

## SOILS FOR CRUARD

Careful Preparation Should Be Made Before Planting Trees.

On New Land Plowing Should Be From Six to Twelve or Fourteen Inches Deep and Graded for Distribution of Water.

(By R. W. FISHER, Horticulturist, Montana Agricultural College Experiment Station.)

The soil on which fruit plants are to be set out should be given very careful preparation before any are planted. On new land this preparation consists in plowing the soil from six to twelve or fourteen inches deep, carefully grading so that water can be distributed in furrows from one end of the field to the other, and then growing a crop of clover, alfalfa, peas or some cereal for one or two years in order that the soil can be pulverized and opened up to the action of the air and to supply humus. A method that is practised with success is to plow the land deep in the fall, and grade it. In the spring following, oats and red clover are planted. The oats are harvested the following fall and the next year one crop of clover hay can be cut and the second crop plowed under as a green manure. In the spring of the third year the soil should be in excellent condition for fruit trees. In cases where the farmer does not desire to wait so long before planting trees they can be set in the spring of the second year following a crop of oats and clover or potatoes, or some intertilled crop may be grown instead.

On soils in which there is found a large amount of humus it may not be necessary to grow an annual crop previous to planting the trees. As a general rule, however, much better results will follow from the growing of some crop on the land before fruit trees are set out. On land that is to be irrigated the surface should be leveled and graded so that water will run through small furrows from one end of the field to the other without flooding the ground. On soils that are very uneven on the surface a grader will prove efficient in smoothing it. This grader will take the soil from the high places and deposit it in the depressions. On very uneven surfaces where considerable soil has to be moved a slip scraper, Stuart grader or other specially made instrument may prove better adapted to the work. After the grading is done the soil should be thoroughly cultivated with either a disk harrow, a spring tooth or spike tooth harrow, depending upon the character and condition of the soil. On land that is irrigated it is desirable to run a grader over after each plowing in order to smooth down the surface so that water can be easily distributed.

At planting time trees are taken from this trench, a few at a time and set in the field, but at no time should the roots be exposed to the direct rays of the sun. They can be protected in the field while planting by throwing a wet sack or cloth over the roots.

In the fruit-growing valleys many different soil and climatic conditions exist, and it follows that different varieties will prove successful. In several of the fruit valleys trees have not been grown for a long enough period to determine with any degree of certainty the varieties that will prove most profitable. For the higher altitudes and colder parts of the state the varieties have been determined. A different selection of varieties would necessarily be made if the fruits are grown for commercial purposes than if grown only for home use. In growing fruits for home consumption the grower can choose with more regard for his own personal tastes, while commercial varieties demand that they be suited for shipping and to meet the demands of fruit buyers.

### Buckwheat.

Buckwheat is not raised extensively in many sections. It can, however, be successfully grown as a catch crop. It will grow on very poor soil. If wheat ripens early this year, which is probable, buckwheat can be sown on the wheat field. It is cut with a self-binder and shocked and threshed like other small grains. If bees are kept, the buckwheat blossoms furnish excellent honey, and by sowing at several different dates quite an extended honey period is obtained. During seasons when clover, etc., are not abundant, buckwheat as a bee pasture is important.

### Use of the Weeder.

The weeder is a very useful tool in the cultivation of potatoes when properly used. It should be run crosswise of the rows after each cultivation as long as the size of the plants will permit. It helps to pulverize the surface and destroys many of the weeds in the rows where they cannot be reached with the cultivator, thus making hand hoeing less necessary. Some growers continue to use the weeder lengthwise of the rows after the plants are too large to permit running it crosswise by removing some of the teeth from directly over the row.

### Mixing Broods.

Many poultrymen find it pays to put two broods with one hen every time. If possible, select the more motherly hen and arrange her headquarters away from any other hen. By all means keep the young chicks away from the barn and outbuildings. The longer they are kept the surer one is of health and thrifty growth.

## LAND AFTER SMALL HARVEST

Effort Should Be Made to Make Best Possible Use of Scanty Soil Water.

(By ALVIN KEYSER, Colorado Agricultural College.)

Harvest is either now being finished or is in progress in this season of short water supply, both under irrigation and on dry land, an effort should be made to make the best possible use of a scanty soil water. If small grain stubble is allowed to stand after harvest without treatment, the surface of the soil soon dries out and bakes so that plowing can scarcely be done, if at all. Of course, rains occasionally come to soften this crust, but these cannot be absolutely depended upon. The formation of a crust can be prevented by thoroughly double disking after the binder. If the disking is well done, baking and clodding of the surface will rarely occur. Land so treated may be plowed and fitted for seeding when unfitted land cannot be plowed. Such land will also take up rain or irrigation water much better than undisked land. The writer made some experiments a few years ago on this feature of soil management.

The land was disked after the binder and plowed about August 1. A similar piece on the opposite side of a 16-foot roadway was not disked. The plowing was done at the same time. No rain fell from July 1 until August 31. From August 31 to September 5 three inches of rain fell. The land that had been properly tended was well wetted by this rain, and fall crops started and grew well. The undisked land was wetted only about six inches, not enough to make it possible to thoroughly break down the lumps.

The good effect of judicious disking will be seen on the next crop. The effect is to prevent the soil getting into very bad condition.

### Nitrate of Soda.

Applications of nitrate of soda sometimes fail to benefit crops and the fertilizer is condemned and its use abandoned. Whenever this quickly acting plant food has no effect and the mechanical or physical conditions of the soil are satisfactory, it is unmistakable evidence that the soil contains enough available nitrogen to meet the needs of the growing crop at that particular time. When cow peas, clover seeds or well preserved stable manure have been incorporated with the soil and the soil is warm and moist there should be no want of nitrogen. If, on the other hand, the soil is light, cow pea crop short and light or the manure supply scant and poor, nitrate may be applied with great profit.

### Blanching Celery.

Early or summer celery is usually blanched, after the first "hiding," by standing 12-inch-wide boards close against each side of the celery plants, the top edges hooked or cleated so as to be about three inches apart. The boards should be about 12 feet long, and are put on when the celery is about a foot high, says a writer in Farm Journal. I think that the board method is better than earth for summer blanching, because celery covered entirely with earth is more liable to rot or rust in warm weather. This blanching process requires two or three weeks after the boards are put on. Then the plants can be dug, as wanted, and sold or used. In very small gardens celery may easily be blanched by slipping a piece of tile over each plant.

### Valuable Sow.

An Indiana man reared and sold, at pork prices, from a Poland-China sow in five years 79 pigs for \$1,073.31.

### POULTRY NOTES.

A check in growth means a loss in rearing.

Bumble foot is produced by flying down from high roosts.

Birds with small combs and plenty of feathers endure cold best.

Young hens and early hatched pullets make the best winter layers.

The neglect given chickens now cannot be overcome by good care later on.

A small quantity of carbolic acid will greatly benefit the whitewash in killing lice.

A dull sunken eye shows defective nutritive power and lack of constitution and vigor.

If you cannot dress poultry so it looks good, better sell it alive, as it will bring more.

When a chick stands still, the food it eats is wasted—the breeder gets no return for it.

Plan in good season to reduce the winter stock of poultry, as much as possible, to layers.

Do not feed ducks whole grain of any kind. They need bulky food, plenty of sand, grit and oyster shells.

While the turkeys "roost high" at Thanksgiving time, the ducks are hiding. Never fasten the nests to the house in such a manner that they cannot readily be taken down for cleaning.

Fowls never get sick without a cause. Find out what this is and remove it, before you talk of "bad luck."

Warmth and dryness are necessary if you would have the early chicks. Protection from the damp is of more importance than artificial heat.

Laying hens need animal food now as they are right in the heaviest laying season and green cut bone or beef scraps should be furnished. These will not only increase the egg yield but the fertility as well.

# WASHINGTON GOSSIP

## Uncle Sam Is Loser in Cash Account



WASHINGTON.—One of the mighty few instances on record of the United States having been "done" in its cash accounts came to light at a decision handed down by the controller of the treasury. In this particular instance the government is short more than \$4,000 and has no way of helping itself. It became a victim through the carelessness of its own officers, and the victimization, too, was not criminal in its nature.

Prior to 1879 the late Samuel J. Little of Georgetown owned four certificates of 6 per cent. stock of the old corporation of Georgetown. Upon his death he left a life interest in the stock to his sister, Mrs. Eliza A. Ricketts, and the residue to his minor children, J. C. Little and Julia A. Little. In the settlement of the case before the probate court the actual possession of the four certificates of stock was passed to Mrs. Ricketts, so that she might collect from the treasurer, from time to time, the interest due her.

Shortly after this United States Treasurer Gillilan issued a circular calling upon all holders of Georgetown corporation stock, which was

one of the old forms of obligation by the District of Columbia, to present the certificates for redemption. Mr. Ricketts took the four certificates to the treasurer's office, indorsed "I hereby assign the within certificates to the treasurer of the United States for redemption, on account of Eliza A. Ricketts."

The treasurer refused redemption upon this indorsement. Mrs. Ricketts then asked the first auditor of the treasury, as he was known in those days, to approve the indorsement, but he refused. She appealed to the office of the then first controller of the treasury and obtained the desired approval.

Accordingly the treasurer paid Mrs. Ricketts \$4,012 principal and \$9.23 interest.

In 1894 Julia A. Burnell, formerly Julia A. Little, the daughter of Samuel J. Little, made claim for the \$4,012.23, alleging that it had been erroneously paid to Mrs. Ricketts, who had a life interest only. The claim was disallowed by the treasurer. Mrs. Burnell and her husband then entered suit for the amount before the court of claims. A year ago they obtained judgment for the amount, and in the deficiency act of June 25, 1910, appropriation was made to pay this claim, along with others.

Mrs. Burnell has been fighting for sixteen years to secure the money she thought was hers and is just now coming into her own, while the government is out over \$4,000.

## Hall of Fame Statuary Not Artistic



Webster, whom everybody knows was not a large man, but the statue makes him a regular giant. There is a statue of John J. Ingalls, the only one as yet sent by Kansas, and excepting that it is like a line, has neither breadth nor thickness, which was a good description of Ingalls. It is the limit for ugliness. There is a statue of Frances Willard in a basque and ill-hanging dress, which bears not the slightest resemblance to that dainty, sweet-faced woman. There is a statue of Phil Kearny in bronze, which is very pretty to look at, but has very little artistic merit, and there is one of Shoup, of Idaho, which looks as though it might have been sandpapered out of a piece of marble. And then there is Washington, a dapper little darling with sloping brow, as fashioned by Houdon.

The Washington newspapers some time ago began a crusade to have the law placing statues in Statuary hall by the states repealed. It is to be repealed on the ground that the hall is already jammed to overflowing, and if any more statuary is presented it will be necessary to make a second and inner row.

## Much-Read Social Science Bulletins



WHETHER the high price of food is causing the public to take an uncommonly keen interest in domestic problems now, or whether the cause is something else, the officials of the Department of Agriculture do not undertake to say. The fact remains that there has been a greater run up to date on the so-called "social science" series of bulletins than on any other pamphlets the department has ever produced.

Up to the present there has been a total of 10,674,000 bulletins distributed. Some now out of print have been applied for so often that it is probable the estimates for next year will include provision for reprinting.

This government is the only one in the world that has gone into the business of printing cook books. It was

started, when the Department of Agriculture recently issued the book on the use of cheap cuts of meat, that it was the first government cook book ever printed.

The social science series has been running for more than a decade, and has, incidentally, taken in various domestic problems in the food line under the head of "Nutrition Investigations." The earliest of these was one on the composition and cooking of meats, issued nearly 14 years ago. Of this there has been something over half a million copies distributed.

But the most popular of all the bulletins was the recent one on "The Economical Use of Meat in the Home." This has been out only a few months, and there have already been distributed 1,200,000. Calls are still coming in rapidly.

The series comprises books on all sorts of subjects—the preserving of fruits and vegetables, fish as food, the care of milk in the home, the value of peas, beans and legumes in general as food, the cooking of vegetable, and more than a dozen other subjects.

## Postal Thieves Comparatively Few



Circumstantial evidence does not go at any time with us. It is an established rule that the evidence must be positive and direct. In almost every case an arrest means conviction.

"From one point of view it is wonderful that there are so few thieves among the many thousands of clerks who handle the mails first and last, for great temptations surround them as they handle millions of valuable parcels. It is known that these clerks soon learn to tell by the very touch of a letter whether it contains money. If so inclined it would be an easy matter for the dishonest clerk to slip letters into his pocket and open them in the privacy of his room. That the cases of dishonesty are comparatively few is a high tribute to the moral qualities of the postoffice clerks.

"There are but two successful ways to catch a postoffice thief—constant watch and decoy letters. With these, and a large supply of patience, the game will be landed, though it often requires months, and sometimes years. It is one of the most annoying and difficult lines of detective work, and requires the most earnest application. Not a single circumstance or detail must be overlooked."

"Postoffice thieves are not arrested every day, although valuable letters and other articles are stolen almost daily and an army of shrewd inspectors are on the alert. Positive proof of guilt must be in the possession of the inspector before an arrest is made.

## INDIAN MUSEUM AT LONDON

is to Outshine All Other Architectural Attractions and Will Cost Three Million Dollars.

London.—That something must be done to meet Indian sentiment if the growing restiveness of the natives is to be offset has at last dawned on John Bull. So in addition to giving titles to prominent men and admitting more Indians to the viceroys' council, it is intended to build in London a magnificent three million dollar museum nearly opposite the houses of parliament. There will be stored specimens of all the varied products and curiosities of the great principal



Proposed Indian Museum.

ity. At present Indian geological exhibits are stored in one part of London, the vegetable products in another and the antiquities at the British museum.

Some Indians want the palatial building to be erected in Calcutta, but others support the British proposal. Alongside this Oriental palace of national interest the London county council is building a huge county hall, so before long the south side of the Thames will lose its present sordid appearance and rival the Victoria embankment side, with its parliamentary buildings and great hotels.

To make the building stand out unmistakably, it is proposed by ex-Government Architect Chisholm of Madras to cover the domes and minarets of the museum with white tiles. There are some financial difficulties to be met, for the British taxpayer is to be called on to buy the site, find fresh accommodation for the present occupier, and to pay an annual subsidy. But as the scheme is backed by Lord Curzon, Lord Roberts, Sir Mancherjee Bhownagare and a host of others notable it is sure to materialize.

## NOW THE HUMANITARIAN HAT

New French Models Now Being Shown Imitate the Plumage of Birds in Ribbons.

New York.—The vogue of ribbon plumage now extensively seen in Paris millinery will appeal irresistibly to the humanitarian woman. All kinds of birds are imitated in shaded ribbon, silk and velvet, the colors and form of the most beautiful plumage being carried out to perfection.

A striking instance of the humanitarian hat is one on which the plumage of the owl, a bird that is one of the latest fads for millinery decoration, is imitated in ribbon in the natural tones. Two cardboard discs, covered with velvet and set with cabochon glass that has the gleam of jewels, are used to imitate the eyes and make effective pieces of display.

As a model for the woman who loves the tones of bird plumage but who will not sacrifice any form of



Hat With Imitation Wings.

bird life for her own decorative purposes, this humanitarian imitation of the feathered world in shot ribbon and silk is likely to prove one of the most favored forms of trimming for the season.

## FLY PAPER STOPS CRITICISM

Hoosier Daughter-in-Law Is Fined \$10 for Use of a Novel Gag.

Indianapolis.—Mrs. Clara Brandon, who used fly paper to close the mouth of her mother-in-law, was fined \$10, but lost her mother-in-law as a member of the family. Mrs. Lavina Brandon, the mother-in-law, admitted in court that she was a "very tedious old person," and told of the pasting of the fly paper across her mouth.

"Judge, I just couldn't stand it. She criticized my hair and my dress. I did use the fly paper, but she deserved it," said Mrs. Clara Brandon.

She said Alonzo, son and husband, promised to find a new home for his mother. The wife has appealed to the higher courts to determine whether she is guilty.

## Munyon's Soap

is more soothing than Cold Cream; more healing than any lotion, liniment or salve; more beautifying than any cosmetic. Cures dandruff and stops hair from falling out.

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That's Why You're Tired—Out of Sorts—Have No Appetite. CARTER'S LITTLE LIVER PILLS will put you right in a few days. They do their duty. Cure Constipation, Biliousness, Indigestion, and Sick Headache. SMALL PILL, SMALL DOSE, SMALL PRICE. Genuine must bear Signature.

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the name to remember when you need a remedy for COUGHS and COLDS.

## IGNORANT OF ART.



The Kid—Mister, Johnnie says that purple tint in front of the picture's a windmill 'n' I say it's a tree; which is right? The Impressionist—That's a cow.

## A Question.

Vera (eight years old)—What does transatlantic mean, mother? Mother—Across the Atlantic, of course; but you mustn't bother me.

Vera—Does "trans" always mean across? Mother—I suppose it does. Now, if you don't stop bothering me with your questions I shall send you right to bed.

Vera (after a few minutes' silence)—Then does transparent mean a cross parent?—Ideas.

## Not Strictly Orthodox.

Police Justice—Young man, what is your religion, if you have any? Chauffeur (arrested for overspeeding)—Something like Jim Bludso's, your honor—never be passed on the highway.

## Recipe for Happiness.

Happiness would seem to consist of not longing for the things that would make us happy.—Life.

## A FOOD DRINK.

Which Brings Daily Enjoyment. A lady doctor writes: "Though busy hourly with my own affairs, I will not deny myself the pleasure of taking a few minutes to tell of my enjoyment daily obtained from my morning cup of Postum. It is a food beverage, not a poison like coffee.

"I began to use Postum eight years ago, not because I wanted to, but because coffee, which I dearly loved, made my nights long weary periods to be dreaded and unfitting me for business during the day.

"On the advice of a friend, I first tried Postum, making it carefully as directed on the package. As I had always used 'cream and no sugar,' I mixed my Postum so. It looked good, was clear and fragrant, and it was a pleasure to see the cream color it as my Kentucky friend always wanted her coffee to look—like a new saddle.

"Then I tasted it critically, for I had tried many 'substitutes' for coffee. I was pleased, yes, satisfied, with my Postum in taste and effect, and am yet, being a constant user of it all these years.

"I continually assure my friends and acquaintances that they will like it in place of coffee, and receive benefit from its use. I have gained weight, can sleep sound and am not nervous."

"There's a Reason." Read "The Road to Wellville" in pkg. Ever read the above letter? A new one appears from time to time. They are genuine, true, and full of human interest.

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