

# Soils and Crops

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## When Weighing Hogs.

I often read and hear of people who complain of the large shrinkage of hogs on comparatively short hauls. I believe that this trouble may usually be traced to the scale itself or to the method of weighing.

We will take it for granted that the scale itself is weighing correctly. Then one of both of these two things may happen: First, the team, in its uneasiness, may pull, making it necessary for the driver to keep a stiff hold on the lines. Such a circumstance will easily lighten the load from 20 to 50 pounds. Second, the team may back decidedly against the neck yoke, which will add from 10 to 50 pounds to the weight. There is just one thing to do to avoid these possibilities, which are really probabilities, and that is to unhook the tugs when weighing and make the team stand perfectly slack. Test your scales occasionally by driving a load from scale to scale and weighing with the horses unhitched. Scales should not vary over five pounds.

When taking your hogs to market, see that the scales are balanced before weighing. Rain will add from 10 to 50 pounds of weight, according to the dryness of the platform and the fall of rain. Then, in wet weather, rain will gather and be left on the scale, also adding to the weight. So it is always safe to ask for a new balance.

See that the scale does not bind anywhere—that is, that no part of the stone has become wedged between the platform and planks, a condition which will also lighten your weight.

The question is often raised as to what constitutes correct weight, or where the nose of the beam should come to rest—at the top of the trip loop or pin, or at the centre of trip loop or pin. If it comes to rest at the top, you are accepting light weight, especially on a sluggish scale. The centre of the trip loop indicates the proper weight.

In some scales you will find the sensitivity very sluggish. By this is meant that the nose or weight indicator may be shown ahead or behind 20 to 50 pounds while the beam is travelling from one trip loop to the other. It is difficult to get such a scale to show correct weight on such a scale, and it should be adjusted.

Hundreds of people are of the impression that a scale is correct if it balances. This is not necessarily true. A scale may balance perfectly and yet not weigh correctly within 200 pounds on a ton. This is because scales have great, are built along one characteristic line, and there are a number of points to get out of adjustment. A person should go over a heavily used scale at least once a year.

Now, again, there is the man who knows his scale is all right because he frequently tests it with a 50-pound iron weight. That scale may also be wrong, for two reasons: A 50-pound weight is not test enough. One is that the error in a scale may not show up until heavily loaded—at least a ton should be put on the scale, more if possible. Then put on 1,000 pounds of iron weights and notice the error in the 1,000 pounds of weight. Let us take a moment and figure what some of these errors might total: A 50-pound scale error plus 5 pounds wrong balance, plus 15 pounds bind on platform, plus 40 pounds team error equals 100 pounds error. When such a scale is used to weigh a hog, it would cost the seller \$15. Surely, such a scale is a waste of money. The farmer is looking over the scales which he uses.

## The Tractor in the Orchard.

While the development of the farm tractor during the past five years has been little short of marvelous, only a small percentage of the farmers and orchardists have seen fit to substitute the tractor for the horse. In the past they have had four very good reasons for not making the substitution.

First, the old type of tractor could not turn in a short enough space and as a result many trees were injured at the ends of the rows.

Second, The old type of machine

was entirely too tall and many lower limbs were injured.

Third, Many orchardists did not believe that the tractor was reliable.

Fourth, The lack of mechanical knowledge on the part of the average owner caused a great deal of trouble.

But recently these objections have now been overcome. We have tractors that can turn in a diameter of less than twelve feet, and that are built so low that all possible danger of injuring the trees has been done away with. Also better methods of construction have made the tractor practically as certain of doing its work throughout the year as the horse.

At present the tractor has two great points in its favor.

First, The tractor is speedier than the horse.

Second, The tractor is more economical than the horse.

The tractor is speedier than the horse because it can travel along at the rate of two and one-half to three miles an hour, and do its consistently in spite of hot weather and other adverse conditions which naturally tend to slow up the horse. The question of speed is of great importance to the orchardist because orchard operations are of such a nature that they need to be done as quickly as possible. Delays are both dangerous and costly in the orchard.

In the second place the tractor is more economical than the horse. Aside from the interest on the investment, depreciation, and storage, it costs practically nothing to keep the tractor while not in operation. On the other hand it costs nearly as much to keep the horse when idle as when at work. This is of great importance to the orchardist as the season during which the tractor or horse is needed in the orchard is much shorter than on the general farm. A few idle horses will eat up the profits in a short time.

A series of experiments recently carried out showed that the tractor could do the same amount of work that a horse could do with one-half less labor, and nearly one-half less labor is an item that can not be very easily overlooked in these days of scarce labor and high wages.

## Value of Manure Spreader.

If I were to advise one about buying implements for a dairy farm, the first in the list would be a manure spreader.

The main crop a dairy farm should produce is hay, and the manure spreader is the hay-maker than cannot be beaten. Two years ago we needed a piece of clover and timothy. The seeding came along very good until the drought struck it, and by the last of August it didn't look good enough to leave for a hay crop, but we needed the hay badly and decided to give it a top-dressing with the spreader.

At this time we hadn't much manure but used all we had, which covered about an acre and a half. The next spring we went on with the spreader, covering the whole field lightly. And say, if anything can perform a miracle, manure can. Just before cutting time I went over the field to see what kind of a crop we had. I was surprised to be able to track that manure spreader as easily as a dog would a rabbit on a fresh snow. Wherever the spreader threw its "streak of gold" there stood clover up to my waist and where the manure did not cover, nothing but ragweed and sheep sorrel were growing. At the ends where the machine would lap, the clover was so rank that it lodged in such a shape that the mower would not cut all of it.

This top-dressing was put on in the early spring, in the forenoons of each day before the sun out the frost and let the spreader down into the manure.

Another advantage of putting the manure on the grass crop is, that not a bit is wasted. It is all washed to the roots of the plant and not down the dead furrows and larger creek. It makes a better and larger crop of hay and stores valuable plant food for the succeeding corn crop.

not prove they are egg eaters. But when they deliberately break eggs they are profit wasters that must be eliminated.

A man who is satisfied to know nothing must be satisfied to drudge.

A raw potato will remove mud stains like magic. Brush off the surplus dust, then apply the potato. Don't be afraid to rub, and take a clean slice as one gets soiled. Leave until dry and then brush off.

Cakes should not be left to cool in the tins in which they were baked, neither should they be placed flat on a solid surface to cool. Take them out of the tins and put on a sieve, or tilt them up so that the steam can escape.

No crop produces a more satisfactory roughage for sheep than oats and field peas hay. A sufficient area can be plowed in the spring and seeded with a mixture of equal parts of oats and field peas. They should be mixed together and drilled in at the rate of three bushels per acre. Seeding can be done early in the spring.

## Table of Concrete Mixtures.

A 1:2:3 Mixture for: Feeding floors and barnyard pavements.

One-course floors and walks, Roofs, Fence posts,

Water troughs and tanks. A 1:2:4 Mixture for: Beams and columns,

Engine foundations, Watertight basement walls, Reinforced concrete floors,

Work subject to vibration. A 1:2:4:4 Mixture for: Building walls above foundation,

Silo walls, Base of two-course walks and floors,

Backing of concrete block and similar concrete products.

A 1:3:5 Mixture for: Basement walls where watertightness is not essential, and foundations below ground,

Mass concrete footings, etc. Mortar Mixtures:

1:1½ Mixture for: Wearing course of two-course floors,

1:2 Mixture for: Scratch coat of exterior plaster,

Facing blocks, Wearing course of two-course walks, feeding floors and barnyard pavements.

1:2½ Mixture for: Finish coat of exterior plaster.

The first figure in each formula stands for cement, the second for sand, the third for gravel or stone.

Thus, a 1:2:3 mixture means one sack, or one cubic foot of cement, two cubic feet of clean, well-graded sand that will pass a one-fourth-inch mesh screen, and three cubic feet of clean, well-graded pebbles or crushed stone ranging in size from one-fourth to one and one-half inches.

## Typewriters on Farms.

The use of typewriters on farms is coming to be quite common. In this neighborhood I estimate that ten per cent. of the farmers have typewriters in their homes. So far as writing letters, and the appearance of the correspondence in general are concerned, a typewriter is well worth while.

But there is another reason for the typewriter. I remember the first one that was in our house. I was about ten years old at the time, and going to a country school, of course. I liked to write some of my letters on the typewriter. The typewriter was useful in learning to spell, and spelling is a very badly neglected subject. One can not write a word on a typewriter and have it misspelled; it stares at the writer too plainly.

The formation and general construction of every kind of letter come to the user of the typewriter. Many social letters are written on the typewriter to-day.

I use a typewriter for all my letters, and before I was married I wrote practically all of my social letters on a typewriter. It was a favor, I think, because my friends could read the letters easily.

The boys and girls who have typewriters in their homes are a step ahead of the boys and girls who do not have them. They will get along better in their school work. The lessons they hand in to their teacher will show more care if written with a typewriter.—E. R.

## Bee-Keeping as an Avocation

Busy people, women as well as men, should always have an avocation as well as a vocation. In other words, cultivate a hobby. Hobbies are commercial assets to people who know how to use them, and to everybody they are health assets.

We are all familiar with the advice to forego business when you leave the day's work, and think no more about it till the next day, but to most people such advice is about as useful as being told to be "careful" so as not to take cold. "How do you do it?" in reply quite crushes the advice-giver.

One way to stop thinking of business is to have a second interest to turn to. Business holds our attention usually because it means bread and butter, with or without gain, according to circumstances, but the second interest should claim our attention because we really like the subject. Too many people do not have any definite likes and dislikes, but to have them adds a good deal of vividness to life. If there is no guiding choice, select the opposite of the regular employment, and the thing that supplies the most wanted conditions. For the person whose regular occupation keeps them out of doors all day, often in noisy cars and streets, select some quiet interest that can be developed at home in quiet rest; for those whose work means confinement in a building, make some outdoor occupation the second interest; and remember that we are always stronger when we rely upon ourselves for our pleasure as well as for our business.

A second interest that may be made a source of profit as well as pleasure, is to keep one or two hives of bees. There is an unreasoning fear among many people of bees, that the creature itself does not warrant. If they are not handled with some consideration they will sting, and like all living things they must be understood, and it must be fully realized that we simply guide their natural instincts to our own ends, and do not attempt to force them to our point of view. When we realize this, and supply their needs, they are excellent neighbors, even in a city, and will repay the care they get many times over.

They can be kept anywhere there is room to set a hive; many are kept on roofs of buildings in large cities; sometimes in attics, with runways to an open window; in the smallest of yards surrounded with neighbors. When they are treated kindly and quietly, they molest no one, but if they are worried or neglected they may defend themselves.

The best way to begin, but possibly not the cheapest, is to buy a full colony of bees, in a new, modern hive, and two or three extracting supers with full sheets of foundation. Have the hive set, just where it is intended to stand, and partly open the entrance. Have something in the entrance that they must crawl over, or through for the first day, so they will pause and locate their new position; after that they never get lost.

If a hive is secured in the early spring, when the fruit trees are beginning to bloom, and it is not known whether they have much food in the hive or not, it is well to give them a pound cube of sugar which will insure food till the honey flow comes.

## The Welfare of the Home

### What's Wrong With Baby?

By Ida M. Alexander, M.D.

This is the question asked by many mothers regarding their babies of less than a year old. Most of these mothers take it for granted that the baby's food was the cause of the trouble. Instead it was nearly always one or two things: either the baby was not given enough water or the mother herself was sick and the baby was sick for that reason. When I say "sick," remember I do not mean sick-a-bed, I mean, she was not 100 per cent. healthy.

When you do not give your plants enough water the leaves begin to turn brown and get dry and the plant grows very slowly. A water-starved baby is like a water-starved plant; its skin gets dry and it grows slowly and gains in weight little, if any. Your geranium needs more water than your cactus. The cactus has very little of what we may call "skin" exposed to the air; the geranium leaves have a great deal of "skin" exposed, and so the plant dries out more quickly. An eighteen-month baby considering his weight, has a great deal of skin exposed to the air, so he needs water often every day.

Let me tell this story: The Professor's year-old daughter was very cross and restless one night and they had done everything they could think of for her, to no avail. The father in desperation at last cried out angrily: "What do you want, anyway?" To his amazement, the child spoke her first word and that word was "Water!" In baby pronunciation, but they understood and gave her what she asked for. She drank, cuddled down and slept soundly. But never did she forget the magic word that had brought relief for her thirst!

Baby's first year can be hard indeed when people forget he needs water and he cannot ask for it. I am sure after this you will give the baby water at least, not forgetting that he may get thirsty at night, too.

Lack of water in the baby's system makes him nervous and irritable. The

nervous system of a child demands much water and is super-sensitive when it is not furnished. Lack of water is the commonest cause of baby's refusing to eat solid food when he becomes old enough to do so. If you doubt this, eat only chewing food for one day and drink nothing but milk. Never again would you "forget to give the baby water" after you had once experienced that gnawing uneasiness, that burning sensation, that dryness that makes it impossible at last to chew food at all.

The health of the baby depends greatly on the health of the mother before his birth. Sometimes when she does not feel well, a mother blames her condition and never blames the real cause, overwork. A few weeks ago in talking to an audience on Health, I picked out of the audience for illustration, a little seven-year-old girl. She was thin and pale, and weighed about thirty pounds. She was no taller than a five-year-old. Of course she was nervous and shy. She tired easily and should have had many rests during the day and a rest before each meal. Of course you know her school work could not be even passable. What was wrong? The mother worked too hard before this baby came. All of her life, she will pay the penalty for those nine months of overwork when the mother could not protect her unborn child because she had to cook and wash for the children she already had.

Many mothers tell me: "My baby was perfectly healthy when she was born" and then go on to prove that she was not, for they tell me the food did not agree with her, she was cross for a long time, and she cried so much and she was so restless. She did not gain in weight as she should have done. All these signs, O mothers, are the signs of the child that was carried by an overworked mother. It takes long years of after-care to make up to the child for the strength that should have been given through the mother during those first nine months and during the nursing period.

If your chickens are hatched early they get their growth and prepare to start laying in the fall. Late-hatched pullets do not make such good layers, as they are not matured before cold weather comes on.

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## Curiosities of the Calendar.

January always begins on the same day of the week as October, and the same is true of April and July, September and December. Again, February, March, and November also begin on the same day of the week. This, however, is only true in normal years of 365 days. A century can never begin on Wednesday, Friday, or Saturday. Furthermore, the ordinary year ends on the same day of the week as that on which it begins.

Enjoyment is nine points of possession.

The frontiersman needs courage; what else than a frontiersman is he who goes fearlessly onward into the future?

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Planting a Tea-Set.

More than fifty years ago a small girl lived on a large farm in the State of Michigan. Her only dishes were the broken parts of a little china tea-set. The sugar bowl had lost its cover, the teapot spout had been broken off, and the cream pitcher had no handle. The tea cup was very friendly with the cream pitcher, for it, too, was without a handle, and the small girl played there were two saucers, as one was in two parts! These tiny dishes were decorated with very pink flowers and delicate sprays of green leaves. Every little piece was well washed and dried whenever the small girl and her smaller doll had a tea-party.

One night when the farmer was planting acres of potatoes the small girl watched the careful cutting of the seed-potatoes before they were put in the ground.

Feeling sure that she had mastered the lesson about potato eyes and the fall crop, she hurried to look at the parts of her beloved tea-set. She had a plot of her very own in the flower garden, and for once she was glad that her dishes were already broken, for she decided to plant them! Every part was put into its little hole, and covered with a shapely hill of good earth. Her garden was hoed, weeded and watered with diligence, and when others were digging potatoes, she dug for tea-sets! She was a brave child, and when she found only pieces she had planted, she washed and dried them, saying to herself: "Good thing the seeds didn't rot!" and nobody knew of her thwarted attempt to grow the tea-sets until she was a grown woman, with a little boy who loved to hear her tell about long ago when she was a little girl. Then one day she told him the secret.

Not long afterward she had a little day and one of her presents was a lovely little tea-set with pink flowers and sprays of green leaves. The little boy had saved his pennies until he had enough to buy the gift of which nobody but his mamma guessed the secret when he said that it was for the little girl whose tea-set never grew. She took her boy in her arms, and laughing said: "But it has grown, it has grown, my precious boy, and it is more beautiful to me than any tea-set ever made!"

Planting Trees in Line.

When starting the orchard it is necessary to use a planting board in order to get the trees in a true alignment. Take a board four or five feet long and bore a hole in each end large enough for small stakes to slip through. Then make a notch in the centre of the board.

Of course, the location of each tree to be placed in the orchard will be indicated by a stake. Place the planting board on the ground so that the notch coincides with the stake which has been set for the tree. Then pin the planting board to the ground with the small stakes at each end. The middle stake can now be removed and also the planting board. Dig the hole for the tree and then place the planting board back on the two end stakes. The notch will come right where the tree stake stood before. Bore a hole wide enough, and of course, that is the place to put the tree. It enables the grower to place his trees upright in straight lines. If the planting board is not used it will be difficult to line up the trees even if the holes are in line, as one tree will be too near to one side of the hole and the next tree too near to the other side. The result is an orchard which advances for many years the careless methods by which it was planted.

Buy Thrift Stamps.