

The DAIRY



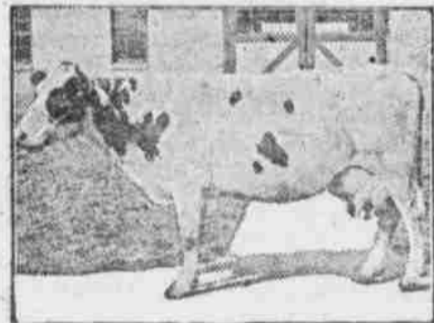
NEW QUEEN AT BELTSVILLE

Calamity Wayne Pauline II Completes Year Test, Producing Eleven Tons of Milk.

(Prepared by the United States Department of Agriculture.)

A new queen reigns in the herd of Holsteins on the government experiment farm at Beltsville, Md. She is as unassuming and peace loving as any of her subjects, although she bears the name Calamity Wayne Pauline II, and has just completed a test in which she produced in a year more than 11 tons of milk. In 365 days she produced 22,547.8 pounds of milk which averaged 3.805 per cent butter fat, the total fat being 855.4 pounds.

This animal was selected by dairy specialists of the United States department of agriculture from a Michigan herd in July, 1917. She was brought to the Beltsville farm, where she produced a heifer calf, and was started on her test December 7, 1917, at the age of eight years. The test was run through the coldest winter that section had experienced in 40



Calamity Wayne Pauline II.

years, and a summer that was extremely hot. The test for advanced registry was conducted under the rules of the Holstein-Friesian association. During the year the animal was handled by two different herdsmen.

A son of Calamity Wayne Pauline II has been placed at one of the government substations, and one of her half-sisters is making a fine record at the Michigan Agricultural college. Calamity's 365-day record was 19,256.6 pounds of milk, averaging 3.7 per cent butter fat, making a total of 718.13 pounds of fat.

All the dairy cattle on the Beltsville farm are used for experimental purposes, and will be given at least two advanced registry tests to determine their capacity for production.

SUPERVISE PURITY OF MILK

List of Equipment Necessary to Furnish Laboratory Is Sent Out by Dairy Division.

(Prepared by the United States Department of Agriculture.)

A letter has been sent by the dairy division of the United States department of agriculture to 1,500 health officers in cities having over 5,000 population urging the city governments to supply the health officers with proper laboratory equipment so they can adequately guard the city milk supply. A health department without a laboratory equipment is as helpless as a soldier without arms, says the letter. A city government has no right to hold its health department responsible for the health of the community unless it has provided the department with the equipment necessary to wage the fight against disease.

The work of supervising the safety, cleanliness and purity of its city milk supply is one of the most important duties of the modern health department. Bacteria, dirt, added water and preservatives in milk cannot be determined without chemical and bacteriological apparatus. The letter gives a list of the equipment necessary to furnish a laboratory for milk analysis.

DAIRY COW MOST PROFITABLE

Animal Never Fails to Return Profit for Feed and Care—Keep Her Comfortable.

The dairy cow is the most profitable animal on the farm if rightly managed, as, under ordinary conditions, she never fails to return a profit for her care and feed, if she is given the right kind of food and just the right quantity. If she is underfed, her product will be correspondingly small, and if she is overfed, she will be unhealthy. Feed the cow just right, keep her quiet and comfortable, and she will be equal in value to the goose that laid golden eggs.

COOKING GRAINS FOR COWS

Act Does Not Ordinarily Add Much to Palatability—May Decrease Digestibility.

While some unpalatable feeds may be consumed by dairy cows in larger quantities if they are cooked, the cooking does not ordinarily add much to the palatability of the grains and may even decrease their digestibility.

FARM POULTRY

QUALITY AND UTILITY FOWLS

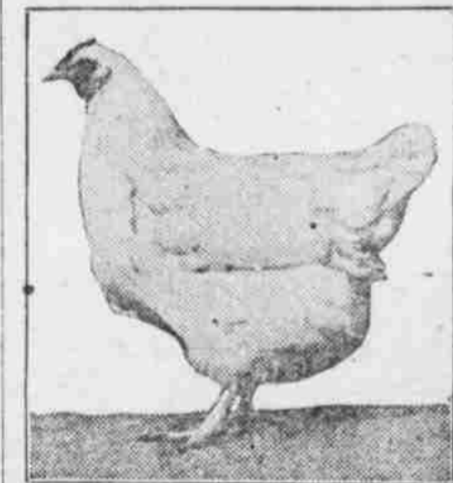
Breeders Encouraged to Develop Flocks Along Breeding Lines for Good Production.

(Prepared by the United States Department of Agriculture.)

A hen, in order to be classed as a genuinely good one, should be equally capable of going in the show ring and taking a ribbon or of going on the yard and making a record as a layer. And the breeder, in order to get the advantage of the best and broadest markets, must breed for a combination of utility and standard quality instead of following the tendency to become either a fancier or a utility breeder. That is the advice of Rob B. Slocum, a poultry specialist of the United States department of agriculture, and it is based largely on results obtained on the poultry farms of the department at Beltsville, Md., where many of the exhibition males used have 200-egg production in their pedigrees.

"Except in a few more or less isolated cases," says Mr. Slocum, "there is nothing in the standard requirements directly opposed to utility, and the buyers during the past few years have shown an increasingly insistent demand for fowls that have egg-producing ability back of them."

Fanciers, Mr. Slocum points out, are too prone to put the appearance of the fowl above everything else, and thus to neglect the egg-laying quality, while, on the other hand, unsuccessful fanciers are likely to turn completely to the egg-production side of breeding without any attention to "points."



Quality and Utility Are Combined in This White Plymouth Rock Hen of the Flock on the Government Farm at Beltsville, Md.—Thought of a Family of Show Birds, She Has Made a Good Record as a Layer.

Either of these attitudes, he says, is an obstruction to the best development of poultry raising in the United States. "The department of agriculture," he continues, "encourages poultry breeders to develop flocks along breeding lines to secure a combination of good production, vigor, and uniform type. That goal is readily attainable through careful selection of breeding stock, and those who follow the policy suggested may confidently expect the most attractive markets."

GRIT IS POULTRY ESSENTIAL

Material Takes Place of Teeth in Preparing Food for Digestion—Part of Feed.

Grit is essential to the health of the fowls and to economy in feeding. Grit takes the place of teeth in preparing the feed for further digestion, and is required for the proper preparation of feed in the gizzard. When the feed is not properly taken care of in this organ, an undue strain is thrown on the fowl's system, often resulting in disease, and also allowing much of the nutriment to pass through the bird's body without being absorbed. In every pen or yard a box of grit should be kept. Investigators have asserted that grit is a part of the necessary feed, giving the fowls strong bones and a bright plumage.

TO CURE EGG-EATING HABIT

If Fowls Have Ample Supply of Oyster Shell and Are Kept Busy Habit Won't Develop.

Egg-eating is a product of idleness. If the fowls have plenty of oyster shell and are kept busy, this habit will not develop. Where it appears, fill an empty eggshell with a stiff paste formed by a mixture of three parts of corn meal and one part of cayenne pepper and place it in one of the nests. If this is attended to promptly the egg eating will stop at once. If the habit becomes well developed it may be necessary to repeat the dose several times, but in connection with plenty of exercise for the fowls and darkened nests, it never fails to effect a cure.

POULTRY NOTES

Do not pack eggs that are cracked, for they will probably become broken before they reach the market and soil a number of other eggs.

If the henhouse is cold cover it or line it with two or three thicknesses of tar paper. This will keep out the wind and the cold and is not expensive.

BAD EGGS FOUND AFTER STORAGE

Imperfections in Handling, Grading and Marketing Are Mainly Responsible.

SPRING EGGS KEEP BETTER

Only Clean, Fresh Product With Sound Shells Should Be Stored—Selection Method Is Said to Be Cause of Deterioration.

(Prepared by the United States Department of Agriculture.)

Freshly laid eggs, with clean, whole shells that have not been wet show a negligible loss in bad eggs, even after 10 or 11 months in storage. Imperfections in commercial handling, grading and marketing previous to storage are mainly responsible for bad eggs developing after storage.

These are two conclusions reached by specialists of the United States department of agriculture as the result of a series of experiments with cold-storage eggs recently reported. The eggs were produced mainly in the middle West, and all were stored in warehouses in the East. Other conclusions reached were as follows:

Preservation in the shell of under-grade eggs, including those that are dirty, cracked, heated or stale should not be attempted. If not marketed for prompt consumption, the contents should be removed under proper conditions and frozen. The frozen product will keep in good condition for a year or more where there would be a marked loss by spoilage in a few months if the eggs were stored in the shell.

Spring eggs on the market are usually fresher than summer eggs, and for that reason keep better in storage. Most of the eggs stored are produced in the spring.

Selection Method Inefficient.

The common method of grading from current receipts by inspection, and by clicking to determine cracked shells is inefficient. Cases of commercial "spring firsts," sorted by this method showed, when ready to be taken to the storage house, an average of 17.5 cracked eggs and one leaking egg to the case. Candling is a much more accurate method of selecting eggs suitable for storage. Cases of "spring firsts" graded by candling did not average more than three cracked eggs to the case when ready for storage. When examined after 7 to 11 months in storage, eggs selected by clicking showed an average total loss of 18.5 bad eggs per case, while those selected by candling showed a total average loss of seven eggs per case.

Of the average of 18.5 bad eggs to the case when selection was based on clicking, after long periods in storage, nine were due to direct spoilage of damaged eggs or to their contamination of neighboring eggs by molding. The deterioration of the balance was charged to deleterious prestorage conditions, such as dirt, stained, washed or heated eggs, many of which could have been eliminated by candling.

Changed During Storage.

The rate of evaporation of moisture from eggs was remarkably uniform during the storage period, averaging from three to four ounces a case a month in all of the storage rooms under observation. The moisture evaporated from the eggs is condensed on the air, case, and fillers.

Eggs that are fresh when stored show after storing an increased air space and often a tinge of yellow in the white. The yolk membrane is slightly weakened, but commercial separation into white and yolk is easily accomplished, even after 11 months in storage.

The percentage of ammoniacal nitrogen in eggs increases during storage, the rise being fastest in the early part of the storage period. The amount of ammoniacal nitrogen in eggs is a good index of chemical deterioration.

Present evidence indicates that the cold-storage taste which begins to develop about the seventh month in storage, and becomes stronger the longer the eggs are stored is due to the absorption of odors from the surrounding environment, and particularly from the strawboard fillers. Experiments to prevent absorption of the taste from the fillers are in progress.

The detailed results of the investigation are embodied in a bulletin, "Commercial Preservation of Eggs by Cold Storage," to be issued as Department of Agriculture Bulletin No. 775.

LIME AND CHARCOAL

(Prepared by the United States Department of Agriculture.)

Ordinarily the hen does not consume enough lime to form the shells of eggs if she is laying abundantly unless something besides the ordinary grain feeds is accessible to her. Oyster shells are very good for this purpose. A box of crushed shells may be placed before the fowls, allowing them to eat at will. Old mortar and fine gravel are also useful in supplying lime. Charcoal has a great absorptive power for gases, impurities, and acids, and thus acts as a corrective when the stomach is sour and digestion has been impaired.

TOBACCO RESISTANT TO ROOT-ROT FOUND

Trouble Is Caused by a Fungus Which Lives as Parasite.

Most Characteristic Symptom of Disease Is Decay of Root System Resulting in Stunting of Plants—Tests Being Made.

(Prepared by the United States Department of Agriculture.)

If two varieties of tobacco, Connecticut Havana and White Burley, for instance, are planted side by side on ground which has just grown two or three crops of Burley, the Havana seed in most instances will produce from two times to one hundred times as much as the Burley. If, however, these two varieties are planted where tobacco has not been grown for several years and on soil which is not "tobacco sick," the Burley will produce as large a crop, acre for acre, as the Connecticut Havana. The cause of the low yield in the first case is root-rot, a disease the Connecticut Havana is able to resist, but to which the Burley is susceptible. For several years specialists of the United States Department of Agriculture have been working to develop by selection a type of Burley as resistant as some of the cigar varieties, but which will still possess the yield and quality of Burley. During the past three years these strains have been tested in Kentucky. In these tests the resistant strains have made average normal growth each year, while ordinary Burley produced practically nothing.

The importance of this disease is shown by the fact that recent careful observations over a considerable part



of the tobacco-growing section of the United States have shown an annual damage of millions of dollars. The loss in Kentucky alone is believed to exceed easily an average of \$2,000,000 annually.

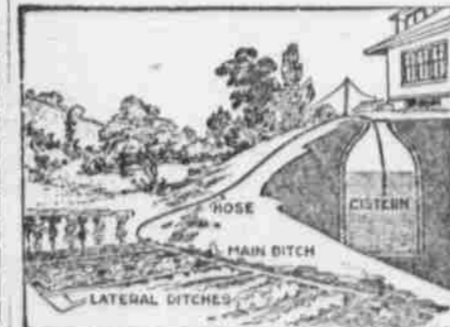
Root-rot is caused by a fungus which lives as a parasite on the roots of the plant. This fungus can grow into the roots and feed on their tissues which results in decay. It can live on dead organic matter in the soil, but in the absence of tobacco plants it gradually dies out, though this may require from five to ten years or more. The disease spreads much in the same way as other diseases of plants and animals.

The most characteristic symptom of root-rot is a decay of the root system resulting in a stunting of the plants. Curiously enough, root-rot rarely kills the plant in the field. Aside from becoming stunted and yellow the diseased plants may show wilting even in very moist soils on days when tobacco in healthy soil, and other crops, show no wilting. The depleted root system is not able to take up water as fast as the leaves use it.

WATER SIPHONED TO GARDEN

Ample Supply Obtained During Dry Summer Spell by Using Reserve Stock in Cistern.

During the dry months last summer we assured a rich return from our home garden by irrigating our vegetables from the house cistern which was on land higher than the garden. A hose was employed to siphon the water to a main ditch, from which extended lateral ditches by carefully conserving our supply we had water

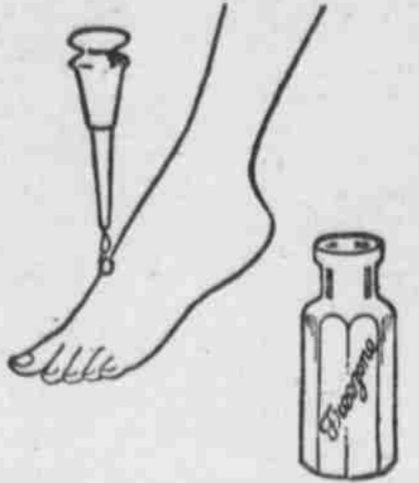


Siphoning Water With a Hose From a Cistern to a Garden Occupying Near-By Low Land.

enough to last all summer. By corking the hose at the downward end, and filling it with water before placing the other end in the cistern, the siphon is started by the flow of water caused by removing the cork.—K. M. Koggeshall, Webster Grove, Mo., in Popular Mechanics Magazine.

LIFT CORNS OFF IT DOESN'T HURT

With fingers! Corns lift out and costs only few cents



Pain? No, not one bit! Just drop a little Freezone on that touchy corn, instantly it stops aching, then you lift that bothersome corn right off. Yes, magic! Costs only a few cents.

Try Freezone! Your druggist sells a tiny bottle, sufficient to rid your feet of every hard corn, soft corn, or corn between the toes, and calluses, without one particle of pain, soreness or irritation. Freezone is the mysterious ether discovery of a Cincinnati genius.

What Esau Sold.

Bobby was entertaining the air pilot who was waiting to see his sister.

"Fancy," said Bobby, "flying machines are mentioned in the Bible."

"Are they really?" asked the interested sub.

"Well, in his sermon this morning the vicar said that Esau sold his heirship to his brother Jacob," replied Bobby.—Stray Stories.

Cuticura for Sore Hands.

Soak hands on retiring in the hot suds of Cuticura Soap, dry and rub in Cuticura Ointment. Remove surplus ointment with tissue paper. This is only one of the things Cuticura will do if Soap, Ointment and Talcum are used for all toilet purposes.—Adv.

MERELY PIECE OF FOOLING

Course Taken by Germany Resembles Closely Neat Trick That Is Credited to Sheridan.

"The Germans, by fooling us with German bolshevism, hoped to escape the payment of war indemnities," said a congressman.

"It reminds me of a story about Sheridan, the spendthrift playwright. 'Gunter, the confectioner, left his statement with Sheridan one morning, and a few hours later Hanson, the ironmonger, called.

"Hanson was very pressing on the subject of his account. He harangued and he harangued. Sheridan, broke, as usual, paced the floor in despair.

"But suddenly an idea struck the spendthrift and he said:

"'You know Gunter?"

"'One of the safest men in London,' Hanson replied.

"'Then you will be satisfied if I give you his bill for the amount?"

"'Certainly!'

"Sheridan thereupon handed the ironmonger Gunter's neatly folded account, snatched up his hat and rushed forth."

Old-Fashioned.

"They are old-fashioned children."

"That so?"

"Yes. They even obey their parents."

Ominous.

"I don't notice anything of a music rack about here." "Just wait until you hear Sallie begin to play."

Suffered for Years

Miserable From Kidney Trouble. Doan's Made Mr. Barnett Strong and Well.

"I suffered untold agony with my kidneys for years," says John Barnett, 30 Virginia Place, Buffalo, N. Y. "Sometimes I felt that I would burn up with fever, but every now and then would have a severe chill. Often my clothes were wringing wet with perspiration. The kidney secretions were unnatural in color and odor and burned terribly. At night my shoes were so tight on my feet that I could hardly get them off and my hands swelled so I couldn't hold a teacup. My back! Oh, how it ached! I walked with two canes and was all bent over like an aged man. When the terrible pains shot through my kidneys, my knees would give way and many times I had to be lifted to my feet by people on the street. I didn't care whether I lived or died. I was so miserable. I finally used Doan's Kidney Pills and they cured me of all kidney trouble. Doan's made me strong and well."



Sworn to before me, A. A. WILCOX, Com. of Deeds.

Get Doan's at Any Store, 60c a Box DOAN'S KIDNEY PILLS FOSTER-MILBURN CO., BUFFALO, N. Y.

Value of Canadian Farm Land.

In the annual report of the Canadian bureau of statistics, recently issued, it appears that the average value of farm land in the dominion, including improved and unimproved land buildings, was \$46 an acre in 1918. The average was \$44 in 1917, \$41 in 1916, \$40 in 1915, and \$38 in 1914.

Catarrh Cannot Be Cured

by LOCAL APPLICATIONS, as they cannot reach the seat of the disease. CATARRH is a local disease, greatly influenced by constitutional conditions. HALL'S CATARRH MEDICINE will cure catarrh. It is taken internally and acts through the blood on the mucous surfaces of the system. HALL'S CATARRH MEDICINE is composed of some of the best tonics known, combined with some of the best blood purifiers. The perfect combination of the ingredients in HALL'S CATARRH MEDICINE is what produces such wonderful results in catarrhal conditions. Druggists 75c. Testimonials free. F. J. Cheney & Co., Props., Toledo, O.

LOOKED LIKE LABOR WASTED

Board's Visit Over, Small Boy Couldn't See Further Necessity for So Much Soap and Water.

He was a new little boy at the orphanage and was much impressed by all the scrubbing and cleaning he saw done there, more so because he had come from a home in which disorder and dirt had held sway. He could not understand it; more than that, it irritated him, and when he got the job of scrubbing the dining-room steps he was almost ready to leave.

But just then came a new excitement to the home. The board was coming to make its annual tour of inspection, and the cleaning was doubled. "Get ready for the board," was the home watchword, it seemed, and he, being very human, decided to stay until that big event was over.

The day of visiting came and passed. The next morning the new youngster sought the matron. "Now that them boards has been here, I don't see no use of scrubbing them steps so often—do you?" he asked.

Appropriate.

Outside Brussels is a large monument of a German general. When the allies started to advance last year, some wit placed a handbag with the words "To Berlin" printed on, in the outstretched hand of the monument.

Very Likely.

"What killed your case in court?" "I guess it was the fact of its being a short circuit court."

Is Your Table Drink A Real Part of the Meal?

There's no food value in coffee or tea. They are only accompaniments to the meal.

POSTUM CEREAL

is part of the meal and a right royal part, as one well knows who enjoys a hot, full-flavored cup of this snappy, invigorating drink.

Why do hundreds of thousands of Americans now drink Postum in preference to coffee?

The better health from a 10 days' trial in your home will tell.

Postum is boiled just like coffee (15 minutes after boiling begins), is a beverage of rich, delicious flavor, and economical.

Two sizes, usually sold at 15c and 25c.