

Soils and Crops

By Agonomist.

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. Stamped and addressed envelope is enclosed with your letter, a complete answer will be mailed to you. Address Agonomist, care of Wilson Publishing Co., Ltd., 73 Adelaide St. W., Toronto.

"Blue Lights" in Dairying

We have been accustomed to speak of the "blue lights" in stock breeding, meaning thereby how to attain the highest merit in the individual's career. In dairying there are two ways of obtaining high potential value in the young breeding herd. Of course, there are really three ways, but only two are practical for the breeder of small means. The breeder who has considerable money to start with often goes into the dairy cattle business, not because he needs the money, but because he either wants a pastime or wants to leave some monument for himself which is very enduring and it is true that there is no more enduring monument than to establish a superb herd of dairy animals because with such an establishment it is a fact that many of these animals will become a matter of history and their offspring will march down through the ages as long as dairy cattle are kept, which will be as long as the civilization of man is in the progressive phase. One of the quickest ways to attain the blue with the breeding herd is to buy a bull with individuality and excellent breeding that may be placed at the head of the herd. It has been said by old breeders who realize the value of quality in the products they have to sell, that a man can put as much into a herd header as the combined value of all his cows. This advice is given out by so many good breeders of proven ability that the young breeder can do no thing better than to take the advice at its face value and invest in a bull whose quality cannot be questioned.

Another way which is some slower but just as effective, however, is for two or three breeders to combine and take the very best cows or heifers they have, at least two, and sell them to a bull of unquestioned superiority for breeding. It is true that the service fees are sometimes very high, but this way of getting extra fine individuals is much less expensive than to try to buy males with the breeding and individuality that the young stock will have. Of course, the idea in sending these cows away is to secure, if possible, a male that

can be placed at the head of both herds and the sending of two cows will in three times out of every four make it possible to secure the male. These two methods of securing extra good stock to continue operations with are both of them practical and have received the sanction of a number of practical breeders.

There are a good many registered scrubs in breeding herds all over the country and I have observed that the man who keeps only registered stuff is not likely to show progress materially better than the man who keeps only good grade stuff. It is not enough to keep stuff that is registered; it is imperative to keep the best of registered stuff. The surplus animals produced from a herd kept on this basis are always in demand while the surplus animals from a herd kept on the basis of registry alone very often for the sides, the latter for the floor. The bottom should be reinforced beneath with strips of oak. It probably is unnecessary to remind anyone of the importance of rub irons to protect the box from the front wheels' friction in turning.

The resistance encountered in moving a wagon and its load is termed "draft." Reduction of draft always has been a primary aim in wagon-making. Naturally, the lighter a wagon can be, and yet have ample strength for the owner's purpose, the better—that is, as regards economy of horse power and time in transportation. But the size and shape of the wheels, the thickness and width of tires, etc., have a vast deal to do with draft. That wide tires favor

Wagon Wisdom.

To choose a satisfactory farm wagon requires either experience or advice. There is a vast difference in wagons, and he who buys hastily is apt to regret it many times.

Naturally, your particular use for a wagon will be the first consideration, but in any case you have a right to expect durability even in a very light wagon. The wood should have been air-and kiln-dried. Demand the black birch hub, white oak spokes, felloes, bolsters, and hounds. The best straight-grained white oak makes good axles, and is highly recommended by some wagon makers. If I may advise, I should stand by the hickory axle every time. The metal parts may be of Norway iron or mild steel. For a hilly country, steel skains will be better than those of cast iron.

If examination of the axle shows an undue number of holes, reject that wagon. Of course, the king bolt must go through, but aside from this prefer clips, for too many holes assuredly weaken this vital part of a wagon. The tongue and whiffletrees may be of oak, but be certain to have a hickory doubletree. Of course, there must be a metal sleeve for the reach to pass through; metal plates or collars at the wear points greatly prolong any wagon's life.

The best woods for the wagon box are yellow poplar and three-inch quarter-sawn yellow pine flooring—the former for the sides, the latter for the floor. The bottom should be reinforced beneath with strips of oak. It probably is unnecessary to remind anyone of the importance of rub irons to protect the box from the front wheels' friction in turning.

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easy progress of a load, because they distribute the pressure over a larger surface, is typical of a number of fundamental principles easy of discovery and of practical value.

It is commonly believed that placing the load well forward in a wagon lightens it, in effect. But this is true only when the wagon slopes to the rear. In an ordinary wagon, whose hind wheels are the larger, the greater weight should go to the rear; but there should be no great difference. The best general rule is to distribute the weight about equally, particularly as regards the sides.

Another simple little thing to know, handy in a pinch, is this way of tightening wagon spokes: Place a small stick against the hub for a fulcrum, and use another for a lever. Raise the felloe off the spoke, place a small piece of leather around the tenon, and allow the felloe to drop back in place. Keep this up until the wheel is tight.

The best of wagons require care. Wheels give out first; a good practice is to give them a hot oil bath about three times a year. Keep all wooden parts of the wagon well painted; this keeps out moisture and the resultant rot.—L. E. E.

His Girl.

The day you went away to France I came back through the streets alone With burning eyes and feet that dragged.

And for my happy heart a stone. Folk passed me smiling, so I smiled. To see how dark the world had grown.

I came home to my father's house And stood beside the empty chair Where you had stood and where we

said Our blind good-bys; the twilight air Was full of you; I had not known That life would be so hard to bear.

And yet—God hears!—no dusk nor dawn Could bring me peace had you not gone.

The Kimberley diamond fields were discovered in 1871.

FARM FIRE PROTECTION

By D. Williamson

"Well, you saved the barn, anyway," I said, consolingly.

"Yes—by sheer good luck," grunted the owner of Maple Grove Farm, picking a dented fire pail from the bins. "The wind happened to be blowing the other way; that was all."

"Couldn't you get a fire stream on it? I thought you had a good water-supply?"

"I thought so, too. I had a pressure-tank in the pit under my shop, and a gravity-tank over it, on a high iron tower. But the fire started in the shop, and burst through the roof before we discovered it. In two minutes the iron supports of the tower were red hot and crumpled up—there the thing lies." He pointed to what looked like a blackened, tangled framework of a wrecked Zeppelin. "Of course, when the tower-tank fell, it landed on the pressure-tank, smashing the valves off that; my gasoline engine and pump were in the shop, too; the fire-buckets had been carried off to stop the hogs—and there you are!"

Now, all this isn't an argument against fire protection; precisely the opposite. My friend did not have a good fire system; and so he lost several thousand dollars' worth of farm buildings, with all their contents. Iron is far less fire-proof than stout timber; it bends like wax, when hot, and should never be used for a tank-tower, unless set away off by itself. The pressure-tank should have been buried in the ground. The pumping-engine ought to have been in a small, isolated building. And so on.

In these war-time days a farm fire is as much a national calamity as the destruction of a munitions or a ship-

building plant; and it's a patriotic duty for all of us to protect our farm buildings more carefully than we have been doing.

Common whitewash, with a little salt added, makes the best possible fireproof paint. Did you know that? In a large, connected mass of farm buildings, fire partitions can be run up, so that a fire can be kept from spreading. These partitions should be of course cut right through the roofs and frame walls, and can be made of brick, cement block, hollow tile or metal lath plastered with cement. All doors through such partitions must be tightly covered with tin on both sides.

Fire-extinguishers are good things to have handy. If you have a water-system it should keep head enough to throw a good stream against the highest point of any building. A pressure at the ground of thirty pounds will shoot the water about forty feet in the air, using two-and-a-half-inch fire hose.

If you have only the ordinary garden hose, a very much greater pressure is necessary; the concern you buy your water-tank from will figure it all out for you.

But the best possible fire protection is a "sprinkler" system; there are dozens of good sorts on the market, and practically every factory, large or small, is equipped with one.

Then, there are all sorts of things you can do to keep fires from starting. When I visit an old farmhouse I always examine the chimneys very carefully; nine times out of ten I find gaping holes right through the brick-work, just under the roof! And then there's the danger of spontaneous combustion from greasy rags; the danger from lightning, etc.

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GOOD HEALTH QUESTION BOX

By Andrew F. Currier, M.D.

Dr. Currier will answer all signed questions of general interest. If you are 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. W., Toronto.

M. E.—Will you please explain nerve trouble? How does it affect a person? Does it affect the heart?

Answer—Nervousness may be an evidence of diseased organs and tissues; or that the psychic part of the individual, the will, desires, emotions, senses, are out of joint and have gone on strike.

This term is dear to the heart of those who are nervous, and few of them would be willing to give it up for any other.

With doctors the condition is known under such terms as nervous excitement, neurasthenia, hysteria and hypochondria.

It is perhaps best expressed by the term "nervous excitement." Nervousness from real disease, or from an impending event of seriousness and great importance, is easily understood, and it would be a rare person who did not suffer from nervous excitement under such conditions, even if he did not cry out and make a great time about it.

Again, a child with scarlet fever, with parched mouth and heated body, with unbalanced mind and uncontrollable restlessness, may have his nervousness or nervous excitement as a direct product of disease.

Or a child of high-strung parents and excitable temperament is denied a toy, or compelled to go to bed when he prefers to sit up, whereupon he cries and stamps his feet or breaks dishes or throws things at his mother's head.

This, also, is nervous excitement or nervousness, but has no direct relation to disease.

Or a woman cries or laughs immoderately perhaps over trifles, or is unable to keep quiet or has a foreboding of evil, acids, or finds fault continually, and we are compelled to say this woman is laboring under strong nervous excitement or simply that she is hysterical.

When nervousness proceeds from disease, we must cure the causative disease to get rid of the nervousness, and we cannot prevent it except as we prevent the exciting cause.

It may be an indication of insanity and show that mind and body require certain remedies, whether they are suitable hygiene or food or medicines.

When nervousness is unassociated with disease, the great thing is to train the will; to determine persistent-ly not to give way until victory or death results.

Such a task is all the harder if the will was not brought under some measure of control in early life.

Nervousness may come to anybody, but it is far more common in women and children than in men.

It is less common in women who work hard, day by day, than in those who have been brought up in luxury and idleness and who spend their time in frivolity or in tasks which are of no consequence.

Children have it so often that it becomes a reflection on their bad inheritance or their bad bringing up.

The patent medicine makers deluge the market with all sorts of nostrums for nervousness.

Give them as wide a berth as possible; they are very apt to make

things worse and give you a drug habit, besides.

Asafoetida is not a pleasant smelling drug, but a five grain pill will often cure an attack of nerves, and I never heard of its forming an asafoetida habit.

Useful, also, are infusions of chamomile, pennyroyal, catnip, and other herb teas dear to our grandmothers.

It would be well if we went back to these harmless remedies, gathering and drying herbs as our forebears did, and substitute them for the whole array of patent medicines.

Neurasthenia, called by foreigners the American sickness, is not a disease at all, strictly speaking, but only a collection of very uncomfortable symptoms, though it often leads to real diseases or may accompany them.

It was first brought to notice by Dr. George M. Beard in 1860.

It belongs to the intense period of life, particularly in men, is essentially nerve exhaustion and is thought to be due to a deficiency of oxygen in the blood. A neurasthenic is always tired, always afraid something terrible is going to happen. Everything fatigues him or makes him dizzy or gives him a headache, and he is unable to concentrate his mind upon anything apart from his own misery. Frequently he looks well except for a constantly anxious expression, and he may have fits of uncontrollable trembling. He is forgetful and irritable, troubled with insomnia, or if he sleeps has bad dreams. His skin tingles, he has flashes of heat, his extremities are cold, his heart is weak and palpitates uncomfortably, his arteries throb, his vision is bad, his ears ring and he is annoyed subjectively by unpleasant tastes and smells. His digestive apparatus is constantly upset and he is always on the lookout for some new ache or ail.

Many causes may contribute to this condition which is based upon a weak nervous system. Among them are worry, grief, intense hurry to get rich, excesses of all kinds, atmospheric extremes, and unhealthy occupations. Indoor work favors it, and nervous, highly organized people are especially sensitive to it. It may last indefinitely but it never kills except as it leads up to some fatal disease. A change in surroundings may be all that is necessary to throw it off. Too often the will power is insufficient to fight it successfully.

The only medicines which are suitable in treating it are cathartics to regulate the bowels, and simple tonics. One who has it should breathe deeply, stay out of doors as much as possible, exercise moderately, sleep as much as possible by day as well as by night and eat only simple food. Massage, baths, and sunlight are all helpful. Cheerful company, wholesome amusement, and change and occupation are useful measures of treatment. One should neither ridicule nor pamper a neurasthenic; he is really sick, but not so sick as he thinks he is. A good doctor or nurse who can win his confidence and guide him intelligently and kindly will serve as the best possible tonic for restoring his debilitated nerves.

considers a waste of time, plus foolishness."

Farming is a business and the only way to make an assured success in it is to conduct it on the same business principles known to be successful in other lines. One must learn to do his work "conspicuously well" and know that he is doing it at a profit.

Mother: "I wonder how this book got in such a horrible condition?" Angel Child: "I heard papa say it was too dry for him, so I watered it."

Hundreds of Vancouver men, 40 years and over, have rushed to take advantage of the low rail rates to the prairies for the summer farm work.

SMOKE TACKETT'S T&B PLUG

IT'S THE SLACKERS WHO WHINE

In a recent article, Margaret DeLand discusses the absence of fear in travelers passing through the danger zone. This she attributes to the psychological fact that "no single human mind can experience two emotions at the same time; it can not be both angry and afraid." Therefore, the voyagers, being filled with anger at the Hun have no room in their minds to fear the submarine.

It is probably the psychological fact that no two emotions can possess us at the same time, but I doubt if the ruling emotion is anger. It is hardly possible that the boys going over to the trenches, the girls going over to the canteens and hospitals, are so intensely angry they are unconscious of any other emotion. It is more probable that the consciousness of doing something, the knowledge that they are actively engaged in whipping the Hun, the intense interest in their work so fills their mind that every other emotion is crowded out, even anger, as well as fear.

It works out that way on this side. Haven't you noticed that the folks who are hard at work to help win the war are contented and at peace? You all know that woman who, before the war was a bundle of nerves and worry. Her one mission in life seemed to be to fret and stew and worry over everything. She was always filled with apprehension and thinking up things which might happen to her family. Her boy enlisted and you said right away:

"Well, Mary will just naturally lie down and die. This will certainly kill her. She's worried about nothing all her life and now that something really has happened it will be the end of her."

But did Mary die? Not a bit of it. She got better right away. You went over to see her and sympathize with her and to try to reason her into seeing the justice of the war and the opportunity for her to help democracy, and what did you find?

You found Mary, if she was at home, busily knitting socks for her boy, and she told you with a smile, although it might be a bit quavery, how proud she was of him and how fine he looked when he marched away, ever so much trimmer and handsomer than any of the other lads, and what a glorious thing it was to have a son so brave. More likely you didn't find her at home at all. She was down at the Red Cross sewing away on pajamas and robes or folding gauze or giving knitting lessons. And her face wore a calm, contented look, for the first time since her babyhood.

Her mind is filled at last with real things, and as it can not experience two emotions at once, of course the trifles which once occupied it are wiped out. Life is at last something more to her than a round of meals and dish-washing and keeping things "picked up." It is something big and noble, a gift to be prized highly and experienced, not simply moaned through.

And the faultfinders who are still with us. Have you ever gone into their lives? If you have, you've found out they are the ones who are not helping. You'll find, if you investigate, that beyond spending a dollar to join the Red Cross and giving another to the Y.M.C.A., they haven't done a thing but grumble about the high prices. They have bought one bond, but if they have it was only one, and that of the smallest denomination. They have no part in the war, they are doing nothing, and that is why they are grumbling at the hardships they've had to endure.

We don't find fault with a work we are interested in. No sacrifice is too great to make to insure its ultimate success. We count "these light afflictions as but for a moment, for they work for us a far more exceeding and eternal weight of glory."

You'll find it isn't the folks who are "giving until it hurts" that are waiting at the hard times and the substitutes. It's the shirkers and slackers, the ones who will neither fight nor give nor go without, that are complaining. If they would get into the game and help fight their mind would have no room for carping.

A Hero's Deeds.

The London Gazette announces the award of five new Victoria Crosses, says a despatch of June 4th. Two of the recipients are dead. The stories as usual reveal almost superhuman heroism.

Lieut. E. S. Dougall, of the Field Artillery, subsequently killed, undoubtedly averted a serious breach in the British line by his personality and skilful leadership throughout the day. Lieut. Dougall rallied and organized the infantry, whom the enemy had pressed back to a level with his battery, supplied them with Lewis guns, armed all the gunners he could spare with rifles, and with them formed a line in front of his battery, which meanwhile was harassing the advancing enemy with rapid fire.

Urgent Case.

The young wife gazed upon the sleeping form of her young husband with the tender eyes of youth. As a matter of fact, hubby had got a cold, and he found it conducive to sleeplessness at night. It seemed a pity to disturb his repose; but her affection was equal to the task, and, shaking him gently by the shoulder, she said: "Wake up, George; the doctor's just sent your sleeping draught!"

Horse Sense

The horse's stomach is small, therefore if it is to eat but three times daily, and has a large amount of labor to perform, his food should be concentrated. The amount of roughage the horse is able to take depends largely upon custom. However, better results will be secured and the animal will keep healthier and last longer if permitted to eat lightly of roughage and liberally of grain.

But what grain shall we feed? This is an important question, and the answer will depend upon circumstances. If we have oats we may as well feed them, if we are fortunate enough to possess corn and have no oats we need not buy them to mix with the corn in order to make a suitable ration. The old notion that a horse must have oats in order to do his best work must go because there are a number of careful experiments which prove that if the horse is fed either corn or oats in equal quantities there will be practically no difference in results.

The ration adapted to the needs of the horse differs from that required by the cow. The cow must make milk from her ration and to do this requires a large amount of protein. Protein builds the body, and carbohydrates furnish heat and energy. The waste of the body of the horse must be repaired and some protein is needed, but the great demand is for food that will furnish energy. This is where corn excels: Barley will practically take the place of corn. Wheat bran may be given in small quantities with either of these grains, with good results.

Flower seeds, particularly annuals, are cheap and a beautiful flower garden may be had at a trifling cost by purchasing a few packets of seeds of annuals and sowing them now in well prepared beds in the open ground.

WOOL

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

ASK ANY FARMER! who has sold his wool both ways, and note what he says or, better still, write us for our prices; they will show you how much you lose by selling to the General Store.

We pay the highest prices of any firm in the country and are the largest wool dealers in Canada. Payment is remitted the same day wool is received. Ship us your wool to-day—you will be more than pleased if you do, and are assured of a square deal from us.

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Hogs

Every hog that is killed in transit, due to overcrowding or mishandling, means a loss, at present prices, of probably more than \$30 to the shipper as well as a waste of meat needed by the nation. Mortality in transit, after arrival at the central market can be lessened greatly in hot weather by the practice of the following simple precautions on the part of shippers and dealers:

1. When hogs are very hot, during or after a drive, never pour cold water over their backs.
2. Before loading, clean out each car and bed it with sand which, during dry, hot weather, should be wetted down thoroughly. Hogs in transit during the night only are not so likely to be lost from overheating as are the animals shipped in the day-time.
3. With day shipments in hot weather it is highly advisable to suspend burlap sacks of ice from the ceiling in various parts of the car in order to reduce the temperature, and incidentally, to sprinkle the animals with cool water. The ice sometimes is placed in sacks on the floor, but the animals are likely to pile and crowd around the cakes so that only those close to the ice are benefited. The ice should be sufficient to last to the destination.

4. Do not overload. Crowding hogs in a car during warm weather is a prolific source of mortality.
5. The feeding of corn, because of its heating effect, before and during shipment in hot weather should be reduced to a minimum. Oats are preferable where a grain feed is necessary. The maximum maintenance requirement of hogs in transit for twenty-four hours is one pound of grain a hundredweight, or approximately three bushels of corn to a car.

Plowing with a Tractor.

After I had been plowing with a tractor for a while, I noticed that I was not finishing up the corners of my fields in very good shape.

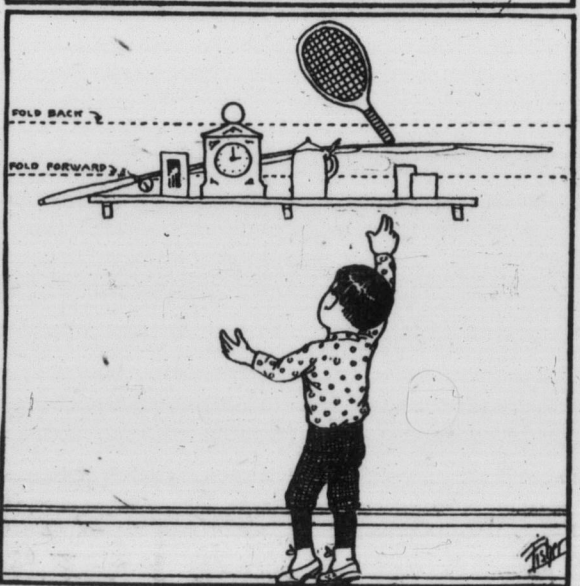
Of course I plowed the main part of my field by lands, but I was leaving a good-sized headland, and when the strip on each side of the field was the same width as the headlands, I plowed around the field, throwing the dirt in toward the plowed field.

At first I would plow up to the corner while making these rounds, raise my plow as soon as I had them even with the last furrow, turn around, and drop them on a line with the furrow last plowed, and so on around the field, just as I had been used to doing with a team and sulky plow.

By plowing a short distance past the last furrow on the corner I found that I was able to make corners with no triangles of unplowed land as had previously been the trouble.—H.H.C.

FUNNY FOLD-UPS

CUT OUT AND FOLD ON DOTTED LINES



Willie went to father's den. Took the racket down and then— Little rascal's got his nerve. Hear him shout "All ready—Serve."