

Soils and Crops

By Agronomist.

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.

After-Value of Fertilizer.

No mixer whether a farmer buys a ready-mixed fertilizer or one that is made up of the separate parts and mixed at home, there is the "after-value" to take into consideration when figuring the benefits derived from the fertilizer.

So many times we seem to think that whatever we are doing for the one season is what our fertilizer is worth to us. That is a safe place to stop figuring all right, but it is not a safe one. I can safely figure that every dollar I have spent for fertilizer has made me from \$2.00 to \$4.00 in increased production. This is on the average, of course, and I know of some cases that have made much more than this.

Three years ago I had a field of two acres in onions from seed. Previous to this the field was in potatoes and had about four hundred pounds to the acre of complete fertilizer. The year the field had one thousand pounds to the acre of a high-grade onion fertilizer. The year the onions were planted it was rather dry and so a good deal of fertility was not available that year. The year following the potatoes and onions the field was planted to corn along with a few acres adjoining it, which had been in potatoes for a year or two. The yield of corn was nearly a ton better on the old onion field than on the other part. Besides that it was of better quality and matured early enough to be sold and marketed at once. That, of course, was one reason why there was so much difference in the yield. It was so well matured that it was sold and marketed. The other part of the field was rather soft.

And while I am mentioning it I want to add that here is one point about fertilizer that we do not consider enough—early maturity. With me this is worth fully as much as the large yields. In fact, in many cases it is just what it means—larger yields because of early maturity. In the short crop seasons that we have, it is a quicker way of getting an early crop than breeding corn up, though both methods of course, will help just that much more.

I have another instance of the after-value of fertilizer in my own experience. A field of a little over two acres was planted to onions from the seed and twelve hundred pounds of a complete fertilizer was used to the acre. The onions were fair. The next year this field and another part next to it was in sugar beets. The total acreage came to about four, I think. Now, when one looked over the field during the growing season there was not much difference to be seen, but when you got under the leaves there was a lot of difference. When the yield was measured the two acres that had fertilizer went almost twenty tons to the acre. To anyone who is not used to the beet crop let me say that twenty tons is a mighty satisfactory yield. I have raised slightly less than ten tons to the acre and thought it was a fairly good crop. I am sorry that I can't give the exact yield of

the rest of the field but I am not sure enough to say except that I figured at the time that it was mighty good pay for the fertility used even if the onions hadn't been taken off the year before, and I might add, too, that the next year after beets this field was in corn and the difference could be seen even then. Just what it was I could not tell, but it was to be seen easily during the growing season.

Your Iron Churn Boy.

The modern gas engine is a highly efficient and never-tiring helper, capable of adapting itself to almost every known need for power on the farm.

As the first and foremost consideration of gas engines is the means of employing their power, the first thing a farmer or other user needs to know is not only how to make them run, but also to adapt them to the work they are to do. We have seen some gasoline engines standing out in the open, where the owner leaves them through summer and winter, covering them up with some frail covering like a blanket or an old box that leaks. An engine in such a situation is certainly subject to all the direct influences of the weather, and should not be expected to do good work. It should be housed at all times.

A special engine house, with the various adaptations of shafts, pulleys, belts, etc., where the engine can rest bolted down to a solid bed, is the best arrangement of all. Such a house can be built at a place convenient to all power work it is needed for. It is no trouble at all to have the engine separator in a house, joining the engine room, and then provide a shafting to run this separator. An engine of sufficient power to do several things at once is the most profitable plan, and then so arrange the work that it can operate more than one thing at a time.

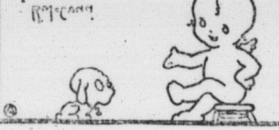
There is even a way of having several beds made for one particular type of engine. In this case the engine is wheeled about on its truck to the required place, where a firm bed is ready, bolted down, and then put to work.

In putting up shafting and pulleys, you should know about what speed the pulley is required to run to perform the chosen work satisfactorily. The wood saw will necessarily have to run very swiftly. The fanning mill to do several things at once is the most profitable plan, and then so arrange the work that it can operate more than one thing at a time.

Flour should be sifted just before used, in making measurements. The slogan of the Canadian Trade Commission, "CANADA-PRODUCT," is to be a guarantee of good quality, fair price, and all around high level.

THE CHEERFUL CHERUB

I started life a friendly soul With frank and smiling face, But office boys and traffic cops soon put me in my place.



Brush for Harness Oil.

It stands every farmer in good stead to use all the care he can with his harness. Not only is leather exceedingly high in price, but it is mighty hard to get.

The usual job of oiling a harness is one that is dreaded. I have read so many times about how to take the harness all apart and unblock every possible buckle, then wash with lukewarm water and soap and keep it in a warm place, and with a cloth saturated with the oil go carefully over every piece. All this is right, but how many farmers who are using it? I have seen many a harness that has been oiled, but the oil has not been put in the right place.

My plan is to take a harness at a time and clean off the mud and sweat the best you can, take the straps out of their keepers and go at it with a good oil with blackening in it.

Instead of the cloth brush with oil I take a two-inch brush and a saucer or small pan and apply it that way. It is quicker, gets into the cracks much better, and keeps your hands clean while you work. Then, if there is time, take another harness and do the same. Hang the collar and bridle separate, and the rest of the harness over a rope that is adjusted to suit your height. After a few hours go over the job and wipe off the excess oil and apply more where it shows need.

If you have time and want the harness to look better all around, get a small can of enamel and go over the metal parts. It dries in a few hours, and then the entire harness looks fresh and new.

Some farmers have a little can of oil with a cloth in it which sets back of the horses. When they have time they take a cloth of oil and run over the tops or lines, and after a few nights they have the harness all oiled.—E. R.

Why I Am a Farmer.

Have you ever asked yourself this question, Why am I a farmer? It is the writer's belief that many so-called "misfits" are really persons who have failed to solve the problem as to why they are engaged in this especial work.

What are the advantages and disadvantages of your business? I am a farmer because.

Farming is a very old and honorable business; that is, if the farmer makes it a business and not a disease.

Farming is my specialty. By farming I can do more for my country and my family than I possibly could if engaged in any other profession or occupation.

I am my own boss and call no man master. I do not have to punch a time clock, neither do I jump at the sound of a whistle or bell. I am entirely free of the heart-burnings and petty bickerings common in persons who work for others. No one can take my place away from me. I have no fear of the boss who might bring a rabbit-faced individual in, introduce him as his cousin and calmly inform me that said cousin would take my job in the morning.

I make my own plans and work them out in my own way; there is no one to steal the glory if they are successful or to berate me if they prove faulty. As the British soldier says: "I am on my own."

Among country people there is no great wealth or abject poverty. Each person, if honorable, is the equal of his neighbor. People have a chance to get acquainted in the country.

There is a patriotic sentiment connected with the ownership of a farm that is not noticeable in other possessions.

A well-titled farm is the grandest monument a man can leave behind when he is gathered to his fathers.

The Camera on the Farm.

The camera is a valuable asset to the farmer for advertising his farm and its products. If he has a brood mare or a valuable bull for sale the camera will truthfully portray his image on paper and carry a forceful message to the prospective purchaser.

A good photograph with age, pedigree and other details written on the back tells instantly just what the critical buyer wants to know.

A dated negative is indisputable evidence. Damage accidents are frequently proved by photographs taken of the scene. Write on the back of the film or glass negative with a steel pen or ordinary black or red ink and the lettering will come out gray on the print. If figures or letters are desired directly on the picture, bicarbonate of soda, mixed with enough water to make it flow from the pen.

Health Talks

By John D. Huber, AMMD

Dr. Huber 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. Huber will not prescribe for individual cases or make diagnosis. Address Dr. John D. Huber, M.D., care of Wilson Publishing Co., 73 Adelaide St. West, Toronto.

The Cigarette Smoker.

Asthma is not rare among smokers; the breathing of such sufferers is deepened and quickened, and short-windedness results. The weed produces by irritation reddened, even "pink eyes," which is a contagious affection; or the nicotine, when slowly and continuously absorbed from the digestive tract may induce—how often has it not induced—blindness, acute or permanent and hopeless. Indeed, such blindness—amblyopia—has come even from tobacco being applied to a hollow tooth; in a patient who took snuff for ten days to cure a cold.

The sexual function is impaired in the tobacco-poisoned, and the victims are notably weak-bodied (anemic). And tobacco poisons the boy to tobacco. The most injurious way of using tobacco is the cigarette, largely because the fumes are inhaled and passed through the lungs.

Smoking many cigarettes comes from the pipe, especially if the smoker is allowed to gather the least injurious is the cigar. Other things being equal, the more excessive the smoking, the more the smoke is inhaled, and the sooner the "sport," the worse are the effects.

Tobacco has its analogue among perhaps every people or tribe that our explorers and discoverers have ever visited. For adults this plant is one of the "paratriptics," the savings banks of the tissues. Such also are makes a cheap and permanent white ink.

When you have acquired skill in making pictures the farm papers will pay you from \$1 to \$2 each for any prints they can use. When you get this far remember to send only clean, snappy prints, printed on glossy paper, and make each one tell a story.

A special implement, new ways of doing things, threshing day, the tractor in action, a day's outing in the country and filling the sif suggest the kind of pictures wanted by the farm papers.

In the year before the war Germany sold goods valued at \$835,000,000 to the British Empire. Canada's opportunity to get a large share of this is waiting for Canada's action—that is the opinion of the Canadian Trade Commission.

the Calabar bean, cocoa, arsenic, gentian, strychnine, cinchona, Indian hemp, alcohol, coffee, tea. The best reason for saying that these things are beneficial when judiciously used is that the demand for them is imperative, worldwide, and not to be denied; and that they certainly do tide an exhausted or a misused organism over physical and mental crises. To the beginner in their use the most of them are unpalatable, and it is not likely they would be taken in any degree at all were it not that the moderate and occasional use of them has been found salutary, even necessary. But the bodies of the child, the growing boy, the youth, are fresh and rich in reserve forces, in factors of safety, needing neither tobacco nor any other stimulant. Surely a substance which can so profoundly affect the immature organism, is like to work—has with deplorable frequency worked—electrical and permanent changes in the delicate organs and tissues.

Question and Answer. A large yellow dog last winter and had her wound treated locally. The dog was not killed. Please state whether or not she can get hydrophobia during the hot weather of the coming summer? Please also give the symptoms and if there is a cure.

Answer—Your piece is a story. If symptoms do not ease within a month after the bite hydrophobia is not to be feared.

MR. FARMER

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After one of our hired men had been with us a few weeks, I noticed that the horses began to look a great deal better than they had before. They not only looked sleeker, but they took on flesh and did their work more easily; that, too, without using any more hay or grain.

It was simply the care the new man took of them. He was always quiet when around the horses, he kept the pores of their skin open by the use of a good comb and brush, and he was regular in doing his work.

Seeing these things, I thought it was no more than fair that I should say so. And you should have seen how much higher the hired man stepped after that. It was very plain that my good words had warmed him. He not only took better care of the horses, but he did his work more all the time, and on the farm.

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Electricity Saves Labor For Farmer and Wife

Farm work is not just a matter of taking a team to the fields and putting in so many hours a day plowing, harrowing, reeding, harvesting or whatever the task might be. There are also the chores, and farmers are coming to realize more and more that valuable time can be wasted in doing chores, that is, where folks persist in doing them in the old way.

In the field modern machinery is employed to save time and labor and to make possible short cuts, so that fewer hands can do the work and keep the farm production up to the standard that has been set for it. Why isn't it just as reasonable to employ short cuts about the barn, in the chore work as in the regular farm work in the fields?

A great many farmers are coming to decide that it is, and your up-to-date farmer is using modern equipment about the farm buildings just as he is using modern equipment in the field work. One of the most important of the new and labor-saving forces he is using today is electricity. Generally he gets it from one of these small, individual electric plants that can be installed in the tool-house or garage, or in any other convenient place about the premises. This electricity, of course, is about as cheap as electricity can be. Then, if he and his family are to work effectively, he will light his barns and stables and the surrounding yard with electric light. It is a great saving. Most of the modern electric plants are now after dark if bright electric light were provided and that much more time would be saved for work in the fields.

Then the farmer with electricity will use electric power to save steps, save work and save time. He will use electricity to pump the water. He will have this water stored under pressure so that it is forced to the faucets, either at the house or barn, and no pumping or carrying is necessary. If there are many cows to milk he will run the milking machine with an electric motor, and the farm boy who otherwise would be tempted to leave the farm to escape an unattractive job will be satisfied to stay and supervise so interesting an operation as milking by mechanical means. Then this electric power the farmer will use to turn his grindstone, the corn sheller or grinder, the clippers for clipping horses, for cleaning seed, for a dozen different uses that will suggest themselves wherever electricity is available.

Of course, the women folks will not fail to reap a benefit from it, too, for besides the modern lighting, the bath and indoor toilet that electricity makes possible, the electric power gives them the vacuum sweeper, the electric vibrator with its healthful, beautifying massage, and such household machinery as electric washing machines, churns, and the like. Then there is electric heat for repair jobs like soldering, for the electric toaster or percolator, for the electric warming pads for the sick room, for the flat iron and various devices all calculated to bring comfort, saving or pleasure to the farm family.

How I Save on Roofing.

"Nearly every year I used to have an old shed or outbuilding that needed repairing," says a farmer. "This was especially true of the roofs, which I noticed were the first things to go. It seemed to me that I had more leaky roofs than any other man in the country, and I always had some extra expense in the way of roofing. But I have now found a way to overcome this trouble and my leaky roofs repaired at a much lower cost."

"If the building happens to be an old one I never go to the expense of putting on shingles or galvanized iron roofing, because they are too costly. The plain sheet-iron roofings that are not galvanized are not satisfactory in the way of service. After several years of experience with various roofings, I have discovered that the prepared roofings are the most serviceable of any, besides being much cheaper."

"When I apply this prepared roofing I never take the trouble to tear off the old roof first, because I have found it to be much easier and much more desirable to lay the new roofing right over the old one. I cut the roofing into strips so they are convenient to handle, and I allow enough in the length so they can be turned down at the ends. I then cement them at the laps with roofing cement, and also nail wooden strips, called battens, over these laps, making them more solid."

Safety First.

A handy method of disposal for the gasoline tank on the farm is to place the tank under proper shelter underground, with facilities for filling the tank from the surface and a pump with which to force the gasoline from the tank to the automobile gas reservoir. Such a system places the gasoline out of danger from a stray match, and puts it in a place where children cannot tamper with it. A pump which will be very convenient in transferring the gas from the supply tank to the motor or other receptacle may be purchased at a slight expense.