



#### Picking Apples.

All handling of the apple crop should be done with the idea of bruising the fruit as little as possible, says a bulletin from the Maryland station. In all apples of good quality a bruised specimen soon becomes

PORTABLE TABLE.

a rotten one. Apples should be picked into bags or from these into the barrels or on to padded baskets and carefully rolled from these into barrels or on to the sorting table. A very handy picking bag is made by placing a pebble in a corner of a grain sack and tying the corner by means of the pebble to one side of the mouth of the bag. This makes the bag into a loop, which may be hung over the neck of the picker. The mouth of the bag comes to the front and is held open by passing a stiff bent wire under the arm. This kind of picking bag leaves both hands of the worker free for picking. A gang of pickers will empty their picking bags and baskets directly on to a portable sorting table placed between the rows on which they are working. This table is placed on low truck wheels and has a single whiffletree, so that a horse can move it to any desired point as work proceeds. A cut of this kind of sorting table is here shown. It should be made large enough to hold not less than two barrels of fruit. The rear bolster is higher than that at the open end so that culls can be rolled. A long, heavy plank is placed on the ground on each side of this table on which the barrels are set for filling. The sorters pick the apples from the table into padded wicker baskets which have low or folding handles, which permit of their being placed down into the barrel before being dumped. Apples would be greatly injured if dumped from the mouth to the bottom of the barrel. The fruit is sorted into two grades, first and seconds. In sorting exclude all fruit that are ripe, for if a fruit is ripe at picking time it will soon decay and spoil its neighbors. Fruits that are too green or poorly colored should be left out, as they are always of inferior texture and flavor. Undersized, diseased, wormy, bruised or misshaped specimens should of course go as culls. The culls are allowed to roll into a pile from the lower end of the grading table.

After being properly "racked," to insure a tight pack, and when ready for heading, the fruit should stand as evenly as possible at about one-half to three inches above the chime of the barrel. A corrugated paper cap or excelsior cushion should be placed on the head laid and the press applied. The figure shows the barrel with the screw press in position ready for driving down the head. Just beneath the head may be seen the excelsior cushion. After a little experience a handy man learns lots of little knacks about heading up fruit.



HEADING BARREL.

#### Experiments in Fowls for Eggs.

The New York Experiment Station studied the effect of different rations upon the flavor of eggs. Those laid by hens fed with highly nitrogenous ration were inferior to those from hens fed with a carbonaceous ration. They had a disagreeable flavor and odor. The eggs and yolk were smaller and the keeping qualities inferior. In the test at the Massachusetts (Hatch) Experiment Station to compare cabbage and clover rowen as the green portion of a ration for laying hens it was found that the eggs produced on the former ration, although heavier and possessing a higher percentage of dry matter, protein and fat, were inferior in flavor and cooking qualities to eggs produced on the ration containing clover.

A small quantity of chopped wild onion tops and bulbs were added to the feed of a number of hens. After about two weeks the onion flavor was noticed in the eggs laid. When the amount of onion feed was increased the flavor was so prominent that the eggs could not be used. A week after the feeding of onions was discontinued the flavor could no longer be noticed.

#### How They Store Sweet Potatoes.

The New Jersey sweet potato house is a stone building, say 16x18 feet on the inside, with walls 10 feet high and a good roof. The building is half underground and the earth is banked up around it. There is a passageway

through the center, and the bins for the sweet potatoes are 6 to 8 feet square and 8 to 10 feet deep. There is a door on the south side, with window above, and a stove is placed inside the building for use when required. The walls are plastered, and the underside of the roof is also covered with lath and plaster, and the place is thoroughly weatherproof. A house of this kind will afford storage room for 3,000 or more bushels.

#### Stock Breeding and Management.

Another method of cheapening the expenses is to use pure breeds and provide abundant pasturage. Poor pastures make poor stock, no matter how careful the breeder may be. It will not do to endeavor to bring the stock or herd up by breeding unless all the conditions are favorable. The razor-back hog is the result of poor feeding, and though man compelled the animal to resort to scanty herbage, nature fitted him for the purpose by gradually changing his form, thus adapting him to the surroundings. We thus know that climate, soil and the growth indigenous thereto are important factors to be taken into account, and in the breeding of live stock farmers should consider well as to what may be needed before making the effort.

The large mutton breeds of sheep now weigh twice as much as the ordinary common kinds, but in securing size the sheep have been fed on rich pastures, where everything favorable for improvement has been in their favor, and they have never retrograded during a single period, but progressed without difficulty. Hence, if the large breeds are to be the agents for improving the common flock, the farmer must take a look over the feeding grounds. The Berkshire hog would starve if compelled to compete with the land pike variety. It could not exist under the same conditions, for it has been bred away from that sphere, and it is of no use unless adapted to the place which is to be its habitation. The native cow can exist where the pure-bred animal might starve, but this is because she is not required by nature to convert a large quantity of food into milk. Scanty herbage has dwarfed her milking qualities, and this has been handed down from ancestry, but scanty herbage will not do. The change is upward, and the conditions must be changed to suit the demands of the animal.

#### Forming a Wind Break.

A grove should have forest conditions. By this is meant that the leaves falling should remain and form a leaf mold which will act as a fertilizer and hold moisture during severe winter weather. To accomplish this to a certain extent low growing trees and shrubbery may be planted among the trees, and near the outside some evergreens, such as red cedars or the white spruce. These will break the force of the high winds and leave at least part of the leaves upon the ground.

To sum up the different varieties that may be grown with success on our prairie soil, I will mention the black walnut, butternut, white ash, elm, basswood or linden, shellbark hickory, bur oak, box elder, wild black cherry, white birch (inclusive of the European and cut leaved varieties), also the catalpa, cottonwood and willow.—I. W. Hoffman.

#### Good Days for Farmers.

The last ten years has been the golden age of American agriculture. More advance has been made than in any twenty or thirty years in the nation's history. Land has increased enormously in value since 1890, and is destined to go higher in the farming sections. Prices for products have been good all the time and are better now than ever. If the importance of agriculture and the farmer increases at the same rate in the future—and it is sure to do so—the agricultural life will be considered the ideal one, and to own a good farm the very acme of felicity.—New Haven Leader.

#### Outclassed.

Everybody's kickin',  
Kickin' 'bout the heat;  
Kickin' 'bout the price  
We pay for things to eat;  
Kickin' 'bout the railroads  
An' the government;  
Kickin' 'bout the taxes  
And the way they're spent;  
Kickin' 'bout the autos  
And the pace they set;  
Kickin' 'bout the grafters  
An' the pull they get.  
Old mule looks dejected,  
Says in tones demure,  
"When it comes to kickin'  
I'm an amachoor!"  
—Washington Star.

#### Kainit with Manure.

Kainit is one of the best substances to use with manure. It does not liberate ammonia, but changes it into sulphate of chloride, and thus "fixes" it. Kainit is a potash salt, and also contains common salt. It is one of the best fertilizers for clover, and increases the value of the manure. Applied to the land in the spring, it is beneficial, not only as a plant food, but in its chemical effect on the soil. It is also cheap compared with some other fertilizers.

#### HOME VEGETABLE GARDEN.

Worth Many Times Its Cost to Every Farmer's Dinner Table.

Professor J. R. Shinn, horticulturist of the Idaho Experiment station, Moscow, Idaho, in a recent letter gave the following suggestions concerning the home vegetable garden:

"The vegetable garden should be an important factor in every farmer's home throughout the country. It will afford him an economic element in providing for his family; it will add to the comfort and happiness of the mother, the children and himself; and it will do much toward creating an interest in farm life if properly planned and managed.

"The fact that a vegetable garden will aid in keeping down the expenses of the home is likely to appeal strongest to the average man, and for this reason it demands first consideration. In order to gain some definite idea of the exact usefulness of the home garden the experiment station of Illinois conducted experiments with a garden for a period of five years. This garden consisted of one-half acre of black prairie soil and the average net profit for the five years, after all expenses for seed and labor had been deducted, was \$74.85 per year. Some years gave less returns than others owing to the effect of dry seasons but under irrigation it is probable that the returns would be much more constant and even higher. During the best year this plot of one-half acre gave a net profit of \$111.08. Where could the average farmer turn to find a more paying use for his ground?

In the matter of creating happiness in a family and rendering the home life more comfortable the farmer's vegetable garden may exercise an important mission. Happiness always comes to those who are deeply interested in the things that surround them. If a farmer has a fine herd of Hereford calves he immediately shows his interest by taking his friends or relatives to see them as soon as they arrive at the farm; if the wife has something in the parlor that is attractive and new, no time is wasted before the guests receive information about it, and from these facts the whole household rejoices and the guests are made glad with them. In like manner the vegetable garden may create another avenue for happiness. Visitors will undoubtedly enjoy seeing a well kept garden and especially if the number varieties is great and the size of the individual vegetables large, the pleasure of the occasion will be at its maximum. Then the comfort of sitting down to a meal where vegetables in great variety adorn the table will be greeted with the utmost satisfaction on the part of guests, but it is to the family that gather around the same board three times each day that such an assortment of food is the most satisfying and comforting. Pork and beans may satisfy hunger adequately for a time, but the same things appearing on the table too frequently become distasteful. The average individual therefore needs a change in his ration often. No other method is so readily accessible to the farmer as the garden to meet this demand for variety for his table.

"Aside from the economic value of the vegetable garden and the satisfaction it brings to the home, the interest which it may create in farm life may be of no small moment. Rightly planned and properly conducted the garden may furnish the first element that shall interest the farm child in his surroundings. The little tots all enjoy garden-making time and no farm garden is complete without certain definite portions set aside for the special provision for the children's garden. Here is where the first lessons in the science of agriculture should be taught, and through these lessons the very sanest and brightest children will decide early in their career to follow the calling of their parents.

"Viewing the vegetable garden from the standpoint of its economic value, its value as a comfort and pleasure to the household, and its usefulness in arousing a deeper interest in the farm, it behooves every farmer to direct his attention toward planning the garden for next year during the long evenings at his disposal this winter."

#### TOMATO BLIGHT.

Results of Exhaustive Research at Washington State College.

A great many remedies for tomato blight have been suggested by tomato growers, but most of these have proved to be unsuccessful. A couple of years ago the State college experiment station experimented quite extensively with tomato blight at Clarkston, Freeman, Pullman, Wenatchee and North Yakima. We found that tomatoes which were grown in the shade did not blight as badly as those which were grown in the sunlight, but usually, there was about twenty-five per cent of blight, even in the shaded plants. Shading tomato plants can therefore hardly be considered a remedy for the blight.

Some growers at North Yakima have gotten fairly good results by planting the seeds rather thickly in the rows, and afterwards thinning out, instead of planting the seeds in the hotbed, and transplanting to the field. Various methods of irrigation and cultivation have been investigated, but no satisfactory results have been obtained. Sev-

enty different varieties of tomatoes have been tested in our own experiment station, and all have blighted more or less. Unfortunately, Sparks Earliana, one of the favorite varieties for early tomatoes, is one of the worst to blight. We have found that the Dwarf Champion is less susceptible to blight than any of the varieties we have tried. At Clarkston, it was the general opinion of the growers that the blight was due to a hot wind which blows up the Snake river valley about the first of July. However, in our experimentation there, we discovered that seventy-five per cent of the blighting occurred before the hot winds came.

A peculiar phase of the situation regarding tomato blight is that it occurs only in the Northwest. Although it has been investigated by our station staff for the past ten years, we have failed to discover a remedy, or the cause, although it seems probable that it is due to the attacks of fungi, or a bacterial disease. Blighted plants may be recognized by the leaflets beginning to curl and turn over. Next the plants cease to grow, and gradually turn yellow. An examination of the roots of diseased plants shows that the interior of each root is blackened. Insects have nothing to do with the blight, so far as this station has been able to discover. Indeed, tomato blight is one of the puzzles which thus far has not been solved by investigators, and is a serious menace to tomato growing in the Pacific Northwest.

R. Kent Beattie,  
Botanist.

#### DIPPING OF SHEEP.

Formula for Killing Lice and Mange Successfully.

In response to numerous inquiries, the State College department of veterinary science has prepared the following formula for the making of sheep dip. From several regions of the Northwest, word has been sent of the existence of mange and other infectious maladies among the sheep, which it is hoped to eradicate by properly dipping the sheep.

Use twenty-four pounds flowers of sulphur; eight pounds unslaked lime; one hundred gallons of water. Place the unslaked lime in a mortar box, or suitable vessel, adding enough water to slake the lime and form a lime paste, or "putty." Sift into this lime paste the flowers of sulphur, and stir the mixture well. Be sure to weigh both the lime and the sulphur. Do not trust to measuring them in a bucket, or to guessing at the weight. Place the sulphur and lime paste in a kettle, or boiler, with about twenty-five to thirty gallons of boiling water. Boil the mixture for two hours at least, stirring the mixture and sediment. The boiling should be continued until the sulphur disappears, or almost disappears from the surface, at which time the solution will be a chocolate, or liver color. The longer the solution boils, the more sulphur is dissolved, and the less caustic the ooze becomes.

Pour the mixture and sediment into a large tub, or barrel, and allow it ample time (from two to three hours, and more, if necessary) to settle. Draining off the liquid is a great advantage over dipping it out, in that less commotion occurs in the liquid, and therefore it remains freer from sediment. Add enough warm water to make one hundred gallons. Under no circumstances use the sediment for dipping purposes.

In order to attain success in the treatment of mange by dipping, care and sureness of method must be observed. Animals that have been exposed should be dipped, as well as those that show distinct evidence of the disease. After the elapse of two weeks following the first dipping, the animals should be subjected to a second dipping, in order that parasites that may have survived the first treatment, or that may have gotten on the animals from corals or elsewhere, may be destroyed. The liquid at the time of dipping should have a temperature of 102 to 112 degrees Fahrenheit. Each animal should be kept in the dip for two minutes, and in unusually bad cases of mange the sheep should be hand rubbed, and kept in the dip for four minutes.

The treatment just outlined applies to mange or scab. If, however, you desire a dip for lice, make a solution of crude tobacco leaves and water, used in the ratio of three pounds of tobacco to ten gallons of water. Boil the tobacco until its properties have been thoroughly taken up by the water, and then dip the sheep the same as prescribed for mange.

F. B. Hadley,  
Instructor in Obstetrics.

#### Care of the Filter.

The water filter must have an occasional cleansing, and one of the best preparations is a solution of permanganate of potassium. Dip a small brush in the solution and go over every atom of the surface after washing with hot soap suds and thoroughly rinsing. Should some small amount of the solution remain after several rinsings, it is not injurious. A cheap filter can be made from a large new flower pot thoroughly cleaned, with the hole in the bottom covered with a piece of clean, new sponge held down by a layer of coarsely powdered charcoal covered with a layer of clean sand with a top layer of coarse gravel stones. This will filter the water as successfully as an expensive apparatus.

## ADVICE TO VICTIMS

TELLS READERS HOW TO PROMPTLY CURE RHEUMATISM AT HOME.

Directions to Mix a Simple Preparation and the Dose to Take—Overcomes Kidney and Bladder Trouble Promptly.

There is so much Rheumatism everywhere that the following advice by an eminent authority, who writes for readers of a large Eastern daily paper, will be highly appreciated by those who suffer:

Get from any good pharmacy one-half ounce Fluid Extract Dandelion, one ounce Compound Kargon, three ounces of Compound Syrup Sarsaparilla. Shake these well in a bottle and take in teaspoonful doses after each meal and at bedtime; also drink plenty of good water.

It is claimed that there few victims of this dread and torturous disease who will fail to find ready relief in this simple home-made mixture, and in most cases a permanent cure is the result.

This simple recipe is said to strengthen and cleanse the eliminative tissues of the Kidneys so that they can filter and strain from the blood and system the poisons, acids and waste matter, which cause not only Rheumatism, but numerous other diseases. Every man or woman here who feels that their kidneys are not healthy and active, or who suffers from any urinary trouble whatever, should not hesitate to make up this mixture, as it is certain to do much good, and may save you from much misery and suffering after while.

#### According to Rules.

Sentry—You can't leave.  
Soldier—But I have the captain's oral permission.  
Sentry (Importantly)—Let's see it!  
—I! Motto per Ridere.

ITS St. Vitus' Dance and all Nervous Diseases permanently cured by Dr. Kline's Great Nerve Restorer. Send for FREE \$2 trial bottle and treatise. Dr. R. H. Kline, Ltd., 363 Arch St., Phila., Pa.

#### Imperfect.

Automobilist—Say, I want this mask changed. It doesn't cover my face sufficiently.

Clerk—But it's the regular thing.  
Automobilist—Can't help that. I find that the people I run over are apt to recognize me.

#### \$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 it a 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 all druggists, 75c.  
Take Hall's Family Pills for constipation.

District Attorney Jerome of New York pleads guilty to three weaknesses—candy eating, cooking strange dishes and making furniture.

#### To Break in New Shoes.

Always shake in Allen's Foot-Ease, a powder. It cures hot, swollen, itching, swollen feet. Cures corns, ingrowing nails and bunions. At all druggists and shoe stores, 25c. Don't accept any substitute. Sample mailed FREE. Address Allen S. Olmsted, Le Roy, N. Y.

After He'd Been Sentenced.  
Lawyer (In courtroom)—What time have you got, please?

Prisoner (at trial table)—I can't tell you until after the trial.

## SINKS AND DRAINS A FREQUENT CAUSE OF TYPHOID.

Purify These and You Will Be Safe From Contagion.

## DISINFECTING THE ONLY PREVENTIVE

BORAX, A SIMPLE, SAFE AND SURE METHOD

How to keep our homes clean, sweet and free from germ influences is a question.

While there is no occasion for alarm, it is always well to be forearmed on the theory that "An Ounce of Prevention is Better Than a Pound of Cure," and no ounce of prevention has yet been discovered that is more simple, more direct and more effective, yet harmless to the human system, than is Borax.

Borax has been known and used for generations as a purifier and preventive against epidemic influences originating from unclean conditions resulting from unsanitary sinks and drains, and when used as a hot solution in the proportion of two table-spoons to a gallon of hot water flushed through the offending locations, removes every trace of disease germs and renders the pipes clean and wholesome.

Borax in addition to its hygienic qualities is a household necessity, and can be used for numerous domestic purposes. It softens the water, makes linen dazzling white, will cleanse every article in the kitchen or dining room and make it bright, will prevent moths, soften and whiten the skin, remove dandruff and cleanse the scalp, and for cleansing and sterilizing baby's milk bottle and nipple has no equal.

Borax, unlike every other cleanser and disinfectant, is absolutely harmless to the system, and is safe, simple, economical, and can be purchased at any drugist or grocer.

A dainty book in colors, called the "Jingle Book," will be sent free to any Mother sending name and address of her baby and tops from two one-pound cartons of "30-Mule-Team" Borax, with 5c in stamps. Address Pacific Coast Borax Co., New York.