

EFFICIENT FARMING

Tractor Things to Know and Do.

Keeping the tractor fit means constant care and attention on the part of the operator. Like a good horse, it should be handled and cared for by one man who can become familiar with it and know its individual requirements. While it is an inanimate object, it responds to intelligent treatment. Further, the operator should study the principles of its construction as much as opportunity will permit. If the purpose of each part of the tractor is understood, better judgment will be used in its care.

The instruction book which accompanies every tractor represents the tractor-maker's best judgment as to the care of the machine. It also enables the operator to become familiar with the tractor's construction and principles. Under no circumstances allow it to become misplaced or lost. The repair-parts list, which gives cuts, description and number of parts, is nearly always furnished with the instructions and this book therefore becomes indispensable in ordering new parts or repairs.

The greatest fears of the tractor are friction and wear. This is true of other machines but it is doubly true of the tractor, because of the heat in the cylinders which must be lubricated and on account of the heavy pressures which are occasioned by the explosions within the cylinder. The lubricating properties of oil are destroyed by the heat within the cylinders so that the system of lubrication for these parts should have special attention. Frequent inspection of the supply is also necessary because the tractor, being a heavy duty machine, consumes much more oil than an automobile engine running at the same speed.

The use of kerosene in the engine may also cause some difficulty with the lubricating system. While many engines burn kerosene economically, there are times, especially when the motor may not be hot, when liquid kerosene gets into the cylinders and cuts or thins the lubricating oil so that it does not have the same lubricating properties as fresh oil. For this reason, many manufacturers of kerosene-burning engines recommend removing old oil from the crank case and replacing with fresh oil after periods of from twenty-five to fifty hours' work for the tractor.

Go over your tractor once a day with rags and wipe off excess dirt and grease. This is not so necessary from the standpoint of appearance, although the operator should take

pride in its appearance. This daily cleaning is more valuable in bringing to the attention of the operator loose nuts and bolts, worn or overheated parts, parts bent or out of adjustment, and the like. The tractor represents an investment probably equivalent to the value of two teams of horses, and is therefore entitled to as much attention daily as two teams of horses would receive.

Specific instructions regarding the care of any particular make of tractor are given in the instruction book which is sent out with the machine. There are, however, a number of general rules which apply to all types and makes of tractors, and these may be summarized as follows:

Things You Should Know.

1. That your tanks contain fuel, oil and water.
2. That every part is properly lubricated.
3. That all bolts and nuts are tight.
4. When you have proper fuel, oil and spark adjustment.
5. When engine is overloaded or over-speeded.
6. When engine is in good condition; that is, no carbon deposits, loose rings or bearings.
7. When valves and ignition are properly set.
8. When the clutch, brake and governor are correctly set.
9. What kind of lubricant to use in each place.
10. When engine gives signs of distress, knocking, overheating, lost power, etc.

Things You Should Do Every Day.

1. Follow out oiling schedule as required for each day.
2. Make inspection for worn, heated, or loose parts, nuts and bolts.
3. Clean tractor with rags.
4. Drain radiator in cold weather.

Every Week.

1. When using kerosene drain crank case, wash with kerosene, replace with fresh oil.
2. Make inspection of other parts of motor. Do not make adjustment unless it is clearly necessary, and then with the greatest care.
3. See that transmission has enough oil.

Every Month.

1. Examine valve and valve adjustments and clean carbon from cylinders.

Every Year.

1. Thoroughly overhaul tractor.
2. Make renewals.
3. Order additional parts and supplies likely to be needed for the year.

Poultry

In marking hens with leg bands we have saved time by purchasing the bands which are made for that purpose rather than making them. Home-made bands can be constructed of wire but it takes time and they are usually not as satisfactory as the commercial article which sells at a moderate price. We like the single coil spiral bands which are made in several colors. They slip on quickly and stay. The birds cannot pick them loose.

The colored spiral bands are useful to distinguish the pullets, the year-old and the two-year-old hens. The early hatched pullets and cockerels can also be marked with the spiral bands to separate them from stock hatched a few weeks later. These spiral bands are also made with a long lap at a slightly increased expense. Possibly they might stay on better but the single coil with the short lap has proven satisfactory.

The spiral bands are also made with a double coil and these have the advantage of being more easily seen. The aluminum bands with numbers are handy in trap-netting work or for designating certain hens of special value when they are culled to find the best egg-laying types. We like the bands the best that are the least complicated. One type consists of double clinches for locking around the foot's leg. When once clamped down with pliers it is not apt to work loose. There are adjustable bands made which are suitable for birds of all sizes but we do not like them as well as the systems of clinching is more complicated and occasionally we have had such a band work loose. Bands that are sealed with a soft metal rivet are valued highly by some poultrymen who wish to take no chance of losing good records by finding hens with missing bands.

Rules of Health for Children.

- A full bath oftener than once a week.
- Brushing the teeth at least once a day.
- Sleeping long hours with windows open.
- Drinking as much milk as possible, but neither coffee nor tea.
- Eating vegetables or fruit every day.
- A bowel movement every morning.
- Drinking at least four glasses of water a day.
- Playing part of the day out-of-doors.

The Dairy

The following rules in the care and management of the herd will prove of value to many farmers who are new in the business:

1. Keep as many cows as you can properly feed and care for.
2. Use purebred sires and raise only the best heifer calves.
3. Use the scales, Babcock tester and pencil.
4. Grow as much of your feed as possible.
5. Provide a comfortable and sanitary stable.
6. Feed all the good roughage they will eat up clean.
7. Have faith in your cows and in the dairy business.

Two Farm Essentials.

A typewriter and a camera should have a home on every Canadian farm. If the owner expects to get the most out of his products, he would soon try to farm without power as to do without either. A typewriter, letter or letter-head stationery, mailed promptly, creates a pleasant impression on the man who has written to enquire about your products. A camera is a valuable aid in selling farm products direct by mail. There is something convincing about a picture—something difficult to express by mere words alone; it seems as if a picture adds proof to the truth of statements made in a letter. I know beyond all doubt that your camera is valuable in our business. Probably you will laugh at me when I say that pictures have at least half to do with every sale made by mail. If this is not true why do the successful mail-order houses spend vast fortunes in illustrating their catalogues?

Although it has been argued times without number that farm products can not be successfully sold direct to the consumer, our experience leads us to believe that such statements are circulated by local dealers and commission men who have been lining their pockets from both producer and consumer.

Cheese sandwiches require two-thirds of a cupful of grated cheese, one tablespoonful of butter, yolk of one hard-cooked egg, a quarter teaspoonful of mustard, a quarter teaspoonful of salt, a pinch of cayenne pepper. Mix to a smooth paste.

Six Points to Study When You Buy or Sell a Farm.

1. The Soil. What is the soil like; what is its texture; is it fertile, sour, stony; and how has it been handled by previous farmers? Associated with this are such supplementary points as: Is it well drained, naturally or artificially? To what crops is it especially adapted? What have been its per-acre yields of important crops?

2. Size and Arrangement. A second point compounded of seven parts has to do with the size of the farm and the arrangement of its fields. By this is meant both the total acreage paid for and the actual acreage of arable land from which the returns must come. As an expert puts it:

"Very frequently land that sounds cheap is actually very expensive when viewed in the light of its tillable area. Wood and pasture land is usually not very valuable. In other words, if you buy 100 acres for \$5,000 and 75 acres turn out rough scrubby, or otherwise unproductive, you might as well consider the property as consisting of 52 acres which must pay interest on a valuation of \$200 an acre, instead of the \$50 per acre you paid, presumably, for the whole farm. Another adviser cautions:

"See that the sum of the different kinds of land—pasture, woodland, tilled fields, house lot, etc.—equals and does not exceed the figure given for the whole farm. Be watchful for a possible duplication of wood lot and permanent pasture."

The arrangement of the fields is sometimes obviously good or poor. But more often a farmer gets so used to going the longest way round, or to avoiding a wet swale or a pile of rocks, or to tilling half a dozen little fields that might be better thrown into one, that he loses sight of the inconvenience to which he is being subjected, and the time and money he is wasting. Study the farm to see not only how it is arranged, but also how it can be rearranged.

3. Topography. The lay of the land has special significance in these days of machine farming and power equipment. Is it level so as to permit the use of such machinery, or is it rolling, hilly, or cut by gullies or ledges? Is it easy to cultivate, or is there danger of soil erosion taking place, together with its numerous attendant losses? And is the drainage good, especially in the case of the farm that is sought for the growing of fruit?

4. Water Supply. Quite aside from the problem of water for crops, whether from heaven or from irrigation ditch, is there an adequate, unfailing, conveniently located supply of pure drinking water? Offhand one is likely to scoff at the possibility of over-looked such an important feature, yet upon how many farms are man and beast dependent on a single shallow well or a few casual springs so poorly located that every gallon of water used has to be "toted" at an almost inconceivable cost in the aggregate of both time (which means money) and human effort and comfort!

Buildings. Closely related to the

sentinal that their bodies be supplied with mineral feeds; especially is this true of hogs kept for breeding purposes. Hogs that are finished for killing at one hundred pounds or so will need little mineral feed after put in the feedlot besides what they get in milk and tankage.

Wood ashes and cinders are eaten by hogs to satisfy a craving for mineral food. I have seen them crunch the fresh cinders as if they were corn. Corn cobs are suitable in some respects, if they are charred; they can be charred by putting them in a metal drum that is closed at the top, or the pile of cobs may be covered with dirt and charcoal can be purchased for the purpose. Charcoal is beneficial to the digestive tract. Besides these, bone flour is valuable to furnish phosphorus and lime, also. Growing pigs require salt in their ration; it is an aid to digestion.

A good mixture which can be fed to pigs confined in small lots or that may be given to pigs on range, is made up of the following ingredients: One hundred pounds of wood ashes, thirty pounds of salt, forty pounds of slaked lime, four pounds of copperas, thirty pounds of charcoal; mix well and feed three or four times a week.

A good mixture to keep before hogs in a self-feeder is made up of three parts air-slaked lime, three parts of wood ashes or charcoal, and one part of salt. If tankage is being fed there is no need of feeding ground bone or any other phosphorus carriers, as tankage carries sufficient.

Sick Room Don'ts.

- Don't forget to be kind and patient.
- Don't allow the sheets to become wrinkled.
- Don't jar the bed by leaning or sitting upon it.
- Don't allow stale flowers to remain in the room.
- Don't appear anxious.
- Don't rattle papers. Nothing gets on one's nerves more than this.
- Don't forget to be kind and patient!

Depend upon your alarm clock to remind you when it is time to peep into the oven and you can rest while the baking goes on.

YOUR PROBLEMS

BY MRS. HELEN LAW

Address all communications for this department to Mrs. Helen Law, 235 Woodbine Ave., Toronto.

M. V. B.: You should not be worried about your hair being lighter in some places than in others. You have probably exposed it to the sun, my dear, and it has bleached where the sun's rays have struck it. When you are working in the sun next summer, protect it with a big hat. If you are very thin, you will do nothing about it, for it will soon grow out from the roots and if as I said above you are careful next summer, it will soon, I am sure, take on the proper shade all over your head.

Until you are very much older you should not go driving at night with your young man friend without an older person or a girl companion. Do you think you are wise to accept a ring or a watch from a boy who is just a friend? Will not your acceptance of it imply that you consider your relation more than that of a friend? Convention decrees nothing, absolute in that regard but it is my opinion that presents of jewellery should not be exchanged except by engaged couples. I am very sorry this young fellow is so jealous. Ask him some day if he considers it complimentary to you that he cannot trust you to speak to other boys. I think jealousy is a kind of selfishness, don't you? It cannot grow out of a pure love.

Doleful: My dear girl, you are not the only one to come to me with your pathetic little problem about an allowance and a father who doesn't understand and various pitiful little needs that you wish to satisfy. There seem to be lots of you, bless your hearts! How I wish I could help you all by giving you that longed-for bit of money that would spell happiness for you. I cannot even suggest any sure solution. I can offer you is that when you have girls of your own, you will understand and keep such misery from them. Have you had a good cry and talk with your father? Have you told him of the legitimate needs you have and how much happiness that little sum each week would bring you? Or have you just sulked and been unpleasant whenever you have spoken of it?

I know a girl whose father just could not see her side and refused the allowance she needed each week at school, so she asked him if she might earn it. And she did, working hours after school and insisting on doing work her brothers should have done. Her father soon realized what it meant to her and softened. Somehow I feel if you

The Sunday School

INTERNATIONAL LESSON.

February 8.

Peter at Lydda and Joppa—Acts 9: 32-43. Golden Text—James 5: 15.

32-35. As Peter Went Through all Parts. Since the conversion of Saul (or Paul) the Christians of Jerusalem and Judaea had comparative peace, for he had been their most zealous persecutor. See 9: 31. But persecution which had driven many of those who lived in Jerusalem to seek homes elsewhere. They had carried the gospel with them and they founded Christian churches and communities wherever they went. The church in Jerusalem was a mother church and had a care over its daughters, and so the apostles went out from time to time to visit them. We can imagine how great an event, in one of these little communities of the country towns, the visit of Peter, or John, or James would be, and how eagerly looked for. It is an interesting conjecture that Philip, who knew the country towns so well, and who lived in Caesarea, may have told these stories of himself and of Peter to Luke, who was Paul's companion when he visited him in Caesarea, and when Paul was a prisoner there (Acts 21: 8-23; 23). And Luke, who was the writer of this book of Acts.

Farm Shop Saves Money.

A small farm shop, equipped to handle simple repairs, will soon pay for itself. The greater part of many winter days can be spent in putting the farm implements into good condition. It doesn't require much shop equipment to make welds and bend rods. A forge, anvil, tongs and hammer will do it. With these tools as a start, others can be made. Old machinery ready for the junk heap can be rescued and handy tools made from its steel. Chisels of all shapes and sizes, S-wrenches and the like, can be shaped from the old steel and they are to be put the use to which size and shape may be made from the wrought iron parts. Add to the equipment a press drill, and many visits to the village blacksmith will be forestalled. The best thing about having a shop is that the more it is used, the more proficient the operator will become. Results at first may be disappointing, but the new smithy can soon develop a proficiency in handling common repairs.

When agriculture prospers, all the people prosper. When agriculture sickens all the people languish.

READING IN THE HOME

Country life has broadened in recent years and now occupies a place much larger than the little round of daily routine that formerly constituted the total activities of many folks. The knowledge and the spirit which have led rural life out of its old past came very largely from homes supplied with libraries and reading tables. We have completed a acquaintance with books, but considering people in the mass, it is true that the reading community is almost invariably the progressive community, and the reading farmer an influential one. The homes with libraries include our best homes, while homes that send out the incorrigible specimens of the race are generally without helpful books.

Libraries usually change the general atmosphere of the household when the members of the household have the advantage of ideas gleaned in reading, their conversation rises above the petty things of every day living that annoy the unread, and dwells upon subjects of new interest which carries the mind to things worth while. Good reading is an efficient alterant for complaining, gossiping and imaginary ill health, and supplies a person with a reserve from which to draw in times of sickness, during old age, or whenever the hours are not filled with employment.

Then, too, it is easier to keep the boys and girls interested in the home where reading has been emphasized. Such an interest is a standard antidote for harmful outside influences. The farmer who takes pains to provide his home with good reading is making an investment that will return larger dividends than any stocks ever offered by the brokers of the Stock Exchange.

Living Into It.

The agent, Mr. Peters, gave one last glance round the rooms. They were desolate-looking rooms, with the furniture standing about in impossible places and looking as shabby as furniture always does look when the moving men have just gone; but Mr. Peters was used to seeing houses at their worst.

"It looks some upset just this minute," he acknowledged, his kind face full of sympathy, "but it will be a right cozy little place as soon as you begin to live into it."

"And now," Janet said laughing, as the door closed behind him, "to begin to live 'into' it!"

Nora brushed angry tears out of her eyes. "I don't see how you can joke over it!" she cried brokenly. "This little cheap house on this little cheap street! But if that were all, I could stand it. It's leaving behind, all the memories—and mother's room—"

"I know, dear," Janet replied gently. "She wanted to cry out that she knew a thousand times better than which Dorcas made." Nora, for she never had left home for college or anything else. But the only way to be true to the memories was to carry the spirit of them into the new home; so she began at once. Many times in the next week Janet almost grew discouraged. It was not the little house—the house responded wonderfully. It was Nora, who steadfastly refused to do anything for her room or to hang the pictures—Janet's secretary acknowledged that she had not an eye for pictures, or to give the new house any of the lovely touches that she had loved to give the old one. Janet could make things comfortable, but she could not make them distinctive. And all the time Nora was comparing the new home with the old.

Curiously enough, it was Leila Parker who made Nora see. One day Nora came home sputtering. "Leila Parker makes me so mad!" she cried. "Her secretary came into my office to-day, and we got to talking, and the poor girl just broke down. Miss Parker does nothing but criticize her and compare her to that paragon of a Miss Marvin. As if anyone could do her best when she is forever being criticized and compared to a paragon! As if—"

Nora broke off sharply, a startled look in her eyes. "What's the matter, Norrie?" Janet cried.

But Nora answered only, "Nothing." The next day Janet went downtown for what Nora called an orgy of shopping. She came back at dusk, tired and almost—she insisted upon the "almost"—homesick. But at the living-room door she stopped in amazement. The pictures had been hung, there were curtains up, and flowers where no one but Nora would have thought of putting them. The little room was really beautiful.

"Norrie!" Janet cried. "Nora met her eyes bravely. "I'm ashamed, Janet. I've been as unfair to the little house as Miss Parker is to her stenographer, to say nothing of being horribly selfish. Mr. Peters was right. There's a heap of difference between living in a house and living 'into' it."

After a Shampoo.

Rub a little liquid vaseline into the scalp after a shampoo and the annoying dizziness will turn into bliss, and you will be able to keep the hair in

BIG INFLUX OF IMMIGRANTS TO CANADA

With conditions fast returning normal, Canada is promised a material increase in immigration. Plans are now being laid by the government in charge of such matters to care of the anticipated last year 40,000 persons coming to the United States and settling in Canada, and this year it is estimated that the number will be 60,000.

It is reported by immigration authorities that a large number of immigrants from the Western and Middle West are now being attracted to the prevailing high rates, and new locations where property is cheaper and are intending to move to the prairie provinces of Canada. Already the Americanies in Manitoba, Saskatchewan, Alberta are very extensive and in influence, and are now being proved to be of the most intelligent and desirable class of citizens.

Movement From England. There also will be a considerable movement this year from the Isles, from which in 1919 about 20,000 came to Canada. The British government is providing free transportation for all war workers who wish to go to the Overseas Dominion, and training is made conditional on the ability of the country to absorb the position of the war workers, only two classes are "bonuses" come.

One is the agricultural class in the development of the agricultural resources of the Dominion, and the other is the "domestic" class, which is now called "wages" is now within the last few weeks parties of women, varying from twenty to eighty, have in the country and readily absorbed into service.

The agricultural movement, while the other are what is later, as "household workers" term "domestic," which is now called "wages" is now within the last few weeks parties of women, varying from twenty to eighty, have in the country and readily absorbed into service.

The general provisions which have been made by the Canadian government for the land settlement are available not only to those who have served in the armed forces, but also to those who come with the intention of offering up farming acreage for the work, and with the view a committee of experts has been sent to Great Britain on all applications for land settlement in this country.

Ban on Former Foes.

There is an absolute ban on former enemies of Germany, Austria, Bulgaria and Turkey. The fortification of peace has not yet removed the restriction which existed against such immigrants.

Flag of Zion Floats From Palestine's Mouth.

A despatch from New York. The first vessel of Palestine templated merchant marine, the blue and white flag of Zion was named "Hecholah" (The Hero), at Jaffa recently, the Zion organization of America has announced that the vessel is owned and crewed by Jews, and is the first of a fleet which Zionists plan an ultimate appropriation of \$10,000,000.

The vessel was formerly a yacht and was purchased to ply the Palestine coast, making the blue and white flag of Zion, several others in Egypt. The engineers plan to convert the one of the leading important industrial centres of the near east.

British Release German Ad.

A despatch from London. Admiral von Reuter, the chief of the German fleet at Scapa, who gave the order for the scuttling of the German warships the June, has been set free by the authorities. The Admiral had been held in Germany.

One should learn to talk when it is well not to talk.

