DAIRY FACTS

BETTER COWS HELP PROFITS

High-Producing Dairy Animals Make Best Market for Different Home-Grown Feeds.

Hundreds of millions of dollars' worth of feed is consumed annually by our dairy cows. The net income is large or small, according to the way that feed is used. When production is increased through feeding and breeding, the income rapidly expands, yet a few real scrubs on any dairy farm will deflate the net income.

Farmers of the United States furnish feed and care for 23,000,000 dairy cows. Because of low-producing cows a large part of that feed is wasted. Weighing out expensive feeds to a low-producing cow is like shoveling costly coal into the fire box under a leaky

Like a Factory, the Dairy Cow Transforms Raw Materials Into the Finished Product—Milk.

boiler; and the farmer who keeps such cows seldom has to pay any income tax.

Like a factory, the dairy cow transforms raw materials—silage, hay, and concentrates—into the finished product, milk. In this way she furnishes a market for the feeds. Whether that market will be good or bad depends in part upon the way the cow is fed, and in part upon the cow herself. There is no better way to market the feeds grown on the farm than to feed them to a herd of high-producing dairy cows. The cow takes corn silage, grain, and hay and converts them into a product for which there is always a ready sale.

It is much easier to send the milk or cream to the creamery than to haul the hay to town. In the long run it is generally much more profitable, because it keeps the soil fertility at home.

In selling feeds to dairy cows the farmer has a wide choice of markets—bad, good, and very good. Few men discriminate closely enough between these markets. If a wheat buyer offers 1 or 2 cents a bushel more than other buyers he gets the wheat; if a wool buyer offers half a cent a pound more he gets the wool. But if one cow returns $3 from a dollar's worth of feed and another only $2, it is scarcely noticed. There is a difference of a dollar in the income every time each of these two cows eats a dollar's worth of feed.

According to estimates of the United States Department of Agriculture, the average dairy cow in the United States produces annually about 4,000 pounds of milk and 160 pounds of butter fat. According to 40,000 yearly individual-cow records recently tabulated by the department, the average cow testing association cow produces 5,980 pounds of milk and 246 pounds of butter fat a year. The world's records are 37,381.4 pounds of milk and 1,205.09 pounds of butter fat in a year. There is plenty of room for improvement, it would seem, in the average production.

The keeping of individual cow records is easy. To test a half dozen samples of milk for butter fat requires about half an hour. Weighing the milk, estimating the weight of roughage, and weighing the concentrates requires but little time. The testing of a composite sample of each cow's milk from two consecutive milkings once a month furnishes the figures from which the yearly production records can be computed. Any man competent to care for a dairy herd can easily learn to make the butter fat test and to keep feed and production records.

WINTER FEEDS FOR HEIFERS

Young Animals Should Not Be Compelled to "Rough It" During Cold Weather Period.

Young heifers should not be expected to "rough it" during the winter, but should have feed and shelter. The feeds should of course include bulky feeds, such as silage, stover, hay, fodder, etc., and concentrates. The young animals should have enough such concentrates as cottonseed meal, wheat bran, shorts, rice flour, alfalfa, pea hay, peanut hay to develop body.

Practice of Testing Cows.

The practice of testing cows to determine their milk and butter fat production and feed consumption by means of cow-testing associations has become widespread. There are now 452 associations of this kind in the United States.

Cracking Velvet Beans.

Velvet beans, as a dairy feed, are improved by cracking, soaking and grinding. Cracking alone does not pay for the work of doing it, but grinding did, in a feeding test in Texas.

POULTRY

PRACTICAL FATTENING WAYS

Where Crates Are Used Little Space Is Necessary—Exercise Is Not Desirable.

(Prepared by the United States Department of Agriculture.)

Three methods of fattening poultry are used in this country—pen fattening, crate fattening and machine cramming. The first two are the most common; the third is used only where but a few birds are to be fattened.

Pen fattening is practiced by many persons who do not have the time and inclination to use other methods. The essentials of pen fattening are quiet, darkness, except at feeding time, and plenty of soft feed given at regular intervals, usually three times a day. Birds may be kept in flocks of 15 or 20, but the sexes should be separated.

In crate fattening a few chickens are kept in crates and fed from a trough. A crate 6 feet long, 18 inches high, and 18 or 20 inches wide, is suitable and is large enough for a dozen birds. Sometimes the crate is divided into two or three compartments, four to six birds being kept in each compartment. Little room is desirable, for the less exercise the birds have the more readily will they fatten. If the crate is to be left outdoors the top should be covered. The sides should be made of slats about two inches apart, so the birds can eat from the trough which is hung just outside the crate. The bottom of the crate should be of slats about an inch apart, to permit the droppings to fall through, or dropping pans may be used and the crates arranged in tiers. In indoor feeding the crates should be put in a well-ventilated room. Usually the birds are fed three times a day and are allowed to eat for half an hour at a time, when the uneaten feed is removed.

Crate and machine cramming are described in Farmers' Bulletin 287, issued by the United States Department of Agriculture, and it would be advisable to procure a copy.

Crate-fattening birds should always have soft feed. As they have no exercise they require a feed that can be digested easily and quickly. This mix-

Crate Fattening Is One of the Most Common Methods.

ture is used in a New York poultry farm: 100 pounds finely ground barley, 100 pounds finely ground corn and 100 pounds finely ground oats (with hulls sifted out). Buttermilk or skim milk is used for mixing to the consistency of thick cream, the buttermilk being preferred. A little salt sometimes is added. In this instance the birds are fed twice a day at intervals of 12 hours and are fattened for about three weeks. It is important that the intervals between the feedings should be as nearly equal as possible.

Another ration is: 100 pounds ground oats, 100 pounds ground corn, 50 pounds low-grade flour and 4 pounds tallow.

MILK EXCELLENT FOR FOWLS

Productive of Good Money-Making Results and May Be Fed Alone or to Moisten Mashes.

One class of feeds that is excellent for poultry and that can be used advantageously on dairy farms, includes milk, skim milk, buttermilk, sour milk, cottage cheese, etc. These are all productive of good money-making results and, where they are available, it is wise practice to feed them. They may be fed either alone or used to moisten the mashes.

The mash, however, should not be moistened one day and then fed dry the next. Follow one or the other of the two plans constantly. Fowls will convert what many times would otherwise waste, into meat and eggs if fed the milk and its by-products that are often obtainable on the farm.

DUST BATH FOR FOWLS

Fowls will keep themselves free from vermin during the winter months if given a convenient place to dust. A box 30 inches square and 12 inches deep may be built in one corner of the house or pen, or such a box may be made with legs so as to raise it above the floor. Almost any fine dry powder will make good dusting material.

SUITS FOR LATE WINTER; KNICKERS AND PETTIBOCKERS

SPRING has several things up its sleeve in the way of innovations and pleasant surprises in suits. We are promised that things "new and different" are to come within the range of the styles. Given three guesses, the fashion expert will probably predict: many three-piece, along with two-piece suits, the introduction of ingenious sleeves, contrasting cloths in collars and cuffs, to replace fur or other winter trimmings, and an emphasis on sport styles—including many suits with knickers and capes in their composition. The use of home-spuns, tweeds, jersey cloth in these suits follows as a matter of course, But sport suits are another story.

The exquisite finish and painstaking stitchery done by the natives of the Philippines and by the needle workers of France are here, to allure the American woman to their heights of elegance. She is learning that "there is nothing so beautiful as care."

In materials, cotton fabrics remain most important, beginning with fine batiste and nainsook. There is a lot of pink shown in these fabrics. Some use has been made of dimities, in fine stripes and of shadow striped batiste, in both white and flesh tints. For heavier garments printed crepes are

Premonition of Spring.

chosen and for bloomers, knickers and pettibockers sateen is in strong demand.

Speaking of these bifurcated garments, knickers and pettibockers will receive at least as much attention as petticoats on the part of makers of lingerie. They are made of the same materials as petticoats; the cotton ones of batiste and nainsook and the silk ones of satins, crepe de chine and glove silk. The two models pictured show how attractive these convenient substitutes for petticoats are. In the knickers at the left of the picture, the scant fullness about the waist is all gathered in at the sides and back, over an elastic band. In the pettibockers it the amount of fullness and its disposition being governed by the figure of the wearer.

In French lingerie, silk appears to have absorbed the interest of its ingenious makers, and they have sent us captivating and dainty things in pastel shades of flower-like colors along with

New Styles in Lingerie.

its flaring box coat, merely needs to replace its fur collar with a throw collar of cloth and to dispense with its pockets or to make them of cloth, to accomodate itself to spring weather and spring styles.

Now is the time of year when it is possible to get away from the winter of our discontent, even if we do not go farther than to the nearest dry goods store on a shopping tour. In January and February the stores are full of new lingerie and the dainty materials of which it is made. It is an inspiring display this season.

fine linens and sheer cottons that show little change in style or decoration. American manufacturers have adopted these imports to our needs and a little journey to the shops will repay the needlewoman who intends to replenish her own supply of underwear with something useful and of her own making.

Julia Bottomley

NATIONAL CAPITAL AFFAIRS

Uncle Sam's Wealth in Public Lands

WASHINGTON.—An untapped wealth estimated at a minimum of $150,000,000,000 is contained in the more than 400,000,000 acres of land still held in the public domain, Secretary Fall of the Interior department says in his first annual report. Coal and oil form the bulk of this wealth, the total coal deposits being estimated at 110,000,000,000 tons, and the oil deposits at 1,325,000,000 barrels, with an additional 50,000,000,000 barrels of shale oil. From the development of these resources the federal government, Secretary Fall says, would realize by way of royalties, rentals, etc., a total of $12,387,500,000, divided as follows:

Coal in public ownership: Bituminous, 10,000,000,000 tons; at 10 cents royalty, $1,000,000,000. Subbituminous, 30,000,000,000 tons; at 8 cents royalty, $2,400,000,000. Lignite, 50,000,000,000 tons; at 5 cents royalty, $2,500,000,000.

Oil in public ownership (crude), 700,000,000 barrels at $2, $1,400,000,000; at 12½ cents royalty, $175,000,000.

Shale oil, 50,000,000,000 barrels at [illegible] $100,000,000,000; at 5 cents royalty, [illegible] 000,000,000.

Phosphate, 3,500,000,000 tons at [illegible] $14,000,000,000; at 2 per cent royalty, $280,000,000.

Potash, 20,000,000 tons, at $75, [illegible] 500,000,000; at 2 per cent royalty $30[illegible] 000,000.

Water power, 13,000,000 horse power at 10 cents per horse power per year, $1,300,000.

Indian reservations: Oil, 600,000,000 barrels at $3, $1,800,000,000.

Phosphate, 1,000,000,000 tons at [illegible] $4,000,000,000.

Alaska: Coal, 20,000,000,000 tons all grades, at 5 cents royalty, $1,000,000,000.

Oil, 25,000,000 barrels at $1, $25,000,000; at 10 per cent royalty, $2,500,000.

Water power, 2,500,000 horse power at 10 cents per horse power per year, $250,000.

Surface value of public lands outside of national forests:

Desert and semi-arid lands, 100,000,000 acres at $1, $100,000,000.

Grazing lands, 75,000,000 acres at $2, $150,000,000.

Grazing and forage lands, 15,000,000 acres at $4, $60,000,000.

National forests: Grazing lands, 110,000,000 acres at $4, $440,000,000.

Timber, $580,000,000.

Other resources, $145,000,000.

When History Was Recorded on the Fly

THUS does the Congressional Record record history in the making:

Mr. Lanham—Mr. Chairman, there is now happening in the city of Washington what is destined, in my judgment, to prove an historic event. At this time there is floating over the Capital city the United States navy dirigible C-7, the first ship of the air filled with helium which has ever flown in the entire world. This accomplishment marks a new era in aviation. This wonderful inert gas affords the long-sought combination of safety and efficiency.

It was my pleasure this morning to attend the landing of the C-7, observed also by many interested spectators who have labored faithfully in the inauguration and development of the helium project. It came to the earth with the ease and grace of a large bird, bearing a confident crew that displayed no nervousness, despite the fact that this was an initial experimental trip.

In a flurry of snow it completed its aerial journey from Norfolk, Va., in less than four hours, and is now be-

ginning its return flight by circling in triumph above the capitol and the departments which have helped to make its achievement possible.

A novel incident occurred shortly after the landing at Anacostia. Those gathered about the dirigible were requested to smoke to their hearts' content and were furnished the necessary materials for this purpose. Even the pilot in the cockpit was permitted to partake freely of his favorite pipe. Had the dirigible been filled with hydrogen, smoking would have been a reckless flirtation with death. The safe minimum distance of approach to a hydrogen vessel, under such circumstances, is perhaps 100 yards.

Congress Disappoints Foreign Writers

THE eyes of all European correspondents were turned the other day upon congress. It was the first opportunity for many of them to see that body in action, and so the attendance was large. The fact that the President was to deliver his message added interest to the occasion. Keenly on the alert for some significan hint, ready to read a meaning into his words that did not exist and hoping to see some dramatic reference to the conference that would stir the world, they went in a body, and felt highly honored to be placed on the floor of the house.

They returned, however, no wiser, but somewhat sadder. The session merely served to mystify their conceptions of American politics. The one thing that apparently made the greatest impression upon them was the sight of a correspondent for a Kansas newspaper sitting in the press gallery during the invocation, sharpening his pencil as he prepared for action. To a fellow correspondent who remonstrated with him that he was showering the heads of congressmen with lead and pine shavings, he replied with becoming dignity: "Let the chips fall where they may."

Everyone in congress was happy for an hour and basked in the light that had so long been turned on the conference performers. Our congress is a jealous congress and does not look with favor upon the intrusion of diplomatic gatherings in Washington.

Rarely have the members of congress had such an audience. All the big wigs among the foreign delegations were there. The diplomatic gallery was filled to overflowing. The press galleries were crowded. It was almost a question of "standing room only."

Cabinet Members Allowed in Congress?

REVIVAL of the plan to change the rules of congress to give cabinet members the privileges of the floor, without a vote, to make the new national budget law more effective, is in progress here. The national council of the National Economic league, composed of 3,000 presidents and professors of universities, judges, bankers, lawyers, manufacturers, and others, has issued the results of a referendum among its members on this subject. The league regards the question as "the most important one before the country at this time" with the exception of international relations.

Under the system established by the new law signed by President Harding last June the national budget is prepared by a bureau, of which Gen. Charles G. Dawes is director. To give it consideration a budget committee has been created in the house, the finance committee performing for the senate.

It is pointed out no opportunity is given for the executive to defend or explain the budget's proposal publicly before either branch of congress as

a whole. The Good committee itself, which prepared the bill, in its report declared: "The plan does provide for an executive initiation of the budget, but the President's responsibility ends when he has prepared the budget and transmitted it to congress."

In criticism of the measure, the National Economic league says it will not give "visible government" and will not fix responsibility in a way to help the voter. The only way executive heads can be made responsible and the voter intelligent is to require the cabinet to appear personally before the appropriating, representative branch, and explain and defend their acts and proposals.