Soils and Crops

Address communications to Agronomist, 73 Adelaide St. West, Toronto

REPAIR TOOLS ON THE FARM.

"Man without tools he is nothing, with tools he is all."—Carlyle.

Forty years of observation leads me to believe that the average farm is poorly equipped with repair tools. Not as much as a good sharp axe can be found on some farms. If I could have but one tool I would choose the axe. The first tool used by man was an axe made of stone, it is the fundamental tool.

In grandfather's day, a set of farm implements consisted of plow, spike-tooth-drag, wagon, harness, and a few hand-tools, as rakes, forks, hoes, and scythes. So about the only repair tools required were an axe, monkey-wrench, jack-knife, a chisel, a brace and bits.

With the present-day implement equipment, which may include tractors, motor trucks, automobiles, windmills, gangplows, disc-harrows, planters, drills, binders, huskers, and threshers; it stands one in hand to have good facilities for making quick and inexpensive repairs.

We all know of men who spend many a half-day every summer going to and from town and paying someone a dollar an hour on repair work, that they could do themselves at home in half the time that they spent on the road, if they had tools with which to do the work.

Tools most needed are axe, pocket-knife, monkey-wrench, claw-hammer, hand saw, steel square, cold chisel, files, screw-driver, wire pliers, punches, jack-plane, draw-shave, wood chisels, brace and bits, a grindstone or emery wheel, two saw-horses, and a work-bench with vise attached.

The most useful and economical vise for farm use is a regular blacksmith's vise. Small cast-iron vises are too fragile to be of much use.

Outside of work-bench and saw-horses, which one can make for himself, the cost of the above mentioned tools is about $25 at present prices. Six per cent. interest on the above cost is $1.50 per year. Saving of a half day in a busy season more than pays it.

The more mechanically inclined farmer might add to the above list such tools as, forge, anvil, drill-press, hack-saw, pipe wrenches, jack-screws, taps and dies, spirit level, trowels, soldering outfit, and cobbler's outfit.

A certain amount of raw materials for repair work is as essential as tools. Inch boards, 2x2, 4x4, 2x6 and 2x8 scantlings are of frequent use. Nails, from carpet tacks to six-inch spikes, but mostly 8d. size. Srews, rivets, bolts, nuts, washers, wire and hoop-iron. Paints, linseed oil, turpentine, putty and glue.

Farmers need to bear in mind that city wages are excessively high when compared with his own, so that it is good business on his part to do his own repair work in so far as possible, so that he may retain those high wages for himself. Farmers are obtaining fair prices for their products, but have to pay too much for what they buy.—A. N. Clark.

DAHLIA CULTURE

The dahlia has become one of the noblest of garden flowers. Those who have not been keeping in touch with the development of this flower would be amazed at the shades, form and size of the modern dahlia. It is doubtful if any flower can surpass the dahlia in these characteristics. With proper culture one can have dahlias blooming from the latter part of July until well into October. The rapidity of introduction of new and improved varieties in recent years is a revelation to amateur and professional gardeners alike. So well has this flower advanced that a test plot for it has been established at Mimico, Ontario, under the supervision of the Canadian Horticultural Council. These grounds will be used for trying out different methods of culture as well as the proving of new varieties with a view to registration.

The dahlia requires a rich soil, well prepared, and one that will not only retain moisture, but also drain quickly at times of excessive rainfall. In clay soils it is recommended that coal ashes be thoroughly mixed in to help the drainage. It is a mistake to plant each year the whole clump of roots from a plant of the previous season. The individual tubers of the clump should be used as separate plants. It is well to select the strongest and best of these. Each tuber should be cut from the group with a sharp knife, being careful to see that a piece of the crown or eye is present. It is the eyes, as in potatoes, that produce the sprouts and the new plants.

Another system of starting the plants is by the use of cuttings. The group should be started into growth at the beginning of March in a greenhouse or warm window. As soon as the young sprouts have three pairs of leaves, cut just below the second pair and place in a two-inch pot, using a compost of equal parts of loam and sand. When the cuttings have filled the pots with roots, they should be removed into four-inch pots, where they may remain until it is time to plant them out after danger of frost has passsed. The soil, when removed from the pot, should not be disturbed but planted in a hole carefully prepared for it.

The dahlia requires plenty of room. Rows three feet apart, and the plants three feet apart in the rows, is close enough. When planting, it is well to cover the tubers with sand to prevent rotting. A handful of sheep manure and a springling of bonemeal placed in the bottom of the hole and mixed with the soil that is used for filling in, will bring on a plant rapidly. It is well to drive a stake beside the plant at the time of planting. This will be needed to support the plant later on.

The dahlia plant should produce but one stem. If more than one comes up, leave the strongest and cut the others off. If exhibition blooms are wanted, disbud every second shoot the whole length of the stem. Careful watering is essential. The ground should never be allowed to dry out. During the growing period occasional dressings of sheep manure and bonemeal well worked in, will ensure luxuriant growth. These fertilizers should be kept a few inches away from the stems of the plant. The dahlia in its most modern form may be regarded as an aristocrat of the flower kingdom. One can pay long prices for the newer creations or secure very beautiful varieties, that have been in cultivation for a few years, at very moderate cost.—Can. Hort. Council.

POULTRY.

It is a serious mistake to crowd poultry of any age into quarters too small for their comfort and well-being. The results of crowding young chicks are particularly far reaching, because next year's income depends largely on the pullets to be raised this coming summer.

In estimating the capacity of colony brooder houses it is well to allow one square foot of floor space for each three chicks when it is desired that the chicks have optimum conditions. On this basis the house will be large enough to take care of the pullets that are to be raised to laying age, provided the young cockerels are sold as broilers.

Hatches should be planned to fit the available brooder house capacity just as closely as possible. Often it may be advisable to put an extra fifty chicks in some house rather than to operate an additional coal stove.

Under no circumstances, however, should young chicks be started in flocks so large as to average more than five chicks to each square foot of floor space.

Shipments of Argentine Cattle.

Although without a doubt exportation of live cattle to Europe from the Argentine is bound to have some effect on the market, it need have no marked discouragement on Canadian shipments. It does, however, indicate that for the future we must look for keener competition, which can be overcome only by steady maintenance, and improvement if possible, of quality. It will be noticed that a cablegram in the daily paper recently announced that 150 head, averaging over 1,200 lbs., the first shipment in 25 years, had arrived at a French port, and was thought to mean a continuation of such consignments. Apropos of this the following comment in the January market report of the Dominion Live Stock Branch becomes of special interest:

"Lord Vestey in giving evidence before the British Commission on food prices stated that during 1924 the profits made by his company on their Argentine shipments of meat was less than 50c per hundred. Heavy handling and labor costs were mainly responsible. Sir Edward Vestey, brother to Lord Vestey, said that during the last six months of the year their profits were practically nil. Referring to the present high prices of beef, it was given as a reason that the Continent is now taking very large quantities equal to about 1,250,000 cattle during 1924. This has created a shortage and low average prices are not expected.

Getting Rid of Weeds.

The way to get rid of weeds in small grain, hay and pasture fields is to get rid of them in the seed supply. That is, sow only clean seed.

Sometimes it happens that you find yourself forced to use seed with a lot of weed seeds in it, and in that case, the thing to do is to get the weeds out by screening. There are seed graders on the market that will take out mustard, buckhorn, etc. These graders do not cost a great deal, and one will pay for itself in a year or so.

Brake Tests Should Be Made.

Always test your brakes when starting, and have them inspected frequently.

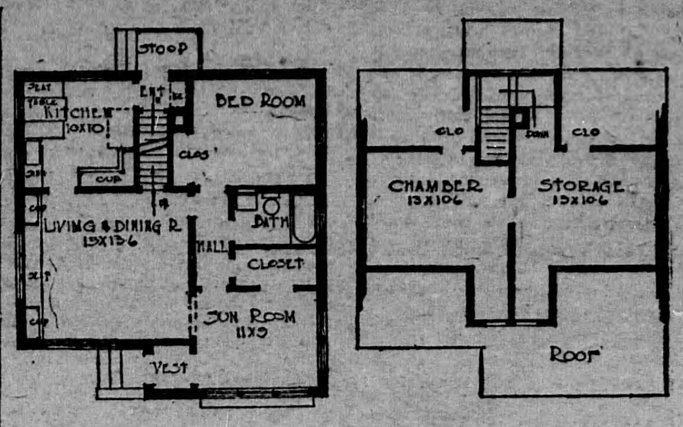
A SMALL BRICK AND TILE HOME

1921 DESIGNED BY W. W. PURDY

The use of brick and tile in the construction of the small home is becoming more popular every year. It makes a warm house in winter and cool one in summer, at oftentimes a cost not exceeding ten per cent more than a well-constructed frame house.

The home here shown was planned for an owner who desired the above construction, simple design, and a minimum cost. Careful study of the floor plan will reveal a number of interesting features and will show that the plan has been carefully studied with a view to eliminating waste room, each room serving a two-fold purpose.

The entrance is direct into a sun-room, off of which is a closet large enough for bed and dressing room. The living room is a combination living and dining room. The fireplace has been omitted and a built-in seat with china cupboards placed across the end. The kitchen, while small, is large enough to provide the necessary space for cupboards, sink and range, as well as built-in pullman set. The refrigerator is located in the small entry and can be filled without going into the kitchen.



The rear bedroom has a good sized wardrobe which can be used for closet bed if desired. The stairway leads to the second floor where one fair sized chamber has been shown to be finished, together with an equal amount of storage space. If desired, too, the large bedroom on the first floor can be used as a dining room and the storage space on the second floor be turned into an extra bedroom.

The basement contains the usual laundry, furance room, etc. Using hardwood floors with hardwood trim in the living room, pine to paint in the bedrooms, it is estimated that this home can be built as described, exclusive of heating and plumbing, for from $3,500 to $4,500.

APRIL FOOLS HOLD A PARTY

BY BEATRICE PLUMB.

April Fool's Day is the jolliest twenty-four hours of the year. It's then that laughter is contagious. What an ideal time for your party! This verse will make a good invitation printed on foolscap paper in red ink and folded into neat dunces' caps:

They say there's one born every minute—
Don't know how much of truth there's in it!
Next Wednesday night we'll have a party—
An April Fools'!—and here's a hearty
And real-for-honest invitation
To join our foolish celebration.
Please dress the part. (To put you wise,
The craziest guest will win a prize.)

Two vacant-eyed scarecrows should receive your guests. They must greet each newcomer with something foolish, like "Many batty returns of the day!" or, "With every good wish for a bright blue year!" Tack up plenty of laughable signs. Near the door where newly arrived guests will see it first have a card reading "Good-bye. So glad you couldn't come!" At the foot of the stairs, "Stop, look, and whistle!" At the head of the stairs, "Thousands escape safely—you should worry!"

When your guests are ready to settle to the program announce that, since this is an April Fools' party, only *simple* games will be tried. The first old favorite will be Musical Chairs. See to it that the fun is fast and furious until the last chair is won by a triumphant guest. Then present the prize for the *first* person who lost his chair. The prize could be a small doll's chair with the inscription, "To make up for the one you lost."

The second game will be a simple Nut Hunt. Give each guest a paper sack, promising a prize to the one who finds twenty nuts in five minutes. Of course there aren't any nuts hidden, and presently someone will say so. Present this someone with a shiny tin mug inscribed, "A bright gift for a bright child." By this time your guests will suspect a hoax in every game, so try something different.

Craziology is the most side-splitting game I know. Have the boys and girls draw from different hats cards on which you have previously written melodramatic sentences describing action. Here are some typical examples, "Flinging himself on his knees before every girl he met, he groaned, 'Sold again!'" "The car skidded and rolled over." "The dog barked." Tell your guests that when you say "Go," each one must act out the sentence written on his card, doing it continually until you call "Halt!" You will think you are in a madhouse. At the word "Go!" one guest will groan on his knees, "Sold again!" Another will skid, while a third will bark like a dog. The craziest performer should receive as a prize a one-way railroad ticket to the nearest insane asylum.

Two more games before refreshments and the judging of costumes. Hold a Cabbage Head Relay Race. Each contestant must carry on his head a small round cabbage. The trick is to reach the goal and return without spilling the vegetable cabbage head off the human cabbage head. For the last game play Nuts to the Nuts. Each one is given a paper sack containing twenty peanuts. On the floor, about twenty feet away, is another sack, empty. The prize, a walnut, is awarded to the one who first eats all his peanuts. A journey must be made between the eating of each nut to put the shells in the empty sack.

Games over, take the party to a specially prepared room for refreshments. Doughnuts and coffee, nut bread and peanut-butter sandwiches could be served. Your guests must sit on stepladders, tables, high stools and boxes. The table centre should be a bouquet of cauliflower surrounded by young beets, carrots and onions, nestling in a bed of parsley.

Now, go to it! I'm sure you'll have the merriest time!

Combatting Enemies of the Rose Garden.

The rose plant is subject to many enemies, both insect and disease. Mr. Wm. Hartry, addressing the Ontario Horticultural Convention, gave his experience in combatting the rose enemies in his garden, in Huron County. Almost immediately after setting out a bed, or with older plants, even before growth begins, it is necessary to spray the bushes. Mr. Hartry recommends for the early spray Bordeaux mixture with ten per cent. arsenate of lead. Rather than to take the trouble of making the Bordeaux mixture at home, the commercial preparation is recommended. Green aphis, a very troublesome insect to the rose grower, can be easily combatted with a nicotine spray. The commercial preparation known as Black leaf-40, procurable at any drug or seed store, is easily prepared, simply by adding water according to the directions given and a little soap. Mildew has always to be combatted in the rose garden. The American Beauty, Mr. Hartry finds, is very subject to this disease. Much trouble from mildew, however, can be avoided by care in watering, that is to avoid watering the plants in the evening. Watering should be done either in the morning or early in the afternoon, so that the plants will be perfectly dry before the sun goes down.—Ontario Horticultural Association.

The European Corn Borer.

Burial experiments were conducted by the Dept. of Entomology of the O. A.C. in which 1,800 corn borers in stubble and stalks were covered by the plow to a depth of five to six inches and then the soil cultivated and treated in a manner similar to what would happen on an ordinary farm. The results, as determined by cages placed over the plowed area, showed that all the borers perished, not a single moth having been taken in any cage. This, and similar burial experiments conducted by others, have made us feel satisfied that we are quite safe in recommending plowing as one of the great factors in control of the corn borer, says Prof. Lawson Caesar.

It has been said that progress lies in thinking well of your business, and most women consider it a privilege rather than a duty to pass on helpful information they have gained.

Silage and Sour Soil.

I am not disputing the idea that silage makes acid manure. I believe it to be true, for we all know that silage goes through a chemical process, and it seems quite reasonable that this chemical change should be passed on to the soil, because we know that manure loses its plantfood by heating or lying in the barnyard in warm weather.

The silo is not such a criminal sinner that we should pass the sentence of annihilation upon it, but while recognizing its good points we should also recognize its faults and use it only where the good points outweigh the faults.—D. M.

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THE PERENNIAL PEA

The perennial pea, resembling the annual sweet pea in habit of growth and form of flower, is a very desirable vine for covering a fence or screening a verandah. It is a native of European woods, but there are many cultivated forms differing somewhat in color. It has a long tap root and is therefore difficult to transplant after it is once thoroughly established. It may be grown from seed. The seed is often slow to germinate. Germination is hastened by soaking the seed for a few hours in a weak solution of sulphuric acid, or even in warm water. After it is once established it self sows, but not sufficiently to make the plant troublesome if reasonable care is taken to remove the surplus new plants should they appear year by year. Although perennial pea bloom has no fragrance, it is an excellent flower for cutting. While the bloom fades to a lighter shade after being cut, it does not become objectionable until it is actually dead. A bowl of perennial peas arranged with Baby's Breath (Gypsophila) makes a very pretty effect. The growth is so vigorous that one can cut graceful sprays with buds and foliage without risk of destroying the appearance of the vine. Like the annual sweet pea, the perennial pea blooms from early summer until well into the autumn. There is a pure white variety and several variations of pink, magenta, and purple.

The perennial pea is one of the hardiest of perennial plants and very easily cultivated, thriving almost anywhere, even among rocks and boulders and in poor soil. Like all other flowering plants, however, it responds to good treatment in the matter of soil and position. It is a good trellis plant and is adapted as a covering to such wild, rough places as a rock garden, where it scrambles over bushes and stones. It succeeds in shade and grows rapidly when once established. Although there are different varieties of the perennial pea these have not been clearly defined. The variety Elbus is white. Splendance is dark purple and red is claimed by L. H. Bailey in the Standard Encyclopædia of Horticulture as the best form but does not come true to seed. There is also a striped form. Other trade names are Albi florus, Grandiflorus, Grandiflorus Albus and Magnificus, with large richly colored flowers.

Most of the Canadian nurseries carry the perennial pea in the various varieties.—Can. Hort. Council.

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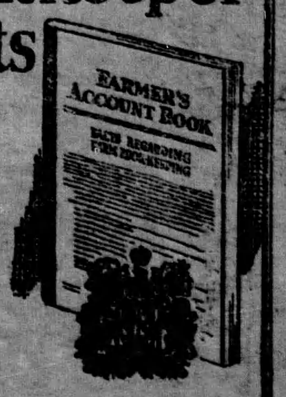

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