

THE FARM.

THE DAIRY COW.

We must all recognize the fact that the cow is the foundation of the dairy. She is the machine with which the dairyman does his work. The machine by which he produces milk and butter. She takes the raw materials—the hay, corn, oats, bran, etc., and converts them into the finished product. Of course she is more than a mere machine as she reproduces her kind as well as sustains her life. But aside from these functions, her value is confined to her power to manufacture milk. This being the case, the dairyman in selecting a cow is concerned in the selection of an animal which is most efficient in this productive power. The manufacturer in selecting machinery for his factory chooses that best adapted for the intended work. Economy and efficiency are the qualities desired, that machine which will produce the most and best work with the least waste of fuel and energy. The farmer or dairyman is as truly a manufacturer as the man making cloth, tools or clothing. His farm is his factory and his cow his machinery by which he works the raw material of his farm into milk, butter, or cheese. The same principles governing the selection of machinery in the factory, should govern the selection of his cows. He wants, for the economical production of milk, the cow that will produce the greater profit—the cow that will produce the most and best milk at the least cost. In other words, the cow especially adapted to the production of butter—the special purpose cow. The old fallacy of a double purpose cow is giving way before the demands of more scientific methods of farming, although she still has earnest adherents. Not that they admit that the special beef animal will produce more and cheaper beef, and the special dairy cow will produce butter at a less cost than the general purpose cow, the claim being that there is greater profit from combining the two. We suppose the adherents to this idea would advocate the use of the old-fashioned combined reaper and mower for grain and grass. The reaper with the rake or dropper would not be as efficient in the field as the improved self-binder, nor the mower as economical in time and horse power as the ball-bearing mower of present date; nevertheless one machine could be used for both purposes. Any up-to-date farmer would scoff at the idea of such a machine on his farm, yet the same man will cling to the notion that the double purpose cow is the most profitable. And why? Simply because in the one case the advantage of the special machine is easily apparent, while in the other case he has not taken the trouble to know, through investigation, the value of one cow over another. But the successful dairyman of the future is going to be driven to a more intimate knowledge of his cows. He will be compelled to exercise the most careful judgment in selecting a cow that will produce butter at the greatest net profit. Loose and indifferent methods in all departments of farming must be supplanted by the intelligent application of the most approved tools and methods. Dairying is no exception. The dairyman of the future must of necessity, we predict, manufacture his butter with a special dairy cow.

PLANTING AND CARING FOR GRAPEVINES.

Plant vines eight feet apart each way. Run rows north and south. Dig holes 18 inches square, and at least 15 inches deep. If to be had, put five to eight pounds of old bones in the bottom of each hole. Fill the holes with good top soil and pulverize it as well as possible. One-year-old vines from cuttings are best, but those two years old will do. The planting should be done as much as possible with the hands. Place the roots in their natural position, and fill around them closely with good soil which is fine and mellow. At planting, cut the vine back to two buds immediately above the top of the original cutting, so the new growth will start from very near the ground. When the buds are well started, rub off all except the strongest looking ones thus growing but one vine, which should be kept tied up, as it lengthens, to a five-foot stake set at the time of planting. It is best to trellis at once, but if work is pressing this may be deferred till summer or fall. The horizontal trellis is recommended. In making it, the posts are set 16 feet apart. Saw tops off square five or six feet from the ground. A cross piece of 2 x 4 two feet long is laid on the top of each post, and securely nailed at right angles to the direction of the row. Three No. 12 galvanized wires are straped to these cross pieces, one directly over the post, and the others one inch from the ends of the cross-pieces. When the growth of the vine has reached the center wire pinch off the top. The formation of intervals or branches now begins, and they should be so pinched back and directed as to cover all three of the wires with healthy bearing canes or vines. Very little summer pruning is done with the knife, but prune frequently with thumb and finger. The ends of the bearing shoots are pinched off two or three leaves beyond the last cluster of fruit, and most of the barren shoots are removed. The important points

to be remembered in pruning is, that all the fruit is made on wood which grew during the previous year, and enough of this should always be left to bear a full crop. Prune early in winter to avoid bleeding. Cut back the bearing shoots to from two to four joints, according to the number of them on each vine. As no very explicit directions can be given for pruning in all cases, every grower must exercise his own intelligent judgment in the matter. If bones have been used as directed, a shovelful of wood ashes to the vine every year or two will be sufficient fertilizing; otherwise fertilize as needed, making sure that enough potash and phosphoric acid are used. Cultivate sufficiently often and thoroughly to keep the soil mellow and free from weeds.

SUCCESS WITH CURRANTS.

Prolificacy, size and quality of fruit are dependent upon generous fertilization of the soil when the plants are set, and more upon frequent applications after they begin to bear. Under favorable conditions the currant is a vigorous grower, and of course needs a large supply of food. Its roots are small and fibrous, so fertilizers should be applied generously, directly and at least annually. The neglect to yearly dress the bushes after of bearing age is the reason many fail to succeed in the cultivation of this fruit. These annual dressings need not be large but should be applied about the roots of the bushes and always in the fall before the ground freezes. Any well rotted manure will be beneficial, also the addition of wood ashes, bone-meal or chemical fertilizer. An application of nitrate of soda in April when the leaves are coming out, say 150 lbs per acre, and the same amount again when the fruit is two-thirds grown, gives excellent results. This would be a small handful to each hill, sprinkled about the bushes a little distance from the stalks. An examination of the root system of this plant will convince one of the necessity of frequent applications of fertilizing elements to insure good crops of fruit. The roots grow in a limited space and largely near the surface, hence, barn manure applied in the fall affords protection against frost, while the rain and melting snow carry the soluble elements into the soil, where they are appropriated by the roots when growth commences in early spring. The prevalence of the gooseberry saw-fly larvae is looked upon by many as a serious drawback in the currant and gooseberry culture. If looked after from the time the leaves begin to develop up to the 15th of June, it can be readily controlled. Use white hellebore as an insecticide. Dust on the bushes when damp or apply a spray, mixing one ounce of the hellebore with a pail of water. Paris green is more effective, a level teaspoonful to a pail of water being sufficient. This may be used early in the season and the hellebore later, if found necessary to spray after June 10. A later brood of insects appears usually after the fruit is picked, which should be destroyed to prevent defoliation of the plants and subsequent injury of the following year's crop of fruit.

WHEN MOST BEAUTIFUL.

When 30 years of age woman is most fascinating. All the women famous for power over the hearts of men, from Cleopatra to Helen down, were nearer 40 than 20 when at the zenith of their power.

At a literary salon in Paris, Balzac was once asked by a pretty little miss of 17 why it was he liked women she would call passe. "Why, monsieur, even when they are as old as 40 you seem to enjoy their society!" Balzac looked at her earnestly for a second and then laughed heartily. He bent over to explain matters and remarked in a serious voice as though weighing every word he said: "Perhaps the secret lies in the simple fact that the woman of 20 must be pleased, and the older woman's power consists, not as has been so often said, in understanding and making the most of her own charms, but in comprehending and with happy tact calling out and making the most of the good qualities of the man whose favor she seeks."

There is no doubt that a man always admires a clever woman, yet he enjoys himself better with a woman who makes him feel that he is clever. Of course all the men like being entertained for awhile by a well-informed woman, but man is essentially vain, and he enjoys much better the happy tact which makes him believe that he is entertaining the well-informed woman. The woman a man likes best is not always the smartest or most brilliant. No, indeed. A pair of brown, sympathetic eyes, a sweet voice, will do away with all the logic and philosophy a man's brain has ever entertained. Of course the woman must have the happy knack of discovering what subject the man talks about best. Then she must listen quietly, and in an interested manner. Perhaps it would be a good suggestion for to draw him out with happy queries until he is astonished at his own brilliancy.

The Duke of Connaught and the executive officers have decided to abandon the army rifle meeting at Aldershot, owing to want of general support from the army and the lack of necessary funds to keep the institution afloat.

At the Chamber of Commerce, at Northwich, on March 21, the president made a presentation of a silver casket containing an address to Rev. Ludwig Mond, in celebration of his gift of the Davy-Faraday institution to the nation.

THE SAN JOSE SCALE.

EXTENT OF THIS INSECT'S RAVAGES IN THE STATES.

The Pest Has Infested Twenty States—Characteristics and Methods of the Bug—Methods for Its Destruction Must Be Persistently Carried Out—Enemies Which Prey Upon It.

The United States Agricultural Department has just issued a bulletin on the San Jose scale in 1896-97, prepared by Entomologist L. O. Howard. It is of much interest at this time in view of the recent edict of the German Government the legislation of the Canadian Parliament, prohibiting the importation of living plants, fruits, etc., because of the alleged discovery of scale on pears shipped from California. In the light of what we now know, the bulletin says, our agricultural knowledge of the distribution of the scale in the East in the autumn of 1895 was comparatively slight. It was then reported as occurring in twenty States, but in comparatively few localities in each, with the single exception of New Jersey. In 1896-97 actual field inspection in Virginia, Maryland, Illinois, Ohio, Georgia and several others showed that in these States the insect was nearly as widespread as in New Jersey, while twelve States and the District of Columbia have been added to the number containing infested plants. The condition in over thirty States and Territories are then given, some of the more important being as follows:

California.—In this State the insect is or has been generally distributed. The conditions of climate sometimes kill it out, and it often seems to be destroyed by a fungus disease, but neglected and improperly sprayed orchards exhibit trees in as bad condition as can be found in any of the orchards of New Jersey or Maryland.

Maryland.—More actual damage seems to have been done in this State than in almost any other. The scale has been treated in sixteen counties.

Illinois.—The scale was not known to exist in this State in November, '95, but Prof. Forbes has found twenty-two colonies in nineteen different localities situated in eleven counties.

Michigan.—This State, not known to be infested in 1895, has been found to have a number of infested localities in the southern half.

New Jersey.—In his last bulletin Prof. Smith states that all efforts to exterminate the insect scale must be abandoned. In 1895 the scale was widespread and since that time the situation has not become perceptibly better. A list of fifty-five fruit and shade trees and ornamental shrubs affected by the pest is given. Considerable space is devoted to a discussion of the remedies suggested to kill the pest.

THE BUG AND ITS RAVAGES.

The San Jose scale insect has been for some time past a very serious cause of worry to fruit growers. Almost microscopic in size, the "pernicious scale," as it is otherwise called, is attacking the fruit orchards and fruit patches in nearly a score of States, and destroying them as effectually as if the fruit-producing districts were overrun by fire. The bug in question has a very curious life history. The male, in its perfect state, is fly like, with two wings and long feelers; his eyes are purple and his wings iridescent with yellow and green. His existence in this form only lasts a few hours, at the end of which he dies. The rest of the 25 days of his lifetime is spent beneath a waxy scale, formed on the tree-bark from a secretion exuded from his body. It is the same with the female, save that she never assumes wings. When she is about 35 days old the female begins to give birth to young ones. The latter are not produced from eggs, but are born alive. The baby insect forces itself out from beneath its mother's protecting scale and runs about over the bark of the tree until it finds a suitable place to settle. When the proper spot is found, the infant bug inserts through the bark its long, bristle-like sucking beak, then it proceeds to suck. The insect all its life long, is a bloodsucker. It sucks the blood, or sap, of the plant. When millions—ye, billions—of the creatures are attacking a tree together, the latter must succumb before long, as a man would do if he were exposed, bound and helpless, to the combined assaults of myriads of mosquitoes. The new born bug is orange yellow, with an oval body and six legs. As soon as it has settled down to suck, the waxy covering begins to develop. White waxy threads spring from all parts of its body, and become rapidly more numerous and denser until within two days the insect is concealed by the characteristic pale, grayish shell.

THE SCALE.

Is formed by the slow melting together of the filaments of wax. Eventually the males issue from beneath their scales in the winged form described. It is estimated that a single female may have 3,216,000,000 descendants in a single season, and under favorable conditions a large proportion of this enormous number will actually survive. The bugs occupy all parts of the infested plant—trunk, limbs, twigs, leaves and fruit. One of the chief difficulties in connection with this insect pest has to do with the ways in which it is distributed and carried to previously uninfested localities. Young fruit trees grown in nurseries and shipped all over the country are apt to convey it. Being very small individually, the scales are not likely to be observed until the infestation has become very bad. Fruit, too, is apt to be infested, and to serve as a means of transportation. Left to themselves, the bugs cannot spread much. The female is wingless, and, after becoming fixed, cannot move. The young ones are not able to crawl far. This abominable insect is found in Australia, Chile and Hawaii. In all likelihood it was introduced into the United States from Chile. It is said to have reached California first in 1870. The name bestowed upon it comes from the fact that it first appeared conspicuously in the San Jose Valley, California. By 1873 it had become a serious pest in that region, and from that time on it spread rapidly northward and eastward. In the East it was first discovered in 1893, at Charlottesville, Va. Since then the plague has extended alarmingly, and it is now found in many localities in nearly all of the Eastern States. Fortunately, the scale-bug has insect enemies which prey upon it—notably, a kind of beetle. These are being encouraged in California, and seem to be reducing its numbers there. In Florida recently has been discovered a peculiar fungus, which attacks it as a disease. Washes of kerosene and other substances are employed as destroying agents. But no measures can be effective unless persistently carried out, and it is believed that the pest can never be exterminated wholly in badly infested places.

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FABRICS NAMES TRANSLATED.

Many of our fabrics and dress goods have French names—and we use them without much idea that they originally had any meaning.

Armure is a material woven so that the cloth has the effect of being woven with small seeds on the thread.

Barre refers to a fabric crossed by bars of a contrasting color.

Bayadere comes from the dancing girls of the East, whose garments are made of stuff crossed from selvaige to selvaige with stripes, and when worn with stripes appear to run around the body.

Beige—Composed of yarn in which two colors are mixed.

Boucle—A fabric having a marked curl or loop in the yarn, which is thrown to the surface. Boucle, is French for curl.

Bourette—This puts a lump instead of a curl on the surface. The word comes from bouree—to stuff.

Carreau—The same as checks, carreaux meaning squares.

Chene—A printed effect.

Crepion—A crepe or crinkled effect. Damasse—A figured fabric, showing a contrast in luster between the groundwork and the figure. We have the same idea carried out in damask lines.

Drap d'Ete—An all-wool fabric with a twilled face and broadcloth back, woven as a twill and finished as a broadcloth, with the gloss showing on the back of the fabric.

Drap de Paris—A twilled armure. In the weaving the seed-like effects are given a twill effect as in a serge.

Etamine—Open work effect. Etamine—A fabric in which the pile stands up from the surface in uncut loops. Frieser is to curl, or, as we say, to friz.

Gloria is a silk and wool material. Jacquard—A weave called after its inventor, in which every warp thread can be made to move independently of any other, intricate figures being this produced. All such complex figured fabrics are classed under the broad name of Jacquards.

Matelasse—A fabric whose face is broken into rectangular figures and puffed up so as to resemble quilting. Matelasse may best be translated as tufted.

Melange (literally, mixed)—A fabric produced from yarn that has been either printed in the wool or dyed of different colors and mixed together before being spun.

Satin Berber—A satin-faced wool fabric with a wool back. The effect is one of finish, rather than of weave.

Satin Soie—A satin-faced armure fabric woven with a ribbed effect.

Sicilian—A plain-weave fabric composed of a cotton warp and mohair filling, with the filling threads less twisted and broader on the surface than in regular mohair.

Twill—A raised cord running in a diagonal direction in the fabric from left to right. Any fabric with this weave may be called a twill. The number of twills to the inch in cashmere, and other standard fabrics is often used to indicate their quality.

Vigoureux—An effect produced by printing the yarn of which the fabric is composed and using it without any regard to order or design.

Zibeline—A wool material used in imitation of sable fur. It has on the face long hairs that give it a fur-like appearance, and may be produced in several ways, but all give the same distinguishing feature—a "camel's-hair" fabric.

AN ENGLISH ORDER.

England has requested a bid from a Missouri packing establishment for furnishing 750,000 pounds of canned meats for the British Army in India.

HE'S SAFE.

Why, Tommy, said the good lady of the house to the little boy of a neighbor, you're eating the last piece of a whole mince pie. I don't begrudge you that, but I'm afraid it'll make you sick.

I ain't skeert. My folks is Christian Science.

LABELLED.

He—Winkle isn't even friends with the girl who broke off her engagement with him, is he?
She—Oh, no. When she sent back the ring by registered post she labeled it Glass, with care.

NEWS OF MERRY ENGLAND

INTERESTING READING BROUGHT BY THE MAIL.

Breedy Notes from Many Points in the Tight Little Island—Matters of More Than Passing Interest.

Henry Whitmarsh, of Kidderminster, died in a cab, while driving from Cannonock to Kidderminster.

The Earl of Zetland has contributed £1,000 towards the cost of rebuilding the tower of Saltburn parish church.

Lord Roberts has consented to become a vice-president of the Cadwiler's Benevolent Association, 15 Soho square, London, W.

W. J. Barnes, chief clerk and store-keeper, Northalerton prison, has been appointed by the prison commissioners governor of H. M. prison, Carmarthen.

E. Price, Q.C., Recorder of York, who has held the office since 1866, and is in his 80th year, has announced his resignation in his charge to the grand jury.

Ald. Tucker, of Bridport, who died at the age of 95, was in his boyhood rowed out to the Bellerophon in Torbay, and saw Napoleon walking on the quarter-deck.

A find of quicksilver is reported from Swanwick near Netley. The discovery has caused much interest, Hampshire being practically free from metallic deposits.

Anonymous donations of £10,000 and £5,000 have been made for the erection and maintenance of a new physical laboratory at Owens College, Manchester.

Robt. Tweedy, one of the best known men in Cornwall, died at Truro, at the age of 91. He was a bank manager, and formerly chairman of the Cornwall railway.

Sir W. Harcourt was recently re-elected president of the Home Counties division of the National Liberal Federation at the annual meeting, held at Brighton.

Lord Wenlock, on March 1, introduced to the president of the Board of Agriculture, a deputation of farmers, who asked for a uniform weight in the sale of corn.

At Lewes, on March 1, Henry Wade, a licensed victualler of Lewes, was sentenced to a month's hard labor for ill-treating a pony by withholding proper food from it.

T. A. Wilson, goods manager for the North-eastern Railway at Newcastle-on-Tyne, has been appointed general manager of the Highland Railway, in succession to C. Steel.

Captain G. R. Tod, 1st Seaforth Highlanders, has been selected to succeed Captain T. G. Glynn, Kings' Liverpool, regiment, as adjutant of the London Rifle Brigade.

The London Hospital has received from the governor and directors of the Bank of England a donation of £500 in response to a special appeal in aid of the maintenance fund.

On March 1, Fred Cole, for twenty-five years chief inspector, under the Swansea United School Board, died suddenly while riding in a tramcar. He was sixty-five years of age.

The London & Brighton Railway Co., has been fined £10 and costs at Brighton, for crowding ninety sheep into two vans in such a way as to cause them unnecessary suffering.

H. A. Fricker, of Folkestone, has been appointed Leeds city organist, in the place of the late Dr. Spark, who had filled the post since the opening of the town hall by the Queen in 1858.

Jessie Elizabeth Evans, at the Liverpool assizes, recently recovered £250 damages for the loss of her husband, who was killed while passing a warehouse by a box falling from a sling.

The banks of the Kennet and Avon, canal at Murrill, a few miles above Bath, collapsed on Feb. 28, and vast floods of water poured over the adjacent fields, some men having narrow escapes.

Earl Cowper, the Earl of Clarendon, Baron Dimsdale, Sir George Faudel-Phillips and Mr. Walter Rothschild have been re-elected members of the Hertfordshire County Council without opposition.

Colonel G. B. Malleon died on the 1st inst., at his residence, 27 Cromwell road, London. He was born in 1825, and was the author of "The French in India," and a "History of the Indian Mutiny," in continuation of Sir John Kaye's Sepoy War.

The Board of Trade has awarded a piece of silver plate to Richard Nierlich, master of the German steamship Aller, of Bremen, in recognition of his humanity to the crew of the Dago, of Sunderland abandoned in the Atlantic on January 27.

Sylvester Samuel, who was to have contested Central Hackney in company with T. B. Westcott in the Moderate interests, died on Feb. 27. Mr. Samuel was a well-known member of the Jewish community.

The marriage took place on March 3rd, at St. George's, Hanover square, London, of Percival Miller, of Thistleton, Lancashire, and Miss Norah Quilter, younger daughter of Sir W. C. Quilter, M.P.

On March 1, at Christ's, London, a collection of engravings was sold, one of which, "Mrs. Pelham Feeding the Chickens," after Sir Joshua Reynolds by W. Dickenson, the property of a nobleman, fetched £20 guineas, a record price.