

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 dairymen 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 dairymen 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—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 but 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 profits 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 self-binding 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 dairymen 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 dairymen 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 the ground. A cross piece of 2 x 4 two and a half inches laid on the top of each post, the center wire pinched off the top. The now begins, and they should be so all three of the wires with healthy bearing canes or vines.

Very little summer pruning is done with the knife, but prune frequently the thumb and finger. The ends of three leaves beyond the last cluster are removed. The important points

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 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 effectively 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.

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

Etainine.—Open work effect.

Friesie.—A fabric in which the pile stands up from the surface in uncultivated loops. Frieser is to curl, or, as we say, to friz.

Gloria.—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 thus 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-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 hain't skeert. My folks is Christian Science.

LABLED.

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

Breezy 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 Cannock 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 Cabdriviers' Benevolent Association, 15 Soho square, London, W.

W. J. Barnes, chief clerk and store-keeper, Northallerton 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 Wadey, a licensed victualler of Lewes, was sentenced to a months' 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, King's, 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 Murhill, 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. Malleson 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 Nierich, master of the German steamship Aler, 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 W. Percival Miller, of Thistleton, Lancashire, and Miss Norah Quilter, younger daughter of Sir W. C. Quilter, M.P.

On March 1, at Christi', London, a collection of engravings was sold, one of which, "Mrs. Felham Feeding the Chickens," after Sir Joshua Reynolds by W. Dickenson, the property of a nobleman, fetched 420 guineas, a record price.