

FARM DEPARTMENT.

USEFUL INFORMATION FOR AMERICAN FARMERS.

Scientific Methods of Managing the Modern Farm and Garden—Live Stock, Poultry, Dairy, Apiary and Orchard.

Tuberculosis.

Readers of the Farmers' Review are doubtless aware that experiments are being made the world over with tuberculin as an agent for the detection of even dormant tuberculosis. They, too, have learned that hundreds of cattle have been destroyed in the east as a result of the findings of this new method of diagnosis. Tuberculin is injected hypodermically and causes a rise in temperature when, say the experimenters, tuberculosis is present in the animal, no matter whether the disease be virulent or passive. A heated discussion has arisen over this matter, for one side claims that where almost any lesion is present in the cow's body the injection of tuberculin—or other agents for that matter—will cause a rise in temperature. Results have shown, as published in the columns of the FARMERS' REVIEW that the work with tuberculin has given wonderfully correct and even astonishing results in some cases of tuberculosis that could not be diagnosed by percussion and auscultation by qualified veterinarians; but on the contrary it has, if we have read aright, condemned healthy beasts unjustly while there is a suspicion in the minds of some that where a rise in temperature had resulted from the injection of tuberculin simple post mortem lesions were pronounced tuberculous for convenience sake. If it should prove that tuberculin is a safe, never failing detective agent in the diagnosis of tuberculosis it must

mayhap at the behest of some enemy or business rival. There is, too, another point of importance, viz. that the government should supply tuberculin at cost, with instructions for use to every qualified veterinarian throughout the country who will engage to test it to the best of his ability and report results. The entire profession should be able to experiment if they so desire, and many a veterinarian would be willing to experiment and pay for subjects for post mortem examination if given a chance to procure a supply of tested tuberculin.—Farmers' Review.

Certified Tests of Dairy Cows.

The Illinois agricultural experiment station announces in bulletin No. 33 just published that it will supervise tests of dairy herds and, in exceptional cases, of individual cows owned or exhibited in Illinois, under the following conditions: The number of tests so supervised, and the times at which they shall be made, will be determined by the practicability of sending an authorized representative for the purpose without serious interference with other work of the station, but it is expected that there can be prompt compliance with all requests. Preference will be given to tests of pure bred herds or cows kept for the rearing of dairy stock, and to tests continuing for seven days. The station through its representative shall receive full information as to breeding, age, time of calving, date when bred, and treatment of the cows prior to the test; also have full opportunity to determine the quantity and kinds of food used, and the methods of feeding and treatment during the tests, with privilege of taking samples of food for inspection or analysis, as well as the quantity and quality of the milk and butter product. The results of the tests, duly

Beef from Tubercular Cattle.

We find the following in the Dairy World, London, which that paper has translated from some German contemporary: Owing to the present spreading of the tubercular disease it is of much importance to the farmer to know what the hygiene has to say as to the use of beef from tubercular animals, and what the means are which will in some measure lessen the pecuniary losses he has to sustain. Already, when discovering the real nature of the disease and its contagiousness, steps have been taken to lessen the danger by destroying and burying down the carcasses. At all the veterinary and medical congresses the opinion has always been expressed that the flesh from tubercular animals, whatever may be its condition, was unfit for human use, and Prof. Koch has tried to prove by numerous experiments that such was the case. Lately, however, it has been found that it is necessary to modify these rigid conclusions, and several scientists have expressed the opinion that not all flesh is detrimental to the health, but that it depends entirely on the nature of the changes themselves. Thus the beef in which tubercles show sign of calcination may be considered rather harmless, but if having a cheese-like appearance highly contagious. In this case it is indispensable that the beef sold be carefully controlled. A country where hygienic matters receive most attention is undisputedly Germany; this state has now instituted new regulations re the sale of beef which somewhat modify the previous existing ones. According to these a detrimental effect is as a rule only to be anticipated if knots of tubercles are contained in the flesh, or the animal very much fallen off without any such colonies being visible to the naked eye. If the animal is in fair condition and the tubercles have only affected one or several organs in the same

Ayrshire Butter Tests.

The Ayrshire Breeders' association believes the success of the breed in the future demands a cow that shall be not only a large milker and an economical producer, but shall have the ability to produce a large per centage of butter fat and total solids. Therefore, to encourage the testing of Ayrshire cows and to influence its selection for breeding for butter qualities, the association offers \$50 in premiums, divided as follows: \$25 for the first, \$15 for the second and \$10 for the third. These premiums shall be awarded to herds of ten cows producing the largest average record for two consecutive days, as determined by the scale of points herein mentioned. It is not necessary for this test that cows should be fresh in milk. No premium will be paid to a herd testing less than thirteen per cent total solids. Competent agents will make the tests at the farms of the competitors. Arrangements have been made with experiment stations to perform the work in their several states where the competing herds may be located, and send the result in duplicate to C. M. Winslow and the competitors. The agent will visit the farm of each competitor at a mutually convenient time, as soon as possible after the entries close. He will see the cows milked clean at least twelve hours previous to the beginning of the test, and will weigh and test the milk of each cow at each milking during the two days of the test. The tests shall be made by the "Babcock tester" and the "Quevenne lactometer." All entries must be made before July 1, 1894, to the secretary. Any breeder of Ayrshires may enter a herd of ten cows, which shall at the time of entry, stand on the books of the association as owned by him. He shall in making the entry, fill out a blank furnished by the secretary, giving name and number of each cow, her age and weight, the number of calves she has produced, the date of birth of last calf, and date of last service by bull since last calf was dropped. A statement as accurate as possible is requested of the method of feeding and care for at least two weeks previous to test, and during the test the kind and weight of food consumed by the cows will be ascertained and recorded.

Chicago Butter Market.

Some of the Chicago butter dealers have announced their intention of breaking away from the Elgin market and establishing quotations of their own. They recently held a meeting at which the following classification of butter was established. We publish it for the information of our readers that ship butter to Chicago.

Extras—Shall consist of the highest grade of butter produced during the season when made.

Flavor—Must be quick, fine, fresh, and clean if of fresh make, and good, sweet, and clean if held.

Body—Must be firm and solid with a perfect grain or texture, free from saltness.

Color—Must be uniform, neither too light nor too high.

Salt—Well dissolved, thoroughly worked in, not too high nor too light salted.

Package—Good and sound as required in classification.

Firsts—Shall be a grade just below extras, lacking somewhat in flavor, which, however, must be good, sweet and clean. All other requirements being the same as in extras, except style of package.

Seconds—Shall consist of a grade just below firsts.

Flavor—Must be fairly good and sweet.

Body—Must be sound and smooth, boring.

Color—Fairly good, although it may be somewhat irregular.

Salt—May be irregular, high or light salted.

Package—Same as required in firsts.

Thirds—Shall consist of butter below seconds, defective in flavor, showing strong tops or sides, not smooth boring, mixed or streaked in color, irregular salting and miscellaneous packages.

Grease butter—Shall consist of all grades of poor and rancid stock below thirds.

Packages to be used—Creamery—Tubs, hardwood 55 to 60 pounds. (For extras shall be standard five-hoop, white ash, 56 pound tubs.)

Imitation creamery—Tubs 30 to 60 pounds.

Dairy—Tubs of varying sizes.

Ladies—Tubs of varying sizes.

Packing stock—Any style or size of package.

Roll—Any style or size of package.

Grease—Any style or size of package.

—Farmers' Review.

MINNESOTA DAIRY STATISTICS.—We have at hand statistics of the dairy production of Minnesota. In that state dairying is still practically confined to the southeastern part, as a sort of overflow from Wisconsin and Iowa. In 1886 there were only 392,536 cows in the state. In 1893 there were 600,000, an increase of over one-third in seven years. The number of creameries has increased from 52 to 210 in the same time, and the butter products from about 36,000,000 to 70,000,000 pounds. In one county, Freeborn, last year the value of the butter made in the creameries alone was \$400,000.



AN ITALIAN BUFFALO.—FROM FARMERS' REVIEW.

be considered one of the most important discoveries of recent years in the annals of veterinary history, but on the contrary it is evident that the greatest possible care must be taken to conclusively prove the efficacy of tuberculin before making it the judge authorized to condemn to death dairy cows in wholesale numbers under state laws. We submit that the study of tuberculosis, its etiology, its symptoms, its post mortem lesions, every possible phase and stage of development, is of as great importance as the study of tuberculin and its effects. There is great danger in adopting this most interesting "new discovery" as a means of diagnosing tuberculosis, if it be true that other diseases of the lungs and pleura, of the spleen and liver, on the exhibition of tuberculin, produce a rise of temperature as great as that when tuberculosis is present. The study of tuberculosis is necessary, because should different states authorize the condemning of cattle showing a reaction to tuberculin the agent will be put in the hands of hundreds of practitioners who know little or nothing regarding the post mortem lesions of tuberculosis. We apprehend that a few savants can not settle this matter for the whole community; that a few experiments showing successful diagnosis of tuberculosis through the medium of tuberculin should not be accepted as so conclusive that tuberculin experiments in the hands of non-professional inspectors or even young veterinarians may be safely considered equally trustworthy and final as to the health or disease, life or death of the dairy cow. This evidently is a matter for the government to take up and settle after careful work in each state possessing an experiment station. It is work that the farmer should not pay for; work that the government should undertake in an honest, thorough manner to be reported upon candidly and in an unbiased manner. Then and not till then should any man be made to abide by the results of tuberculin injected into the veins of his cows,

certified by the station, will be furnished as soon as determined to the owners of the cows, or to the associations under whose auspices the tests are made. The station shall have the right to make publication of the results obtained, but no publication will be made without the consent of owners or associations until the completion of any public competition in which cows have been entered. The expenses of the representative of the station in going to and returning from the tests, as well as his maintenance during the tests, shall be paid by the owners of the cows or the association authorizing the tests.

Best Records in Egg Production.

We believe that the main-stay of the poultry business is egg production, and that there is more money in it for the egg-producer than for the producer of dressed poultry. The egg is without dispute a more perfect food than the flesh, in the same way that milk is a more perfect food than beef. Eggs are in every way more marketable, as they are used in such innumerable ways, and in all kinds of cooking. This demand will increase from year to year, and there is little danger of the supply exceeding the demand in this generation, at least. The production of eggs needs to be stimulated, and we know of no better way of doing it than recording the experiences of others. Such records have a great value. They set a standard of attainment, as it were, that is sure to be used by others, for one naturally reasons that what one person has done others may do. We want to hear from poultry raisers everywhere as to the best records their hens have ever made, but we want figures and particulars. In replying give the breed, number of hens, season and duration of the laying period reported, kind of food, whether hens were in pens or running free, and any other items that may have had an influence on the egg production. Let us have many replies, for in a multitude of counselors there is wisdom.

Poultry Is Safe.

Do not be afraid to invest a little money in the poultry business. A great many farmers do not succeed with poultry, for the reason that they want to conduct it in a manner different from that in which they would carry on any other business. The idea should be that the business is one in which money is to be invested. Many people try to carry on poultry raising without money. Let a man consider whether it will pay him better to put \$100 in the bank at 6 per cent interest, or whether he shall invest it in modern poultry houses, and rat-proof yard, with the other necessary adjuncts of the successful poultry raiser. Even if a man has a flock of common, unpedigreed hens, \$100 so invested would pay him a large per cent. True, he could not draw his money at will, but generally he would not want to, for the per cent of interest would be so high that he would be willing to let it remain.

Mighty is the Truth!

And it will prevail. Against underhand competition and spurious imitation, the genuine efficacy of the great national tonic, Hostetter's Stomach Bitters, always has and always will prevail. The public recognizes it everywhere as the chief preventive of malaria, and a reliable specific for dyspepsia, constipation, nervousness, rheumatism, kidney trouble, biliousness and loss of appetite. Efforts made by irresponsible dealers to compete with it by indirect means have and will continue to fall upon the heads, and it may be added, the pockets of those making them. Through the length and breadth of the American continent it is the acknowledged household remedy, reliable and prompt. It relies upon facts, upon public experience, and upon the emphatic commendation of the medical fraternity.

He: Why are you forever roasting Charley Fenderson? She: Simply because he isn't half baked.

When Traveling.

Whether on pleasure bent or business, take on every trip a bottle of Syrup of Fig, as it acts most pleasantly and effectually on the kidneys, liver and bowels, preventing fevers, headaches and other forms of sickness. For sale in 50c. and \$1 bottles by all leading druggists. Manufactured by the California Fig Syrup Co. only.

"My darling," whispered the Chicago man. "My life," she murmured. "You are the only wife I ever loved."

Notice.

I want every man and woman in the United States who are interested in the opium and whisky habits to have one of my books on these diseases. Address, E. M. Wooley, Atlanta, Ga., box 377, and one will be sent you free.

Edith: What did Mr. Lover say to you when he called last night? Maud: He made a ringing speech. See my finger?

Hall's Catarrh Cure

Is a constitutional cure. Price, 75c.

She: Does it make anything cheaper to put it on the free list? He: Certainly, my dear. She: Then why don't they put house rent on?

Hegenann's Camphor Ice with Glycerine. Cures Chapped Hands and Face, Tender or Sore Feet, Chilblains, Piles, &c. C. G. Clark Co., New Haven, Ct.

Miss Jarvis: She seems to be very popular with the men. Miss Bathbeach: Yes; she has declared that she hates ice cream.

A Good Appetite

Is essential to good health, and when the natural desire for food is gone strength will soon fail. For loss of appetite, indigestion, sick head-

Hood's Sarsaparilla

Cures... and other troubles of a dyspeptic nature. Hood's Sarsaparilla is the remedy which most certainly cures. It quickly tones the stomach and makes one "real hungry." Be sure to get Hood's and only Hood's Sarsaparilla. Hood's Pills are purely vegetable. 25c.

ELY'S CREAM BALM CURES CATARRH PRICE 50 CENTS, ALL DRUGGISTS

ALL THE WOMEN WONDER

at the Eureka Coffee Strainer. So simple, yet so useful and complete. Something new. Fits any pot; used inside, improves the flavor and takes less coffee. No one will be without it after once using. Endorsed by physicians. Regular price \$1. To introduce: For the next 40 days, a sample will be sent postpaid for 25c. Send stamps or postal note. The Karmelcoese Co., Topeka, Ill.

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Write to the Western Newspaper Union for samples and prices. No other house furnishes authorized matter. W. S. MORGAN, Sec. National Reform Press Association. Address,

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Davis International Cream Separator, Hand or Power, Every farmer that has cows should have one. It saves half the labor, makes one-third more butter. Separator Butter brings one-third more money. Send for circulars.

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Consumption and people who have weak lungs or asthma, should use Dr. Williams' Pink Pills for Pale People. It is the best medicine for consumption, and it is the best medicine for weak lungs or asthma. It is the best medicine for consumption, and it is the best medicine for weak lungs or asthma. It is the best medicine for consumption, and it is the best medicine for weak lungs or asthma.