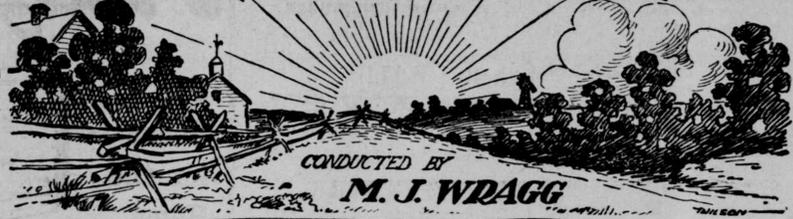


FARM ORCHARD AND GARDEN



Mr. Wragg invites contributions of any new ideas that readers of this department may wish to present, and would be pleased to answer correspondents' desiring information on subjects discussed. Address M. J. Wragg, Waukegan, Iowa.

BROAD TIRES FOR WAGONS.

The great value of broad tires for both farm wagons and carts and those used for carrying heavy loads has long been beyond question. In a recent bulletin issued by the experiment station of the University of the State of Missouri, the director says: Numerous tests of the draft of wide and narrow tired wagons have been made at this station during the last two years on macadam, gravel and dirt roads, in all conditions, and on meadows, pastures and ploughed fields, both wet and dry. The draft has been determined by means of a self-recording dynamometer. The net load in every trial was the same, viz., two thousand pounds. Contrary to public expectation, in a large majority of cases the draft was considerably less when tires six inches in width were used than when the tests were made with tires of standard width—one and one-half inches.

There is a brisk demand for our apples in Europe, the crop being short there. The quality of American fruit is excellent, and prices are good, and are likely to be maintained. The price will compensate in part for the limited quantity.

A HALLOWE'EN INVITATION.

Come all ye men and maidens gay—
The kettle sings a cheerful lay—
Close tight the casement, latch the door,
Snuff candle wicks and sand the floor!
The witch-hags ride about to-night
To cast their spells of plague and blight
On all who do their wrath awake—
So bring forth posset-ale and cake.
"Tis All Saints' feast and Hallowmas—
A mystic time for lads and lass,
When white and black witch work a charm,
The first for good, the last for harm!
So rise up, sluggard, cease thy scowl,
Lest at thy back the belchings crowd,
Pile high the logs upon the fire;
'Twill help to ease thy jealous ire.
And saucy jade in kirtle red,
The time draws near to melt the lead,
For hearts of men and maids I ween
Are toys for Fate on Hallowe'en.

When the pasture dries and grows scant and the cow has to work hard to merely fill herself, to say nothing about the inferior quality of what she eats, why not cut some corn and give her? You will give it to her next winter anyhow. It will go further now and do her more good and you will save husking.

OUR GARDEN.

We not only believe in gardens but we have a garden, and we think that every farmer who enjoys a dish of luscious, ripe strawberries, a mealy baked potato, or a piece of cherry pie should have a good garden, an abundance of small fruit and an orchard. If a man is not a farmer, and is not the fortunate possessor of broad acres, if he only controls a square rod of ground; if he ever knew the pleasure of picking and eating a fully ripe bunch of grapes, or a juicy, fine flavored apple he should plant that square rod of ground to something. Or, if he has not even that much ground, if he loves a beautiful flower he may plant a rose or a vine at the wall of his house, that he may have a personal interest in some growing thing. It helps to make life worth living. It is a wonderful inspiration to better living.

If we maintain good fences the flock will not become unruly. We should spend the time that we too often waste chasing an unruly flock in building substantial fences.

HOW TO PLOW.

In starting to plow a piece of ground it is best to spend a little time at the start and map out the course that is to be pursued. By laying the field out in "lands," it is possible to make the turning all come at the ends so that the plowed ground will not be compacted, and the field will be left in gradual swells that are highest at the back furrow and gradually slope to the dead furrow, so that the land will be drained in this way. The common way of starting at the outside and going round and round, throwing the earth all to the outside of the field, should in most cases be abandoned, for by that method the drainage is all toward a depression in the center of the field. This is worth thinking about, and it will not be a bad plan to lay out the fields in lands this winter when there is not so much to do as there will be next spring in the "rush" of the season's work.

In a majority of cases, where a variety of fruit which once flourished in a given soil has ceased to flourish and perfect fine fruit there, the change will be found due to the fact that the soil has become destitute of the necessary mineral.

STORING CABBAGE.

The usual mode of storing cabbages for winter is to bury them—heads down and roots up. A better method is to place them together in a furrow, roots down, then throwing the dirt to them and adding another layer of dirt until a compact bed of cabbages is made. Now cover with straw or hay and place cornstalks on the hay. When wanted for use remove a portion of the hay, cut off the heads desired and leave the stalks. In the spring remove the hay and the cabbage stalks will produce early sprouts, or "greens." All that is necessary is to keep the cabbage from thawing too suddenly. If buried heads down they soon begin to rot after the frost is gone and the rains come in the spring.

WINTER PROTECTION TO RASPBERRIES AND BLACKBERRIES

In one of our exchanges Mr. Kellogg says: "The hardiness of all varieties of blackberries and raspberries is largely a question of manipulation during the growing season. If the foliage is kept free from fungi by spraying as well as giving them plenty of sunshine by having them set far enough apart so each leaf shall have full exposure to the sun's rays, no fungi will form and each leaf kept green until ripened by the cool fall weather so the wood cells complete their formation, any of our varieties recognized as hardy will pass through 25 or even 30 degrees below zero without harm.

"This is a question of tillage to a great extent. If the ground is allowed to remain with a hard crust on the surface the water draws to the surface very fast and if this is aided by a good crop of weeds, the winter rains will soon get away and during the early summer the plants will make a feeble growth and during the protracted drought the new buds for next season will form prematurely and when early fall rains come these buds develop and keep on growing so late they do not fully mature before winter sets in. We must bear in mind the ripening process must stop as soon as the leaves are killed by the frost.

"There is a wonderful work going on during the cool weeks of September and October. When we see the frost hold off late and the leaves gradually taking on the beautiful red and yellow color, we should know they are completing the work of assimilating and storing food in the wood to start the leaf growth next spring. If nature had not taken this precaution every tree which drops its leaves in the fall would die because it could not digest any food to start new leaves.

"I have always been especially careful to hold winter rains for the use of bushes by frequent cultivation and by thus exposing the soil grains to the air so the elements were reverted to a soluble form, the plants would take it up and thus by the latter part of summer the interrupted growth desired and then check growth by the cover crop, and we are sure of perfect buds and fully matured buds.

"I have never given ground protection for any of the bush fruits except the Early Harvest and Wilson black berries, and by following this practice, never lost a bountiful crop of nice berries."

A NATURAL LAW.

In the study of plant and animal life it will be found that every species almost without exception has some parasite which preys upon it, always with the result that it limits the development of such species. This is in accord with the great natural law which always provides agencies to preserve the proper balance of the species. This explains why when any one crop is grown to the exclusion of others on a large scale sooner or later some parasitic enemy is sure to develop. Thus the hop louse riddles the hop yards, the "yellows" blight the peach orchards, the cholera cleans out the hog yards, the rust smites the wheat field. Nature wants everything to have a fair show, and when any form of life becomes monopolistic in its growth or development she makes very short work in providing a remedy. Possibly there may be a hint here for some of our statesmen who are to-day wrestling with social, political and economic problems.

It has taken many years and many generations of cows to produce the special dairy cow. One cross on another breed may undo all the work and care of years. Don't work backward.

In locations where it has not frozen up, it is a good plan to plow and cultivate the garden so that the weed seeds will start to germinate and the young seedlings will be killed later by freezing.

THE NEW ALLEGHENY HOLLY-HOCKS.

Prof. Meehan says that there is more in the Allegheny strain of holly-hocks than has yet developed. The most notable departure from the ordinary type is in the grade of the petals. The regular, solid, rosette-like shape of the old flower is in a measure pretty and near and very desirable, but it becomes monotonous. Allegheny petals are more loosely arranged, not very double, as a rule, and gracefully fringed.

Another prominent feature is the size of the flowers. They range in various sizes, from four to seven inches. They are also remarkable for a free blooming character, tall spikes being produced that frequently give bloom until frost. The colors are various, from very light pink—"shell

Japanese Belief in Dreams.
A fanciful race, the Japanese people set great store by dreams. The native astrologer is usually very busy in the early part of the year delineating the meaning of the many visions brought to him for solution, and foretelling events to come. If you dream that you are struck by lightning, it means you will grow suddenly rich; but to dream of frost means a feast; of wind, it denotes that sickness is coming.

Living on Flirtation.
While there is no doubt that men understand the art of flirtation a great deal better than women, it is doubtful whether they get quite as much enjoyment out of it as the latter do. A man may, and generally does, get excellent sport for his pains, but he cannot live, as so many women do, on flirtation. A man flirts when he has no more exciting occupation.—Ladies' Field.

Insects and Snakes as Food.
In Arizona Indian children may be seen catching ants and eating them and in Mexico the honey ant is eagerly sought after by the natives, who eat the well-rounded, currant-like abdomen. In South America the large lizard, the iguana, is a delicacy, not to speak of the larger snakes, which in taste are like chicken. The ordinary rattlesnake, it is said, is very good eating if one can overcome the inborn prejudice.

There is more Catarrh in this section of the country than at other districts, and until the last few years was supposed to be incurable. For a great many years doctors pronounced it a local disease and prescribed local remedies, and by constantly failing to cure with local treatment, pronounced it incurable. Science has proven Catarrh to be a constitutional disease and therefore requires constitutional treatment. Hall's Catarrh Cure, manufactured by F. J. Cheney & Co., Toledo, Ohio, is the only constitutional cure on the market. It is taken internally in doses from 10 drops to a teaspoonful. It acts directly on the blood and mucous surfaces of the system. They offer one hundred dollars for any case that fails to cure. Send for circulars and testimonials. Take Hail's Family Pills for constipation.

Man's Love Easily Lost.
When a woman has won the love of a man, however devoted he may appear, it is usually necessary for her to take some pains to hold fast to his love if she wishes to keep it. There are exceptions, but most men's love is a fire, which easily dies for lack of fuel.—Exchange.

PILLSBURY'S BEST
Takes Three Grand Prizes
At the St. Louis World's Fair.
The Grand Prize for the highest grade of flour, a Grand Prize for the finest exhibit and a Grand Prize for the best loaf of bread.

Too Much for Duck's Digestion.
Recently one of the St. James' park (London, Eng.) lake keepers found a duck lying on the bank dead. It was discovered that the bird had swallowed a penny toy clock and a small rubber ball, evidently thrown into the water by children.

Try One Package.
If "Defiance Starch" does not please you, return it to your dealer. If it does you get one-third more for the same money. It will give you satisfaction, and will not stick to the iron.

The Best Results in Starching
can be obtained only by using Defiance Starch, besides getting 4 oz. more for the same money—no cooking required.

To live is to eat crusts; to live and to love is to banquet.

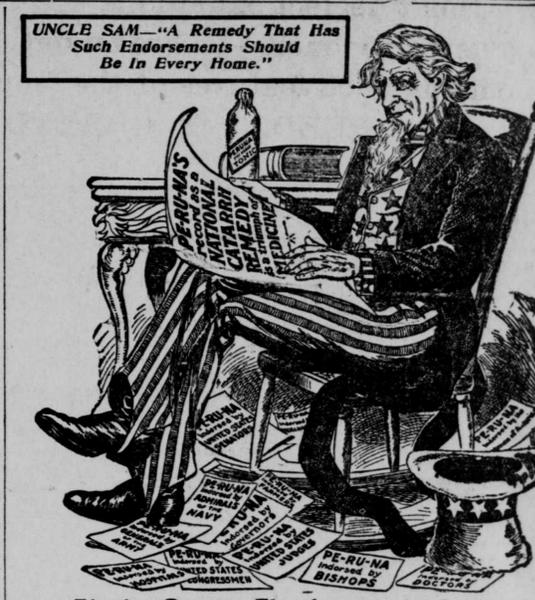
Mrs. Fairbanks tells how neglect of warning symptoms will soon prostrate a woman. She thinks woman's safeguard is Lydia E. Pinkham's Vegetable Compound.

"DEAR MRS. PINKHAM:—Ignorance and neglect are the cause of untold female suffering, not only with the laws of health but with the chance of a cure. I did not heed the warnings of headaches, organic pains, and general weariness, until I was well nigh prostrated. I knew I had to do something. Happily I did the right thing. I took Lydia E. Pinkham's Vegetable Compound faithfully, according to directions, and was rewarded in a few weeks to find that my aches and pains disappeared, and I again felt the glow of health through my body. Since I have been well I have been more careful. I have also advised a number of my sick friends to take Lydia E. Pinkham's Vegetable Compound, and they have never had reason to be sorry. Yours very truly, Mrs. MARY FAIRBANKS, 216 South 7th St., Minneapolis, Minn." (Mrs. Fairbanks is one of the most successful and highest salaried travelling saleswomen in the West.)—\$5000 forfeit if original of above letter proving genuineness cannot be produced.

MEXICAN Mustang Liniment
cures Sprains and Strains.

PUTNAM FADELESS DYES

LEWIS' SINGLE BINDER
TRAIGHT 5¢ CLEAR
ANNUAL SALES \$5,000,000



UNCLB SAM—A Remedy That Has Such Endorsements Should Be in Every Home.

Election Returns That Interest All Parties.
Sensible Housekeepers will have Defiance Starch, not alone because they get one-third more for the same money, but also because of superior quality.

DON'T WEAR A WIG.
Keep the luxuriant, healthy head of hair which nature gave you. If your hair is falling out you can stop it—use Undoma. It gives new life to sickly hair. It's guaranteed—Ask your barber. Send us your name for free treatment.

DID YOU KNOW
that you can get more light for less money with a MONARCH CARBIDE FEED ACETYLENE GENERATOR than from anything else in the world—except the most expensive.

FREE Save 1/2 on Drugs
write for our 100-page catalogue, showing 10,000 articles at cut prices. PATENT MEDICINES, RUBBER GOODS, TRUSSES.

WINCHESTER
RIFLE & PISTOL CARTRIDGES.
"It's the shots that hit that count." Winchester Rifle and Pistol Cartridges in all calibers hit, that is, they shoot accurately and strike a good, hard, penetrating blow. This is the kind of cartridges you will get, if you insist on having the time-tried Winchester make.

W. L. DOUGLAS
50¢ SHOES
W. L. Douglas makes and sells more men's \$5.00 shoes than any other manufacturer in the world.

THERE'S NO USE ARGUING
Defiance Starch is the very best Starch made. It's a fact. Hundreds will testify to it. Try it once yourself. We guarantee satisfaction or money back. You can't lose. Defiance Starch is absolutely true from chemical. It makes the clothes look beautiful and will not rot them. Get it of your grocer. 16 ounces for 10 cents—one-third more than you get of any other brand.

THE DEFIANCE STARCH CO., OMAHA, NEB.

PISO'S CURE FOR CONSUMPTION
BEGGS' CHERRY COUGH

Mrs. Mary E. Meserve, of Salisbury, Mass., was cured of Anemia, a disease in which there is an actual deficiency of the blood, by the use of Dr. Williams' Pink Pills for Pale People

She says: "The first symptom was an unusual paleness. Later the blood seemed to have all left my body. I had shortness of breath and fluttering of the heart; was depressed, morose and peevish. I suffered for two years. Physicians did me little good but I am now a well woman because I took twelve boxes of Dr. Williams' Pink Pills."

These pills really make new blood and have cured obstinate cases of rheumatism, scrofula and erysipelas. They are especially useful to growing girls.

Sold by all Druggists.

WET WEATHER COMFORT
I have used your FISH BRAND Blister for five years and can truthfully say that I never had anything give me so much comfort and satisfaction. Enclosed find my order for another one." (NAME AND ADDRESS ON APPLICATION)

You can defy the hardest storm with Tower's Waterproof Oiled Clothing and Hats

OUR GUARANTEE IS BACK OF THIS SIGN OF THE FISH
A. J. TOWER CO. TOWERS
TOWER CANADIAN CO. TOWERS
Limited TORONTO, CANADA

Trick of Photography.
If you are an amateur photographer and have a negative of some friend whom you would like to see locked up for a long term, put your printing frame just inside a wire mosquito netting when you print the net picture from the negative. The result will be a print showing your friend behind the bars. The effect will be almost startling.

A GREAT INSTITUTION.
It is unusual that a single institution in a city of 8,000 people will overshadow in importance every other interest, but such is the case with the American School of Osteopathy, and A. T. Still Infirmary at Kirksville, Mo.

A stranger in Kirksville is immediately impressed with the idea that the town is sustained by this institution. In fact, Kirksville has been made what is to-day by Dr. Still and his famous School and Infirmary. It is the largest patronized unendowed institution of its kind in the United States.

Dr. Still's school enrolls over 700 students yearly and each student is required to attend four terms of five months each before completing the course of study. There are over 2,000 graduates and they are practicing in every state and territory of the Union. About two-thirds of the states have passed special laws legalizing the science.

This school teaches every branch taught in medical colleges except "drugs" and osteopathy is substituted for that. So thorough is the teaching in anatomy that over one hundred human bodies are dissected yearly by the students.

The Infirmary, patients from every part of the country and with almost every form of disease are constantly under treatment. For the past fifteen years almost every train coming to Kirksville has brought some new sufferer hoping to find relief by the science of Osteopathy. By the thousands who have left the institution benefited by the treatment, the science has been heralded to the world as a safe and rational method of cure. Several years ago a free clinic was established in connection with the practice department of the school and this is still in operation. Hundreds of the worthy poor, who are unable to pay for treatment, are treated every afternoon by the senior students free of charge.

And Some Won't Pay Any.
People who own their own house won't go away because they object to paying rent and those who lease a house won't because they object to paying two rents.—New York Press.

Defiance Starch is put up 16 ounces in a package, 10 cents. One-third more starch for the same money.

No City for Capital.
Wales wants a capital, but though the search has been going on for years, no city has yet been found pre-eminently suited for the honor.

Do our Clothes Look Yellow?
Then use Defiance Starch. It will keep them white—16 oz. for 10 cents.

Improved Milling Facilities.
Flour-making and wheat-raising go hand in hand. During the past twenty years the milling industry has been revolutionized.

First Street Lighting.
In 1897 the New York state council ordered householders to hang out lanterns—the first street lighting in America.

BITTER ROT OF THE APPLE.
"A word now should be said upon the common name. Very commonly the infected flesh of an apple is distinctly bitter to the taste, but there is much variation in this. Sometimes the bitterness is very slight, in other cases almost equal to quinine. But such bitterness sometimes results also from other causes. Other fungi produce a similar taste in the affected fruit, though those usually attacking stored apples have no such effect. The musty flavor due to common molds is altogether different. If the word bitter is not always characteristic, the word rot is not especially appropriate. The affected tissues are never slushy-soft. There is indeed no extra accumulation or incorporation of water. The spot is hard and firm and at length becomes sunken somewhat from the shrinkage of the drying pulp of the fruit. There is no odor. The apple seems to be converted into a semi-woody substance which is resistant of decay. It is in this condition a year or more attached by its stem to the 'wig or cord' for a similar length of time upon the ground. If, however, the affected fruit is neither constantly bitter nor really rotten, still the name is as appropriate as any that can probably be found and is certainly better than that of 'ripe rot' which has been proposed."—Prof. T. J. Burrill.

One of the best crops to grow for late fall or early spring pasture is ryegrass. When sown for this purpose, so far as conditions will admit the seed should be sown early in the fall in order that the plants may secure a good start to grow before using for pasture. Few plants will stand more tramping or closer grazing than ryegrass and yet come out and make a good growth in the spring. The soil should be prepared in a good tilth, and the seed sown under as favorable conditions as possible.

WIND BAD FOR FRUIT TREES.
Experienced investigators have found that the wind does more damage in the winter than the mere cold. Shrubs and plants that ordinarily withstand much chill "milk" become winter-killed when suffering only a moderate degree of cold accompanied by wind.

"Many horticulturists wrap hay and burlap around plants, but this does not always keep out the wind. A modern invention consists of a wide board sharpened and driven down beside the plant on the side toward the prevailing winds. The branches are gathered and tied to the board.

"Hay and burlap may then be used in the usual way, the board serving to strengthen the whole and to protect from the wind. It is well to let the hay come well out upon the ground around the base, since this gives protection to the roots of the plants."

One thing must result from the scarcity of farm help. We must use more machinery. If we cannot get men, machines must take their places. Either this or we must give up a portion of our farming.

EVILS OF CROSS-BREEDING.
Replying to an inquiry as to the best breed of hogs to cross-breed in order to get the best results," the Indiana Farmer says:

"In our reply our advice is, that unless you have money and years of time to throw away, you had better not try cross-breeding at all. It has required years of breeding, toil and patience to obtain the existing splendid types and families, and the better thing for a young or old breeder to do is to stick to them. Select the one you prefer and get dams and sires not too near akin, and stand by that, if you want certain success. Life is too short to take the chances of success against the record of scores of failures. Especially is this the wisest course to take, since it is true that, while once in fifty or a hundred years a new breed has been produced, the new was no better than the old ones crossed to produce it. Continue to improve the present improved breeds, instead of trying to get a new-fangled one that will not be better."

Be gentle with the hogs so that they become docile and quiet. The keeper's disposition is often reflected in the herd.

STORING ONIONS.
My plan of keeping onions through the winter is this: Be sure they are perfectly dry when cribbing them, as that is one of the main points to be considered. If they are to be disposed of before cold weather comes, they can be kept in any dry place where they have plenty of air. The best place is a crib built in the same manner as a corn crib, so the air can circulate freely through them. Onions to be kept for the winter market, must be kept at a low temperature from the time they are first put in storage, keeping them at thirty-five to thirty-two degrees; there is no danger of the temperature being too low, just so they are kept from actually freezing, and are nice and dry.

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