

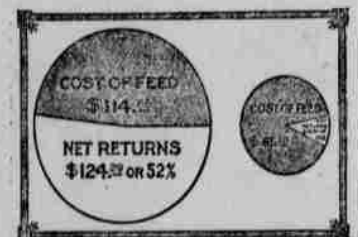
WEIGH AND TEST MILK

Lack of Records Is Reason for Unprofitable Cows.

Only Reliable Way to Learn Whether Individual Animals in Dairy Are Paying Is to Keep Tab on Production of Each.

It is variously estimated that one-fourth to one-third of the number of cows in Wisconsin—one of the very best dairy states in the Union—belong to the class that is referred to as "robber cows" or "star boarders," from the fact that they do not pay for their keep, to say nothing about yielding a profit to their owners. According to Mr. F. N. Woll, the main reason why farmers continue to keep such cows is that they do not know how the accounts stand with the individual cows in their herds. They do not know how much milk or butterfat the different cows produce, nor how much feed they consume, or its cost.

There are, on the other hand, many dairy herds in the state that average over twice 170 pounds of butterfat (the estimated average production in the state) a year. These are yielding



Best Ten Cows—Poorest Ten Cows.

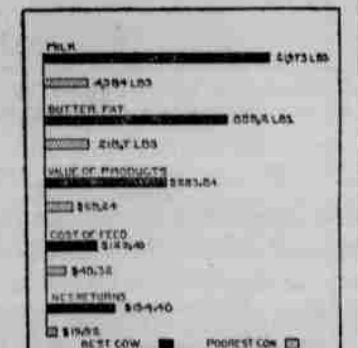
large profits, and the number of such herds is increasing with each year, as more and more farmers learn how to feed and care for their cows so as to secure the best returns.

The only way to learn whether the individual cows in a dairy herd yield a profit is to weigh and test their milk regularly, so that their production of butterfat during the year can be determined with at least a fair degree of accuracy. This work of testing the cows is generally admitted to be of fundamental importance in the management of a dairy. It can be done by a farmer himself, by means of a milk scale and a Babcock tester, or it can be done by outside parties, either co-operatively in the cow-testing association, or by the system of official testing of dairy cows conducted by the experiment stations.

As a special incentive to better dairying a dairy cow competition for the benefit of cow owners in this state was begun several years ago which lasted two years.

A large number of extraordinarily high records were made. Nearly two-thirds of the cows produced over 400 pounds of butterfat during the year, or considerably more than twice the average production of dairy cows in Wisconsin and other states.

Striking fundamental facts relating to the dairy production of cows are brought out by the results obtained in this important competition. It remains for our farmers to take ad-



Returns From Highest and Lowest Producing Cows.

vantage of the facts brought out and to apply in the management of their herds the principles which these illustrate. The standards set by the cows in the competition are high and probably beyond the reach of the majority of farmers, but all can profit by emulating the methods of handling and feeding practiced by the breeders who achieved the best results in the competition. Above all, no farmer depending on the income from his herd for a living can feel that he has done his duty to himself, his family or his community, until he takes proper steps to ascertain whether each one of his cows is yielding him adequate returns for the feed she eats and the care bestowed on her. A conscientious inquiry as to how matters stand in this respect will inevitably lead to improvement in the production of the cows and in the returns which will be secured in the management of the herd.

BUILDS UP DAIRY INDUSTRY

Community-Owned Purebred Sires Help Business—Discourage Idea of Selling Calves.

Purebred sires co-operatively owned by dairymen in any community means the upbuilding of the dairy industry in that section.

In order that this system may be successful the prevalent idea and practice of selling the young calf for veal at an attractive price and ready money must be abandoned, and the whole milk separated at the farm and the skim milk fed to these young animals.

COLTS AND CALVES IN FALL

Practical Dairymen and Horsemen Make Most Profit Out of Animals Dropped in Autumn.

We have inherited from our ancestors the idea that spring is the time for calves and colts. But the most practical dairymen now know that cows which freshen in the fall are apt to make them more money than the ones which come in in the spring. The succulent pastures of May and June cause a great flow when milk is cheap; and the usual August drought cuts down the yield so early in lactation that the loss in getting the cow back or trying to do so is great.

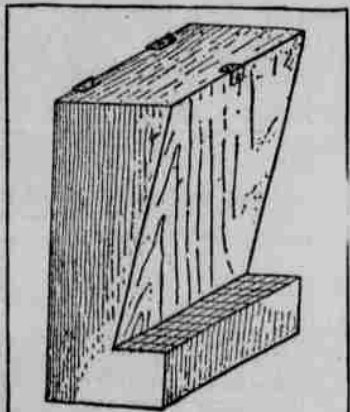
When milk is dearest the cows are drying up. But the fall freshening cow, when comfortably housed, gives her full yield in the winter, when milk is scarce. Just as she begins to need crowding, to prevent a shrinkage in her yield, the spring grass comes on and gives her the required boost. The August drought strikes her about the time she ought to begin to dry off, anyhow.

But fewer realize the arguments for the fall colt. The dam of a colt dropped in October has the entire winter of leisure to devote to the duties of maternity. She is off work when the drain on her vitality is the greatest. If the colt has warm quarters at night and during stormy weather he will do as well as he would in summer. When he is weaned, the grass is ready for him. He has more vitality to devote to flies and mosquitoes. Some mighty good horsemen think the fall colt is the only colt for them.

FEED HOPPER FOR CHICKENS

Device Can Easily Be Made by Sawing Sides of a Laundry Soap Box as Shown in Sketch.

A feed hopper for chickens can easily be made by sawing the sides of a laundry soap box as indicated. A lid is fastened on the top by hinges, and the feed is poured in at the top. The front slants, which keeps the feed



Chicken Feed Hopper.

always sliding down as it is taken out of the opening. The opening is covered with chicken wire to keep the fowls from stepping into the feed and fouling it. The dotted lines show the original construction of the box.—Popular Science Monthly.

PREVENTION OF OATS SMUT

Formaldehyde Treatment Has Been Thoroughly Tested and Found Effective Against Disease.

Just before seeding oats is the time to prevent oats smut. The formaldehyde treatment has been thoroughly tested and found effective, and is the cheapest kind of insurance against the disease. As an example, the Cornell station points out that a man who planted five acres of oats last year had a fourth of it affected by smut, so that the yield was only 150 bushels. Had he treated the seed, there would have been an additional 50 bushels. At 50 cents a bushel this increased yield would have brought him \$25. The treatment, including material and labor, could not cost more than \$2, which would have meant a net profit of \$23. Farm experts claim that it pays to treat seed oats even if it prevents only a two per cent loss. The formaldehyde solution, which is a colorless pungent liquid and preferably of 40 per cent strength as purchased, may be obtained at any drug store for about 30 cents a pint. It sometimes goes under the trade name of formalin.

RAPE WILL ASSIST RYE CROP

If Rye Is Not Pastured Too Closely, Rape Will in All Likelihood Make Good Stand.

If your stand of rye is a little thin, sow four or five pounds of rape seed per acre early and afterward give one or two strokes with the harrow. There need be but little fear of dragging out the rye, as the crop is deeply rooted and the harrow will have but little injurious effect.

Of course if the rye is pastured close the young rape plants will be nipped off when they are very tender, and this may interfere with a rank summer or fall growth; but, on the other hand, if the rye is not pastured too closely the rape in all likelihood will make a fairly strong stand.

Transplanting Plants.

Transplanting of cabbage, tomato and other plants encourages a thrifty growth of root and stem. Neglect transplanting and when ready to put in the garden the plants will be spindling and weak and may not survive.

About Portugal



Lisbon's Beautiful Harbor.

PORTUGAL, the most recent nation to be drawn into the maelstrom of the European war, was once a part of the ancient Roman province of Lusitania, says a bulletin issued by the National Geographic society.

With a population scarcely exceeding the combined population of New York city, Jersey City, and Newark, and an area in Europe less than the state of Indiana, Portugal has not played a major role in the politics of continental Europe in many years, not, in fact, since Wellesley, afterward the Duke of Wellington, landed his English forces and, with the aid of native troops, defeated Soult and Massena, Napoleon's marshals, in the two peninsular campaigns.

But the colonial empire of Portugal is out of all proportion to the importance of the home country. In fact there were, at the beginning of the war, only three other countries in Europe—Great Britain, France, and Germany—whose flags floated over more territory beyond the boundaries of the home country. The combined area of the New England and North Atlantic states would equal less than one-fourth of the territory under the dominion of the tiny republic occupying the western edge of the Iberian peninsula, whose navigators in the fifteenth and sixteenth century were the wonders of the world. Yet all this vast territory is held by 8,000 colonial troops, supplemented by native armies.

Peasants Are Poets.

A curious anomaly is to be found among the peasants of Portugal, who are classified as among the most illiterate of Western Europe, yet among the most intelligent. Many of the farmers—three-fifths of the population is devoted to agricultural pursuits—have a remarkable gift for versification, and many of the poems of the country are handed down from generation to generation without being recorded. The peasants also are noted for their sobriety, and yet the annual production of wine exceeds 25 gallons for each inhabitant. So great, in fact, is the product of the vineyards that in the cities the various qualities of water are discussed with keener interest than the grades of wine.

While Portugal's maritime glory is a thing of the past, a large number of Portuguese still follow the sea for a livelihood, and the fishing industry is important. The Portuguese sardines, however, are preserved in Italian olive oil, although one-fifth of the cultivated area of the nation is given over to olive groves, for the production of oils of a cheap grade.

The Portuguese peasant woman is an important bread winner, but she receives for her day's labor of 16 hours in the field only a shilling or less, while the men get two shillings.

One of the profitable and extremely popular "industries" of the rural population is a placid laying in wait for tourists who attempt to motor through the country on the less-frequented and often impassable public roads. With an ox-team the peasant waits at a favorable spot until a motorist, traveling on an automobile on which an import tax of \$120 has been collected by the Portuguese government, sticks in the mud. To haul out such an unfortunate is often more profitable than several days' work in the wheat, maize, or rice fields.

Lisbon's Beautiful Harbor.

The harbor of Lisbon, where the seizure of the German merchant ships precipitated Portugal into the war, is one of the most beautiful in all Europe, ranking scarcely second to Naples and Constantinople. The city is about the size of Pittsburgh, and has been the political center of the nation since it was wrested from the Moors in the middle of the twelfth century by Alfonso Henriques, the founder of the kingdom. It was the English who aided Alfonso in his war against

REAL CHAMBER OF HORRORS

Attic in New York's Criminal Court Building Poor Place to Spend a Pleasant Afternoon.

Any attic is a collector of forgotten relics as in dust. But in the attic of the normal household there is very little that is gruesome and much that is tender, and humorous, in its associations. The ghosts of the past which lurk under the domestic eaves are for the most part kindly, though some may be melancholy and some foolish. One finds them, on rare visits to their dusty retreat, making a gentle appeal to one's heart, seeking to soften one's facial lines with ghostly caresses, coaxing a philosophical welcome.

We dwell upon these characteristics simply to emphasize the contrast presented by the fearsome wraiths haunting the attic of the criminal courts building. A spring housecleaning there, the first in many years of crime, has discovered among the dust-gathering contents a thousand suits taken from the bodies of murdered men, including the clothing worn by Caesar Young, by Stanford White and Herman Rosenthal. There was the trunk in which Elsie Siegel's body was found. There were gambling outfits captured in the spectacular raids of William Travers Jerome. There were weapons of every description, the agencies of murder and assault—in fact, an accumulation of criminal exhibits covering a decade and more of the city's history and recalling to mind a host of half-forgotten tragedies and sad failures and grim triumphs of justice.

Perhaps it is not altogether fair to call this chamber of horrors our communal attic, since to be completely representative it should gather also those more wholesome relics of a people's activities which eventually find their lodgment in museums. And yet until this criminal courts attic more nearly resembles in contents of association the domestic species the millennium will seem too far off to bother about.—New York Tribune.

City Bird Clubs.

It has taken more than twenty years of steady work by the National Audubon society to demonstrate the economic value of birds to agriculture, and the result is in our state laws protecting song birds and the federal laws protecting the migratory game birds. Incidentally, bird sanctuaries have been established in several places, remarks the St. Louis Post-Dispatch. Henry Ford's near Detroit, and Avery Island on the Gulf coast, given by Mrs. Russell Sage, are noteworthy. Several state preserves have been set aside for the game protection. The bird club movement strives to save the birds, with objects both economic and esthetic. Bird club organizations have taken firm hold in several of our large cities, and have brought about increased attractiveness to parks and residential sections reclaiming the wild native birds. The methods include planting trees and shrubs suitable for nesting places and bearing acceptable fruit for food, and the provision of drinking fountains for bird use. The methods have proved successful—and does anything add more charm to outdoors in a city than bird songs?

Sterilizer for School Pencils.

In many public schools where the children do not own their individual pencils, but where these are distributed and collected by the teachers, it has been felt that infectious diseases might easily be communicated from one child to another by the pencils. For boys and girls have a habit of chewing or sucking the ends of their pencils, and the germs of the many diseases that lurk in the mouth are thus transferred to the soft wood. Thus might any of the affections of the throat, nose and lungs, to say nothing of the more serious diseases that manifest themselves in sores of the mouth, be transmitted.

It is to safeguard against this that E. S. Mathis of Haddonfield, N. J., has patented a sterilizer for pencils. These are put in a rack, their point being immersed in formalin gas, which kills any germs that may be upon them. Mr. Mathis says it will cost \$1 a year to sterilize the pencils of a school with his device.

Hamlet Only Told the Truth.

"Tell people the truth and break social conventions as Hamlet did, and they will think you crazy!" Dr. John Duncan Spaeth, professor of English literature in Princeton university, said recently in a lecture on "Shakespeare and the Democratic Spirit." "Hamlet was perfectly sane," Doctor Spaeth added, "but when he told the truth to foolish people they thought him crazy. He called Polonius a fool, and the latter at once tapped his head and was quite convinced Hamlet had gone mad. Hamlet did the same thing with many others who figured in his life. With the exception of his mother and Horatio, all other characters in the play, when told the plain, unvarnished truth, thought him insane."

Teneriffe Would Extend Trade.

The first combination of business men brought together in the Canary islands for exclusively foreign trade purposes with any one nation was organized December 29, 1915, under the title of "The Teneriffe-American Board of Trade." The purpose of the new trade body is to increase the commercial relations between the island of Teneriffe and business men in the United States.

GREAT BRITISH FORT

ADEN ONE OF EMPIRE'S MOST PRIZED POSSESSIONS.

By No Means the Least of Strategic Points on the Way to India and the Far East—Can Defy Mighty Fleets.

Aden is the unhappy gateway into happy Arabia, and, moreover, it is one of the foremost strategic points on England's trade route through the Red sea to India and the Far East, says a war primer issued by the National Geographic society, which tells of the first stronghold on the London-India route to withstand a severe attack by the Turks. One Arabian author says of the country behind Aden, that country known as Arabia Felix: "Its inhabitants are all hale and strong, sickness is unknown, nor are there poisonous plants or animals; nor fools, nor blind people, and the women are ever young; the climate is like paradise and one wears the same garment summer and winter."

Aden, however, where the British and Turkish forces are opposing one another, enjoys none of these advantages catalogued as inherent in Arabia Felix.

Spread over its ragged hills of sun-made ash and cinder, sweltering, gloomy, and unrelieved by vegetation, Aden invites little attention in peace times. "Aden is a valley surrounded by the sea; its climate is so bad that it turns wine into vinegar in the space of ten days," complained one disappointed Arab traveler of the Middle Ages. And in the centuries since his visit the climate has not improved. In spite, nevertheless, of the terrible heat that gathers over Aden's valley and clings to its low hills and its lack of a good water supply, the place maintains a reputation as a healthy one.

The town is built on desolate volcanic rocks that constitute a peninsula near the entrance to the Red sea. The strait of Bab-el-Mandeb lies 100 miles away; and Aden is the British Gibraltar toward the Indian ocean that keeps an eternal vigilance over the safety of the rich English commerce that goes this way. The British captured and annexed the place on January 16, 1839, since which time they have made the place a most emphatic fortress, one of the strongest anywhere in southern Asia. Money and labor without stint have been expended there to make the city absolutely impregnable from land and sea. Massive lines of defense, strengthened by a broad moat, guard the neck of the isthmus, and these defenses conceal powerful batteries. Turrets, hidden forts, mined harbors, great naval guns, obstruction piers, barracks, redoubts in solid rock, all are elements in the British plan to guard this southern end of their important trade route beyond all possible chance of failure against superior and sustained attack. Aden may be last in matters of climate, but it is among the first in matters of fortification.

The narrow peninsula on which this queen of southern fortresses rears itself is only about fifteen miles in circumference. It is the bowl of an extinct volcano. The lofty hills around are the remains of the crater sides, and, of these, Shem Shem has an altitude of nearly 1,800 feet. All food and water for use on the peninsula has to be brought in from the outside. Much of the water is supplied from the government condensers, which were designed to make the fortress independent in case of war's necessities. The population of 44,000 is a mixture of all the elements of the Orient, with an intersprinkling of western drummers and British administrators and military men. Arabs, Chinese, Persians, Turks, Hindus, Parsees, Egyptians, Soudanese and Jews compose the stolid, stable population that endures the climate year in and year out, and carries on the labors of the great fortress camp.

Fortune in Waste Paper Basket.

The days when poor men may prospect for gold are pretty well past, but it seems as though a substitute, perhaps less picturesque and exciting, offers itself in the waste paper baskets of business corporations.

Not very long ago the Hemingway Paper Stock company purchased from the banking firm of Townsend, Whelen & Co., in Philadelphia, a batch of old correspondence and papers, to be used as paper pulp. The price paid was \$70. An employee of the purchasing firm began going over the documents and letters and discovered a great number of old, foreign stamps. He reported the matter to his employers and they ordered him to go through the whole lot and pick out every stamp that seemed unusual. A vast number were collected and when shown to A. F. Herkels, president of the Philadelphia Stamp club, he appraised their value at over \$75,000, thus giving the firm a profit of more than a thousand dollars on each dollar of their purchase.

Needs Must.

"I think I'll go in for aquatic sports this summer."
"I didn't know you cared for that sort of thing."
"I don't, but that suburban lot I bought seems to be better adapted for boating and swimming than for anything else."

Give Up Coat Tails to Help Win War.

As a measure of war economy, the schoolboys of the famous English school, Harrow, will cut off their immemorial coat tails and also wear fewer buttons.