

### CROP ROTATION.

This is a subject that is of much importance to the farmers. We are usually in the habit of thinking of crop rotation as of quite recent date, writes Mr. C. A. Wilson.

Crop rotation is by no means recent or modern origin, for we find in the writings of Cato, Pliny, Columella, and Festus, that it was practically and the Doman civil

rye, barley or oats, fallow. This was the crop rotation that was practised on the more fertile soils of Europe for centuries. So thoroughly did this rotation become established that it actually became an impediment to a more rational system of agriculture.

It is folly to talk crop rotation to a man who is cultivating a virgin soil; for is he not growing good crops of hay or wheat on the same field of hay or wheat on the same field who is cultivating a virgin year after year? It is true. But let us see what he is doing. He is taking from the soil, without replacing anything in return, the capital that nature has taken centuries to place

FOR HIS BENEFIT.

He does not stop to consider he is drawing out the money nature's bank without givin nature's bank without giving as much as a receipt for it. Lawes and Gilbert grew wheat for fifty years on a manured and on an unmanured field and found at the end of that At present commercial fertilizer would cost \$144.34 per acre to replace this element alor have only to look to the older parts of our country to-day to what has been the result of such system of spoilation.

What means this statement that a soil is "worn or run out." It is simply the loss of one or more essential ont plant elements from the soil below for the amount needed to support plant life successfully. It is surprising to what extent some of the farmers of a system. There may be bought to-day; by paying the back taxes. some extent erroneous, yet when put "wornout lands in the east that were once as fertile lands as we have in

ONE THING DONE WELL.

Dr. Williams Pink Pills for Pale do that one thing—but they do that one thing well. That is the secret of their success. They actually make new blood; just that and no more. But good blood is the best cure—the only cure—for most disbad blood.

1. That all plants do not draw to an equal extent upon the manurial ingredients of the soil.

2. That they send their roots to different depths and have a different solvent action upon the constituents.

3. That the soil is good till. cure—the only cure—for most diseases. Most diseases are caused by had blood. Anaemia, paleness, pimples, eczema, indigestion, biliousness, kidney trouble, backaches, sideaches, neuralgia, nervous troubles, rheuma-tism and the special secret ailments recent or modern origin, for we find in the writings of Cato, Pliny, Columella, and Festus, that it was practiced at the time of the Roman civilization. Their method of rotation was to grow a grain crop for two years and then let the ground lie fallow for a year. By so doing, they reasoned that the land gained a needed rest, while the truth was, that the year's rest added no fertilizing elements to the soil but simply increased the soluble salts in the soil.

But our more modern system of crop rotation dates back to the recent time, when in England the farm was made necessary by the methods of agriculture which then prevailed. The management of the farm was not in the hands of the individual, but was under the control of the village. Each family was allotted a piece of land for a single season upon which to go on a certain kind of crop. And to avoid all conflict of interests, each of the large, common fields was marked off into three great parts, and fallow. This was rotated with winter wheat or rye, barley or oats, and fallow. This was the crop rotation was in the consumption. I have the weet all caused by one titled more evenly. Enter the time and the special secret ailments of growing girls and women—these are different diseases but they are all they are different diseases but they are all they forget that the idea that one little medicine can cure all these to had blood. The foolist ferrent diseases—but they are all caused by one titled more evenly. Entering the time at the vision of intered tiseases but they are all caused by one titled more evenly.

Experiments carried on at our extending that the idea that one little medicine can cure all these to had blood. The foolist that they tored that they tored that they forget th

Miss Blanche Durand. St. Edmond, Que., says:—"The doctor told me I was in consumption. I had alternate chills and fever, and severe cough and was daily growing weaker. Then I began the use of Dr. Williams Pink Pills and my health and strength have fully returned."

Mrs. John McKerr. Chickney. N.

strength have fully returned."

Mrs. John McKerr, Chickney, N.
W. T., says:—"For some years I
was a great sufferer from the ailments that make the lives of so
many women miserable. I never got
anything to relieve me until I began
using Dr. Williams Pink Pills and
they have made me feel like a me they have made me feel like a person."

Mrs. Albert Luddington, St Mary's River, N.S., says — I was a cripple from rheumatism until I began using Dr. Williams Pink Pills. Now the school and pains have left me and I from as well as ever."

Mr. M. Cook, Lamerton, N. W. T.,

says :- "Dr. Williams Pink Pills cured me of a severe attack of erysipel-

Mr. William Holland, Sarnia, Ont. time that the manured field contained 5,018 lbs. of phosphoric acid and the unmanured 2,956 lbs. of phosphoric acid, or a difference of 2,062 phosphoric acid, or a difference of 2,062 pills and after using them. Pills, and after using a month every bit of the trouble was

> What Dr. Williams Pink Pills have what Dr. Williams Pink Pills have done for these people—and for thousands of others—they will do for you, if you will give them a reasonable trial. Sold by medicine dealers everywhere, or by mail from the Dr. Williams Medicine Co., Brockville, Ont., at 50 cents a box or six boxes for \$2.50.

While agriculture is one of the most this state continue to crop a field with the same kind of a crop year after year, when we have at our very door in the castern states examples of what has been the result of such a system. There may be bought to

tion are based upon the following

good tilth by the addition of humus; and bacteria which is beneficial to the soil and the plant is encouraged.

4. And that weeds are more easily eliminated and the farm work distributed more available.

tributed more evenly.

Experiments carried on at our ex-

ke a miracle."

Miss Blanche Durand. St. Edmond, storms and through the loss of solution in consumption. I had altertation of wheat, clover, wheat and oats an average of 178 pounds of nitrogen per acre was removed annually, yet there was a gain for four years over and above this amount of 245 pounds of nitrogen. This nitrogen was gained largely by the clover from the free nitrogen of the air. In this rotation not only were larger crops grown, but the nitrogen and humus contents of the soil was increased.

has been said that successful farming is based upon the conservation of the organic matter of soil, and the following out of a good the soil also it influences to a marked extent the available potash phosphoric acid of the soil. Humus forming materials, like green manures and barnyard manure, have the power, when they decompose in the soil, of combining with the onsoluable potash and phosphoric acid of the soil and converting them into forms which are readily available by plants. It also aids in the relaxation of soluble nitrates and ammonia phosphates.

But the benefits that are to be de-

rived from humus in the soil cannot be measured entirely by its chemical effects; but what seems to be greatest source of benefit to be rived from it, is from its physical effects upon the soil. A soil that centains a proper proportion of hu-mus will be more porus, will hold more capillary water, and will aver-age from 2 to 3 degrees more in temperature throughout

## THE GROWING SEASON.

Now it can plainly be seen that there are only two ways by which we can keep up or add to this humus content of the soil, namely, by very

because of the length of time it takes to establish the crop.

The modern systems of crop rotation it.

The amount of humus added to our soil by a crop of clover or a sod is even greater than we would at first suppose. Storrs, of Connecticut experiment station, found that a grass sod three inches high, when plowed under, returned to the soil 8,228 pounds of organic matter which contained 90 pounds of introgen, 25 pounds of phosphoric acid, and 56 pounds of phosphoric acid, and

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# Fashion ....Talk

\*\*\*\*\*\* SUMMER SHIRT WAISTS.

The tailored shirt waist has a rival in the simple sheer blouse, but it has by no means been supplanted, and, for certain purposes, it is desidedly more desirable than any other cidedly more desirable than any other separate waist

For outdoor summer sports the shirt waist is the thing, and a host of women maintain stoutly that trim tailored shirt waist is more in connection with a coat and skirt norning costume than the daiotiest sheer embroidered blouses. latter is, perhaps, more distinctly feminine, more exquisite in quality, and strongest argument of all, more Pari-sian; but it loses its freshness and daintiness readily, and when mussed has little charm.

The shirt waist, made of stouter stuff and severely tailored, stands rough wear better, resists the reckless assaults of the laundress, and is really an indispensable feature of summer girl's wardrobe.

The shirt waist suit is of course smarter than the separate shirt waist and there is a marked tendency this season to make up simple skirts match shirt waists of all kinds. prices asked at popular shirt ist makers' shops for the whole the prices asked at popular snirt waist makers' shops for the whole frock are out of proportion to a woman's income she in many cases hasher waists made at the shop, buys enough material matching the waists for white and makes the skirts herfor skirts, and makes the skirts her self at home.

Some very good shirt waist makers will use materials bought by the cus-tomer; but unless one goes to a good maker the safest course is to buy good pattern, hire an inexpensive seamstress, and have the waists made an inexpensive at home under one's own direction.

To make a shirt waist may seem a imple proposition, but as a matter of fact a really satisfactory shirt waist is a rare thing. Very careful fitting is required; and in the large where hundreds of the waists are turned out in a week, and many workpeople are employed, mistakes important that we foster the humus of our soils, because in it we have the principal source of nitrogen in careful fitter, and often the homemade shirt waist, fitted early and often, and watched at every point in its progress, turns out much better than the expensive shirt waist ordered at the fashionable shop,

### RUCHINGS A FEATURE.

Ruchings are a feature of wraps, and oftentimes the ruchings showing about the edges of a garment are decided contrast to the body of the wrap or to its trimmings. One very handsome wrap is made of pale grey The shirred yoke is trimmed pongee. with choux of shaded crepe, and long crepe streamers ending in kno hem of the long wrap. Huge llions of grey lace are inserted that medallions of grey so as to form a border to the wrap, and are also used at the bottom of immense sleeves. These sleeves the are gathered into the huge armholes and fall in straight folds to the wrists where they measure fully three-quar-

ters of a yard across.

Heavy silk crepe is being made up into coats and loose wraps. It is a material that lends itself with especonce as fertile lands as we have in any of our western states. They were abandoned because they ceased to give a profit after the labor and taxes were paid.

But how are we to redeem our wornout soils or to maintain the fertility of our richer soils? We answer, by a proper system of rotation and by returning as far as possible the plant elements that we remove the plant elements that the proper that the plant elements that the plant elements that the proper the plant elements that the proper that the plant elements of the plant elements that the proper that the plant elements in this way, that each plant eleast once in every turn down at least once in every turn down at

### ADVICE TO MOTHERS.

"Keep your little ones stomach and howels right, and they will be healthy, happy and grow well." This is the deliberate opinion of a physician of world wide reputation. One mother who followed this advice—Mrs. Albert Boisvert, St. Claude, Que., proves the truth of it. She says:—"I have the greatest faith in Baby's Own Tablets for young children, and I always keep them in the house. Both my little ones were troubled with constipation and sour stomach. I gave them the Tablets and they are now perfectly well. Once in a while I still give them a dose to prevent the trouble coming back." It will be the still the still the still give them a dose to prevent the trouble coming back." dose to prevent the trouble back." If all sensible mo dose to prevent the trouble coming back." If all sensible mothers follow this advice there will be fewer low this advice there will be fewer cross, peevish, sickly babies in the land. These Tablets are guaranteed to contain no opiate or harmful drug. Sold by medicine dealers everywhere, or sent by mail at 25 cents a box by writing The Dr. Williams Medicine Co., Brockville, Ont.

during the two past summers. Now. that the white corner is broken, colored handkerchiefs are rapidly returning to favor—for the summer, at least. So far the color portion consists of patterns formed by embroidered dots—the "jewel" effect of the that the white embroiderer.

To prove to you that Dr.
Chase's Ointment is a certain and absolute cure for each and every form of itching, bleeding and pretruding piles, the manufacturers have guaranteed it. See for itself to be sure what they think of it. You can use it and get your money back if not cured. 60e a box, at all dealers or EDMANSON, BATES & CO. Toronto, Dr. Chase's Ointment

### CANADIAN WOMEN WARNED.

Vile Wretches Trying to Induce Them to Go to St. Louis.

A caution to young Canadian wo men is as necessary as that which is finding place in many American re-ligious papers, to the effect that an ligious papers, to the enect that an organized attempt is being made to entice young women to St. Louis for infamous purposes, under the guise of attractive and profitable employment, says the Canadian Bap-tist. The great Exposition to be tist. The great Exposition to be held there will call for domestic help of every class, and many favorable positions will open for industrious and competent girls, but there is a fearful rich in and competent girls, but there is a fearful risk in any young woman going to such a city to find employment in answer to an ordinary advertisement, and without certainty as to the responsible and respectable character of the advertiser. A woman's society in the Western cities is sending out circulars and publishing papers showing that there are ing papers showing that there are gangs of vile wretches scouring the gangs of vile wretches scouring the country towns and places to lure girls to cities where it is promised they will be met and cared for by kind friends and provided with a home and employment. To their discourt they are taken to dens of inkind friends and provided with a home and employment. To their dismay they are taken to dens of infamy, and only escape as by a miracle, if they escape at all. And the scoundrel who sent them forward is paid a large commission for every the three scade to the spare of the paid a large commission for every one he thus sends to the snare of the fowler. This seems too diabolical to be true, but the facts are verified and the operators of the shameless game have been traced and convicted and imprisoned, though much oftener they escape. Knowing young women of Canada Knowing this only keep far away from all such treacherous schemes and schemers, but they should put all their young aquaintances in possession of facts referred to, and unite them in a crusade for purity and vithin the range of their acquaintance.

Chronic Liver and Stomach Trouble Thoroughly Cured by Using

Dr. Chase's Kidney-Liver Pills

In every home there is more or less affecting as a result of constipation with the description of the digestive.

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