

Soils and Crops

This Department is for the use of our farm readers who want the advice of an expert on any question regarding soil, seed, crops, etc. If your question is of sufficient general interest, it will be answered through this column. If stamped and addressed envelope is enclosed with your letter, a complete answer will be mailed to you. Address: Agronomist, care of Wilson Publishing Co., Ltd., 73 Adelaide St. W., Toronto.

HANDLING FARM MANURE IN RUSH SEASONS.

Almost everyone who has made a study of the matter would agree that the only way to conserve all of the fertilizing elements in farm manure is to place it on the land as soon as it is available. There are some conditions, however, which preclude such disposition of the manure supply and it becomes necessary therefore, to so arrange the materials and appliances at hand that the greatest amount of fertilizing constituents in the manure shall be saved and made available for future use. At the same time it is agreed manure should be put on the land as soon as made, it is just as well agreed that it should not be placed upon hilly or rolling land, but a short while before that land is to be plowed or worked up. Freshets and showers when falling upon manure so placed on rolling or hilly land carry away a very large amount of the fertilizing ingredients and for this reason it is not wise to make such a risk.

The other condition which makes it impossible to spread manure as soon as it is made is in the rush season. If there was some way of getting at the exact amount of loss that takes place while the manure is being stored under ordinary conditions for three or four weeks until the work lightens sufficiently to put it on the soil, we probably would find that there is no reason too rushing nor too work that pays better than putting the manure directly onto the soil as soon as it is made. However, since we have been accustomed to think this job can not be done during the rush season, it becomes necessary to provide some suitable storage place for the manure.

Taking all the farm manures, by and large, it comes about as close to the truth as we can get to say that sixty per cent. of all the fertilizing elements lie in the liquid part of the manure, while forty per cent. lie in the solid part. If we wish to put it in another way, we might say that eighty-five per cent. of the available fertilizing elements are in the liquid manure while fifteen per cent. are in the solid portion. In other words, the liquid portion is much more valuable than the solid, and where manure is placed out in piles under the eaves of the barn or wheeled out to the side of the hill with the expectation that the rain will wash out portions of it that are too heavy to haul to the field, it will readily be seen that any manure supply so handled might as well be dumped into the river in its entirety since the solid portions of the manure that remain are very inert and it takes a long time before they are decomposed sufficiently to be used by the growing plants.

There are some facts concerning manure that should be kept in mind whenever any system for its handling is mapped out. One of the first is that the liquid portion of the manure is much more valuable than the solid; the next one is that, under normal conditions the nitrogen of the manure is the most valuable part of it. When the small boy goes out to the barn to clean out the stable that he neglected the morning before, he usually gets an eye full of foul smelling gas. This gas is nothing other than ammonia, a combination of nitrogen and hydrogen, and for this reason every bit of ammonia gas should be saved since it contains the nitrogen which is so costly when bought as a fertilizer. The commercial ammonia, so-called, which is bought on the market for use on wash day is nothing more nor less than ammonia gas dissolved in water. Ammonia gas dissolves very readily in water and is somewhat heavier than air and when ammonia is dissolved in

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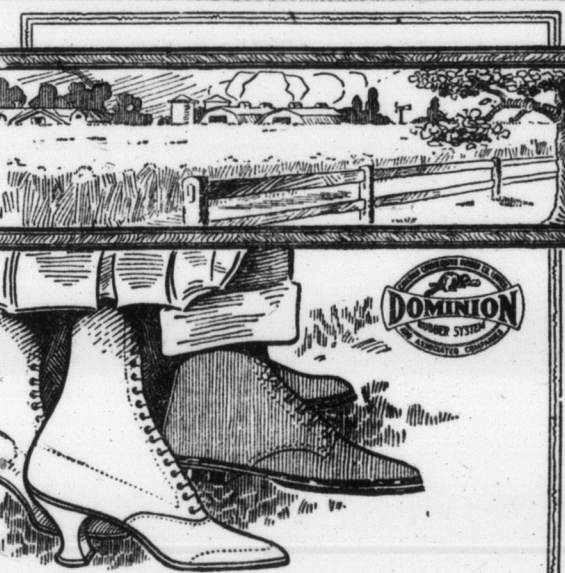
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Poultry

Sweep down the coverts and clean up the house generally, for July is a hot month, and heat and filth make a strong combination favorable to disease and vermin. The work should be done thoroughly, and the premises sprayed with a good disinfectant.

If summer hatching is not done, the male birds should be removed from the flock and placed in separate quarters until after moulting. Males that are not to be kept for next season had best be marketed now to save the feed and to prevent fertile eggs, for infertile eggs are better keepers during hot weather.

As soon as the cockerels start to crow they should be separated from the pullets and fed all they will eat up clean. Those that are not to be kept over for breeding should be sold to make room for the others. All surplus stock should be gotten rid of, for there is no profit in feeding birds that are not needed.

July is an excellent month for the sale of roasting fowls and spring chickens. It is the best season to sell spring chickens.

The drinking vessels should be put in the coolest possible place, and the houses should be well ventilated at night.

There is still a good profit in the sale of dressed ducklings.

When all things are equal, summer hatches can be grown at less cost of money, labor and worry than those brought out during the winter and early spring. If chicks are provided with a cool range they will grow with surprising rapidity.

GOOD HEALTH QUESTION BOX

By Andrew F. Currier, M.D.

Dr. Currier will answer all signed letters pertaining to Health. If your question is of general interest it will be answered through these columns; if not, it will be answered personally if stamped, addressed envelope is enclosed. Dr. Currier will not prescribe for individual cases or make diagnosis. Address: Dr. Andrew F. Currier, care of Wilson Publishing Co., 73 Adelaide St. West, Toronto.

Movable or Floating Kidney.
Mrs. S. McE.—Please write an article on floating kidney, from which I have suffered three years. Was told it would return to its place if I got stouter and wore an abdominal belt. Have suffered severely, of late, particularly in connection with an attack of grippe. I desire to avoid an operation, if possible, as I have a weak heart and barely pulled through another kind of operation. Is there danger that floating kidney may lead to something serious like Bright's disease? Could the condition be due to strain or injury. Would exercise be beneficial? And what would happen if it got twisted?

Not so much is heard about this condition as was heard a few years ago, when it was a novelty. The kidney is embedded in a thick layer of fat which is a very yielding tissue and varies in quantity from time to time. If this envelope becomes thin and weak, or is subjected to strains, the kidney may become loose and mobile and the envelope stretched, so that it will wander more and more from its proper site.

It may move very little, or it may move as far down as the pelvis, but almost invariably remains extra-abdominal, away from the abdominal organs. This is called movable kidney, in distinction from floating kidney, which is within the abdominal cavity at birth and swings upon its pedicle of peritoneum like a polyp upon its stalk.

The latter is a rare condition and need not receive further consideration at this time.

Movable kidney is much more common in women than in men, more often on the right side than on the left.

As it is produced and accentuated by strains and injuries, it often follows the severe efforts of childbirth, prolonged constipation, sudden and violent muscular effort, or injuries in the region of the loins.

It may be free from symptoms, many people being unaware that they have it until their attention is called to it in the course of a physical examination; or it may produce discomfort or pain severe in character or dull, aching and dragging and intensified by exertion.

If the kidney is very loose and movable, it may possibly be twisted on its axis, which would be a serious matter for its pedicle, containing the ureter, renal artery and renal vein, would be greatly compressed, great pain or colic would ensue, its blood circulation would be interrupted, the urine could not pass down to the bladder and the result might be a fatal one.

Fortunately this accident is not of common occurrence. In addition to pain, this condition is often associated with constipation, indigestion, dizziness, palpitation and more or less intense nervousness.

It is not a particularly difficult condition to determine, especially if one is accustomed to the interrogation of the organs of the body.

In the majority of cases the symptoms may be relieved by a well-fitting abdominal belt; but if this does not give relief, an operation may be required.

It used to be the fashion to operate upon every case that came along, but since it was shown by Treves, the distinguished English surgeon who has done more than anybody else to inform us in regard to displacements of the kidney, that operation was seldom necessary or desirable, the craze for operating has subsided.

Operations are sometimes very desirable, but one should know when, as well as how, to do them.

QUESTIONS AND ANSWERS

Mrs. S. M.—Is there danger that a floating kidney will develop into anything serious? Was told by my doctor that if I gained weight and wore an abdominal supporter, the kidney would return to its place.

2—Would playing ball cause the kidney to be misplaced?

Answer—1—You are evidently under good advice. Continue to wear your belt and do as your doctor tells you, and you will probably get good results.

2—The kidney might be detached by violent exercise while playing ball. I can see how that could be possible.

In Paddock and Pasture.

This is a good time to rediscover the value of farm manure. Manure reinforced with acid phosphate is the most effective fertilizer known. More of it is needed.

The fertilizer shortage is real—not imaginary. Even at advanced prices, its use is warranted. Get the fertilizer if you can. If it is not to be had, keep up the fertility of the land by raising more stock and feeding more crops to animals.

An acre of alfalfa furnishes twice as much protein as a ton of bran, four times as much as a ton of corn meal, and nine times as much as an acre of timothy, and it can be grown successfully.

In twenty-four hours the sweat-glands of the horse eliminate waste material equal to that passed through the lungs. Never allow the sweat-glands to become clogged with dirt and sweat particles for lack of grooming.

Tackage, which is composed of the scraps and refuse from packing houses, has received a great deal of attention from hog feeders the last few years. Its composition makes a good source of protein for use with corn in feeding shots.

Cows may have a pedigree a foot long and not have a sixteenth part of an inch in cream on their milk. It pays to find out about that before putting good, hard-earned money into a pure-bred cow. What we want is cream, not simply a big name. Cream pays the bills.

Often when a cow freshens the udder is milked dry, stimulating the flow of milk. Soon the udder gets sore, and milk fever may result. To prevent this trouble, take only a few quarts of milk the first time, and gradually increase the amount. In a few days it will be safe to milk her dry.

Rape seeded at the last cultivation of corn will furnish abundant nitrogenous feed for hogs when corn is "hogged" down. By suspending a tin can with a small hole in it, on each side of the cultivator, rape seed may be distributed in the corn-field without extra labor. From one to two pounds of seed to the acre is the usual rate.

Thousands of horses will suffer with tender or scalded shoulders this summer, and galls will develop later. To prevent the galls, get a can of talcum powder and dust the shoulders well before putting on the collar.

Your druggist will sell you a pound for about fifty cents, which is very cheap. This will save many times its cost later.

Devices for mixing milk with butter to make the latter "go further" should be regarded with caution. Such a product soon becomes sour in warm weather and wastes the butter it contains.

To make a shabby-looking wicker chair look new again, dust well, and scrub well with soapy water. When the chair is quite dry again, apply stain with a fine brush.

GOD'S BURDENS—AND OURS

"I can't understand!" Mrs. Holman cried, with her hollow eyes full of bewildered trouble. "Doesn't God promise to give us strength for our burdens? You said so yourself, Dr. Kerr! The last sermon I heard you preach before I was taken ill was upon, 'As thy days, so shall thy strength be.' You said God couldn't fail. I was fighting to keep from breaking down under all the work I was doing, and it comforted me so! I went home feeling better than I had for a month. And then, three days later, everything came to an end! I don't mean to be irreverent, but I don't see how I can believe God's word. Certainly He has failed me now. It isn't of myself I'm thinking, but of the children; they need me so, and it makes things so terribly hard for Sharley."

Her voice broke abruptly. All her life she had been trying to keep her things from Sharley.

Dr. Kerr's eyes, grave and tender and understanding, met hers steadily. "I am here to repeat it, Mrs. Holman. I could not come to you if I came with any other message. I could not go into my pulpit another Sunday. The God whom I serve and whom I declare to my people never breaks His word. He has said that He will give strength for every duty and every burden that He sends—and He will."

"Then how—" Mrs. Holman faltered.

"Because He never promised strength for all the burdens that we pick up for ourselves along the way. Tell me what you have been doing this winter besides the necessary things for your family. Didn't I hear Sharley say something about a party given?"

"But they can be girls only once—and a party given means so much to a girl!"

"Didn't Sharley have any?"

"Why, of course, she had a couple of old ones; but a girl can't wear them forever."

"Which would Sharley rather have, a new party gown or—a mother? Did you give her a choice?"

There was no answer. Dr. Kerr had not expected one. He went on gravely: "And that entertainment you gave the Fortnightly last month. Everyone was speaking of it—of all the work you did. Would the Fortnightly have gone to pieces if you hadn't entertained it this winter?"

Again Mrs. Holman was silent. Her pastor's strong hand took hers in a comforting grasp.

"That's sermon enough for to-day. I have just given you the text—God never fails. You can preach your own sermon. Only, I've one more suggestion: Suppose you talk the whole matter over with Sharley; take her into the hard and responsible places; nothing in the world will make such a woman of her. The child wants it. You are robbing her if you give her party dresses instead of her mother."

Once more Mrs. Holman was silent.

Doctoring Your Plants.
Some times plants need a little doctoring just as human beings do. They have a tendency to catch diseases which cause them to wilt and die. Occasionally the outside evidence of disease is lacking and the plants die quickly; others, again, dry up and die by slow degrees. To the first class belong the tomato, cucumber and muskmelon and to the latter the potato and bean.

The wilt diseases are caused by bacteria which work inside the plant and clog it up so that it chokes. The only remedy is to pull up the wilted plants and burn them. Before pulling them up, however, you should be quite sure that the wilting is not caused by dry weather or by a worm in the stem of the plant near the ground.

The other diseases are called fungus diseases. They are really caused by tiny invisible plants which are parasites living upon the larger plants. They show up in the form of discolored spots or portions of leaves or stems which die and dry off. These diseases can only be prevented or controlled by spraying.

Compost Heap.
In every war garden this year a place should be set apart in which unused green stuff from the house—weeds, leaves and so on—may be kept to be used, when thoroughly decomposed, as manure for the following season's crops. If a sprinkling of lime is added from time to time, it will sweeten the material. This provides the basis for excellent manure and some of it should be allowed to go to waste.

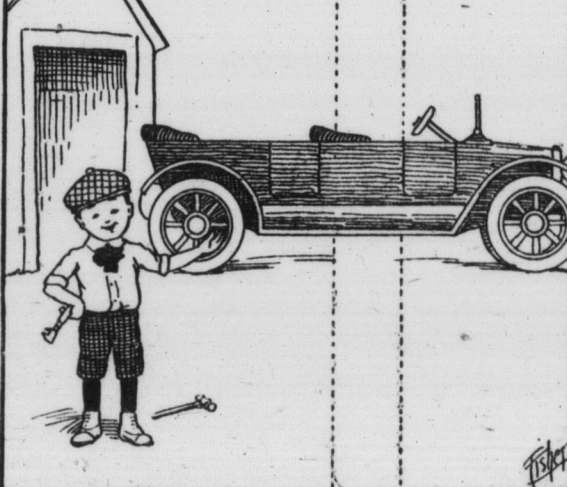
If the compost heap was made up early in the season or if part of an old one remains, it is an ideal place to grow squash or other creeping vegetables, provided that it is not situated in too shady a part of the garden. Every square inch of ground should be made to count.

A Bigger Butter Ration.
With larger supplies of British-made butter the weekly ration of butter or margarine is to be increased from 4 oz. to 5 oz. per head. This has already begun in districts where sufficient stocks are at hand.

When roasting meat arrange to bake your potatoes, also pudding, and bread can be toasted a delicious brown in the oven.

FUNNY FOLD-UPS

CUT OUT AND FOLD ON DOTTED LINES



Willie's father said, "It is no job. This big machine will drive me broke." So Willie took the middle out And made a little runabout.

Horse Sense

Many people who use three-horse teams seldom give a thought to the

WOOL

Farmers who ship their wool direct to us get better prices than farmers who sell to the general store.

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strain on the middle horse. His position is the hardest in pulling, backing and turning, especially if he is a free worker, for many three-horse teams are improperly reined, so that poor control is exercised over the willing worker, and the drones are not made to work into their collars or against their breechings and do their share.

Another great strain on the middle horse, especially in summer, is the heat thrown off by the horses on either side of him. This is severe where heavy hauling is being done by free-sweating horses. Much of this injustice to the middle horse can be overcome. Teams should be so handled by their drivers that "turn and turn about" is the order of the day's work, and the middle horse to-day is the outside horse to-morrow. In this way each horse will have his turn, and the general efficiency of the team will be greatly increased, for too many horses get so used to working on one side of the pole that they are almost useless on the other.

Observant Child.
Teacher—"What is water?"
Willie—"A colorless fluid that turns black when you wash your hands."

Oxford is the greatest university in the world. It has twenty-one colleges and five halls.