

FARMERS' CORNER

Renewing Grass on Pasture Land.
Farmers who keep cattle on the pastures until the animals are compelled to search for food thereby force them to trample over the field and injure the grass. Grass can be killed by keeping it too close, the same as other plants. Pasture fields should be allowed to renew the grass, and if the growth is slow fertilizers should be applied. In place of the grass feed the cattle on young fodder corn, which may be cut and carried to them being them in the barnyard.

Bees in the Orchard.
At the Oregon experiment station they forced a number of peach trees into bloom under glass last November, and introduced a colony of bees into the house, first protecting one tree so that the bees could not get to it. From that tree all the fruit dropped, and the fruit was so abundant that it was necessary to thin it out severely. This shows very clearly how much every orchardist is indebted to the beekeeper for the success of his fruit crop, as without the bees there would not be insects enough to pollinize the blossoms. It should suggest to them also the wisdom of having a few colonies in their orchards.

Saving Straw.
A Kansas correspondent of the Farmer's Tribune calls attention to the great waste on many farms by the careless way in which the straw is put up, not in stacks, but in piles, usually by a gang of boys who think they are doing all that is expected of them if they can keep it out of the way of the carrier or the elevator. We think there are farmers nearer than Kansas who have the same fault, and lose money by it. Straw is too valuable as a rough fodder in sections where hay is high priced to be wasted as it often is. And even where hay is cheap there are uses for straw as mulch, as thatching and bedding, for which it is worth more than hay. Put a good man at the straw stack, or build a good stack of the straw after the threshing is over, and then try to learn how to save money by making a profitable use of that which is now going to waste.—The Cultivator.

Fatal Effects of Green Sorghum.
There has been much discussion in some of the western papers as to the cause of cattle dying suddenly after eating green sorghum. All were aware of the facts, yet chemists have been unable to detect any poison in the sorghum plant or in the organs of the animals that died from eating it. A writer in the Louisiana Planter, who says he lost in this way last year cattle that cost him \$1050, thinks he can account for it. He says: "The blamed stuff won't be swallowed. It simply gets warmed and limbered a little, coats itself over with the tough, sticky saliva, or slobber, repairs to the glottis, pastes itself smoothly over the organ, closing the trachea, or windpipe, and the poor brute in the great distress and misery smothered to death—dies for the want of air. My remedy would be to swab out the throat immediately so as to remove the bits of blades that have pasted themselves over the glottis, or opening to the windpipe. They will sometimes stick there like a wet paper to the roof of the mouth. The saliva of the cow is more sticky than that of a human, and the smooth blades of sorghum stick worse than a fuzzy leaf." His explanation seems plausible at least, and those who lose cattle in this way should examine the entrance to the windpipe to see if it is closed.

Water for Bees.
Water is a necessity for bees, although they do not visit watering places at all times. Bees need water when rearing brood, providing they are not gathering nectar from flowers. When gathering honey from blossoms, the nectar gathered contains enough water to supply them, but if the flow of honey stops off suddenly, and the bees have a large amount of brood on hands, which they mostly have, then they will make a rush for water. They use water too in their composition of pollen and honey for manufacturing food for the young bees, and of a necessity must have it at such times.
Convenient watering places should be furnished them if running water is not near the apiary. While they may go long distances for water, yet it pays to fix a watering place for them near the apiary. Frequently they will water at watering tanks intended for stock, and thus be a hindrance to the stock in getting sufficient water, and in many cases drive the stock entirely away from the water during the day. This may be prevented by furnishing a watering place for them near the apiary. Many bees are drowned in open tanks or large open vessels containing water, so that the watering place must be arranged with floats of sticks or straw on the water to prevent them from drowning. A leaky barrel filled with water and covered over makes an ideal watering place for bees. Some use a salt barrel as the bees seem to prefer the water a little salty, but much salt will not be accepted by them.
When bees once get a start at watering at stock troughs or tanks, it is

very difficult to break them of it, and only by furnishing them water, and covering the stock tanks so they cannot get the water, can we get them broken away from them.—A. H. Duff, in Farm, Field and Fireside.

Importance of Good Tillage.
There is a growing realization of the fact that a soil may be quite rich in all the elements of plant food and yet be infertile, and it is coming to be quite well recognized that thorough tillage will render the inactive fertility available for the plant's use. Manures are largely dependent upon the texture of the soil for their ability to act, and good tillage is essential to give such conditions as to air, moisture within the soil as are necessary to vigorous plant growth. The fertility of the soil is not measured by the amount of plant food it may contain, but by its capacity to yield crops, and to stimulate this capacity, tillage is vitally important. The state of the surface soil does more than determine the availability of the plant food. A good tilth not only does this, but it facilitates the action of the roots in spreading in search of food, and at the same time diminishes the risk of suffering either from drought or excessive moisture during the growing season. In short, a fine tilth has an important regulating influence on the temperature, soundness and productive capabilities of the soil which can be obtained by no other means. In a short time we will be preparing a seed bed for wheat and what is said over and over in the spring that a crop for which there has been a thoroughly prepared seed bed provided is fully half made, they apply to the wheat crop with equal force. If the seed bed is made just right and seed properly planted, and at the right time the result is much more certain than if the plan of your careless neighbor is followed. Don't do your work of plowing, harrowing, dragging, etc., as your neighbor does unless his system is just right and is successful. Too many of us are thankful we are no worse off in our failures than our neighbors. Whether the seed bed is in the condition that it ought to be is not a comparative question at all. Whether a neighbor prepares well or ill, it neither lessens nor increases our own duty to prepare thoroughly well. Good tilth ought to be secured before a seed is put in ground.—Farmer's Guide.

Shallow Culture of Corn Advisable.
Deep cultivation cuts the roots, and frequently, as when it is close to the plant, by cutting one primary root it destroys a large root growth. The secondary roots near the severed end make a larger growth than if the primary root had not been cut, but this extra growth is at the expense of energy and material, and the live, available growth of a severed root does not equal its growth if not severed. Instead of deep cultivation increasing the feeding capacity of the plant, it has the opposite effect.
When there is sufficient moisture in the upper strata of the soil, which also contain the most available plant food, the roots of the corn remain near the surface. But as soon as there is a lack of moisture near the surface, the roots go almost directly downward. If the moisture in the upper strata is increased, the roots will turn upward. Hence the course of the root is sometimes a series of curves. In the case of protracted drought, the course of the root is steadily downward, until some reach a depth of several feet. Usually, during the first half of the corn's growth, the soil near the surface is moist and the roots do not penetrate deep. If cultivation is close and deep, many roots are destroyed, and some have been led to believe that this induces the roots to go deeper. The error is easy, for as all the roots near the surface are destroyed, after a time the only roots are the deeper ones; and also as the season progresses, the surface of the soil becomes drier, especially when there is deep cultivation, and the roots go deeper to get moisture. Many of these roots will be cut by deep, close cultivation and the effect is at once apparent.

Such is the usual character of our seasons that proper cultivation has in view the conservation of the moisture of the soil, especially of its upper strata. This can be accomplished by a mulch, and it has been found that fine earth is a good mulch—few better in fact. If the surface, say to a depth of three inches, is frequently stirred and fined, thus breaking up capillarity, the moisture of the soil is effectually conserved and evaporation from the surface of the soil is rendered to the minimum. This does not effect the capillary rise of the water from the subsoil into the soil, or disturb the roots. Such cultivation can be done with broad shovels or sweeps, instead of pointed, narrow shovels or blades, and as these shovels may be made wide enough to include all the space between the rows such cultivation very thoroughly accomplishes the other purposes of corn cultivation at this time—the destruction of weeds and grass. Every rule has its exceptions, and circumstances may make it advisable to depart from the cultivation suggested above. In general, however, taking it for granted that the ground has been properly prepared for the reception of the seed, the objects of cultivation are a mulch of fine surface soil and the destruction of unprofitable growths. There is no need to stir the soil deep, to allow the roots to go deep, or to put the soil in condition to yield food.—American Agriculturist.

DIAMOND DIES USED NOW.

Brass Wire Made as Fine Cobweb—Copper so Thin as to Be Transparent.
One of the latest and most wonderful developments in brass making is the use of the diamond die by means of which ingot brass is today drawn down to wire of the fineness of nine-tenths of a thousandth part of an inch, says the Waterbury (Conn.) correspondent of the New York Sun. Steel may also be drawn nearly as fine, and the two products when completed are as fine and soft as the threads of a cobweb, and are as wavy and glossy as human hair.
The brass hair is of a beautiful auburn color, while the steel is of an iron gray. This wire is about as strong as a human hair and is of value for mechanical purposes, being in great demand by makers of electrical apparatus. Never before was so fine wire drawn. Until recent years wire was drawn through steel dies. The development of the diamond die to its present stage of perfection has rendered possible the production of much finer wire. In fact, the size of the wire now possible is limited only by the ability to hold together as it comes through the die.
The diamond die is made of a flake diamond looking not unlike a bit of isinglass. The hole through which the wire is drawn is drilled through the diamond, and the stone is then stuck on a steel slab with glue, directly over a hole in the slab which is a trifle larger than that in the diamond. The wire to be drawn is then led through the diamond so that the stone bears steadily against the slab. This keeps the diamond in position.
The brass ingots from which the cobwebby wire is made are four inches square and long enough to weigh about 180 pounds. One of these will make miles of the cobweb wire. It is first put through steel rolls until it is reduced to the size of one's finger, and then it is drawn by machinery through a set of steel dies, gradually decreasing in diameter, until it comes out in the shape of the wire of the fineness seen in the ordinary trades. Then it is put through a set of eight diamond dies, the diameter of the last being the infinitesimal part of an inch indicated above.

Another curious thing in this brass-making country is the development of hydraulic rolls which are so scientifically adjusted that a copper cent may be rolled out under them to the size of an enormous platter, and to thickness that amounts to transparency, so that a newspaper may be read through the metal. The operation has to be conducted with great care. One of the cents thus rolled out was sent to Queen Victoria as a curiosity some time ago, and the Queen returned a letter thanking the workmen.

The Disappearance of a Town.
"Whoever suffers from a sense of the youth and crudity of this country," said a returned tourist, "should take a trip to the Isles of Shoals. There he will see a few scattered relics of the once flourishing town of Gosport, a fishing village of some 600 persons, which has been completely wiped out. The Isles now occupied by hideous hotels and summer cottages, were once the home of a particularly sturdy and intelligent class of people, who had an academy that attracted students from the mainland; sold fish to Spain and other foreign countries as well as to our own, and were in every way a desirable element of population. Their downfall began with the Revolution, when they were forced to leave the islands because there was no way of defending them against the English warships, and has been made complete within the past few years, when the proprietors of the hotels have gradually become possessed of all the land. None of the fishing people are now left; their houses have been torn down, and about the only reminders of them left are a tiny, little, stone church, which was erected in 1800, and a number of graves scattered about the islands. After an existence of nearly two centuries and a half Gosport has disappeared, probably never to figure again, as the islands are doubtless a source of greater revenue as a summer resort than they would be as homes of fishermen."—Philadelphia Record.

A Remarkable Grasshopper Plague.
Some years ago the lower part of Russia was devastated by swarms of grasshoppers. The people were deprived of food, the insects eating up the entire crop, and a famine of appalling dimensions began. The emperor ordered out an army of more than 3000 men to fight them, who, armed with shovels, formed in a line and heaped up the insects, which were then buried. But this singular attack apparently made no impression, though millions of bushels of grasshoppers were destroyed. They devastated an area over 400 miles wide and 600 miles in length, leaving it as bare of vegetation as it would have been had a fire swept over the land. The insects were in such swarms that they piled up in places like snow; horses could not drag wagons through them and became covered. They flew and crawled into houses and drove people out by the terrible odor. It was estimated that 5000 people died as the direct result of this plague.

Classified.
"She is a clergyman's daughter, you said, didn't you?" inquired a young man of a friend who had introduced him.
"Yes," was the reply; "he's the rector, his wife's the director and she's the misdirectress."—New York Press.

Acknowledging the Corn.

The old gentleman was having his shoes polished in the cabin of a ferryboat. The boy was using a little more "elbow grease" than was warranted by the exigencies of the "shine," and a look of pain passed over his customer's face. Finally the old man leaned over and touched the bootblack on the shoulder.
"My boy," he said, in kindly tones, "I do not care so much about the appearance of my shoes as I do about my comfort. On this spot (he touched that part of his left shoe which covered the little toe) I have a corn. It is a nice corn, of lustrous growth. Hit it hard; I like it, as it makes me feel good."
The bootblack "tumbled."—New York Commercial Advertiser.

What Insane People Never Lose.
Mad people suffer the most extraordinary illusions. They often imagine they see things that are not, and hear sounds which never were produced.
But the sense of smell rarely, if ever, is deceived. Even the insane are not subject to delusions of the olfactory nerves. There are no ghost smells. To say the least of it, this is a curious phenomenon.—Penny Pictorial Magazine.

Neither the cat nor the dog can compare in musical susceptibility with the parrot.

\$100 Reward. \$100.
The readers of this paper will be pleased to learn that there is at least one dreaded disease that science has been able to cure in all its stages, and that is Catarrh. Hall's Catarrh Cure is the only positive cure now known to the medical fraternity. Catarrh being a constitutional disease, requires a constitutional treatment. Hall's Catarrh Cure is taken internally, acting directly upon the blood and mucous surfaces of the system, thereby destroying the foundation of the disease, and giving the patient strength by building up the constitution and assisting nature in doing its work. The proprietors have so much faith in its curative powers that they offer One Hundred Dollars for any case that it fails to cure. Send for list of testimonials. Address F. J. CHENEY & Co., Toledo, O. Sold by Druggists, 75c.
Hall's Family Pills are the best.

The Ural Mountains furnish ninety-five per cent. of the world's supply of platinum.

The Best Prescription for Chills and Fever is a bottle of GROVE'S TARTARIC CHILL TONIC. It is simply iron and quinine in a tasteless form. No cure—no pay. Price 50c.

In all India Madras is the only city where electricity is used as a power for street railroads.

Mrs. Winslow's Soothing Syrup for children's teething, softens the gums, reduces inflammation, allays pain, cures wind colic, 25c. a bottle.

Custom house fines were abolished in Mexico March 1, 1900.

Piso's Cure cannot be too highly spoken of as a cough cure.—J. W. O'BRIEN, 322 Third Ave., N., Minneapolis, Minn., Jan. 6, 1900.

The chance of two finger prints being alike is not one in fifty-four billion.

FIT'S permanently cured. No fits or nervousness after first day's use of Dr. Kline's Great Nerve Restorer. \$2 trial bottle and treatise free. Dr. R. H. KLINE, Ltd., 601 Arch St., Phila., Pa.

In South Australia a mine of natural rubber has been discovered.

Worms eradicated. Children made well and mothers happy by Frey's Vermifuge, 25c. Druggists and country stores.

Gold is mined in thirty-seven counties in California.

A Colonel in the British South African army says that Adam's Tutti Frutti was a blessing to his men while marching.

The population of Tien-Tsin, China, is in round numbers 1,000,000.

To Cure a Cold in One Day. Take LAXATIVE BROMO QUININE TABLETS. All druggists refund the money if it fails to cure. E. W. GROVE'S signature is on each box. 25c.

Greece practically imports all the lumber she consumes.



How Mothers may Help their Daughters into Womanhood

Every mother possesses information of vital value to her young daughter. That daughter is a precious legacy, and the responsibility for her future is largely in the hands of the mother. The mysterious change that develops the thoughtless girl into the thoughtful woman should find the mother on the watch day and night. As she cares for the physical well-being of her daughter, so will the woman be, and her children also.
When the young girl's thoughts become sluggish, when she experiences headaches, dizziness, faintness, and exhibits an abnormal disposition to sleep, pains in the back and lower limbs, eyes dim, desire for solitude, and a dislike for the society of other girls, when she is a mystery to herself and friends, then the mother should go to her aid promptly. At such a time the greatest aid to nature is Lydia E. Pinkham's Vegetable Compound. It prepares the young system for the coming change, and is the surest reliance in this hour of trial.
The following letters from Miss Good are practical proof of Mrs. Pinkham's efficient advice to young women.

Miss Good asks Mrs. Pinkham for Help.

June 12th, 1899.
"DEAR MRS. PINKHAM:—I have been very much bothered for some time with my monthly periods being irregular. I will tell you all about it, and put myself in your care, for I have heard so much of you. Each month menstruation would become less and less, until it entirely stopped for six months, and now it has stopped again. I have become very nervous and of a very bad color. I am a young girl and very much pleased if you would tell me what to do."—Miss Pearl Good, Cor. 29th Avenue and Yeslar Way, Seattle, Wash.



February 10th, 1900.
"DEAR MRS. PINKHAM:—I cannot praise Lydia E. Pinkham's Vegetable Compound enough. It is just simply wonderful the change your medicine has made in me. I feel like another person. My work is now a pleasure to me, while before using your medicine it was a burden. To-day I am a healthy and happy girl. I think if more women would use your Vegetable Compound there would be less suffering in the world. I cannot express the relief I have experienced by using Lydia E. Pinkham's Vegetable Compound."—Miss Pearl Good, Cor. 29th Avenue and Yeslar Way, Seattle, Wash.

\$5000 REWARD Owing to the fact that some skeptical people have from time to time questioned the genuineness of the testimonial letters we are constantly publishing, we have deposited with the National City Bank of Lynn, Mass., \$5,000, which will be paid to any person who can show that the above testimonial is not genuine, or was published before obtaining the writer's special permission.—LYDIA E. PINKHAM MEDICINE CO.

BILE IN THE BLOOD



No matter how pleasant your surroundings, health, good health, is the foundation for enjoyment. Bowel trouble causes more aches and pains than all other diseases together, and when you get a good dose of bilious bile coursing through the blood life's a hell on earth. Millions of people are doctoring for chronic ailments that started with bad bowels, and they will never get better till the bowels are right. You know how it is—you neglect—get irregular—first suffer with a slight headache—bad taste in the mouth mornings, and general "all gone" feeling during the day—keep on going from bad to worse until the suffering becomes awful, life loses its charms, and there is many a one that has been driven to suicidal relief. Educate your bowels with CASCARETS. Don't neglect the slightest irregularity. See that you have one natural, easy movement each day. CASCARETS tone the bowels—make them strong—and after you have used them once you will wonder why it is that you have ever been

without them. You will find all your other disorders commence to get better at once, and soon you will be well by taking—
THE IDEAL LAXATIVE
Cascarets
CANDY CATHARTIC
BEST FOR THE BOWELS ALL DRUGGISTS
10c. 25c. 50c.
To any needy mortal suffering from bowel troubles and too poor to buy CASCARETS we will send a box free. Address Sterling Remedy Company, Chicago or New York, mentioning advertisement and paper.