

RHEUMATIC ADVICE

Prominent Doctor's Best Prescription Easily Mixed at Home.

From your druggist get one ounce of this compound (in original sealed package) and one ounce of strup of salicylic acid. Take these ingredients home and put them in a half pint of good whiskey. Shake the bottle and take a tablespoonful before each meal and at bedtime. This is said to be the quickest and best remedy known to the medical profession for rheumatism and backache. Good results come after the first dose. If your druggist does not have this compound in stock he will get it for you in a few hours from his wholesale house. Don't be influenced to take a patent medicine instead of this. Insist on having the genuine Toris compound in the original one-ounce, seal-tight yellow package. Hundreds of the best cases were cured here by this prescription last winter. Published by the Pharmaceutical Laboratories of Chicago.

SHE KNEW BETTER.



Did your wife give you particular because you come home at 3 o'clock the next morning?" No, she didn't say a word. It's near Christmas.

ECZEMA FOR TEN YEARS

1808 Little Walsh St., Baltimore, Md.—"I was afflicted with eczema for ten years, the most tormenting agonizing. It was dry eczema, all itching. It was scratch, scratch, and burn, burn, burn. By scratching I brought sores which itched. I tried all remedies which I saw or heard of; some gave me temporary relief, but none permanent. I couldn't sleep for scratching, which there was burning. I saw advertisement for free samples of Cuticura Soap and Ointment and wrote for them. They did me good immediately and I then bought a box of Cuticura Ointment and a cake of Cuticura Soap. I was cured in two weeks." (Signed) George Wooden, No. 21, 1912.

Fair to All.

Recently," says a Richmond man, "I received an invitation to the marriage of a young colored couple forty in my employ. I am quite sure that all persons similarly favored are left in little doubt as to the attitude of the couple. The invitation ran as follows: 'You are invited to the marriage of Mr. Henry Clay Barker and Miss Sophie Mortimer Dixon at the home of the bride's mother. All who do not come may send.'—Lippincott's Magazine.

Galworthy Aphorisms.

Nothing that's true is cynical, and nothing that is cynical is true. The word "smart" is the guardian angel of all fashions, and fashions are guardian angels of vulgarity.—"Love of Beasts," by John Galsworthy.

Neat Differentiation.

Mayor Lodge, at a dinner in the Bay district of Boston indicated neatly the difference between a woman and a politician. A statesman," he said, "thinks of the next generation; a politician of the next election."

Really Not to Blame.

Don't you know I told you not to go to Sambo's? He was white before he went to Sambo's small son.

Pierce's Pellets, small, sugar-coated,

to take as candy, regulate and invigorate stomach, liver and bowels. Do not gripe. Advise your doctor for a man to resist temptation if he has something better in mind.

AINFUL TRYING TIMES

Housework is hard enough for a healthy woman. The wife who has a bad back, who is weak or tired all the time, finds her duties a heavy burden. Thousands of nervous, discouraged, sickly women have traced their troubles to sick kidneys—have found quick and thorough relief by using Doan's Kidney Pills. The painful, trying times of a woman's life are much easier to bear when the kidneys are well.

DOAN'S KIDNEY PILLS
MILBURN CO., Buffalo, New York

BENEFIT OF DRAINAGE

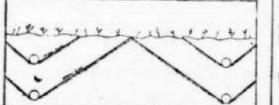
Has Influence That Nothing Else Can Accomplish.

Soil Has Usually Been Enriched by Deposits From Higher Lands and Will Therefore Become Most Fertile and Valuable.

(By C. P. NORGOOD.)

There are in general three conditions of soil needing drainage: First, land which is wet and marshy because of a lack of surface drainage; second, that which has so large an amount of organic matter and such heavy clay that water cannot well penetrate it; third, soils with heavy, compact clay subsoils and hardpans. Upon such subsoils, the attack of the air from above and beneath flowing drainage, and deep plowing or subsiding, made possible by drainage, has a loosening and mellowing influence that nothing else can accomplish.

One of the most obvious results of drainage, from which all other benefits accrue, is the removal of surplus



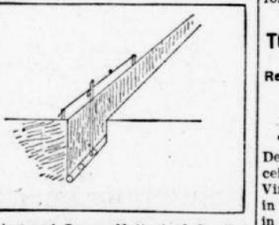
Relation of Depth of Tile to the Position and Depth of Water Table.

water. Plants require a moist soil, but cannot grow in a saturated soil where roots come in contact with standing water below the water table. Plants obtain their moisture almost entirely from capillary water, that is, the water which is held in the small openings between soil grains as oil in a wick. Since capillary water is only available in the unsaturated soil above the water table, drainage, by lowering the water table, makes room for more capillary water, thus increasing the supply of water available to plant roots, and making possible the storage of large quantities of moisture during a wet season against the time of droughts. With drainage comes also the more favorable condition for the formation of mulches and consequent prevention of waste of moisture by surface evaporation.

By the downward percolation of water toward the drains, the plant food, of the fine surface soil and the manures, is carried downward to become thoroughly incorporated in the soil, rather than to be washed away by surface overflow. Moreover, the deepening of the soil increases its capacity for water, and prevents the overflow which washes away the saturated, muddy top soil.

Vegetation can use only plant food of finely powdered soil easily soluble in water. The passage of air and heat into and through the soil, made possible by the removal of the standing water, and the interchange of air through the soil between the bodies of air in the tile and the air above the soil, disintegrates the soil particles hitherto unavailable to plants, and produces that fine, crumbling, workable condition of the soil known as the maximum amount of soluble plant food and the most favorable conditions for plant growth. The toughest clay soils are in this way made friable, responding with increased crops. The increase of heat and air provides favorable conditions for the increase in the number and activity of bacteria, the minute plants whose function it is to set free plant food and change the form of the constituents of soil into a food for plants. Moreover, the constant passage of surface water into soil carries in chemicals which act vigorously to set free plant food bound in various chemical combinations.

Since it is very difficult to heat water from above, a water-soaked soil is very slow to become warm in the



String and Gauge Method of Grading the Bottom of the Ditch.

spring; but well drained soil, like a metal, is easily and quickly heated in the spring, hence is an early soil. The growth and extension of root systems as instruments for obtaining nourishment for the later growth of the upper part of the plant must take place during a certain definite period previous to top development. This period and consequent root development is shortened by a cold, late plant bed in the spring, but increased by a warm, early soil, hence the removal of water by drainage, by permitting an early rapid heating of the soil, insures a vigorous root system to supply abundant nourishment later for the growth of the top.

The development of the root systems is further helped by the lowering of the water table. Roots cannot grow below the water table. Lowering the water table permits a deeper root development and consequently more root surface in contact with and in position to take in the plant food.

Longevity of Dairy Cows.

Prof. C. H. Eckles of the Missouri experiment station sums up its investigations along the line of the profitable longevity of dairy cows in part as follows: Probably the majority of dairy cattle are rejected from the herd on account of failure to breed or from undue trouble before the effect of advancing years can be observed to any marked extent. It is a fact often observed that a cow may make her best

drainage, and that drainage can unlock the fertility of these dead soils and make them alive, warm and fertile.

The deeper the drains are placed the lower do they make the water table with a given distance between drains. Drains do not lower the water table to the same level at all points. Close to the drains it is lowered to the depth of the drain, whereas at the point midway between drains it may be several inches or even feet higher, depending upon the openness and permeability of the soil to water. The water table is thus formed into a series of curves, the end of each at the level of the drain and the crest approaching the surface of the soil. Therefore, the deeper the drains the farther apart may they be placed without danger of bringing to the crest of the water table too near the surface.

Four feet is considered deep drainage, three feet medium, and two and one-half feet shallow drainage. In general three feet is a safe distance, but on some soils containing very thick and close hardpans, it is safer to lay tile at two and one-half feet, if such a depth will keep them above this impervious subsoil.

WAYS OF SECURING NITROGEN

Very Costly Substance to Buy in Artificial Fertilizer, Yet Most Soils Need More of It.

(By L. R. NEEL.)
There is a lack of sufficient nitrogen in the average soil to supply all of the demands of a grain or grass crop. Sometimes this need is very great, so that a good crop cannot be harvested without supplementing nitrogen artificially. This element is very costly in a commercial form, costing most farmers 20 cents a pound or more. So that a fertilizer with only 1.65 per cent of nitrogen is made much more expensive by its presence. At 20 cents per pound for the nitrogen the cost per ton for this element would be \$6.60. If 200 pounds of this mixed fertilizer were used to the acre, only 3.3 pounds of nitrogen would be applied, and this at a cost of not less than 66 cents. This small amount of the element under consideration would only be enough to start growth over the acre.

Nitrogen is a very costly substance to buy in an artificial fertilizer, and yet most soils need more of it. Fortunately it can be secured without buying it. All the plants belonging to the order commonly known as legumes can get their nitrogen power from the air (4-5 of the air is nitrogen), by the aid of very small plants or bacteria living on their roots. So this class of plants is independent of the nitrogen in the soil. If there is plenty of other plant food in the soil, they will make a luxuriant growth where nitrogen is deficient. This nitrogen that the legumes draw from the air is stored in root, stem, leaf and seed. If the crop is allowed to decay on the land or is fed to stock and the manure returned, the nitrogen content of the soil will be increased and a better crop of corn, wheat or grass can be grown. So it is evident from this that there is a practical way of supplying the corn, cotton, tobacco and hay with nitrogen without paying 20 cents per pound for it. And it should be mentioned that nitrogen accumulates in land in pasture or when shaded by some crop, or by straw or boards, etc. Both of these natural ways of securing nitrogen are very important, but it should not be thought that the latter will be sufficient without the former.

The legumes are the beans, peas, clovers, alfalfa, vetches, peanuts, beggarlice, the locust tree and some other plants not so well known. There is scarcely one among them but that is valuable as a farm crop, so that they can be grown at a profit independently of the nitrogen they gather for the farm.

TOBACCO IN CROP ROTATION

Recommendation Made as Result of Experiments Made at Virginia Station—Grass is Best.

The office of experiment stations, Department of Agriculture, has received a copy of a report from the Virginia station of experiments made in co-operation with the department in connection with tobacco growing. As a result of the crop rotation work the following seven-year rotation: Tobacco, wheat, grass, corn with crimson clover as a cover crop, cowpeas and red clover. The rotation of crops in the unencured tobacco district was found necessary and profitable. In connection with this rotation work it was found that seeding grass alone in August gave better results than seeding with small grain.

It was also found that heavy applications of fertilizer were more profitable than light applications. The use of 1,000 pounds of 3-8-3 fertilizer per acre gave a profit of \$40.29, while 1,300 pounds of a home-mixed fertilizer gave a profit of \$112.17.

Water in the Cow Pasture.

It is most important that the dairy herd have plenty of pure water. If water is not abundant and pure the profits will be cut in two or cut out altogether. Keep the spring holes in the pastures clean, and make the approaches safe. Water is a necessity in aiding the digestion and assimilation of solid food.

We feel sorry for the man who has a nagging wife to fuss over the ashes from his pipe dreams.

Depletion of Humus.

Continuous cropping to corn, mangels and wheat causes a depletion of humus; on the other hand, field peas increase the amount of humus.

IDEA ANNOYED OLD GOLDS

He Knew From Experience That College Education by No Means Unfitted Boy for Work.

"Woodrow Wilson naturally believes in a college education for boys and girls alike," said a banker at the Princeton club in New York. "Mr. Wilson, hunching with me here, once said in his quaint way that the old idea about a college education unfitting a lad for work had quite died out."

"When Gobsa Golde's son Scattergood," he explained, "desired to go to Princeton, he said to the old man: 'Pater, is it true that boys who go to college are unfit for work afterward?'"

"Of course it ain't true!" snorted the old man indignantly. "Why, I've got a Princeton graduate running my freight elevator, two of my best coal heavers are Harvard A. B.'s and a Yale B. S. is my star truck driver."

THE FLYING AGE.



"How old is De Swift's youngest child?"
"It can't be more than a year old. It's just learning to fly."

NOW WALKS MOST ANYWHERE

But for Fifteen Long Years, Mrs. Dickson Could Not Stand on Her Feet for Any Length of Time.

Dallas, Tex.—"I cannot recommend Cardui, the woman's tonic, too highly," writes Mrs. R. J. Dickson, of 2907 Bryan Street, this city. "It is the greatest boon to those suffering from womanly trouble, in existence."

For 15 years, I was a sufferer from such severe pains, caused from womanly trouble, I could not walk, or even stand on my feet, long at a time. I also had headaches and dizziness. I commenced taking Cardui, the woman's tonic, and now I can walk anywhere I want to, do my own work, and feel better than I have for ten years. I am so thankful that I took your medicine, as I feel like a new woman entirely.

My advice to all women is to try Cardui, the woman's tonic, when they feel they need a tonic, as it will certainly do for them, what it has done for me."

Cardui goes to the weak spots and helps to make them strong. It is for the weak, tired, nervous, irritable women, who feel as though everything were wrong, and who need something to quiet their restless nerves, and strengthen their worn-out systems. "Thousands of women now enjoy good health as a result of taking Cardui. Why not you? Try it. At all druggists."

N.B.—Write to Chattanooga Medicine Co., Ladies' Advisory Department, Chattanooga, Tennessee, for Special Instructions on your case and 64-page book, "Home Treatment for Women," sent in plain wrapper. Adv.

In a Literal Sense.

Juvenile remarks are not always so naughty as they seem. Sam Sam, for instance, had no intention of using bad language when he got into such severe trouble in class.

His teacher was trying to press home certain facts concerning a volcano. In reviewing the lesson she drew on the blackboard her own conception of a flaming mountain, using colored crayons with extraordinary effect.

"What is it?" she asked, the picture finished. The scholars shook puzzled heads. "You don't know? Well, what does it look like?" the teacher persisted. "I think it looks like hell."—Chicago Record-Herald.

Her Great Love.

They had already celebrated the fact that the mistletoe hung in the hall, and now they were occupying not only one settee, but also the entire drawing room.

"Could you love me, darling," he murmured, as the thought of that sprig of mistletoe came to him again. "If I possessed only one coat in the wide, wide world?"

Almost Thrown Away.

"The fish I had from yesterday wasn't fit to eat. I was obliged to give it to my servants!"—London Opinion.

Real Test.

Gabe—How can you tell a genuine diamond from a fake?
Steve—Try to hock it.

SHAKE INTO YOUR SHOES

Allen's Foot-Ease, the Antiseptic powder for tired, aching, swollen, nervous feet. Gives rest and comfort. Makes walking a delight. Sold everywhere, 25c. Don't accept any substitute. For FREE sample address Allen S. Olmsted, Le Roy, N. Y. Adv.

Have You a Disordered Stomach and Liver?

Do you start the day feeling that the whole world is against you? You cannot hope to "make good" under these circumstances. Nobody can. You must have a clear brain and every organ in perfect trim to do justice to yourself.

Dr. Pierce's Golden Medical Discovery

Will Bring Quick Relief
Dr. R. V. Pierce found years ago that a glyceric extract of Golden Seal and Oregon grape roots, queen's root and bloodroot with black cherry bark, would aid in the assimilation of the food in the stomach, correct liver ills and in nature's own way enrich the blood, tone the entire system and consequently help in the restoration of perfect health. Many who have used Dr. Pierce's Golden Medical Discovery testify that they have been restored to health when suffering from stomach and liver ills. Let this famous old medicine start today to lead you to health and strength.



The Best Physicians Gave Him Up

Now—if you prefer—you can obtain Dr. Pierce's Favorite Prescription tablets of your druggist at \$1 per box, also in 50c size or send 50 one-cent stamps to R. V. Pierce, Buffalo, for a trial box.

You can learn all about hygiene, anatomy, medicine, etc., from the People's Common Sense Medical Adviser, by Dr. R. V. Pierce, a newly revised, up-to-date edition of which is now offered, in cloth covers, post-paid, for 31 cents in one-cent stamps, to cover cost of wrapping and mailing only. Address, Dr. Pierce's Invalids Hotel, Buffalo, N. Y.

Don't be poisoned by sluggish bowels. Dr. Pierce's Pleasant Pellets regulate and invigorate stomach, liver and bowels. Sugar coated, tiny granules.

DOWN TO THE BARE FACTS

Young Minister's Passion for Self-Sacrifice Had Results That Might Have Been Anticipated.

The announcement of Miss Helen Miller Gould's betrothal led one of the charity workers of New York to say: "Marriage itself will not be able to quench Miss Gould's passion for giving. Apropos to this passion, she once told me a story.

"There was a young minister, the story ran, who, being poor and having nothing else to give, used to give away his clothes.

"The young minister's district contained many needy men, and he would give them shoes and socks, shirts and coats, gloves, overcoats and trousers.

"Yes, time and again he would give away his clothes, foolishly and recklessly, piece by piece, until—"

Here the charity worker smiled. "Until," she ended, "he came to himself!"

ETERNAL LAW OF CONTRARIES.



"Do you ever give your husband Christmas hints?"
"Of course I do."
"Do you? Why, the least hint makes my husband so mad!"
"Pooh! you don't know the combination. I tell my husband I don't want what I do want, and then I get it."

Not on the Program.

A little four-year-old girl, whose parents had been discussing an approaching meeting in connection with the Society for the Prevention of Cruelty to Children, begged to be taken. Her mother would not amuse her, but she persisted in her demand, and finally her mother agreed to take her if she promised to be very quiet.

She was very good throughout the greater part of the proceedings, but after listening patiently to the speeches for some time she whispered to her mother:

"Mummy, this is dull! When is the cruelty going to begin?"

Resented His Defection.

Mary and James had been good friends for some years, but with the advent of some "new children" in the block James rather failed in his allegiance for a time. The "new children" proving, after all, unsatisfactory, he returned to Mary—who scorned his advances.

"You needn't come over here no more, James," she told him. "I've done with you. You an' me was friends while you didn't have no others, but I ain't goin' to be no last chance or common folks friends. James. You can go back to your show-off friends, for all of me."

Wedding Rings That Wear.

The next time you are married—or, if you will, when you are married—don't buy a gold wedding ring. It isn't being done. Platinum wedding rings are the newest thing. Mile. Jeanne Provost, a French actress, is to blame. She thought of the idea, and when she was married to M. Firpo, she had one. Platinum rings are more expensive than gold and wear better. Just why an actress, especially a French actress, should want a wedding ring that will last a long while the jewelers haven't learned.

Stops Backache

Sloan's Liniment is a splendid remedy for backache, stiff joints, rheumatism, neuralgia and sciatica. You don't need to rub it in—just laid on lightly it gives comfort and ease at once.

Best for Pain and Stiffness
MR. GEO. BUCHANAN, of Welch, Okla., writes:—"I have used your Liniment for the past ten years for pain in back and stiffness and find it the best Liniment I ever tried. I recommend it to anyone for pains of any kind."

SLOAN'S LINIMENT

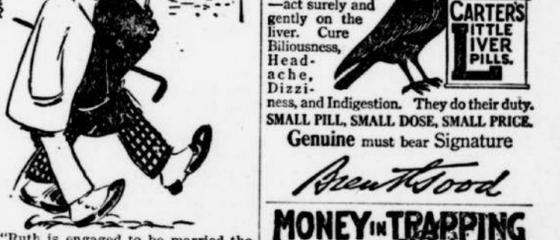
is good for sprains, strains, bruises, cramp or soreness of the muscles, and all affections of the throat and chest.

Got Entire Relief
R. D. BURGOWNE, of Maysville, Ky., R.R. 1, Box 5, writes:—"I had severe pains in my shoulders; I got a bottle of your Liniment and had entire relief at the fifth application."

Relieved Severe Pain in Shoulders
MR. J. UNDERWOOD, of 2000 Warren Ave., Chicago, Ill., writes:—"I am a piano polisher by occupation, and since last September have suffered with severe pain in both shoulders. I could not rest night or day. One of my friends told me about your Liniment. Three applications completely cured me and I will never be without it."

Price 25c, 50c., and \$1.00 at All Dealers.
Send for Sloan's free book on horses.
Address
Dr. Earl S. Sloan,
Boston, Mass.

GOT LEFT IN THE RUSH.



"Ruth is engaged to be married the coming winter."
"The mischief she is! I intended to propose to that girl myself when I got time."

The Kind.

"What would you recommend as the fish diet for sailors?"
"Ro'e, of course."

The Wretchedness of Constipation

Can quickly be overcome by CARTER'S LITTLE LIVER PILLS. Purely vegetable—act surely and gently on the liver. Cure Biliousness, Headache, Dizziness, and Indigestion. They do their duty. SMALL PILL, SMALL DOSE, SMALL PRICE. Genuine must bear Signature



MONEY IN TRAPPING

Do you have any traps? Write for references and weekly returns. R. H. BELL, 100 N. W. 10th St., Detroit, Mich. Dealers in Furs, Hides, Wool, Retained 1906.

THOMPSON'S EYE WATER

Quickly relieves irritation caused by dust, sand, wind, booklet free. JOHN L. THOMPSON & SONS, Troy, N. Y.

Good Crops of Oats were Formerly the Rule; Now a Good Crop is the Exception.

One reason is starvation—the lack of the right kind of plant food in the right form, available at the right time. The result is weak plants that grow slowly, yield little, chaffy grain and fall an easy prey to rust, blight and insects.

POTASH

has been shown to greatly decrease the liability of the small grains to attacks of rust, as well as lodging because of weak straw. Be sure that your oats fertilizer contains 6 to 8 per cent Potash. Ask your dealer to carry such brands, or Potash Salts, to enable you to bring the brands up to this standard.

If he will not, we will sell you Potash in any amount from a 200 pound bag up. Write for price and for free book on fertilizer formulas and how to adjust them.

GERMAN KALI WORKS
Chicago: Southwark Block
New Orleans: Whitney Central Bank Building
St. Louis: Bank & Trust Building
Albany: Empire Building

Death Lurks In A Weak Heart

If Yours is fluttering or weak, use "RENOVINE." Made by Van Vleet-Manfield Drug Co., Memphis, Tenn. Price \$1.00