

# FARM AND ORCHARD

Notes and Instructions from Agricultural Colleges and Experiment Stations of Oregon and Washington, Specially Suitable to Pacific Coast Conditions

## Protection of Sheep From Poisonous Plants.

The only known way to prevent sheep poisoning by poisonous plants is to keep them away from infested pastures and ranges when they are very hungry for green feed, is the conclusion reached by Mr. G. R. Sampson, instructor in animal husbandry at the Oregon Agricultural college, after exhaustive research. Inquiries have come to the college for methods of prevention and cure, and in reply Mr. Sampson says: "Several plants poisonous to sheep are normally found in many localities. Sheep frequently come in contact with them without serious injury. When pastures become poor, due to drought or overstocking, or when sheep are first put on summer range, deaths sometimes occur and serious losses may follow.

"Treatment of poisoned sheep is very difficult, as the animal frequently shows little sign of sickness until a few minutes before death. Regurgitation or vomiting after food has reached the digested stage is nearly impossible for the sheep, so that emetics are of little avail, and physic works too slowly to get the poison out quick enough. These treatments which may relieve poisoned people, are less efficient for sheep, because of the more complicated stomach of the latter. For the same reason, antidotes are difficult to get into action unless administered hypodermically, and unfortunately the commoner plant poisons in sheep do not yield readily to known treatments.

"It is therefore evident that sheep should either be kept away from pastures infested with poisonous weeds, or only allowed on such pastures when there is an abundant growth of wholesome plants and after the sheep have been allowed to eat their fill on unfested pastures.

"Larkspur, loco weed, wild parsnip, poison oak, sage brush and laurel, are all more or less injurious to sheep and will cause death if the sheep eat much of them or if they are compelled to subsist to too great an extent on these plants. The fact that sheep normally run on pastures containing one or more of these plants and yet suffer no ill effects, simply indicates that these plants are not relished by sheep so much as are normal forage plants, and will be left very largely alone unless pasture becomes poor."

## Big Return From Garden.

It is astonishing the amount of garden produce one may raise on a small patch of ground. Last year from a plot 75x132 feet a family of four were supplied with fresh vegetables all summer. Besides using all the early potatoes needed, 39 bushels were put into the cellar together with enough onions, carrots, parsnips, salsify and cabbage to supply the family for the winter, writes an authority in Farm and Home.

Six 50-foot rows of popcorn produced 2½ bushels. One 50-foot row of string beans by carefully picking, that none got too old, provided the family with these, besides enough to pickle and can 28 quarts. Not a pod was wasted. One 50-foot row of beets sufficed for summer pickles, canning 25 quarts, and as much more to give away. Thirty tomato plants furnished enough for use fresh and the winter's supply of canned tomatoes, besides selling two bushels.

From 30 currant bushes, 10 gooseberry bushes, and three 50-foot rows of red raspberries, many quarts of fruit were used fresh, 75 quarts canned and enough sold to buy the remaining fruit needed for the rest of the canning. A bed of asparagus and of pieplant is found at the end of the garden.

How was it done? The ground is kept well fertilized, well worked, and a complete rotation of crops is practiced. Every foot of ground is used. Small vegetables like radishes, lettuce, onions, etc., are planted 14 inches apart. The first little rows of radishes are planted between the currant bushes, as the early cultivation helps them. The two succeeding crops of radishes were put in wherever any seeds failed to grow, so we do not lose the use of any ground. Plant squashes in with the corn, leaving four hills square between the squash hills. Plant no more of anything than you will use, and can what cannot be used fresh, letting nothing go to waste.

## Use for Mouldy Berries.

Oregon Agricultural College, Corvallis—"Just look here," exclaims many a disappointed housekeeper these damp summer mornings. "These loganberries are all mouldy. They are such lovely berries that I do hate to throw them away." Well, don't do it, then. Just turn them into a delicious drink or sparkling jelly, for which purposes they are excellent. Of course, most people have not known this, and as a result have de-

stroyed hundreds of dollars' worth of otherwise good berries. But Professor C. I. Lewis, head of the Horticultural department, has been conducting scientific experiments to determine the fitness of loganberries which have grown a mould but are otherwise sound, for domestic use. The above surprising conclusions are the result of this investigation. Although of great economic value, the results are easily accounted for. Professor Lewis says that mould is a vegetative process as truly as the growth of lettuce, and the high temperature merely kills it.

Directions for the use of the mouldy loganberries are easily followed. The mould is washed from the fruit and it is put into a saucepan with just enough water to keep it from sticking. With a quick fire it is brought to the boiling point without continuing to boil. It is then removed from the fire and the juice strained out. The juice is then mixed with one-third its measurement of sugar, put back on the stove, and again heated as before. It may be mixed with an equal quantity of apple juice and the mixture made into a jelly with the right amount of sugar. Or it may be set aside to cool, mixed with four times its measurement of water, and used as a wholesome and delightful beverage.

## Big Value of Farm Manure.

Manures benefit the soil by adding chemical elements and supplying it with organic matter. The organic matter by decomposition forms humus. A soil deficient in humus has lost its power to retain water for the growing crop, according to a Farm and Home contributor.

Organic matter can be added to the soil by growing and plowing under green crops, but this method adds but little new chemical material. On the other hand, when farmers attempt to keep up fertility by applying commercial fertilizers alone the soil will eventually become depleted of humus. This makes necessary the keeping of stock and saving and properly applying the manure.

The value of farm manures depends chiefly upon the kind and quality of the feeds used and the class of stock kept. The first is by far the most important. On an average three-fourths of the manurial value of the feed is voided by the animals in the manure, and in case of certain chemical elements with some stock nearly all of it is voided.

There are several good ways of saving and applying manure. We as farmers have to consider how we can save all of the chemical elements and at the same time handle it and get it to the fields with the least labor. In the first place the stable floors should be tight so that the liquid portion of the manure containing the nitrogen cannot get away. Even in cases where a large amount of bedding is used, if the floor is poor some of the liquid portion will leach away.

Bedding should be used, even though the floors are tight, as it adds greatly to the comfort of the animals, and when it is of the right sort, it adds to the quality of the manure. A considerable portion of the organic matter of manure is in the bedding. A shed with a tight cement floor and a good roof, in which manure is kept wet down to prevent fermentation, makes good manure, but is often objectionable because of extra expense. —Farm and Home.

## Garden and Orchard.

Evergreens make "all the difference" in the winter garden. They brighten and enliven gardens otherwise winterkilled, bleak and bare.

The importance of the gooseberry in England is shown by the fact that in the county of Kent there are 6000 acres devoted to this fruit. Americans do not half appreciate it, says C. Wall in Farm and Home.

Give Golden Ball lettuce a trial. It is round and compact, as the name implies, and must be sown thinly, as it has a tendency to rot if closely set. In color it inclines to yellow, is of good flavor and nice to garnish or for salad. Boston curled is also a very desirable kind, being tender and fine flavored, and is not inclined to seed early, a fault of many kinds.

Last spring I planted a piece of gravelly loam to sunflowers. They grew very rank, some having heads measuring from 9 to 12 inches across. When harvested the sunflower seed was fed to a sow that had farrowed 10 pigs in June. No feed that I have ever used gave faster gain with this sow and pigs.

## Scientific Point Cleared Up.

A German astronomer has published a series of tables which seem to show a connection between the appearance of sun spots and the wobbling motion of the earth on its axis, due, perhaps, to a variation in the sun's magnetism.

## CLEVER WOMEN SPIES

LINE OF WORK IN WHICH THEY EASILY OUTDO MEN.

To Unusual Powers of Trickery They Add the Charm of Femininity and Thus Win the Confidence They Seek.

Women from time immemorial have been the greatest spies in history. Their charms and resources adapt them to every line of apprehensive endeavor, from tracking the erring New York husband to obtaining the plans and the specifications of the battleships and the forts of the great powers.

To those who are acquainted with the history of espionage, this statement comes as no surprise, for nearly all the most sensational spying cases of recent years have been engineered by unscrupulous women.

For when it comes to trickery there is no match for a clever woman, especially if, as is often the case, she has natural beauty allied to her powers of stealing confidences.

Only a few years back an important German fortress had to be entirely rebuilt owing to France obtaining extensive and valuable information regarding its armaments and the geography of the important portion of German frontier that it guarded. And this act was made necessary owing to the ramifications of a French woman whose attractive personality enabled her to worm these secrets from important Berlin officials, in whose homes she was implicitly trusted and entertained.

Recently a charming woman who posed as a governess was sentenced to four years' penal servitude for spying. She was employed by two European powers, and by acting as a governess to the children of naval officers in Paris and Berlin she paved the way to acquaintance with those holding responsible positions.

With remarkable audacity she annexed charts and plans and sold them in the right quarters. This she found an easy task, having, in her position of governess, ample means of learning in what part of the house such documents were stored, and it was not until a bunch of duplicate keys of a number of admiralty safes were found in her possession that suspicion fell upon her.

Every one remembers the sensation several years ago when most complete plans of the interior of the first British dreadnought were published in a German newspaper. About this time an attractive American woman of German descent disappeared from London's society circles, where, by reason of her charming personality and apparent wealth, she had been given a hearty welcome.

An inquiry was held on the affair, and it was suggested that this woman probably knew a good deal about the leakage of these important plans, and probably further proceedings would have been taken had not the honor of several officers of high standing in naval and society circles been involved.

## Five Families in Single Room.

Five families living and sleeping in one room were recently discovered among the slums of Dudley, Worcester (England). According to Canon Southwell, who apparently possesses an intimate knowledge of the district, the occupants were all quite comfortable until the arrival of "the chap in the center of the room." Then the happy family circle was broken up. Five families and a lodger in one room is really overstraining the economic possibilities of slumdom. Two and three families in one house are common enough to agitate the public mind, even in this age of housing and town planning reform.

## Dental Corps in Navy.

It is probable that with the establishment of the dental corps in the navy bad teeth will not necessarily disqualify a man for enlistment if there is any way in which such defective teeth can be made serviceable. It is the object of the surgeon general of the navy when applicants are qualified in all respects except teeth to accept the candidate with a view to letting the dental corps put him in shape after enlistment.—Our Navy.

## Skeptical.

"Mrs. Nooned prides herself on her ability to make fudge."  
"Indeed! Do you suppose she could cook anything to eat?"

## An Important Omission.

The doctor who laid down the requisites of the perfect baby omitted the most essential one—the baby must be yours.

## A Mixup.

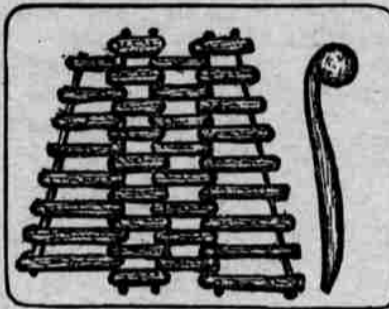
"When do you expect to take a hand in this business?" "When I get a foot in it."

## MUSIC IS MADE FROM WOOD

Among Amusing Toys Any Small Boy Can Make Is Harmonicon—Only Quick Tunes Played.

A harmonicon made of glass is a well-known instrument of ancient date. Glass, from its very nature, lends itself to produce musical sounds, but wood is quite a different material, and a great many people would hardly believe that it contains musical properties. It is not record that a wooden harmonicon was made some years ago out of an ordinary bundle of firewood, the sticks being laid in due order upon waxed threads, and that the music produced was in every way satisfactory. As a toy it is worth consideration, and should be made as shown in the illustration.

The wood should be as hard as possible to produce the finer sounds, and the straightened grain the more true the tones will be. The palettes, as



Wooden Harmonicon.

the pieces are called, must be of varying lengths for the different tones. Oak or mahogany are best. Experiment will soon show what to select and what to refuse. The palettes when cut should be allowed to rest on straws or strings tightened over a shallow box and kept in place by means of wax on their under parts. The music is produced by striking the notes with small hammers in the same way as the ordinary glass harmonicon. These should be made of whalebone or split cane, at the ends of which small knobs of wood are fixed. On these wooden instruments only quick tunes can be played, as there is no sustaining power in the notes.

## MEMORY A MATTER OF HABIT

Forgetfulness Arises Largely From Special Kind of Laziness—Mental Training Needed.

Memory, according to psychologists, is a good deal a matter of habit, and lack of it arises largely from a special kind of laziness. We see the truth of this, remarks the Bellman, when we observe the prodigious memories of some of the men of letters a century ago, and then compare their education with the system of teaching which now prevails. When we wonder at their ability to quote offhand at almost any length, we must remember from their earliest days they were taught to memorize. They had to learn things by heart, and learn them exactly, with the result that in childhood they formed, perforce, the habit of remembering with absolute precision.

What we need nowadays is a sort of mental training analogous to this older schooling. Let us by all means keep our filing cases and memorandum pads, but let us at the same time keep our memories active by making them work. The simple process of committing poetry to memory, futile as it may seem to some, is one of the most useful kinds of intellectual exercise. And if we do not before long make general use of some such stimulus, it begins to look as though our memories would join our appendixes as now useless relics of an earlier stage of existence.

## RIDDLES.

What does man love more than life, Hate more than death or mortal strife;

What which contented men desire, The poor have, and the rich require;

The miser spends, the spendthrift saves, And all men carry to their graves? Nothing.

What man must have his glass before he can do a day's work? A glazier.

When is a pie like a poet? When it is Browning.

What are the greatest obstacles to a Russian invasion of Turkey? The balkin' (Balkan) mountains.

Who was Jonah's tutor? The whale that brought him up.

Why is avarice like bad memory? Because it is always forgetting.

Why is it vulgar to sing and play by yourself? Because it is solo (so low).

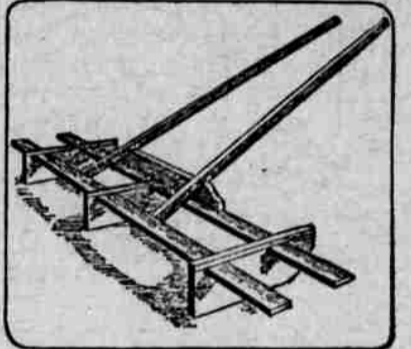
Which of the feathered tribe would be supposed to lift the heaviest weight? The crane.

## TOOLS FOR A GARDEN

Labor of Growing Vegetables Reduced by Field Methods.

Because Much of Work is to Be Done When Other Things Are Pressing, Gardening is Too Often Left as Slack Time Job.

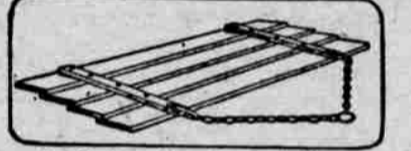
Field methods in the garden go a long way toward reducing the labor of growing vegetables. Long rows and the proper tools to work with will do away with 75 per cent. of the tedious hand work, so freely used as an argument against maintaining a garden.



Garden Marker for One Horse.

Because a large portion of the work must be done when other work is pressing, gardening is too often left as a slack time job. Doing the right thing at the right time in the garden counts for more than it does anywhere else on the farm, since garden crops will not stand much neglect.

Two garden tools that will be found very serviceable, and saving of hand labor, are a plank and marker, says the Farmers' Mail and Breeze. Both are homemade affairs, the drawings herewith showing the plan of constructing them. Use the plank on plowed or harrowed ground, just as



A Plank Has Several Uses.

soon after a rain as the surface will crumble nicely. This will not only fine clods and level the surface, but by putting on weights the seedbed may be firmed, which, with the mulch left on the surface, will hold the moisture where seeds or plants will need it most.

By weighting the marker one can make drills deep enough for the seeds of smaller crops without using any other tool. A good job covering them can be done with the plank, the driver standing on it, or a harrow with teeth set slantwise, will answer the purpose well. In using the marker let the outer runner follow the last drill made, so as to get all rows a uniform distance apart.

## TREATMENT FOR LUMPY JAWS

Most Satisfactory Way is to Remove the Growth With Knife When in the Tissues Only.

(By G. G. GRAHAM.)

The most satisfactory way of treating lumpy jaws is to remove the growth with the knife when in the tissues only. The animal is thrown; the head then held in a favorable position, the skin is cut over the tumor and the swelling removed by cutting around it in the healthy tissues. If hemorrhage is large the vessel may be tied or taken up with the forceps; bleeding from smaller vessels may be seared with a red hot iron. The wound should be washed with an antiseptic in one per cent. solution after the tumor is removed and then packed with antiseptic gauze or cotton and the wound stitched up. The next day removed the stitches and treat as an open wound.

## SOURCES OF HOG TROUBLES

Corn is Productive of Indigestion and Dirt Breeds Disease—Furnish Dry Quarters.

Hog troubles are due to too much dirt and too much corn, says Kansas Farmer. Corn is a fat producer, but not a muscle builder, and an exclusive corn diet during the growing period not only fails to supply the element needed by the animal, but is productive of digestion troubles and weaknesses in the system which invite disease.

Corn is a good element in the ration of any hog at any time. There is nothing better, but it must be balanced by alfalfa, clover or some other nitrogenous feed during the growing periods of hogs. There is only one period in the life of the hog when an exclusive corn ration should be used, and that is at the last end of the fattening period of market hogs.

There is not time in the life of a hog when he should not have clean, dry sleeping quarters and pure drinking water.