



AGRICULTURE

Two Effects of Clover.

The work of clover is not always to get nitrogen from the air. There are some soils that are rich enough in nitrogen and yet need the presence of the legumes. In a visit to Antioch, Illinois, the writer observed that the soil is only a little acid and that it is also rich in nitrogen. Clover is being grown, but its work of soil renovation is different from that it has to perform on some other soils, especially those that are deficient in nitrogen. Here the roots go deep into the soil and help to improve the physical condition of the soil. It taps the stores of potassium and phosphorus that are hidden away in the depths of the earth and brings them to the upper layers of soil, where they will be within the reach of the plants that do not have the deep root systems that clover and alfalfa have.

The clovers will be found to be useful on almost all soils where they will grow, either as collectors of nitrogen or as subsoil cultivators. They send their roots deep into the soil and tunnel in every direction. The roots in time die, leaving a multitude of passages in the soil. These act as drains and as air channels, by which the soil is more fully aerated. As a nitrogen gatherer the clover is of great use on millions of acres of our lands from which the nitrogen has been exhausted, and on millions of other acres it acts as a carrier of fertility from the cellars to the upper storage rooms of the soil.

Varying Gluten Content of Wheat.

The wheat grown in Manitoba and the Northwest Territories in the season of 1902 was a good sample and weighed well; but the millers were unable to make a strong flour from it. The bakers claimed that the flour was weak and would not stand the proper amount of fermentation; and yet it seemed to contain a fair amount of gluten. Complaints were so general that we were asked to examine the flour, and, if possible, find out what was wrong with it. The analysis showed that the gluten was poor in quality. The gluten of flour is made up of two nitrogenous bodies, gliadin and glutenin. The gliadin, or plant glue, as it is sometimes called, is the substance which gives tenacity to the dough. It is due to the elasticity of this gliadin that the gases produced during fermentation are retained in the dough and the dough is said to "rise." If the amount of gliadin is low, the gases break through and escape and the dough does not rise properly. The "Patent" grades of flour always contains more gliadin than the lower grades, made from the same wheat, and, consequently, are stronger flours, and the dough rises better. On examining the flours made from wheat grown in the West in 1902, we found that they were all very low in gliadin.—Ontario Station.

Killing Rose Bushes.

From the Farmers' Review: I have a piece of very sandy land. For some time rose bushes have been working into it, so that in places they now choke out the crop. I have tried to exterminate them by plowing, but they don't die out and continue to increase. You may know of some way to kill them out. They are the common wild rose bushes and grow not much over a foot high. Please let me know if there is any way to get rid of them.—N. Richardson, Morrison County, Minnesota.

A Christmas Gift.

Down in Kankakee county, Illinois, lives a farmer who has two boys in the agricultural college. They have become imbued with the idea that agricultural science is the science that leads all others. They have learned enough about soils and fertilizers to know that the lands of their father need potassium in some form to make it yield good crops. Last December they determined to make their father a Christmas present and cast about them for a suitable gift. They concluded that a ton of potassium chloride would be just the thing, and proceeded to get together the money and buy it. A ton of this kind of fertilizer cost them \$50. The fertilizer was used on the land this spring and is giving promise of great things.

When Corn Wants Potash.

Last week we heard a farmer talking about his corn fields and his experiences on land that has not been found to be deficient in potash. He had great trouble every year in keeping his corn from falling down. It seemed to lack stiffness, and he could seldom get it to the mature stage without having it fall down before the first heavy wind that came along. On the advice of Illinois scientists he applied potassium chloride to his land. The result was seen the following harvest in the stiffness of the corn crop, which stood up not only till the time to gather the corn came, but throughout the entire winter.

The Clay Hills need to be drained as certainly as do the low lands.



FARM MISCELLANY

When Ashes Are Put on Land.

The application of ashes to land does not necessarily show what that land needs. It has been a favorite practice to apply ashes to land to determine its supply of potassium, and to-day most of our people believe that the chief fertilizing value of ashes is the potassium. The writer remembers a bare hill top to which he applied ashes during all of one winter. The next spring the growth was so great on that place that the hay could not be cured on the ground where it was grown; but part of it had to be carried to another spot to allow of its being spread thin enough to permit of the sun's getting into it. The natural inference was that the land had become very deficient in potassium. But Professor Hopkins of Illinois says that the test is not a sure one in its results. He mentioned parts of Illinois where there is no deficiency of potassium, but where the soil is acid. The application of ashes brought good harvests and the farmers wrote him that their land needed potassium. He investigated and found that they were mistaken. The lime in the ashes had neutralized the acid and caused the change in conditions that resulted in an abundant yield of grain. Some kinds of ashes contain over 50 per cent of lime, and this is the element that does the work in many cases. When land responds to the application of ashes it means that either the soil contains too much acid, which the lime in the ashes neutralizes, or that it is deficient in potassium.

Cold Storage Plants.

There has been quite a furor for the building of cold storage plants during the last few years. Some years ago men made fortunes by erecting cold storage plants and buying quantities of butter and eggs, which were carried from the low-priced period of the year to the high-priced period. This of course gave large profits. As was certain to be the case, other men saw the same method of getting rich and began to build like plants. This was all right for some years, while the number of plants was small enough so that the goods stored would not greatly affect the market. But the building continued, and now the products stored compete so strongly with each other that the margin of difference of prices at different times of year is greatly reduced. Reports from New Jersey tell of a new cold storage plant at Jersey City, which was built last year at a cost of \$300,000. The establishment was perfect in every detail and the promoters expected great things. But they were unable to secure business and the enterprise went into the hands of a receiver. The plant was offered for sale at auction, with the proviso that not less than \$190,000 would be taken. Not a bid was received.

Good Heifers from Good Cows.

No really good milk should be sold except for a very high price provided it is possible to breed her to a dairy bull of a good milking strain. Every farmer should make an attempt to raise enough first-class heifers for his own use, and to do this he will have to refuse to listen to the voice of the tempter when he has the opportunity to let go of his best milk cow for a few more dollars than the next best would bring. In the light of a mother that cow is worth more to him than she is to the man that intends to buy her, milk her for a few months and send her to the butcher. It is a bad policy to try to buy cows from others. One never knows what he is getting in such a case. It takes time for a man to learn that the cow he bought has faults, and during the time he is finding this out he may be losing money. Heifers raised on the place are of more interest to the farmer and his family than are the cows that are purchased from no one knows whom.

In Picking Apples.

One man suggests that a good way to pick apples is to put a tick filled with hay under a tree and drop the apples into it from the limbs. He asserts that this has been his practice and that the fruit is not thereby injured. This may be all right for some kinds of fruit, but it would not be for others. There are some of our varieties that injure so easily that even the pressure of the thumb and finger must be looked out for. Besides, in the letting fall of apples from the top of the tree a great deal of skill is required not to hit the other apples in the tick or the limbs of the tree when the apples are being dropped. The apple basket and the apple bag will be found most advantageous for most of the work of fruit gathering.

The Calf for Baby Beef.

The calf that is to be used for the making of baby beef must be kept growing from the start. If the calf cannot be so fed on skim milk that its growth will not be checked, then it should have whole milk till weaning time. A slow-growing animal is of little value to be used as a basis for the production of this kind of beef that is now becoming so popular. The calf must be carefully weaned. It will not do to take it off a full feed of milk and put it onto grain and roughage at once. This process must be so gradual that the calf will not realize it when its milk is finally withheld.



HOUSEHOLD TALKS

Blouse Waist.

Lingerie waists made with lace insertion are among the smartest of all smart things and are charming for wear with the jacket suit in cool weather as well as during the warmer season. This one is dainty in the extreme and combines Persian lawn with Valenciennes insertion and fagoting, but the design is admirable for many other thin materials as well. Lace and embroidery both are used with washable fabrics and all the pretty simple silks, so much in vogue, are appropriate, while the yoke can be made of all-over or of the material trimmed in any way that may be preferred.

Neat Basque Waists.

There is every indication that the basque bodice will be the next thing worn. The pointed crush girdles were the first indication, for they certainly gave the blouse waist a basque effect, and their popularity proved that women welcomed the change. Many of the fitted jackets and Etons are practically basques, and in some of the newest gowns the jacket is not meant to be removed, but is worn over a guimpe or tucker of thin material. A very handsome cloth gown with a satin finish was of a soft tan color combined with green. The skirt was plaited all around, the plaits being very full in the back, so that no sheath effect was noted. The jacket was laid in tiny plaits on the shoulder and was full over the bust. It was held tight below that and around the waist by a corselet arrangement of green and tan colored braid touched with gold.

Preserved Tomatoes.

Weigh ripe tomatoes and allow to every pound of them a pound of granulated sugar. Peel the tomatoes, cover with the sugar and set aside until next day. Drain off the sirup, boil it, and as it boils skim carefully. Lay the tomatoes and simmer for twenty minutes, then with a perforated spoon remove them and spread on platters in the sun while the sirup boils until thick. To seven pounds of the tomatoes allow the juice of three lemons and add this just before taking the sirup from the fire. Pack the tomatoes in jars and fill these to overflowing with the boiling sirup. Seal immediately.

On Summer Costumes.

On many of the elaborate summer costumes mousseline de soie lower trimming is used. This adornment is dainty and extremely easy to make. All one has to do is to cut the material on the cross about four inches wide, fold it double and twist round and round to simulate a full-blown rose. Limp stems of different lengths are supplied by thin silk cord.

Shirred Walking Skirt.

The skirt that just clears the ground is a well-deserved favorite and is eminently fashionable in all its variations. The model illustrated is adapted to all materials soft enough to allow of shirring and suits both the costume and the odd skirt. As shown, however, it is made of bleached Shantung pongee with applique of cream repressé lace. The box plaited effect at the lower edge is a special feature and one that is much to be desired, while the shirrings confine the fullness over the hips and produce a yoke effect without undue bulk, inasmuch as fashionable fabrics are all soft.

Laundering Lace Curtains at Home.

A practical housekeeper says that a clean grass plot is a very good substitute for curtain stretchers. After the curtains are cleansed, pin them to the ground with nonrust hairpins. They will dry in half an hour in the sun to look like new. Curtains of a very delicate fabric, or those tender from long use, should be inclosed in pillow slips to wash successfully without tearing.

Picture Menu Cards.

Some picturesque dinner and menu cards for out-of-town dinner-giving take the form of small English hunting prints, after the manner of Haidecott. The deep reds and greens of these cards make a brilliant color touch for the country house table, and the effect, as a whole, is distinctly novel.

Novelty in Circular.

One of the latest novelties is a huge circular cloak of linen in creamy tone, similar to those worn by the Arabs. It is draped at the back to form a hood. The hood and front are trimmed with white linen galloon. It makes an admirable evening wrap for summer.

Wicker Handles for Parasols.

Wicker is a new note in connection with parasols. It is employed for the handles, and some of the smartest ones of the summer are finished in this way. Wicker handles are particularly attractive on pongee parasols.



WIGGLE-STICK AND JOLLY

Landlord Well Supplied.

The young man suffering from over-study arrived at the resort in the "lonely mountains." "Ten dollars per day?" he gasped, reading the rates over the desk. "Certainly, sir," responded the suave proprietor. "I hope you will understand that this is a nerve sanatorium." "I should say it is, and you have the most nerve of all."

Equal to Emergency.



The Collector—What! Mr. Owing not in!

Why, there he is, before my very eyes!

The Office Kid—Aw—wot! That ain't his old man!—He's out!

That's only his shadow!—Jester.

His Title There.

"My wife and I are going to spend the summer with her people at Strong's Corners," said the meek, little man, "and I want you to mail your paper to me."

Regular Custom.

"Did you follow my advice and send your 'mint-julep' poem to the editor of that Kentucky magazine?"

Not Quite Certain.

Gilroy—Parsons is a liberal sort of fellow. He offered me a cigar just now.

Natural Deduction.

Attorney—What do you do during the week?

Witness—Nothing.

Attorney—And on Sunday?

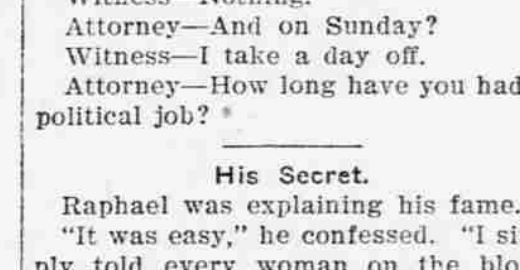
Witness—I take a day off.

Attorney—How long have you had a political job?

His Secret.

Raphael was explaining his fame. "It was easy," he confessed. "I simply told every woman on the block that I had painted my cherubs from hers."

A Missip.



Mistah Jackson (at the cakewalk)—Look heah, niggah, doan' yo' laugh at me; doan' yo' laugh at me!

Mistah Johnson—I ain't laughin'; my face jes' slipped!

The Reader.

Rieder—I suppose I'm a blockhead, but I must confess I don't like Henry James's novels.

Hard Work Ahead.

"Where are you bound now?" asked Psyche of Cupid.

"The Atlantic coast resorts," replied Cupid.

Why He Tarried.

Harold—You shouldn't wait for something to turn up, old chap; you should pitch right in and turn it up yourself.

Rupert—But it's my rich uncle's toes, old chap, that I'm waiting for.

New York News.



Wiggle-Stick

WASH BLUE

Costs 10 cents and equals 20 cent worth of any other kind of bluing.

Won't Freeze, Spill, Break

Nor Spot Clothes

DIRECTIONS FOR USE

Wiggle-Stick

around in the water.

At all wise Grocers.

The Cause of Sleep.

The man who is kept awake by pain, or who suffers in any other way from lack of sleep, can usually obtain it by the use of a drug. Such sleep, however, is generally regarded as unnatural, and hypnotic drugs are avoided when possible. But now comes Mr. Raphael Dubois, a French physiologist, who tells us that all sleep is the result of drugging, the sleep-producer being carbonic-acid formed with in the system.

Weight of Dead Sea Water.

A gallon of distilled water weighs ten pounds, of sea water ten and three-fourths pounds, of Dead sea water twelve pounds. There are eight and one-half pounds of salt in every 100 pounds of Dead sea water to two and four-fifths pounds in ordinary sea water.

Original Rough Riders.

The original Rough Riders antedated the pony express by several years. The Rifle Rangers themselves were rough riders, and Wayne Reid was a captain, leading in person many a gallant charge against the "greasers," Apaches, Comanches and Sioux.

Shouting Their Praises.

Friarpoint, Miss., August 22 (Special).—Cured of Bladder and Kidney Trouble after 26 years of suffering. Rev. H. H. Hatch, of this place, is telling the public the good news and shouting the praises of the remedy that cured him—Dodd's Kidney Pills. Rev. Mr. Hatch says:—

"I have been suffering from Bladder and Kidney Trouble for 26 years and I have tried everything that people said would do me good. But nothing did me any good except Dodd's Kidney Pills.

"I haven't felt a pain since I took Dodd's Kidney Pills. They gave me health and I feel like a new man altogether. Dodd's Kidney Pills are the best I ever had."

All Urinary and Bladder Troubles are caused by diseased kidneys. The natural way to cure them is to cure the kidneys. Dodd's Kidney Pills never fail to cure diseased kidneys in any stage or place. They always cure Backache and they are the only remedy that ever cured Bright's Disease.

Unhappily there are virtues that one can only exercise when one is rich.—Rivarol.

FREE TO TWENTY-FIVE LADIES.

The Defiance Starch Co. will give 25 ladies a round-trip ticket to the St. Louis exposition to five ladies in each of the following states: Illinois, Iowa, Nebraska, Kansas and Missouri who will send in the largest number of trade marks cut from a 10-cent, 16-ounce package of Defiance cold water laundry starch. This means from your own home, anywhere in the above named states. These trade marks must be mailed to and received by the Defiance Starch Co., Omaha, Neb., before September 1st, 1904. October and November will be the best months to visit the exposition. Remember that Defiance is the only starch put up 16 oz. (a full pound) to the package. You get one-third more starch for the same money than of any other kind, and Defiance never sticks to the iron. The tickets to the exposition will be sent by registered mail September 5th. Starch for sale by all dealers.

A woman never cares anything about the answers to the questions she asks.

For Your Perfect Comfort

At St. Louis Exposition, which is very severe upon the feet, remember to take along a box or two of ALLEN'S FOOT-EASE, a powder for Hot, Tired, Aching, Swollen, Sweating Feet. 30,000 testimonials of cures. Sold by all Druggists, 25c. DON'T ACCEPT A SUBSTITUTE.

Never play a horse that is too high-toned to run with the others. He has the habit.

If you don't get the biggest and best of your own fault, Defiance Starch is for sale everywhere and there is positively nothing to equal it in quality or quantity.

If a man has a worthless dog and a frivolous wife he can at least poison the dog.

Lewis' "Single Binder" straight Scigar.

Made of ripe, mellow tobacco, so rich in quality that many who formerly smoked 10c cigars now smoke Lewis' "Single Binder." Lewis' Factory, Peoria, Ill.

The Tailor Took His Measure.

"I was getting measured for a suit of clothes this morn'g," said young Mr. Sissy to his pretty cousin, "and just for a joke, y'know, I asked Snippet if it weally took nine tailors to make a man. He said 'sally and sell to the east door of the take more than nine tailors' Red Willow county, a man of some people. I of August, 1904, at the following de-: The south half of the north half of the on number eight, in % of range number ty of bootblacks.—Philadelphia, 1904.

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