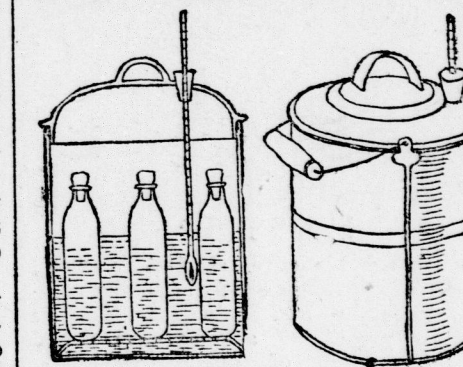
Good stock is an educator. It presents an ever present object lesson of the value of breeding, selection and cultivation.

THE DAIRY

STERILIZING MILK.

A Simple Method of Destroying Germs in Milk Used for Table Use.

The sterilization of milk, now quite extensively practiced in order to destroy the injurious germs which it may contain, can be satisfactorily accomplished with very simple apparatus. The vessel containing milk, which may be the bottle from which it is to be used or any other suitable vessel, is placed inside of a larger vessel of metal, which contains the water. If a bottle, it is plugged with absorbent cotton, if this is at hand, or in its absence other clean cotton will answer. A small fruit jar, loosely covered, may be used instead of a bottle. The requirements are simply that the interior vessel shall be raised about half an inch above the bottom of the other, and that the water shall reach as high as the milk. The apparatus is then heated on a range or stove until the water reaches a temperature of 155 degrees Fahrenheit, when it is removed from the heat and kept tightly covered for half an hour. The milk bottles are then taken out and kept in a cool place. The milk may be used any time within twenty-four hours. A temperature of 150 degrees maintained for half an hour is sufficient to destroy any germs likely to be present in the milk, and it is found in practice that raising the temperature to 155 degrees and then allowing it to stand in the heated water for half an hour insures the proper temperature for the required time. The temperature should not be raised above 155 degrees, otherwise the taste and quality of the milk will be seriously impaired. The simplest plan is to take a tin pail and invert a perforated tin pie plate in the bottom, or have made for it a removable false bottom perforated with holes and having legs half an inch high, to allow circulation of the water.



A MILK STERILIZER.

The milk bottle is set on this false bottom, and sufficient water is put into the pail to reach the level of the surface of the milk in the bottle. The hole may be punched in the cover of the pail, a cork inserted, and a chemical thermometer put through the cork, so that the bulb dips into the water. The temperature can thus be watched without removing the cover. If preferred, an ordinary dairy thermometer may be used and the temperature tested from time to time by removing the lid. This is very easily arranged, and is just as satisfactory as the patented apparatus sold for the same purpose. The accompanying illustrations show the form of apparatus described, and recommended by the United States Department of Agriculture.

Success in Dairying.

Success in dairying depends in a very large measure upon the individual effort of the dairymen. Unless he puts skill and intelligence into the business by selecting the proper cow, providing her with the proper food, and giving her his best attention, he cannot expect to reap a very large profit out of his investment. Too many patrons of our cheese factories carry on the dairy branch of their farming operations in a sort of haphazard way, and then condemn the business because it does not return them a handsome profit.

It pays to keep a good cow or none. It is surprising how many poor cows are kept in some of our oldest dairy districts by men of long experience. In many factories last season where one patron would realize \$45.00 per cow for the season, his neighbor would only realize \$25.00. This is due nearly altogether to the good judgment and superior intelligence of the \$45.00 man in selecting and feeding his cows, as compared with the lack of good judgment and carelessness on the part of the \$25.00 man. It costs on an average about \$28.00 or \$30.00 to keep a cow during a year, and about half of the cows kept by the average dairymen give in return for this expenditure about \$30.00 per annum, and a great number come far short of this amount. This means that there are numbers of cows that might as well be taken to the butcher's block, for all the benefit they are to their owners. If it were pointed out to a farmer that his hired man, for example, was not worth his board or the wages he was receiving, the farmer would simply rise up in his wrath and get more work out of that man, or give him the G.B. Why should not as much good sense and superior judgment be shown in dealing with the cow that does not pay for her keep?

The profit in any business is not always at the market end of the concern, but at the home end. The profit depends upon the difference between the cost of production and the price obtained. Therefore, the man who can produce goods the cheapest is going to reap the largest profit. The logic will apply especially to the business of farming, and particularly dairying, as the market price of dairy products does not vary considerably in comparing one season with another.—Farmers' Advocate.

Dairy Suggestions.

If you have never churned granulated butter it time to begin.

Canada forbids the adulteration of cheese, and Canada is right.

If the cows are "home grown" and are not gentle it is apt to be the owner's fault.

It never increases the milk supply to pitch milk stools at the cows or swear at them.

If you mean to make a success of dairying this winter, believe you can and go ahead.

At the price of feed and milk this season it will not pay to feed poor cows—it never does.

Perhaps one of the things needed about your place is an icehouse; if so, do not wait till the crops are wasted before building the house.

Look out for the man that wants to sell you the "right" to get more butter out of the milk than the cow put in it. Take the right to get out all there is in it, but pay no royalty for doing it.

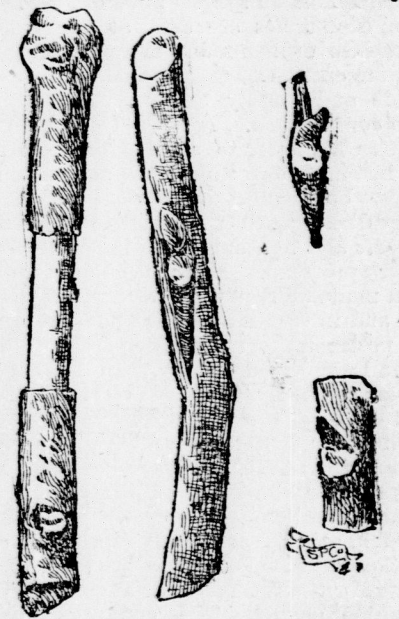
PLANT MORE TREES.

Evils of Forest Devastation—How to Induce Wider Tree Planting.

Trees were a bane to the first settlers of a large portion of our country at least. Like other good things there was too much timber—too many trees. Many a weary day was spent and many a lousy life worn out in removing giant trees, clearing the forests, and while the old residents or their immediate descendants live, it is difficult to build up a sentiment in favor of restoring the forests which it was their life's labor to remove. But we are living in a fast age. Where an acre of timber was felled by our fathers, a section has been demanded by us. Ages are required to change Palestine from a fruitful to a barren land. The Cedars of Lebanon are sacred relics of the grand forests that "grew around about Jerusalem" and sheltered a happy race. We are just beginning to experience some of the evils which have overtaken older nations and which will just as surely overwhelm this people if we persist in the destructive policy heretofore pursued. European countries have spent and are spending millions to reclothe the waste places. Now is the time for us to act if we would avoid similar expenditures and ward off disasters from ourselves and those who are to come after us. Everywhere the living waters are disappearing. The lumberman's axe and fires started by criminal carelessness are even now cutting down or burning up our fine forests of trees, destroying the fine green robes of our mountain sides. Every observing man sees the inevitable result.

But by "blending the useful with the beautiful in planting," we can kill two birds with the one stone. As Edwin C. Powell, of New York, remarks in the American Agriculturist, nut growing is a commercial industry receives two little attention, and the greater part of the chestnuts, hickory nuts, pecans and hazelnuts consumed in this country are picked from trees that have grown naturally. No attention has been given to planting them, nor to the propagation of good varieties, much less to their improvement or the origination of new and better ones. More attention could profitably be paid to nut-growing, for nuts are a delicious and wholesome article of food, and will be used more largely as the supply increases. The trees, after being once established, require no care, have no enemies worth mentioning, and the product is clean gain. Many old pastures, hillsides, rocky knolls, and out-of-the-way places could be devoted to the production of nuts with ease, profit and advantage. Nut trees have a long, strong tap-root, which makes them more difficult to transplant than fruit and ornamental trees. It is better to transplant the trees from the nursery rows when they are a year old than to leave them longer.

Hickory trees, chestnuts and others should be trained in the same way for convenience in gathering the nuts. The hickory trees can stand five, or even ten feet closer—about twenty by twenty—than the chestnuts, because of their upright habit of growth. But little attention has been paid to propagating good varieties, or from extra fine trees, and mainly because it is commonly supposed that it is impossible to bud or graft. The failures in this line have been from doing the work at the wrong season. The cleft graft commonly used in grafting fruit trees will not do nut trees, at least I have never known it to succeed. The veneer graft is the proper one to use, but a better one still is a combination between grafting and budding. The buds on nut trees, hickories especially, are very large and prominent, and for this reason, and also because of hardness of the wood, the success of growth, and the toughness of the bark, spring grafting is rarely successful. The style



METHODS OF BUDDING HICKORIES.

of graft illustrated should be practiced on limbs from one-half to three-quarters of an inch in diameter; the latter being the better. The work should be done in the summer, after the young buds are developed. Select the stock to be worked upon, and procure buds from as large young wood as possible. With a sharp budding knife remove from the cion a strip of bark about one and one-half inches long, with a bud in the centre, as shown in the accompanying engraving. Then remove a similar piece of bark from the stock, and put the bud in place of it, trying it with basswood bark or soft cotton twine. If the bark on the cion is larger in diameter than the stock, cut off a strip to make it fit evenly, while if the stock is larger in diameter than the cion, remove only enough bark so that the cion will fit. After the bark has joined perfectly and become tight to the limb, the strings should be cut, so as not to impede the circulation. The middle stock illustrated shows the common way of budding, as practiced on fruit trees. The prepared bud ready for insertion is shown, also the limb after it is inserted and before tying. Both of these styles are from buds worked on hickory. Chestnuts work much easier and give better results.

Influence of Plants.

Nothing gives more cheerfulness to the home in winter, says the Western Rural, than a few thrifty looking plants. Even if blossoms are few which is often the case where one has not special facilities for keeping an even temperature, the "little green things growing" will be an inspiration and a pleasure. Where no special conveniences exist for caring for plants, only standard, hardy sorts should be chosen. Geraniums, fuchsias, ivies and many others can be grown with little trouble. A hanging basket or orrery is a delight to the eye during a whole winter. Even the sometimes despised wandering Jew grows so easily that it is a boon to one with little time to spare for flowers or plants.