

## PROBLEM OF WATER

### Few Farms Provided by Nature With Exact Amount Needed.

#### It Will Be Found There Is Often Too Much or Too Little—Only Remedy Is to Drain the Land—Gravity System Most Favored.

There is hardly a farm anywhere which is provided by nature with just the exact amount of water for the production of the most satisfactory crop. There is just as often too much as there is too little water; moreover, at times of the year when the precipitation is at its maximum the water bench rises in the soil until it actually drowns out and destroys the vegetation it is supposed to feed; the only way to cure this is to drain the land so as to draw the level of water down to a point where it will do no damage. This work is done either by ditches or piping and care must be taken not to draw the water off too much. Different crops require of course different amounts of water, but as a general proposition the water should not be drawn any lower so the roots of plants are able to reach it and draw it up for their nourishment, says the Irrigation Age. Such drainage water should be made use of again for land lying at a lower elevation as it has many rich salts in solution necessary for plant food which it took up while standing in the soil; thus the water drained from one farm may be used to irrigate and enrich another farm.

A gravity system of drainage is naturally preferable as its operation cost is practically nothing. There are, however, localities where there is no natural drainage and in such case the surplus water must be pumped. In such case the cost of pumping must be considered, and if it can be worked so as to store the water in a reservoir so as to use it when the ground needs irrigation the pumps are doing double duty as their work in draining the land is the first step toward irrigation as well.

It may be truly said that the arts of irrigation and drainage are just now beginning to be developed, and that the next decade will see a tremendous advance in this direction.

The time will come when all the land that can be irrigated by a gravity plan will have been taken up, and then the reclamation of further land will necessarily depend on the ability of raising water from the deep. This will also include such lands as are now watered by artesian wells which deliver water under a head at present, but the time will come when the pressure diminishes and that water will also have to be pumped. The question whether it will pay to irrigate land by pumping the necessary water will depend on a good many circumstances which should be carefully considered. As a general proposition the government should be first consulted regarding the geological formation, quantity and quality of ground water supply in the region under consideration, next the condition of the soil should be established, which is best done by taking samples at different localities and depths and have them analyzed in the various experiment stations. From this information an approximate estimate of the cost of pumping can be made. But the proposition is always one of more or less uncertainty, as no one can definitely state whether a subterranean water supply is permanent, like an underground river, or whether it is just a pocket. For this reason the government should devote more work and money to the establishment of hydraulic information in the various states, especially in the arid and semiarid regions.

#### Soda for Fowls.

There is nothing better than soda for fowls whose droppings are not in the normal condition. This soda water is made as follows: Use three heaping teaspoonfuls of soda (bicarbonate) to one pint of water. Shake well. Dose, teaspoonful to each afflicted fowl. Follow with a one-grain quinine pill each night for three nights in succession.

#### Remove Dirt From Egg.

Any dirt on the egg when it is collected should be at once removed by means of a dry cloth, or, if that method fails, a slightly dampened but not wet cloth may be used. Do not wash hen eggs or put them in water, nor use any chemical to remove the dirt.

#### Danger for Young Trees.

The greatest danger the young, newly set fruit trees will encounter is the scalding effect of the midsummer sun and the weakening of its vitality by the drying of the earth about its roots.

#### Damage by Insects.

Loss through insect ravages for one year in the United States has been found to be represented by the enormous sum of \$300,000,000, nearly one-ninth of the total output.

#### Potato Manure.

Long Island experiment station reports that with wood ashes and well-rotted manure used for three years, smooth, even and large potatoes were produced that had a fine flavor.

#### Plumping Dressed Fowl.

A dressed fowl may be plumped up by first dipping it into water close to the boiling point for a few seconds, and then immediately afterward in cold water. Hang in a cool place.

## LATE IRRIGATION IN ORCHARD

### Care Must Be Exercised That Trees Go Into Winter Quarters With Plenty of Water.

The general practice of discontinuing the watering of the orchard in midsummer for the purpose of allowing the trees to mature wood growth and color the fruit, generally calls for a late fall irrigation. This may be applied any time after the middle of October if the trees have ripened the young wood growth; otherwise the watering had better be delayed until the middle of November, says the Denver Field and Farm. In a bearing orchard the water is applied after the last fruit is picked. In our dry climate care must be exercised to see that the orchard goes into winter with plenty of moisture in the soil. Evaporation from the twigs continues even through the dormant period and unless the roots have access to more moisture the tops of the trees may freeze dry during severe winters.

The amount of water to be used for this irrigation will depend much upon the character of the soil. No doubt many orchards on heavy soils will not require the fall watering. Still some of the heavy soils are deceiving and an examination will show a very dry sub-soil. A good fall watering is one of the most satisfactory means of irrigating such soil. Evaporation from the surface is slow and during the winter the water gradually sinks to the dry subsoil. The soil should be examined and supplied with enough moisture to make it cling together when pressed in the hand, and still crumble when broken up.

As soon as most of the leaves have fallen, the orchard should be plowed or cultivated to catch these leaves for they will help to improve the soil if plowed under before the late winds sweep them into the fence corners. Some growers still question the wisdom of plowing the orchard, but many who have tried it pronounce it not a success but a necessary step in the proper cultivation of a fruit tract in this dry climate. While many growers fear that the destruction of roots in plowing will injure the trees this is not necessarily true. As a matter of fact, a little root pruning by plowing stimulates root growth and keeps the roots down where they belong.

Some of our heavy soils really must be plowed and the fall of the year is an excellent time to do the work. The plow should run deep enough to break up the hard underlayer formed by continual shallow cultivation during the growing season. A light float or harrow should follow the plow to put the surface in good condition. If left too open the tendency is to dry out. A good smooth and well-broken surface tends to hold the moisture. Some folks give one surface cultivation about mid-winter and for this work a disc or cultivator is employed. Orchard soils properly cultivated before going into winter are much more easily tilled the following summer.

#### Keeping Poultry Runs Fresh.

There is more or less dry weather during the summer, and the runs not infrequently become baked, and in heavy soils more or less filthy. The man who has the best interests of his flock at heart will once a week use a hand plow in such yards and stir up the soil as to make it loose and fresh.

If he does this at night, the next morning the fowls will get at work, scratching, hunting worms and stirring things generally. It is wonderful how much they find in this turned-up soil that furnishes them both amusement and food.

#### DAIRY NOTES.

Manure is a part of the dairy profits. Foul and unwholesome feeds taint the milk and cream.

Never give cold milk to a calf under two months of age.

Feed that produces the largest flow of milk is the cheapest in the end.

Barley or corn or hay will be appreciated by the cows now in pasture.

It is not always the cheapest or lowest-priced cow that gives us the cheapest milk.

See that the cows have some sort of good shade protection for the hot, scorching days.

The management of the calf during the first year has much to do with its future usefulness.

The money paid out for purchased feeds will come back soon in the sales of butter and pigs.

Weeds, such as wild onions, in the pasture, will cause the milk to be unfit for human consumption.

The milk from each cow should be tested about once a month during the whole period of lactation.

Trying to keep the feed bill down at any season will result in unsatisfactory returns from the herd.

The silo and the cream separator are two of the dairyman's greatest mediums in making maximum profits from the herd.

The best and cheapest way to come into possession of a good, pure-bred dairy bull is to buy a bull calf of some dairy that keeps nothing but the best pure-bred cows.

Whether the cows be grades or pure breeds, it is of the highest importance in building up a dairy herd to secure a pure-bred sire of outstanding dairy merit.

It pays to purchase some feeds for the cows to help out the pasture feeds, for the cow that is made to give as much milk as possible is the one that will make money for you.

## GUARD AGAINST EVIL

### Ornaments Supposed to Ward Off Disease and Bring Luck.

#### Although Most People Profess to Laugh at Idea of Wearing Them Purely for Luck, Yet Charms Are Popular With Many.

London.—Perhaps the instinct to avert the evil eye is born in our natures. Civilization had lessened it to a great extent, but in every race we find an instinct exists. The wearing of nearly all personal adornment seems to have originated in an idea of pacifying evil deities.

The savage wears ornaments symbolizing the protective powers supposed to be able to keep away harm or danger. In the West Indies there is a bean or seed which the natives think possesses many valuable properties. If carried in the purse they say the owner will never want for money; if hung on a watch chain good luck will ever be with the wearer. But woe betide the man who loses his precious charm. The East Indian leaves a tiny corner of his embroidery unfinished to propitiate the gods; the dusky mother calls her baby hard names for fear her love should bring ill fortune upon him.

In England superstitious country folk tie amulets around their necks to prevent disease. Some of the earliest of these were skillfully wrought by the people who inhabited this country thousands of years ago and treated flint much the same as a cameo, producing varied effects by cutting through into the different layers of color. Several examples of this practically lost art may be seen in the museum at Ipswich. They are carved to represent the heads of men and women, birds, fishes and reptiles, and are for the most part cleverly and prettily done.

The fossil belemnites found on many of our coasts embedded in the rocks were once thought to be thunderbolts and were worn as charms by fisher folk. Farmers in ancient times decorated their horses by hanging amulets and gypsy fetich charms among their trappings to insure a good harvest. These amulets were frequently associated with the worship of the sun and were of Egyptian, Moorish and Persian origin.

Although most people profess to laugh at the idea of wearing them purely for luck or from superstitious motives, yet charms are worn still with good humored toleration and, for reasons none can explain, secretly favored, just in the same way that sober minded men and women cling tenaciously to a crooked sixpence and treasure a three-penny bit with a hole in it as omens of good luck.

A pink coral hand in Italy is supposed to ward off the evil eye and plays its part in ornaments. Ruby ornaments are supposed to disperse evil spirits and are considered a protection from poison and other dire evils. Emeralds banish blindness. Garnet ornaments are supposed to keep one in good health; the sardonyx insures happiness. The sapphire keeps off fever. Amethysts keep off worries. A turquoise means that you will never want a friend. A four leaved clover in a crystal locket is a favorite charm and is said to bring good fortune and long life to its wearer. Jade also has a reputation for a luck bringer.

#### Plan Big Auto Track.

Jersey City, N. J.—Prominent athletic promoters from various New Jersey cities have filed articles of incorporation here for the "Metropolitan Speedway association," with a capital of \$1,000,000. The company plans to construct a stadium on the meadows between this city and Newark, where races, exhibitions and athletic contests of various kinds may be held.

#### Said He Needed Bread.

New York.—A beggar wearing a sign "I Need Bread" was found to have \$84 in his pocket and was sent to the workhouse.

## Save Birds from Odd Death

### Protection From Electric Lighthouses Is Given by Government of Holland—Provide Perches.

The Hague, Holland.—The Dutch government, recognizing the utility of birds, has long sought means to defend them from the danger of the powerful lighthouses especially of the electrically operated "Brandaris" light on the island of Terschelling. Thousands of the birds annually meet their death there and a government commission was appointed to inquire into ways and means of stopping the slaughter. This commission, headed by the noted ornithologist, J. Thyssen, passed several nights in observation at the Brandaris light during the migrating season.

As soon as the light shone forth from the tower flights of birds would approach. Then they would continue to circle about like moths around a candle. All night they flew round and round, while a few flew directly at the flame and were dashed to death against the glass or masonry.

From what he saw Mr. Thyssen concluded that he could easily devise a plan to help the songsters. He had some large wooden frames constructed providing perches for 10,000 birds at a time. Some of the frames were painted white and the others black—

## WILL ADDRESS BIG RACE CONGRESS



MRS. Elmer E. Black of New York recently had the distinction of being the only woman to deliver an address before the universal race congress held in London. Mrs. Black is an extremely wealthy widow and a leader in New York society, but is deeply interested in more serious matters. She is vice-president of the American Peace and Arbitration League.

## DISHWASHING IS ART

### Chicago Club Women Discuss Domestic Duties of Today.

#### Women Must Be Educated "Down" to Kitchen and Standard of Domestic Employees Raised—Let Maid Use Piano.

Chicago.—"Women must be educated 'down' to the kitchen, and the standard of domestic employees raised," was the verdict of prominent Chicago club women, when they decided that women themselves are to blame for the lack of popularity of home occupations.

The occasion was the eleventh annual reciprocity meeting and anniversary of the Artcraft Institute and Guild, and the subject was "How may our widespread interest in art, as a factor in every day life, be best employed to raise the standard of domestic occupations?"

"There is just as much art in laundering a piece of lace as in drawing the design."

"Let the second maid use the piano. The dressmaker does."

"Flats and delicatessen stores have destroyed home life."

"The little things in life, such as

washing dishes and preparing food are included in art as fully as painting and sculpturing."

There were other opinions to receive favor. Incidentally, Mrs. D. Harry Hammer, Mrs. F. K. Bowes and several other women, clad in fine dresses and wearing costly jewels, not only admitted, but took pride in announcing that they were not strangers to household duties.

"I would rather wash dishes than embroider," said Mrs. George Skyes.

"Even with the widespread interest in art as a possible lever to raise the standard of domestic occupations, I confess my inability to apply the lever until the dignity of all work is demonstrated," said Mrs. Hammer. "To dignify dishwashing is difficult, but possible."

Mrs. George P. Vosbrink could not entirely agree with the others.

"Suppose you do raise the standard," she said, "what good is that going to do? I would like to know how many women here would mingle with their servants—"

But Mrs. Bowes interposed, raising a warning finger.

"Why," she said, "there are leaders in Chicago society who worked as domestics, and I know of a prominent Boston woman of high standing who used to sell cigars, and my husband bought from her, too."

Mrs. George E. Colby questioned whether it would not be educating a woman "up" and not "down" to teach her more of kitchen life.

#### FRENCH NOW DRINKING TEA

Seems to Have Become Not Only Fashionable, but Popular—620,000,000 Cups Drunk in 1909.

Paris.—Tea drinking in France seems to have become not only fashionable, but popular. Its increasing vogue is shown by the revenue returns for 1909, which show a consumption of 1,293 tons. Reckoning a pinch of tea a cup, this represents about 620,000,000 cups drunk in the course of the year.

Ten or fifteen years ago tea was regarded in France as a semi-medical concoction, to be used to restore fainting women. It was classed among the mild liquids commonly known as "tisanes," and in the provinces, at any rate, people who expressed a liking for tea as a beverage were looked upon as "snobs" or eccentrics.

Nowadays the fashion has spread all over the country, and no hotel would be likely to perpetrate such an absurdity as the famous announcement, "Tous les jours, 5 o'clock a quartre heures." The practice of giving sweet wines with cakes in the afternoon is now looked upon as quite out of date.

## Doctors Said He Would Die

### A Friend's Advice Saves Life

I wish to speak of the wonderful cure that I have received from your noted Swamp-Root, the great kidney and bladder cure. Last summer I was taken with severe pains in my back and sides. I could not breathe without difficulty and was nearly wild with the desire to urinate. Was compelled to do so every ten minutes with the passage of pure blood with the urine. I tried all the different doctors from far and near, but they said it was no use to doctor as I would die anyway. I was at the end of my rope and was so miserable with pain and the thought that I must die that words cannot tell how I felt. One day a friend told me of the wonderful help she had received from Dr. Kilmer's Swamp-Root. She gave me one of your pamphlets which I read and determined to try Swamp-Root. After taking half a bottle I felt better. Have now taken ten bottles and am well as I ever was, thanks to Swamp-Root. I wish to tell all suffering people that have kidney, liver or bladder trouble, that Dr. Kilmer's Swamp-Root is the best medicine on the market.

All persons doubting this statement can write to me and I will answer them directly.

Yours very truly,  
CLYDE F. CAMBRER,  
Roselle, Wash.

Subscribed and sworn to before me this 23rd day of July, 1909.  
VERNE TOWNE, Notary Public.

Letter to Dr. Elmer E. Black, Washington, D. C.

Prove What Swamp-Root Will Do For You. Send to Dr. Kilmer & Co., Binghamton, N. Y., for a sample bottle. It will convince anyone. You will also receive a booklet of valuable information, telling all about the kidneys and bladder. When writing, be sure and mention this paper. For sale at all drug stores. Price fifty cents and one-dollar.

#### Settled Them.

"I've a sight o' sons—thirteen altogether," remarked a prosperous old farmer, "and all of 'em's done me credit save the three eldest, who sowed wild oats at a pretty rapid rate, and then came home and saddled my shoulders with the harvest."

"Well, I own I was glad to see 'em back, and I feasted 'em, and petted 'em, and set 'em on their legs again, only to see 'em skeddaddle off afresh when things had slowed down, with all the cash they could lay hands on."

"That thereabouts sickened me, so I called the rest of 'em together and said:

"'There's ten of you left, and if any of you 'ud like to follow t'other three I won't try to stop you. But, understand this, though there may be a few more prodigal sons, there'll be no more fattened calves. I've killed the last of 'em!'"

"And," continued the old man, triumphantly, "I've had trouble w' none of 'em since!"

#### Burglar Befriended Him.

A burglar was arrested for robbing a house up the state some time since, and the next morning the victim rushed wildly into the magistrate's office. As soon as he could get his breath to working again he told the official that he had come to see about the prisoner.

"Glad you came down," was the affable response of the magistrate, "I suppose you want to appear against him."

"Well, I guess not!" exclaimed the victim with a glad smile. "I want to kiss him on the brow and give him \$10. Among other things that he stole from the house was a package of love letters that I wrote to my wife before we were married."

Laundry work at home would be much more satisfactory if the right starch were used. In order to get the desired stiffness, it is usually necessary to use so much starch that the beauty and fineness of the fabric is hidden behind a paste of varying thickness, which not only destroys the appearance, but also affects the wearing quality of the goods. This trouble can be entirely overcome by using Defiance Starch, as it can be applied much more thinly because of its greater strength than other makes.

#### Not for Mr. Hercules.

Hercules had finished his twelfth labor.

"That's the last!" he exclaimed. "I positively refuse to do another one!"

"Thus we see that even Hercules was not free from the '12' superstition."

ASK FOR ALLEN'S FOOT-PAINE. The Anesthetic powder to shake into your shoes. Relieves Corns, Bunions, Ingrowing Nails, Swollen and Sweating Feet, Blisters and Callous spots. 50¢ every where. 25¢. Don't accept any substitutes. Sample FREE. Address Allen S. Ginn, Le Roy, N. Y.

#### The Humorous Hat.

"Has she any sense of humor?" "I don't think so. She can look at her hat without laughing."—Lippincott's.

#### Beautiful Post Cards Free.

Send 2c stamp for five samples of our very best Gold Embossed Birthday, Flower and Motte Post Cards; beautiful colors and loveliest designs. Art Post Card Club, 721 Jackson St., Topeka, Kan.

Romance is not altogether dead. Even the most hardened old bachelor has a withered flower somewhere in his possession.

#### Should Walk Upright.

A man should be upright, not have to be kept straight.—Marcus Aurelius

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

Beauty is seldom completely satisfying. The birds that sing are not the ones that are good to eat.

There are imitations, don't be fooled. Ask for Lewis' Single Binder cigar, 5c.

Watch the hobble girl trying to skip over the cobble.