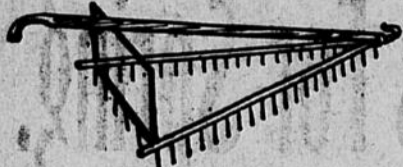


# HORTICULTURE

## CONVENIENT HARROW.

One Horse Can Do Light Weeding with It at Small Cost of Money and Labor.

On every farm where small fruits and vegetables are grown a one-horse harrow is a great convenience. By its use the lighter weeding is done and the surface of the soil kept loose at small expense of labor. If one has a lever harrow two of the beams may be used for this one-horse harrow or the beams may be readily made with lumber of proper length, using long wire nails for



HOME-MADE HARROW.

the teeth. The beams are fastened together in a V shape, as shown in the cut, and a wooden frame is constructed, as shown, to support the handle. If a blacksmith is conveniently near the support for the handle may be two iron rods running from the corners of the harrow to the handle. A board may be placed over the frame and heavy stones set upon it to weigh down the tool if it is found too light for certain soils. This tool will be found especially useful in corn cultivation during the early growth of the plants.—Indianapolis News.

## PLANT LIFE ELEMENTS.

Nitrogen Is the Most Important and Shows Its Effect in a Variety of Ways.

Each element used by plant life helps in the building of certain parts of the plant, and likewise, doubtless, each has some one or more special functions. What some of these are, says a late Vermont station bulletin, is not well understood, but some are known. Nitrogen is known to show its effects on plant life in three ways. It promotes stem and leaf growth, and, if in excess, delays seed and fruit formation. It deepens the green coloration of the leaves. Its abundance may increase and its deficiency may lessen the relative amount of nitrogen in the plant. This means a variation in food value. If nitrogen is freely applied in fertilizers, or is present in plentiful quantities in the soil, its effect is generally shown—unless its effect be negated by phosphoric acid—by a vigorous, dark-green leaf growth, and by a somewhat retarded flower and seed formation. If available nitrogen is relatively lacking, either in the soil or in the added fertilizer, a somewhat more scanty foliage than occurs under better conditions—one of a rather lighter green—is grown. The seed, moreover, is apt to mature rather earlier than usual. The farmer may, by careful observation, judge somewhat as to the crop needs in this manner. It should be remembered in this connection that nitrogen is essential to plant growth, that available nitrogen is in small quantity and easily exhausted from soils, and that consequently it is and always has been the most costly form of plant food.

## GARDEN AND ORCHARD.

Clean out the strawberry bed, unless you are going to plow it under.

Cultivate often in the garden and orchard, weeds or no weeds, and thus keep the surface in condition to receive the rainfall or to retain soil moisture.

An old sow with a litter of vigorous pigs will root recognition out of the garden in about 15 minutes. Pigs and a garden cannot be raised on the same lot.

When the lettuce are too old to use on the table clear the garden of them—unless you have some little chicks that will relish them; in this case let them remain as chicken feed.

The value of good stock was shown at New York recently when strawberries were selling all the way from two to ten cents per box. There were only about 30,000 crates received on that particular day.

## Successful War on Ants.

Large numbers of ants can be destroyed by a liberal use of boiling water, kerosene emulsion or strong soap suds poured over the nests at night when the insects are all at home, but the more effective is a substance known as carbon bisulphide, which may be used in the following manner: Make some holes some inches apart and several inches deep with a broomstick or bar in the nests, and pour in each about a teaspoonful of carbon bisulphide, and cover the nests with a wet blanket, and after a few minutes explode the fumes collected underneath with a match or other light on the end of a short stick. This treatment, if repeated one or two times, should destroy all the occupants of a nest.—Country Gentleman.

## Good News for Shippers.

The supreme court of Minnesota has decided that the Wisconsin Central railroad must pay for apples frozen in transit. A lot was sent from New Hampshire to St. Paul, and arrived frozen. The owner refused the apples, brought suit against the railroad, and a jury gave verdict of \$262.26. The road appealed, with above mentioned result. As the Produce News says, it is the duty of railroads to haul the fruit and deliver it in good order. They always claim not to be responsible, but whenever the owner of the fruit has the nerve to go to the courts, he usually gets justice. This verdict will be good news for a number of shippers.

## THE FRUIT BUSINESS.

If You Put Your Heart in It There is No Reason Why It Shouldn't Be a Success.

As to location, start where you are; locate near home. You can do just as well, and enjoy the old home surroundings and friendships. You want to live, as well as make money, and the best life is in or near the old home. Grow the fruits that you like to care for. It is what we put our hearts into that brings the reward. Doubtless the apple is the best fruit to grow, for it is always wanted.

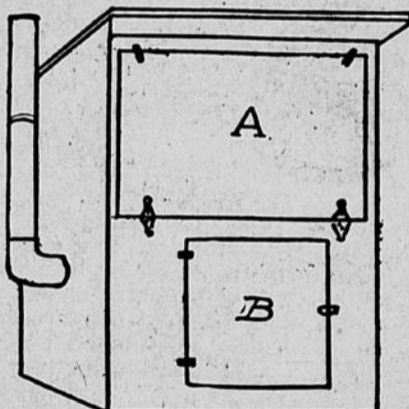
Plant the trees as closely as they will stand to fruit well, say ten by ten feet, then take out a part, later another part, till the trees stand 40 by 40. This means four times as many apples at the start, then twice as many; so with peaches. I believe in close planting, but many planters have not the courage to take out the superfluous trees when the time comes. I have some plum trees set with peaches nine by nine feet, which will bear well next season.

Prepare the land thoroughly, stir it all through the season, and use cover crops, if nothing more than weeds and grass. Don't plant other crops; let the orchard have the first and best. The advocacy of orchards in seed is doing harm. On the Eldwell farm in the Sacramento valley, California, worked with gang plows, the yield of wheat is 15 bushels an acre. Nearby a woman farmer works her land more thoroughly with the best tools, and gets 34 bushels. She does not know enough to vote, but she knows how to handle the land. Prune for shape and a low head. For vigorous growth, prune when trees are dormant; for less vigor prune in summer. When heavy leaders have ceased, cut out the strong leaders, and the small branches will develop fruit buds. Don't shorten it, but cut out entirely. Then keep up vitality by culture and fertilizing. Intelligent treatment is most important. In spraying, never use Bordeaux mixture after the buds have swollen. Spray thoroughly before; later, pick and burn all rotted fruit. Thinning the fruit is not only important for the immediate crop, but tends to create the habit of annual bearing. Thinning costs less than the barreling and marketing of surplus fruit at low prices.—J. H. Hale, in Prairie Farmer.

## A FRUIT EVAPORATOR.

Easily Made at Home and Can Be Operated Rapidly by Women and Children.

A fruit evaporator is something which should be on every farm. To make one, have the roof slant at about eight feet tall at the highest. Build four feet square on ground. Put cleats inside for the trays to slide on. The trays are made of galvanized screening stretched on a frame that fits when slid in on the cleats. A stove under the trays, with the pipe running to the top



CHEAP EVAPORATOR.

on the outside. A door (A) above is large enough to put trays in; (B) small door below to feed stove. This completes this cheap evaporator. If kept running night and day, which can easily be done by putting fuel in stove late and closing all dampers, two evaporators full of apples and one of peaches can be dried in a day and night. Put a tablespoonful of sulphur on the stove for each tray of fruit, to bleach apples. The boys and girls of the farm can run it, and save the cull apples and surplus peaches. Dry the peelings of the apples, and sell them, too. They make good vinegar. Girls, this is a good way to make your pin money.—Mrs. Susie Holland, in Epitomist.

## One Acre of Tomatoes.

How much will it cost to produce an acre of tomatoes, what number of crates of marketable fruit does an acre produce, and what is the price per crate usually obtained by the grower? These are questions often asked by beginners, and the replies here given are by conservative and successful growers. The total cost of an acre of tomatoes is from \$40 to \$60, the range of yield from 75 to 200 crates, while prices vary from 40 to 60 cents per crate. These replies are based on experience in 1902. Small plantations carefully tended usually produce the largest crop and net the greatest profits per acre. Fifty acres, at least, are necessary that car load shipments may be made.—Practical Fruit Grower.

## Why Thinning Fruit Pays.

Thinning lessens the loss occasioned by rot and other fungous diseases of the fruit by eliminating the danger of infection by contact. It also in a measure prevents the appearance and the spread of disease by permitting better ventilation and drying of the fruit inside of the tree. Thinning will produce a better colored fruit by admitting more sunlight into the tree. Thinning tends to ripen up the fruit more uniformly. Thinning will produce a more salable and higher priced fruit by reason of the increase in size, higher color and general appearance. Thinning will preserve the shape of the tree and prevent the breaking of overloaded branches.—Prairie Farmer.

## THE SIMPLON'S EVIL CHARMS.

Strange Beliefs of Swiss Peasants Regarding the Great Tunnel Well Founded.

Three strange and mighty natural phenomena of uncommon kinds have acted almost like three evil charms to hinder the completion of the great Simplon tunnel in Europe. The peasants there have declared that the mountain gnomes and mannikins are trying to fight the men who are boring a great hole through their sacred mountain.

The first strange occurrence was 1 1/2 years ago, when the blow of a pick broke into a tremendous subterranean sea that began immediately to pour out of the solid rock with a roar like that of Niagara.

It swept away everything before it and hundreds of workmen were saved only by swimming with the rushing flood. At first the engineers expected that the water would run off within a few days, but days, weeks and months passed and the water was still rushing in undiminished volume, so that all the work was stopped.

At last a bed was blown into solid rock and the waters were turned into it. They are rushing through it, making it a respectable river.

Scarcely had this danger been avoided before the tunnel began to slide and bend strangely. This was found to be due to rock that was so soft that it could not bear the pressure of the mighty mountain on top of it. Immense sums of money had to be spent to counteract this, and every new cutting has had to be surrounded with cement and concrete.

Before the engineers had more than finished their work over this phenomenon the Swiss end of the tunnel began to grow hot. Day by day the heat increased, until it was so great that it blistered the skin of the workmen, driving them out of the cuttings. The costly ventilating appliance proved useless against this growing heat, that finally became too deadly to permit human being to enter.

Investigations proved that the heat was due to big accumulations of hot water that seeped through the rock there in a thousand veins.

Again the engineers had to call for immense sums of money to install new devices to fight the new enemy. They have succeeded. Although it is still so hot in the tunnel that the visitor perspires as soon as he enters, the work is proceeding rapidly. And the hot water has been chained. It has been set to drive drills and other machinery.

## SPANISH BEGGARS TO GO.

Ancient Organization of the "Pordioseros" Threatened by Anti-Vagrant Measure.

Every tourist who contemplates a visit to Spain will rejoice that the government has reported favorably upon a measure for the repression of vagrancy and begging, which are practiced on a large scale all over the peninsula, and are particularly indulged in by young children. The bill has been prepared by the social reform committee of Madrid, although it was actually drafted by Senator Santa Maria de Parebes, of the Madrid university, says the New York Times.

In no other Latin country is the guild of beggars so well organized. The Spanish beggar is not usually a thief, or rather overt thieving is discouraged by his profession. Spanish sociologists trace the origin of the present-day beggar to the time of barefooted pilgrimages and half-shirt discipline. It is affirmed that the whole class of quite orderly men and women who crouch at the church doors and piously bless the donors of copper coins are in many cases the lineal descendants of pilgrims who used to do penance for those who were charitably disposed toward them. There is no doubt that even to-day the Madrid beggar, who is called in Castilian "pordiosero," is a very pious person; indeed, the appellation implies as much, originating at it did, from the first phrase that a beggar utters to the stranger—"por Dios."

The new measure inflicts on the parents and guardians of minors arrested for begging or wandering and sleeping on highways and the public thoroughfares either fines or terms of from one to 5 days' imprisonment. Heavier fines, or from 5 to 30 days' imprisonment, will be imposed on parents and guardians who ill-treat children in order to make them beg, or who sell them to others for the purpose of begging. All persons convicted will forfeit the right to have the custody of the children for two years or more, at the discretion of the courts and authorities, who will place the minors in proper municipal and provincial establishments which will support and educate them until it is considered possible to restore them to their parents or guardians.

## Gold Found in Tunis.

A strange piece of news comes from Tunis. It is stated that gold deposits have been discovered in the regions of Soussa and Bizerta. Samples are said to have yielded from two to three ounces per ton, with a minimum of 16 pennyweights. A writer in the Matin goes so far as to declare that some specimens obtained near Kairouan have produced in the laboratory the fabulous yield of three and four pounds to the ton. The mining department in the Regency is reported by the same authority, to have at first refused to issue permits until it was proved that the gold existed, but is now granting them at the rate of 100 a day. A specialist in Paris, however, refuses to believe in the authenticity of the discovery, on the ground that the geological formation of Tunis does not admit of the existence of the conglomerate that is said to extend for a distance of over 30 miles, being too "recent," as until modern times it was partly covered with water.—London Economist.

## MADE MERRY TOO SOON.

Woful Tale of the Man Whose Wife Was Going Away But Missed Her Train.

"What's the matter, old fellow?" he said, as they met the morning after, relates London Tit-Bits.

"But last night you were the jolliest member of the party."

"I felt jolly."

"You acted like a boy just let out of school."

"I felt like one."

"You said your wife had gone away for the first time in three years, and there wasn't anyone to say a word if you went home and kicked over the mantle clock."

"I remember it."

"You said that if you stayed out until four o'clock there was no one to look at you reproachfully and sigh and make you feel sad."

"Yes, and I stayed out until four o'clock, didn't I?"

"You certainly did."

"And I gave a war-whoop on the doorstep."

"Yes; and then you sang a verse from a comic opera and tried to dance a jig."

"Yes; and my wife had missed the train. Now she and I leave me. I want to kick myself a little more for not taking the precaution to get an affidavit from the guard that she went with the train."

"And he gave himself several bangs on the car as he took himself till his hair began to fall out."

## BASE NEGLIGENCE OF DUTY.

Some of the Things That Are Expected of Men Who Aspire to Political Leadership.

To become a political "leader," and to retain the post successfully, requires eternal vigilance. One politician, quoted by the Cleveland Plain Dealer, says that in the temperate districts the leader becomes a sort of unofficial mayor, guardian and father of his people. He can never ignore a request. To do so is to offend not only the individual who makes it, but all his relatives.

One woman asked a district leader to take her baby into his family while the mother went out to town for a week's visit. Again, he was called up at two o'clock in the morning by a couple of men who had got into a dispute, and wanted him to arbitrate. He was expected to see that the poor had coal; to bail out those who were arrested; to secure work for those who were out of employment; to have police fines remitted; to attend marriages, picnics and funerals.

One family of voters renounced him permanently because he did not call when seven-year-old Thomas broke a leg.

"But I don't know he had broken his leg," the leader remonstrated.

"Sure, and you should have known it."

"But I didn't even know you had a son named Thomas!"

"That settles it," and the father took up his hat. "Tim Sullivan would have known it. Niver a meal have you ate in me house."

## Found a Friend.

Valley City, N. Dak., July 27th.—Mrs. Matilda M. Boucher of this place tells how she found a friend in the following words:

"For years I suffered with a distressing headache and could get nothing to cure me till about two years ago when I was advised to take Dodd's Kidney Pills. These pills cured me before I had used the whole of the first box, and I have been free of my ailment since."

"In January of this year I had an attack of Sciatica that made me almost helpless, and remembering how much Dodd's Kidney Pills had done for me before, I bent and got some and began to take them at once."

"In three weeks I was well and not a trace of the Sciatica left, and I have been well ever since."

"Dodd's Kidney Pills have certainly been of great benefit to me. I have found them a friend in time of sickness, and I will always recommend them to every one suffering with the troubles that bothered me."

## The Usual Thing.

"I would like to know," asked the parent, who had a son in need of some further education, "what is the course at your college?"

"The usual half-mile course of cinders and all that sort of thing, you know," absently replied the president of the great institution.—Philadelphia Press.

## Ladies Can Wear Shoes

One size smaller after using Allen's Foot-Ease. A certain cure for swollen, sweating, hot, aching feet. At all Druggists, 25c. Accept no substitute. Trial package FREE. Address A. S. Olmsted, Le Roy, N. Y.

"Jenkins must be a pretty straight fellow. Dobbins tells me he never drinks a drop." "So? You probably misunderstood Dobbins. What he said must have been that Jenkins never drops a drink."—Baltimore News.

Piso's Cure for Consumption is an infallible medicine for coughs and colds.—N. W. Samuel, Ocean Grove, N. J., Feb. 17, 1900.

All the world hates a good example.—New Orleans Times-Democrat.

## Stops the Cough

and works off the cold. Laxative Bromo Quinine Tablets. Cold 25 cents.

A good housewife is like the ocean—very tidy.—Chicago Daily News.

Opium and Liquor Habits Cured. Book free. B. M. Woolley, M. D., Atlanta, Ga.

Fleeting: Guilt has very quick ears to an accusation.

**ABSOLUTE SECURITY.**  
Genuine  
**Carter's Little Liver Pills.**

Must Bear Signature of  
*Brentwood*  
See Fac-Simile Wrapper Below.

Very small and so easy to take as sugar.

**CARTER'S LIVER PILLS**  
FOR HEADACHE, FOR DIZZINESS, FOR BILIOUSNESS, FOR TORPID LIVER, FOR CONSTIPATION, FOR SALLOW SKIN, FOR THE COMPLEXION  
CURE SICK HEADACHE.

## FOR TWENTY YEARS MAJOR MARS SUFFERED FROM CATARRH OF THE KIDNEYS.



## DANGEROUS KIDNEY DISEASES CURED

Peruna Creating a National Sensation in the Cure of Chronic Ailments of the Kidneys.

Major T. H. Mars, of the First Wisconsin Cavalry regiment, writes from 1435 Dunning street, Chicago, Ill., the following letter:

"For years I suffered with catarrh of the kidneys contracted in the army. Medicine did not help me any until a comrade who had been helped by Peruna advised me to try it. I bought some at once, and soon found blessed relief. I kept taking it four months, and am now well and strong and feel better than I have done for the past twenty years, thanks to Peruna."

At the appearance of the first symptoms of kidney trouble, Peruna should be taken. This remedy strikes at once the very root of the disease. It attacks the catarrhal kidneys of the stagnant blood, preventing the escape of serum from the blood. Peruna stimulates the kidneys to excrete from the blood the accumulating poison, and thus prevents the convulsions which are

sure to follow if the poisons are allowed to remain. It gives great vigor to the heart's action and digestive system, both of which are apt to fall rapidly in this disease. Peruna cures catarrh of the kidneys simply because it cures catarrh wherever located. If you do not derive 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, O.

# Dr. SLOCUM



# SYSTEM

The Only Treatment That Cures CONSUMPTION.

Here is a combined treatment that does what ONE medicine CAN NOT DO. The complete obliteration of that dread Consumption (Tuberculosis) is now possible through the use of The Dr. Slocum's Combination System of Medication, which will positively cure this dread disease.

It is the Most Modern and the very Greatest Method of Alimantation Ever Presented to Sufferers from this disease. It prevents and Cures Consumption of the Throat, Lungs, Stomach, Liver, Spleen and Kidneys.

All Catarrhal Conditions of these Organs disappear Promptly and Permanently under the Healing Influence of These Wonderful Medicines.

The Dr. Slocum method of treatment consists of Four Specific Remedies as illustrated above.

## FREE MEDICINE TO ALL.

To Prove to All Our Readers the Wonderful Properties of this Great System of Medical Treatment a Full, Free Course, consisting of the Four Free Large Packages, illustrated above, will be gladly sent to every reader on request. Simply send your Name, Post Office and Express Address to DR. T. A. SLOCUM, 48 Pine Street, New York, and the Complete Free Treatment will at Once be sent you.

## DOCTOR'S SPECIAL NOTICE.

"I have prescribed the Complete Treatment called by my name and sold by all druggists in hundreds of thousands of very serious cases, with unexampled success, and most satisfactory results."—DR. SLOCUM.

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**\$50 To California and return**

Daily August 1 to 14, Chicago to San Francisco and Los Angeles. Correspondingly low rates from all points. Variable routes, liberal time limits. The only double-track railway between Chicago and the Missouri River.

**Special G. A. R. Train**

will leave Chicago 10.30 p. m., August 11, with Pullman drawing-room and tourist sleeping cars through to San Francisco without change, through the most beautiful mountain scenery in the Rockies. Stop-overs en route.

Three fast daily trains from Chicago. All agents sell tickets via this route. Write for maps, booklets and special train literatures.

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**LANDS**

in OREGON or WASHINGTON, any distance from the coast, from 1/2 to 1/4 of a mile for 100 to 200 acres. No blizzards, no droughts, no crop failures. All seasons favorable. Write for particulars. A. K. G. PORTLAND, OREGON.

**ESPECIALLY SUITABLE FOR**  
CURE OF ALL THE FALLS  
Cough, Croup, Whooping Cough, etc.  
In use. Sold by druggists.