

ROAD AND FARM IMPROVEMENT

HOLDING NEW SOIL.

The Time to Begin the Work of Improving is at Very First.

The time to begin to save and fertilize the soil is when it is new and rich in plant foods. Land which has always been in forest or wild grass and has never been broken by the plow has high possibilities when brought under cultivation. The soil of such lands is full of the roots of the plants which grew in it and the surface is more or less covered with dead vegetable matter. After the soil has been plowed and these plants remain decay much humus is formed and good crops can be grown.

New forest land just cleared and plowed does not as a rule produce a large crop the first season. But when the immense quantity of tree roots in the soil begin to decay and give up their fertility the soil becomes very fertile and will produce large crops. The roots of trees are very large and penetrate the earth to great depths. When they decay they not only leave available plant foods in the soil but leave deep openings in the subsoil up which deep soil water may rise and down which the roots of cultivated plants can easily go in search of sustenance. It requires several years for all of the tree stumps to fully decay, but as they decay they gradually give up fertilizing elements. By the time roots and stumps have all rotted on new land the soil should be in its highest state of fertility and none of this fertility should be allowed to wash away or otherwise go to waste. Some people farm new land carelessly, thinking that because it is now rich that it always will be so. They burn the trash on the surface and allow the top soil to wash away without any thought of the future.

Much new ground is planted to corn for the first three or four seasons. These corn crops are cut for fodder and the entire crop removed from the field, leaving the soil bare. If the land be at all hilly, the top rich soil of these new fields washes away during the winter and early spring. This annual loss of soil fertility is very large, and difficult to replace. There is seldom any attempt to either save the fertility or to increase it.

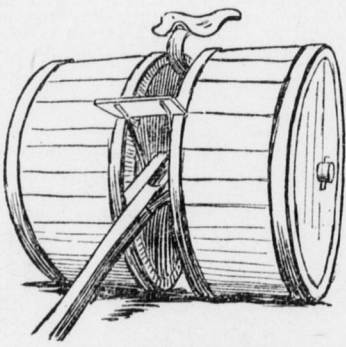
The richness of new ground, in the opinion of the Journal of Agriculture, should not only be conserved but increased as cultivation goes on. Manure and commercial fertilizers will do as much, if not more, good on new ground as they will on old ground. Commercial fertilizers should be used only when there is humus in the soil, and in new ground, if anywhere, their use is to be commended. All refuse vegetation should be saved and used on new ground so that the supply of vegetable mould would be increased rather than diminished. Instead of hauling away, or burning the stalks of a corn crop they should be carefully plowed into the soil where they will decay, hold the wash, and feed the soil. In like manner, all remains of rotten stumps and roots of trees should be covered with soil to decay beneath its surface.

There is no rational need of allowing new land to diminish in fertility, but very much need for it to increase in fertility.

A SNOW ROLLER.

After Heavy Fall of Snow it Packs the Road Bed.

Snow rollers are used for rolling the highways after a snowstorm to pack the snow down, which when frozen makes a road ten feet wide. The diagram shows how made. They are made with two drums 4½ feet long and five feet diameter, with two-inch steel shaft running through, on



Plan of Snow Roller.

which they turn independently, thus permitting them to turn a corner easily. They are made of two-inch oak, the heads being double, and hooped with two by one-half-inch tire iron. The drums are hung in a strong frame and the pole goes through between, and they are about a foot apart. A seat frame is placed on the main frame over the drums, with a place for tools, etc. Four horses are required on the level river roads and six on the hill roads.

Better Education.

"In our judgment the most important single thing to be done for the general betterment of country life it is to provide better education. First, carry good teaching to the homes through the farmers' institute, bulletin, and local papers until our people fully realize that all the advantage does not lie with those in town. Second, adapt our country schools more closely to the needs of the country community."

TANNING HIDES AND SKINS.

How the Work is Done and Good Tanning Formulas.

The effect of tanning is to make the soluble gluten compounds of which the skin is composed into insoluble leather. If the skin is hard and dry it must be soaked in warm water and worked until soft. The hair or wool can be cleaned of grease and dirt by adding a tablespoonful of soda to three gallons soap-suds and washing repeatedly.

Place the hide upon a round, smooth log and scrape off all fat with a dull knife. Then take the brains of the animal and work them thoroughly into the hide, which will render it pliable. Now cover the skin with powdered alum and a little saltpeter and fold up with the hair out. Leave it for three or four days, then hang up to dry, and as the skin dries work it until dry and soft.

Another formula recommended by Farm and Home is as follows: Dissolve two ounces alum and two ounces salt in one pint boiling water, and when cold put the skin in and leave it for 24 hours, then hang up to dry. This quantity must be varied to suit the size of the skin to be tanned.

When nearly dry stretch the skin out and nail it hair side down. Then rub in a mixture of equal parts alum and saltpeter until the skin will not take any more, and keep on rubbing it periodically for three hours. Take out the nails, fold it up with skin side together and hang it up for two or three days, rubbing fresh salt and alum in every day. Then rub the skin down with pumice stone and comb out the fur. This process is especially suitable for large skins, such as sheep skins.

To take the hair off bury the skin in wet wood ashes or soft soap for two or three days until the hairs start, or it may be soaked in lime-water. Then clean off the hair, wash well and proceed to tan as before.

Following is a tanning liquor for large skins: Mix four ounces pulverized alum, eight ounces salt, one quart new milk and one pint prepared starch with four gallons soft water. Put in the skins and air them often by hanging over a stick laid across the tub, so they will drain back into it. After a few days of this treatment remove the skins and add one-half teaspoonful sulphuric acid to the liquor, adding very carefully a spoonful at a time and stirring well.

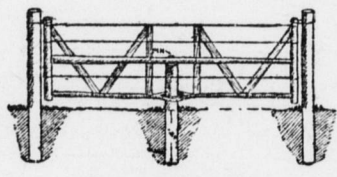
Replace the skins and stir often for an hour, after which take them out, wring and rinse in lukewarm soft water. Hang the skins up in a cool place to dry, and when they begin to turn white work and stretch them until they become dry. Very large and thick hides should be kept in the liquor three or four days.

After skins and hides are dried out the flesh side should be dressed down with pumice stone. This dressing will soften the hide, when it may be trimmed as desired.

A VERY CHEAP GATE.

It is Made of Sassafras Poles and Barbed Wire.

A light, useful and durable gate can be made of sassafras poles and barbed



Pole and Wire Gate.

wire as shown in the cut. Set a strong post four feet in the ground in the middle of the gateway and balance the gate on it. The lower rail, explains Farm and Home, is made of two forked sassafras poles securely nailed together so as to work around the post.

FARM FACTS.

Better baked beans paid for than roast beef on trust.

Where your fight is your heart ought to be. If it is not—give up the fight! Some of our readers report the worst consequences of a drought—ground frozen before sufficient rain fell to fill wells or springs.

You wouldn't from choice buy water for fuel. That is what you do when you buy coal in a wet time. In some cases there are 200 pounds of water in a ton of wet coal. You make that much in buying dry coal.

It is easier to keep breeding sheep in condition than it is to put them in run down.

Feeding the fodder out in the pasture is a good practice in dry and pleasant weather. It spreads the manure where you want it and saves hauling.

Kerosene and Eggs.

It must be remembered that in the use of kerosene in the poultry house none of the liquid must ever touch eggs intended for hatching. It is death to the embryo within. Even a drop or two will ruin an egg for hatching. When coal oil is used in the henhouse for exterminating lice, first gather all the eggs. If a setting hen and her nest become infested, remove the eggs to a clean nest, paint and burn the inside of the nest box with kerosene and refill with clean nesting material. To remove lice from a setting hen insect powders or dust must be used, but never any oil or grease, as it will get on the eggs and cause them not to hatch.

COULD NOT SHAKE IT OFF.

Kidney Trouble Contracted by Thousands in the Civil War.

James W. Clay, 666 W. Fayette St., Baltimore, Md., says: "I was troubled with kidney complaint from the time of the Civil war. There was constant pain in the back and head and the kidney secretions were painful and showed a sediment. The first remedy to help me was Doan's Kidney Pills. Three boxes made a complete cure and during five years past I have had no return of the trouble."

Sold by all dealers. 50c a box. Foster-Milburn Co., Buffalo, N. Y.



"I'll give you a penny if you can spell fish."
"C-o-d."
"That ain't fish."
"What is it, then?"

THE GIRL AND THE LOBSTER.

Possibly Harmless Remark, Though Decidedly Malapropos.

Dorando Pietri, at one of the many Italian banquets given in his honor in New York, talked about professional athletics.

"Amateurism is no doubt more romantic than professionalism," he said, "but we live in an unromantic age."

He smiled.
"Only the other night, at one of your gayest Italian restaurants," he said, "I overheard a dialogue that illustrated forcibly the age's lack of romance."

"It was late. At the table next to mine a rich young Italian contractor was supping with a beautiful young girl. As the young girl played with the stem of her wineglass I heard her murmur:

"'It is true, isn't it, that you love me and me only?'"

"'Yes,' said the young man, 'though this lobster is certainly mighty good.'"

How to Know the Trees.

There is an auctioneer whose "gift of gab" and native wit draw many purchasers to his sales, but sometimes he is the subject rather than the cause of amusement.

The man's name is O. A. Kelley. Not long ago he had to sell, among other things, a lot of pine logs, and the day before the sale he went over them and marked the end of each log with his initials.

On the day of the auction an Irishman came along and immediately noticed the logs with the letters on them. "O. A. K.," he read, loud enough for all round to hear. "Begorra, if 'tis not just like Kelley to deceive us into believing them pine logs are oak!"—Springfield Republican.

Mice on the Pillow.

"I'm not so much afraid of mice as some women," said she, "but I don't like them in my hair. The other night I finished a biscuit I was eating after I went to bed and naturally left some crumbs about, not meaning to, never thinking of mice.

"Well, about the middle of the night I heard scampering, and there were the mice all over my hair, trying to get at those crumbs.

"I tell you, I gave one shriek, sprang up, lighted all the gas in the room and sat up the rest of the night watching that pillow."

HER MOTHER-IN-LAW

Proved a Wise, Good Friend.

A young woman out in Ia. found a wise, good friend in her mother-in-law, jokes notwithstanding. She writes:

"It is two years since we began using Postum in our house. I was greatly troubled with my stomach, complexion was blotchy and yellow. After meals I often suffered sharp pains and would have to lie down. My mother often told me it was the coffee I drank at meals. But when I quit coffee I'd have a severe headache.

"While visiting my mother-in-law I remarked that she always made such good coffee, and asked her to tell me how. She laughed and told me it was easy to make good 'coffee' when you use Postum.

"I began to use Postum as soon as I got home, and now we have the same good 'coffee' (Postum) every day, and I have no more trouble. Indigestion is a thing of the past, and my complexion has cleared up beautifully.

"My grandmother suffered a great deal with her stomach. Her doctor told her to leave off coffee. She then took tea but that was just as bad.

"She finally was induced to try Postum which she has used for over a year. She traveled during the winter over the greater part of Iowa, visiting, something she had not been able to do for years. She says she owes her present good health to Postum."

Name given by Postum Co., Battle Creek, Mich. Read, "The Road to Wellville," in pkgs. "There's a Reason." Ever read the above letter? A new one appears from time to time. They are genuine, true, and full of human interest.

WESTERN CANADA'S 1908 CROP

WILL GIVE TO THE FARMERS OF WEST A SPLENDID RETURN.

The following interesting bit of information appeared in a Montreal paper:

"Last December, in reviewing the year 1907, we had to record a wheat harvest considerably smaller in volume than in the previous year. Against ninety millions in 1906 the wheat crop of the West in 1907 only totaled some seventy-one million bushels, and much of this of inferior quality. But the price averaged high, and the total result to the farmers was not unprofitable. This year we have to record by far the largest wheat crop in the country's history. Estimates vary as to the exact figure, but it is certainly not less than one hundred million bushels, and in all probability it reaches one hundred and ten million bushels. The quality, moreover, is good, and the price obtained very high, so that in all respects the Western harvest of 1908 has been a memorable one. The result upon the commerce and finance of the country is already apparent. The railways are again reporting increases in traffic, the general trade of the community has become active after twelve months' quiet, and the banks are loosening their purse strings to meet the demand for money. The prospects for 1909 are excellent. The credit of the country never stood as high. The immigrants of 1907 and 1908 have now been absorbed into the industrial and agricultural community, and wise regulations are in force to prevent too great an influx next year. Large tracts of new country will be opened up by the Grand Trunk Pacific both in East and West. If the seasons are favorable the Western wheat crop should reach one hundred and twenty million bushels. The prospects for next year seem very fair."

An interesting letter is received from Cardston, Alberta (Western Canada), written to an agent of the Canadian Government, any of whom will be pleased to advise correspondents of the low rates that may be allowed intending settlers.
"Cardston, December 21st, 1908.
"Dear Sir: Now that my threshing is done, and the question 'What Will the Harvest Be,' has become a certainty, I wish to report to you the results thereof, believing it will be of interest to you. You know I am only a novice in the agricultural line, and do not wish you to think I am boasting because of my success, for some of my neighbors have done much better than I have, and I expect to do much better next year myself. My winter wheat went 53 bushels per acre—and graded No. 1. My spring wheat went 48½ bushels per acre, and graded No. 1. My oats went 97 bushels per acre, and are fine as any oats I ever saw. My stock is all nice and fat, and are out in the field picking their own three square meals a day. The weather is nice and warm, no snow—and very little frost. This, in short, is an ideal country for farmers and stockmen. The stock requires no shelter or winter feeding, and cattle fatten on this grass and make the finest kind of beef, better than corn fed cattle in Ills. Southwestern Alberta will soon be known as the farmers' paradise; and I am only sorry I did not come here five years ago. Should a famine ever strike North America, I will be among the last to starve—and you can count on that.

"I thank you for the personal assistance you rendered me while coming in here, and I assure you I shall not soon forget your kind offices."

NO TEMPTATION.

Wag (referring to Miss Oldbird)—Um, I should think it would be more suitable if she were standing under "elderberries" instead of mistletoe-berries.

MIX FOR RHEUMATISM

The following is a never failing remedy for rheumatism, and if followed up it will effect a complete cure of the very worst cases: "Mix one-half pint of good whiskey with one ounce of Toris Compound and add one ounce Syrup Sarsaparilla Compound. Take in tablespoonful doses before each meal and at bedtime." The ingredients can be procured at any drug store and easily mixed at home.

Used Dolls to Set Fashions. Long before women's newspapers were started, and fashion plates in their modern form were thought of, women derived their knowledge of the fashions from dolls dressed in modern costumes, which were sent from one country to another, more especially from Paris, which then, as now, was the leading center of the mode.

There Has Recently Been Placed in all the drug stores an aromatic, pleasant herb cure for women's ills, called Pleasant Gray's AUSTRALIAN LEAF. It is the only certain regulator. Quickly relieves female weakness and Backache, Kidney, Bladder and Urinary troubles. At all Drugists or by mail 40 cts. Sample FREE. Address, The Mother Gray Co., Le Roy, N. Y.

It is easier for a girl to look like an angel than it is for her to act like one.

ONLY ONE "BROMO QUININE" That is LAXATIVE BROMO QUININE. Look for the signature of Dr. W. G. GROVE. Used the World over to Cure a Cold in One Day. 50c.

It is not what we intend, but what we do makes us useful.—More.

CURES COLDS QUICKLY

A never failing home remedy for coughs and colds is made from the following formula to be mixed at home.

"Two ounces of glycerine, one-half ounce of Concentrated pine compound, one-half pint of good whiskey; mix and shake thoroughly; use in doses of a teaspoonful to a tablespoonful every four hours."

This will cure any cough that is curable, or break up an acute cold in twenty-four hours. The ingredients all can be gotten at any drug store.

The Concentrated pine is a pine product refined for medical use and comes only in half ounce bottles, each enclosed in a round case, which is airtight, but be sure that it is labeled "Concentrated."

Inconsistency.

"Isn't that Jones over there—the man who writes the bitter articles about abolishing the tipping nuisance?"

"Yes, that's Jones."

"What's he talking about?"

"He is raising a sarcastic howl over the fact that a noted millionaire is alleged to have given a waiter a nickel tip."

There is more Catarrh in this section of the country than all other diseases put together, and until the last few years was supposed to be incurable. For a great many years doctors pronounced it a local disease and prescribed local remedies, and by constantly failing to cure with local treatment, pronounced it incurable. Science has proven Catarrh to be a constitutional disease, and therefore requires constitutional treatment. Hall's Catarrh Cure, manufactured by F. J. Cheney & Co., Toledo, Ohio, is the only constitutional cure on the market. It is taken internally in doses from 10 drops to a teaspoonful. It acts directly on the blood and mucous surfaces of the system. They offer one hundred dollars for any case it fails to cure. Send for circulars and testimonials. Address: F. J. CHENEY & CO., Toledo, Ohio. Sold by Druggists. 75c. Take Hall's Family Pills for constipation.

The average woman is fond of pets, but her husband is not in that class.

FILES CURED IN 6 TO 14 DAYS. PAZO OINTMENT is guaranteed to cure any case of itching, Blind, Bleeding or Protruding Piles in 6 to 14 days or money refunded. 50c.

A good detective makes light of his ability as a shadow.

Habitual Constipation

May be permanently overcome by proper personal efforts with the assistance of the one truly beneficial laxative remedy, Syrup of Figs & Elixir of Senna which enables one to form regular habits daily so that assistance to nature may be gradually dispensed with when no longer needed, as the best of remedies when required are to assist nature, and not to supplant the natural functions, which must depend ultimately upon proper nourishment, proper efforts, and right living generally. To get its beneficial effects always buy the genuine,

MANUFACTURED BY THE CALIFORNIA FIG SYRUP CO. SOLD BY ALL LEADING DRUGGISTS. ONE SIZE ONLY—REGULAR PRICE 50¢ PER BOTTLE.

SICK HEADACHE

Positively cured by these Little Pills.

They also relieve Distress from Dyspepsia, Indigestion and Too Hearty Eating. A perfect remedy for Dizziness, Nausea, Drowsiness, Bad Taste in the Mouth, Coated Tongue, Pain in the Side, TORPID LIVER. They regulate the Bowels. Purely Vegetable.

SMALL PILL. SMALL DOSE. SMALL PRICE.

Genuine Must Bear Fac-Simile Signature. REFUSE SUBSTITUTES.

CARTER'S LITTLE LIVER PILLS.

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45 to 50 Bu. of Wheat Per Acre

have been grown on farm lands in

WESTERN CANADA

Much less would be satisfactory. The general average is above twenty bushels.

"All are loud in their praises of the great crops and that wonderful country."—Editorial Association of August, 1908.

It is now possible to secure a homestead of 160 acres free and another 160 acres at \$3.00 per acre. Hundreds have paid the cost of their farms (\$2 purchased) and then had a balance from \$10.00 to \$12.00 per acre on one crop. Wheat, barley, oats, flax—all do well. Mixed farming is a great success and dairying is highly profitable. Excellent climate, splendid schools and churches, railways bring most every district within easy reach of market. Railway and land companies have lands for sale at low prices and on easy terms.

"Last Best West" pamphlets and maps sent free. For these and information as to how to secure lowest railway rates, apply to Superintendent of Immigration, Ottawa, Canada, or the authorized Canadian Government Agent:

H. M. WILLIAMS, Toledo, Ohio. Law Building.

W. L. DOUGLAS \$3.00 SHOES \$3.50



The Reason I Make and Sell More Men's \$3.00 & \$3.50 Shoes Than Any Other Manufacturer is because I give the wearer the benefit of the most complete organization of trained experts and skilled shoemakers in the country.

The selection of the leathers for each part of the shoe, and every detail of the making in every department, is looked after by the best shoemakers in the shoe industry. If I could show you how carefully W. L. Douglas shoes are made, you would understand why they hold their shape, fit better, and wear longer than any other make.

My Method of Tanning the Soles makes them More Flexible and Longer Wearing than any other. Shoes for Every Member of the Family: Men, Boys, Women, Misses and Children.

For sale by shoe dealers everywhere.

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We will buy for you on the New York Stock Exchange, stocks from one share and upward at market prices. Write for our CIRCULAR No. 2. We will send to those interested, on request, the most complete and reliable information of all the leading stocks of this country.

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SUPERIOR REMEDY FOR URINARY DISCHARGES: DRUGGISTS OR BY MAIL OR EXPRESS TO 50c. H. PLANTEN & SON, 93 HENRY ST. BROOKLYN, N. Y.

PARKER'S HAIR BALMS

Cleaves and beautifies the hair. Promotes a luxuriant growth. Never falls to restore falling hair to its youthful condition. Cures scalp diseases & hair itching. 60c. and \$1.00 at Druggists.

FREE Beautiful Souvenir Post Cards

Simply send your name and address to one of our postal cards, saying you will show the cards to seven of your friends, and we'll send you—free of all charges—12 of the most beautiful Souvenir Flower Language Post Cards you ever saw. We'll also tell you how you can get 50 more FREE! Simmons Co., 600 Washington, Springfield, Ohio.

FREE Self-Setting Plane

Send us your name and address on a postal card, and we'll send you a FREE Self-Setting Plane of the same quality and 4-in. rules (if this Ad. is sent us with names of 10 plane users. GAGE TOOL CO., Vineland, N. J.

PATENTS Watson E. Coleman, Washington, D.C. Book Free. Highest references. Best results.

RUPTURE CURED WHILE YOU WORK SAME DAY. H. W. WESTBROOK, M.D., 200 N. 3rd St., ST. LOUIS, MO.

If afflicted with: Thompson's Eye Water. A. N. K.—C (1909—4) 2266.



For Lameness in Horses. Much of the chronic lameness in horses is due to neglect. See that your horse is not allowed to go lame. Keep Sloan's Liniment on hand and apply at the first signs of stiffness. It's wonderfully penetrating—goes right to the spot—relieves the soreness—limbers up the joints and makes the muscles elastic and pliant.

Sloan's Liniment

will kill a spavin, curb or splint, reduce wind puffs and swollen joints, and is a sure and speedy remedy for fistula, sweeney, founder and thrush. Price, 50c. and \$1.00.