

# 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.

## Pasture For Hogs.

The feed situation confronting the swine-grower during the coming summer is not altogether a bright one. Standard hog-feeds are not likely to be plentiful, with high prices ruling. Shorts and middlings, while fixed as to price show no likelihood of a surplus. Corn, for some months practically unobtainable and in any case too high in price to be considered, may be available, but whether in reliably constant quantities remains to be seen. Barley will be high priced also and difficultly available in many localities. Oats, under ruling and probable future prices, should be used only for the milking sow and for weaned and growing pigs. Only in small quantities should this feed enter into the fattening ration. It has been shown that with breeding stock, whether during winter or summer maintenance, cheap home grown feeds may be largely utilized as an economy and that from such feeding practice best results may be obtained in health and production. It has been, further, clearly demonstrated that home-grown feeds for summer feeding may economically replace a considerable percentage of meal even at pre-war prices.

At the Experimental Farm, Brandon, it was shown by experiment during the summer of 1916 that oats, barley and wheat all stood pasturing well. These were sown on May 17 and pastured from July 5th until early in August. Rape which was slightly injured by pasturing too early, supplied much needed pastureage when the cereal seedlings had been eaten off. Vetches although slow of growth were readily eaten and stood pasturing well. Sweet clover, was also late in maturing and eaten only when no other feed was available.

It might be stated that beyond a comparison of these crops from the standpoint of palatability, recuperative power, and ability to withstand trampling and pasturing generally, no data was available to show the cost of production one crop against the other.

With these pastures crops a self-feeder was used to supply a supplemental grain ration. Such practice indicated that no more than where hand feeding was employed and that economical gains were made at a cost of 5 cents per pound for grain and pasture, employing feed prices then current. The method in general reduced the labor of feeding to the minimum.

At the Experimental Station, Lacombe, where swine feeding enters largely into live stock operations, rape and alfalfa have proven most desirable crops. As a result of the average of three tests, rape has shown a slight superiority over alfalfa requiring 3.8 pounds meal fed supplementally as against 3.83 pounds in the

case of alfalfa. Rape carried 1786.1 pounds of pork per acre as against 1518.9 pounds with alfalfa.

The findings at Lacombe would warrant the recommendation of alfalfa for early pasture with a block of rape to supply green food for hogs when they attain considerable size. Where alfalfa may be successfully grown, the swine grower would be well advised in retaining a small block for swine feeding purposes. Failing alfalfa, clover will give almost equally good results. With neither of the legumes available, results at Lacombe indicate that a cereal pasture second only to the legumes, is to be obtained by the use of a heavy seeding (3 bushels per acre) of oats and barley, or wheat, oats and barley.

Any one of the pastures above mentioned should be followed by rape seeded early in June, preferably in drills 27 inches apart.

At Lacombe the results of the use of self-feeders versus hand-feeding on pasture, while not sufficiently verified by repeated experiment, would indicate that where hogs are fed to a finish the self-feeding method shows most economical gains. It has been proven, where corn is the principal grain used, self-feeding is more economical than hand feeding. That this is also the case where mixed grains, wheat by-products and feeding concentrates are used, is indicated by the results at Ottawa, Lacombe, Brandon and elsewhere on the Experimental Farms System.

At the Experimental Station at Lethbridge excellent results have been obtained from alfalfa and peas, the hogs being allowed access to both crops at the same time. Here of course alfalfa is one of the most dependable crops grown, conditions being in all respects suited to its culture.

While much evidence is, therefore, at hand, to show that alfalfa possibly holds first place as a hog-pasture, it must be remembered that in many sections of Canada this crop cannot be grown at all, in many others that it is unreliable in the extreme, and that even under more or less favorable soil and climatic conditions for one reason or another it cannot always be relied upon. For reliability and wide cultural possibilities and from the standpoint of palatability, producing power and resistance to pasturing, red clover should receive emphasis equal to, if not greater than, that given alfalfa.

In conclusion, high priced grain and meal for hogs must be replaced, as far as possible, during the coming summer. Pastures, as discussed, form a home-grown, palatable, easily available food, that is harvested without labor. The self-feeder combines well with pasturing, and for growing and finishing hogs is peculiarly worthy of attention during present labor scarcity. Experimental Farms Note.

## Poultry

Good Yards Save Losses.

Near many farm buildings where poultry range unchecked the newly seeded grain fields show bare spaces of an acre or more which have been scratched up and eaten off by the farm flock. The average acre thus eaten frequently means a lessening of the crop by from 20 to 40 bushels, while the feeding value to the flock secured from this acre would not amount to more than that furnished by one or two bushels of grain. This is an expensive and unnecessary plan of feeding. To remedy this I aim to have every chicken house or set of chicken houses provided with a chicken-proof yard so that at critical times during the year all of the chickens may be confined.

We make these poultry fences of woven wire, using strong fence posts which we set substantially in the ground. A six-inch fencing board is placed around the bottom of the fence and one on the top just above the wire. This makes a good brace for the posts. Above this top board is

stretched a strand of barbed wire. This makes a fence six feet high. If an occasional venturesome biddy scales this fence, we clip a few feathers from one wing.

In addition to the advantage mentioned there are several other reasons why it is important to have a place to confine farm flocks. In the spring of the year especially, there are a number of days that it is an advantage to keep a flock confined in order to keep the egg-machinery steadily working. On stormy days we open up the doors and let the birds out into the yard to sample the storm for themselves. They soon decide it is better to stay in and go back, and are contented. But give them free range and they'll be huddled up in groups in various places about the farmyard, quite miserable, and perhaps roost out all night. Then down goes the egg yield. On such days we go into the poultry houses occasionally with a little variety—potato or apple peelings, a bunch of clover or alfalfa hay, silage, etc. These things, of course, in addition to their regular ration when running at large. If not possible to have a yard with a tree or two, we plant a few plums or damsons and it's surprising how soon they make some outdoor shade, and it is not long until there is fruit for ourselves, and chicken too.

## An Omen.

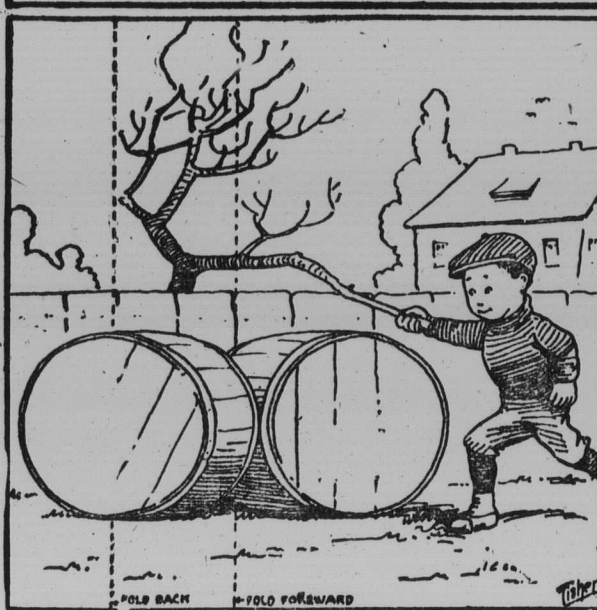
From a land physically remote, but ever spiritually near, has come an omen. Jerusalem, the Holy City, in which grew up the belief in a Kingdom of God, has passed again into the keeping of those to whom that kingdom means justice, and mercy, and truth. Let the victory be our Easter token that those qualities shall triumph and shall be no more overcome.

Celery is more digestible when cooked.

Turn a plate upside down in the bottom of any vessel in which you are cooking any food a long time. The plate will prevent any possible scorching.

## FUNNY FOLD-UPS

CUT OUT AND FOLD ON DOTTED LINES



Out in the alley Willie found  
Two barrels lying on the ground;  
The hoops were loose and a stick you see,  
He broke from a branch of the apple tree.

## 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.

### Chronic Catarrh.

There is no diseased condition in moist climates so common as this. Children are born with it, and many people carry it with them to the very limit of extreme age.

We generally mean, by the term, chronic nasal catarrh or chronic rhinitis.

Consider the anatomical facts for a moment. There are two nostrils or spaces, narrow in front, much wider and more capacious at the back, and terminating in the pharynx or throat.

They are separated in front by a partition which is cartilage below and bone above.

On either side, outwardly, are three small bones, one above another like shelves, giving rise to three spaces or passages; and there are communicating cavities above, behind, and at the sides lined with mucous membrane containing many bloodvessels and becoming more or less swollen when the bloodvessels, for any reason, have an extra supply of blood.

The nasal passages also communicate with the eyes, ears, and mouth, and in the operation of breathing, the air normally passes through the anterior and posterior nasal passages on its way to the lungs.

In this way the air is filtered, and impurities it may contain are often retained on the nasal mucous membrane.

If these structures of the nose are faultily put together (from natural defect or as the result of accident), or if there are diseased tonsils or new growths, like adenoids, in the posterior nasal passages, breathing becomes difficult, the mucous membrane becomes inflamed and thickened, and there is an increase in the secretion of the mucous membrane, be it mucous or pus; this constitutes catarrhal discharge.

Sometimes the irritated and congested mucous membrane throws out masses of soft tissue which take the form of tumors, or polypi and these may entirely block up the nasal passages and compel mouth breathing continually.

Sometimes the inflammation extends to the accessory cavities referred to, which may complicate matters seriously; but this is far less common than the minor disorders.

Then the mucous membrane may be irritated and swollen by strong vapors or gases, like ammonia or chlorine; by impressions and emotions; by dust from one's work, or the dust of the street, or the pollen of plants; or by draughts of air.

Bacteria may be inhaled and cause cold in the head, influenza and other nasal troubles, and there is the ever present irritation of a moist atmosphere at the sea coast and in all humid climates. The more mucous membrane in the extensive nasal area that is involved, the more extensive will be the catarrhal disease and the catarrhal discharge, and in chronic catarrh this continues night and day, sometimes thick, purulent and offensive.

The general health may be disturbed by this disease, and there may be insomnia, dizziness, dulness, headache, poor memory, impairment of smell, sight and hearing, and constant discomfort in the throat and larynx.

Alcohol and tobacco make the disease worse, and so do concurrent

disease of the heart, lungs, liver or kidneys.

Much surgical work is done to relieve nasal catarrh—much boring and gouging and cauterizing which often does more harm than good.

Obvious mechanical obstructions must, of course, be removed. You who suffer with this disease, live simply; get an abundance of good food and sleep; exercise out of doors; and seek the guidance of a wise and conservative physician.

Go to a dry climate, if you can, for this will do more to produce a permanent cure than any amount of medication.

### QUESTIONS AND ANSWERS.

J. A. M.—1. What causes a flow of

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saliva from the mouth during the sleep? 2. How can it be stopped? 3. If the saliva is yellowish in color, is it an indication of indigestion?

Answer—1. It is due to the relaxed condition of the tissues—which always occurs during sleep. 2. I do not know of any way to stop it. 3. It does not necessarily indicate indigestion.

### The Last Syllable.

Scottish Sergeant—And now we'll try the right turn by numbers, and mind that ye don't move till ye hear the final syllable of the word—turn.

Plant spinach very early in Spring with a view to harvesting the crop before very warm weather arrives.

Onions and parsnips can be sown quite early, carrots not quite so soon. Radishes and lettuce, first sowing as soon as the ground is dry enough to work.

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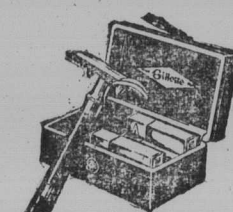
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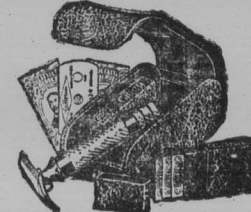
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