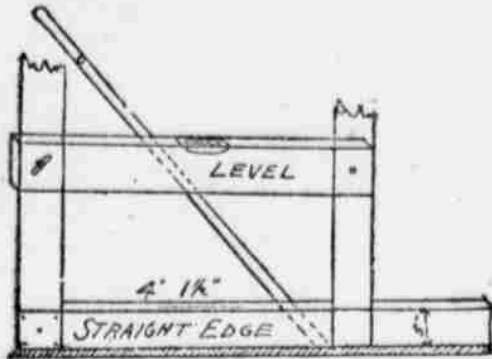


# AGRICULTURAL HINTS

## DITCH-GRADING LEVEL.

Farmers Who Learn How to Use It Will Seldom Require the Services of a Surveyor.

I here give a rude sketch of a straight edge and level for grading the ditch, which I will try to explain. First, the straight edge is five inches wide by seven-eighths inches thick and four feet one and a half inches long, making one-fourth of a rod of 16½ feet. The straight edge is leveled on the bottom, so that no lump of dirt or gravel stone can get underneath to hold it off from the bottom of the ditch. The two uprights, marked a, can be any length to suit the operator, made of one-half



LEVEL FOR GRADING DITCHES.

by three-inch stuff nailed on right-hand straight edge and the level fastened on the right-hand side of the uprights, so as to be out of the way of the staff or handle, which can be of any length to suit the operator. The level is fastened on the uprights with one common screw at the further end of the level. The other end opposite is fastened onto the upright by cutting a narrow slot hole in the upright, through which put a small bolt that will just fill the slot hole sideways, also coming through the level provided with a thumb nut and washer as shown on the drawing. There must be great accuracy in putting the level upon the uprights to have the bottom of the level and the bottom of the straight edge exactly parallel. When you are getting the grade or fall of ditch to the rod by raising or lowering the rear end of the level by taking the difference on a straight line with the bottom of the level measured down at each extreme end of the straight edge, you can tell just what incline your ditch will have per rod multiplying the variation by four. For instance, if the difference in length of the straight edge and the line of the bottom of the level was three-eighths of an inch, the fall in the ditch per rod would be twelve-eighths, equal to 1½ inches, as the straight edge is one-fourth of 16½ feet. Always drive the tile tight at the top of the joint to keep out all the loose dirt. My experience teaches me that the water always enters the tile at the bottom. Always use a scoop to fit the size of the tile, then, when you fill in, the dirt will not crowd the tile out of line. In setting the level for work, always incline so as to have the bubble always occupy the center of the opening of the level. In so doing you seldom require the services of a surveyor.—Prairie Farmer.

## MARYLAND LEADS OFF.

Granges of That State Support National Demand for Federal Aid in Road Building.

The state grange of Maryland is the first of the state granges to follow the National grange in demanding that the government aid in improving the highways. At a fully attended meeting in Baltimore recently a strong resolution on this subject was adopted, and Master J. B. Ager in his annual address said: "There seem to be great interest at this time all over the state in regard to good roads. It is said that the government has expended \$500,000,000 in improving the rivers and harbors and proposes to spend \$200,000,000 in building the isthmian canal. Therefore we believe something should be appropriated to assist the farmers in building permanent highways."

"According to Secretary Wilson's report the farmers have aided the government very materially. Discussing the balance of trade, the secretary says that the favorable balance of trade to the credit of this country is due entirely to the farmers. The balance of trade in the farm products during the last 14 years, no year excepted, aggregated \$4,806,000,000 in products. Other than the farm products during the same period, the balance of trade was adverse to this country to the extent of \$865,000,000. Our farmers not only canceled this immense obligation, but placed \$3,940,000,000 to the credit of the nation, when the books of the international exchanges were balanced. He concludes that it is the farmers that have paid the foreign bondholders. Now, why should not the government aid the farmers in the construction of roads? It is shown by careful estimates that it cost \$900,000,000 to haul the products of the farm to railway stations, rivers and canals, which is vastly more than it costs to maintain 200,000 miles of railway, and by careful estimates the cost could be reduced one-half. I have no doubt that on some roads it could be reduced much more."

## BUT ONE PROPER TIME.

Noted Massachusetts Horticulturist Says That All Pruning Should Be Done in June.

After three score years of experience in orchard culture, allow me to say something on the proper time for pruning. There is but one proper time, the month of June, when the new bark forms on the wood.

More orchards are ruined by being pruned at improper times than from all other causes. If pruned in autumn or winter, the bark will dry around the stump and heal there, but never over the end; this exposed stump will rot out in a few years, leaving a ragged hole where water can enter, and the decay of the center of the whole tree begins, shortening its life many years. If pruned in the spring, the wound bleeds, the sap often running down and killing the bark below, making a black, unsightly wound, which never heals over, and the whole tree is subject to decay.

If pruned in June, when the new bark and wood is forming, the wound begins to heal at once, and no matter what the size of the branch cut may be, the wound will heal before decay begins if the tree is vigorous and in good condition.

Care should be taken to cut close to the trunk or larger branch, so that the wound may heal over the end, for if cut two or three inches from the trunk or main branch, nature forgets to carry the necessary material to heal over the wound, and again the water enters and decay occurs.

When from accident, the effect of snow or ice, a large branch is broken, cut temporarily, leaving a foot or more to be cut again close to the trunk in the month of June.

The reason farmers generally prune in early spring is that they then have time and little else to do and are anxious to be at work, and thus have some excuse; but if they could realize the damage they are doing to their own property, they might perhaps refrain and put their labor to better account at the proper season.—W. S. Ripley, in Country Gentleman.

## HINTS ABOUT MILKING.

Before commencing to milk, brush all loose dirt from the sides and udder of the cow.

Always milk the cow dry before leaving her, but do not continue stripping after the milk is all drawn.

Always milk a cow in the same manner, at about the same time and speed. Any change will irritate and tend to excite her.

There should always be a friendly feeling between the cow and the milker, and milkers should not be changed if it can be avoided.

A cow will not "give down" her milk to a milker she hates or is afraid of, and what she does give will be deficient in butter fat.

After a little manipulation of the teats and udder, the milk is ready to "come down." Then is the time to take it, and do not delay.

The last milk drawn from a cow is much richer than the first. The last quart usually contains more than three times as much butter as the first.

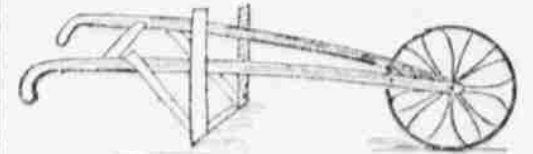
Have the stable clean and have the cow clean, or you cannot get clean milk. Lime and whitewash for walls and posts is a good thing. Land plaster is a good absorbent in the stable.

When it comes a cow's turn to be milked she knows it and expects it and wants to be milked. If you disappoint her and milk half an hour later, the chances are that you will get less and even poorer milk than if you milked at the proper time.

## SAVES LOTS OF WORK.

Wheel Hoe of Simple Construction and Adapted Especially for Light Garden Work.

The accompanying cut explains itself. Use an old hoesaw, bent at right angles for blade, eight inches is wide enough for onions, etc.; in 14-inch rows. Have



USEFUL WHEEL HOE.

the blacksmith punch the holes for bolts and turn the corners. A wooden wheel will do. The large wheel of an old sewing machine is best. The average farm boy will have it built and out in the snow with it to see if it hangs right before you know it. On good garden soil, free from stones, he will do as much with it in ten minutes as you can with a hoe in one hour.—John Jackson, in Epitomist.

## Will Build Good Roads.

The county board of supervisors, of Elmira, N. Y., appropriated \$254,000 for the construction of good roads through the county. The roads will be laid out in accordance with the plans of the state engineer and in harmony with the suggestions of the New York and Chicago Good Roads association. The roads are intended to form a part of a highway running from New York to Chicago.

## WHILE HE WAS WORKING.

The Barber Regaled His Victim with an Illustrative Instance of Ignorance.

The barber tucked a towel under a customer's chin and then cleared his throat, relates the Philadelphia Press. "A victim—I mean a customer of mine," he began, "told me a story the other day which illustrates to my mind, at least, that some men really don't know the difference between patent medicine and Schuykill water. It was this way:

"This customer of mine had a friend who had a great deal of trouble with his hair. It was all the time falling out. He asked all his friends what he could get to keep it in. Most of them suggested that he get a basket, but finally one of them told him of a patent medicine.

"So the man whose hair was bothering him got a bottle of the medicine and discovered that it was a dark brown sticky stuff that he was to rub on his hair five times a day. He tried it the first day, and it appeared to do good, but the second day some one got there first, and emptying the bottle of medicine, filled it up with sarsaparilla. And all day long that poor man rubbed the soft drink on his hair and never noticed the difference. But he did notice, though, that there was an unusually large number of flies swarming about his head. 'Bay rum?'

## ENEMIES ALL RIGHT.

He Was Certain About That and He Took a Sly Shot at Them.

It is related that at a recent sham battle a young lieutenant, posted with his company behind a wall, ordered his men to fire at a detachment of troops who were marching by, says London Tit-Bits.

The guns were loaded with blank cartridges, and no harm was done; but the detachment happened to be on the same side of the sham fight as the company which had fired at it.

The commanding officer came riding up. "Why did you fire at those men?" he demanded of the lieutenant, hotly.

"I supposed they were the enemy," said the lieutenant.

"And what led you to suppose they were the enemy?"

"Because my tailor was at the head of them and I saw my butcher in the ranks. What else could I suppose, sir?"

## Dr. Williamson Swears.

Yorktown, Ark., Jan. 18th.—Last week a statement was published from Leland Williamson, M. D., of this place, to the effect that Dodd's Kidney Pills are the best medicine for all Kidney Diseases and that he uses them with uniform success in his daily practice.

No one who knows Dr. Williamson will doubt for a moment the complete truth of his fearless declaration, but to completely clinch the matter in the minds of those who may not have the pleasure of a personal acquaintance with this celebrated physician, Dr. Williamson has appeared before Mr. H. E. Greene, J. P. for Montgomery county, and made a sworn statement.

In this sworn statement the doctor has cited a number of cases which have been completely cured by Dodd's Kidney Pills. Here is case No. 1:

"Henry Hall, Sr., age 48, an American, attacked with Malaria Haematuria or Swamp Fever, temperature ranged from 101 to 105, highly coated tongue, constipated bowels, hemorrhage or passage of blood from Kidneys, used febrifuge and Dodd's Kidney Pills to relieve the inflammation and congested condition of Kidneys and to render the urine bland and non-irritating. Recovery complete after two months' treatment of the Pills."

## Needed Not the Country.

"And do none of you know anything about the country?" asked the teacher, sadly.

"Oh, yiss, ma'am, I know," said Eva Gorowsky. "The country is the Fresh Air Fund."

"Then you've been there," cried Miss Bailey. "Tell us about it, Eva."

"No, ma'am, I ain't seen it," said Eva, proudly. "I'm healthy."—McClure's.

## Arid Lands Made Fruitful.

Those parched, dry, arid plains of Mont., Colo., Ariz., Idaho and other dry lands respond quickly and give a big yield when planted to Salzer's Speltz, Hanna Barley, Macaroni Wheat, 60 Day Earliest Oats, Billion Dollar Grass and Bromus Inermis. Above seem to flourish and laugh at droughts and arid soils.

## JUST SEND 10c IN STAMPS

and this notice to John A. Salzer Seed Co., La Crosse, Wis., for their big catalog and farm seed samples. [K. L.]

Eva—"What a lovely ring! How did he come to propose so quickly?" Edna—"I innocently remarked that diamonds were increasing in value daily."—Town and Country.

## Quit Coughing.

Why cough, when for 25c and this notice you get 25 doses of an absolutely guaranteed cough cure in tablet form postpaid. WIS. DRUG CO., La Crosse, Wis. [K. L.]

Wantanno—"At which joint did your friend have his arm amputated?" Duzno—"That's a mighty disrespectful way to speak of a hospital."—Baltimore American.

The Wonderful Cream Separator does its work in thirty minutes and leaves less than 1 per cent. butter fat. The price is ridiculously low, according to size, \$2.75 to \$6.00 each, and when you have one you would not part therewith for fifty times its cost.

## JUST SEND THIS NOTICE

with 5c stamps for postage to the John A. Salzer Seed Co., La Crosse, Wis., and get their big catalogue, fully describing this remarkable Cream Separator, and hundreds of other tools and farm seeds used by the farmer. [K. L.]

Grumbling puts spurs to the steed of trouble.—Chicago Tribune.

# MRS. COL. GRESHAM Was Given Up BY THE DOCTORS. Pe-ru-na Saved Her Life.

[It was catarrh of the lungs so common in the winter months.]



MRS. COL. E. J. GRESHAM

## MISS JENNIE DRISCOLL

Miss Jennie Driscoll, 870 Putnam Ave., Brooklyn, N. Y., writes:

"If people knew how efficient Peruna was in the cure of catarrh, they would not hesitate to try it. I have all the faith in the world in it as it cured me, and I have never known of a case when the person was not cured in a short time."—Jennie Driscoll.

Mrs. Col. E. J. Gresham, Treasurer Daughters of the Confederacy and President Herndon Village Improvement Society, writes the following letter from Herndon, Fairfax Co., Va.:

Herndon, Va.

The Peruna Medicine Co., Columbus, Ohio:

Gentlemen—"I cannot speak too highly of the value of Peruna. I believe that I owe my life to its wonderful merits. I suffered with catarrh of the head and lungs in its worst form, until the doctors fairly gave me up, and I despaired of ever getting well again.

"I noticed your advertisement and the splendid testimonials given by the people who had been cured by Peruna, and determined to try a bottle. I felt but little better, but used a second and third bottle and kept on improving slowly.

"It took six bottles to cure me, but they were worth a King's ransom to me. I talk Peruna to all my friends and am a true believer in its worth."—Mrs. Col. E. J. Gresham.

## A PLAIN TALK

### On a Plain Subject in Plain Language.

The coming winter will cause at least one-half of the women to have catarrh, colds, coughs, pneumonia or consumption. Thousands of women will lose their lives and tens of thousands will acquire some chronic ailment from which they will never recover.

Unless you take the necessary precautions, the chances are that you (who read this) will be one of

KEEP PERUNA IN THE HOUSE.

the unfortunate ones. Little or no risk need be run if Peruna is kept in the house and at the first appearance of any symptom of catarrh taken as directed on the bottle.

Peruna is a safeguard, is a preventative, a specific, is a cure for all cases of catarrh, acute and chronic, coughs, colds, consumption, etc.

If you do not receive prompt and satisfactory results from the use of Peruna, write at once to Dr. Hartman, giving a full statement of your case, and he will be pleased to give you his valuable advice gratis.

Address Dr. Hartman, President of The Hartman Sanitarium, Columbus, Ohio.

## PAXTINE TOILET ANTISEPTIC

FOR WOMEN A Boston physician's discovery which cleanses and heals all inflammation of the mucous membrane wherever located.

In local treatment of female ills Paxtine is invaluable. Used as a douche it is a revelation in cleansing and healing power; it kills all disease germs which cause inflammation and discharges.

Thousands of letters from women prove that it is the greatest cure for leucorrhoea ever discovered.

Paxtine never fails to cure pelvic catarrh, nasal catarrh, sore throat, sore mouth and sore eyes, because these diseases are all caused by inflammation of the mucous membrane.

For cleansing, whitening and preserving the teeth we challenge the world to produce its equal.

Physicians and specialists everywhere prescribe and endorse Paxtine, and thousands of testimonial letters prove its value.

At druggists, or sent postpaid 50 cts. A large trial package and book of instructions absolutely free. Write The R. Paxton Co., Dept. 4, Boston, Mass.

## 50,000 Americans Were Welcomed to

### Western Canada during last Year

They are settled and settling on the grain and grazing lands, and are prosperous and satisfied.

Mr. Wilfred Laurier recently said: "A new star has risen upon the horizon, and is toward it that every immigrant who leaves the land of his ancestors to come and seek a home for himself now turns his gaze—Canada. There is

## ROOM FOR MILLIONS

FOR FREE Home-study given away. Schools, churches, railroads, markets, climate, everything to be desired.

Book descriptive Atlas and other information apply to SUPERINTENDENT of Immigration, Ottawa, Canada, or authorized Canadian Government Agent—

J. S. CRAWFORD, 125 West Ninth Street, Kansas City, Mo.

PATENTS 48-page book FREE, high class references, FITZGERALD & CO., Box 8, Washington, D. C.

CALIFORNIA FARMS. Catalogue sent free. C. M. Wooster Co., San Francisco.

A. N. K.—D 2005

WHEN WRITING TO ADVERTISERS please state that you saw the advertisement in this paper.

## Pain's Master

Every nook and corner of this and other countries has seen emblazoned the words

# ST. JACOBS OIL

Thousands have been cured of every form of pain and chiefly

## Rheumatism and Neuralgia

Price 25c. and 50c.