#### U. S. STATEMENT.

## ter to Turkey Says the Banas Not Instruted to Pro-Through Dardanelles.

inople, Oct. 21.-Hon. A. W. e United States minister to as given the Associated first explicit and authornent from an official source the mission of the United amer Bancroft, directly rewild and unfounded stateulted in the United States, aphed here that the Baninstructed to proceed Dardanelles and to Conin spite of whatever probe offered by the Turkish

he attention of Mr. Terrell to this story, he said with

port that the Bancrofit will tructions, force the Dardatoo ridiculous for serious e fact of the matter is e not applied for the entry atch, boat to Constantinople ruary. The statement that andoned or withdrawn an is entirely without founhave not even mentioned of a despatch boat to the February.

tions between Turkey and d States are cordial. No has been sacrificed during crees and it is improbable United States will depart traditional palicy by medhe domestic affairs of Tur-

# INGTON UNIVERSITY.

## olic Institution Receives a Thousand Dollar Gift om the Hibernians.

ton, Oct. 21.-The assembly Oatholic university was hung with the Papal col-The cardinal, archbishops sat on the platform, while of the hall was filled with idents, members of the Hirder and others." igan welcomed the Hibernand spoke of their high giving to the university a would perpetuate the Cel-

sponse by ex-representative Weedock of Bay City, Mich., was made to the absence platform of Bishop Keene. me is inseparably associated university. The mention of ene's name brought out enand long-continued apwhich Cardinal Gibbons and prelates heartily joined. Mr. spoke of the patriotism of rican citizels, and of them rough the A. O. r., of doing hout having a "Dark lantern

ident M. E. Wilher of Philaof the Hibernian order, m of the rescue of the Irish lanthe sons of Ireland in Amerthe hope: "The shackles of mination will fall from the ncient Ireland," a sentiment earnestly aplauded by prewell as those of everybody

ALBERT CO. Annual Fair of the Albert Agricultural Society.

A List of the Prize Winners-Fine Display of Vegetables and Cattle.

Hopewell Hill, Oct. 20 .- The annual fair of the Albent Agricultural society was held here today and was very largely attended, the weather, though quite cold, being beautifully fine and very favorable for the occasion. The exhibition, as a whole, was a good one, though short in some lines, the number of horses shown being noticeably small. These, however, were of superior grade. The cattle show was large and the display of vegatables, turnips, mangels, carots, potatoes, being probably superior to that of any former year in the history of the society. The grain exhibit was also a good one. The fancy work, quilts and rugs shown by W. L. Peck, J. E. Peck and Chesley Smith are worthy of special mention. During the day considerable trotting was indulged in by the owners of "flyers." Among the prominent visitors present were Senator McClelan, Hon. H. R. Emmerson, Dr. Lewis, M. P., C. J. Osman and others. Following is the prize award list, as presented by Secretary W. A. West: HORSES AND SHEEP.

(Judges-S. C. Murray, M. D., John F. Stiles, David Livingstone.) Best three year old draught colt-1st, Silas Bishop; 2nd, Job Stiles; 3rd, John A. Stiles. Best two year old draught colt-1st, Luther Archibald; 2nd, Allen Robinson; 3rd, John A. Stilles. Best yearing draught colt-1st, A. S. Mitton; 2nd, Job Stiles. Best draught toal-1st, Fred E. Rogers; 2nd, C. C. West. Best three year old roadster-1st, W. B. Keiver; 2nr, W. L. Peck; 3rd, S. S. Calhoun. Best two year old roadster-1st. W. L. Peck; 2nd, R. C. Bacon; 3rd, John A. Stiles. Best yearling roadster-1st, Joseph Keiver; 2nd, C. C. West. Best roadster toal-1st, Luther Archibald. Best ram, any age-1st, W. L. Peck; 2nd, Chesley Smith; 3rd, Fred E. Rogers; 4th, John A. Stiles. Best ram lamb-1st, Luther Archibald; 2nd, C. A. Moore; 3rd, Joseph Keiver: 4th. A. W. Peck. Best ewe, any age-1st, Luither Archibald; 2nd, Jos. Keiver; 3rd, W. B. Keiver; 4th, C. C. West. Best ewe lamb-1st, W. B. Keiver; 2nd, Jos. Keiver; 3hr, Lucher Archibald: 4th. C. C. West. CATTLE. (Judges-Stilman Downey, Robert Rennison, Isaac T. Pearson.) Best pair three year old steers-1st, W. T. Wright; 2nd, Fred E. Rogers. Best pair two year old steers-Ist.

Job Stiles; 2nd, A. W. Peck; 3rd, Chesley Smith. Best pair yearling steers-1st, A. W. Peck; 2nd, Job Stiles; 3rd, W. B. Keiver; 4th, Fred E. Rogers.

2nd, C. A. Moore. Best mammoth squash-1st. Job Stiles; 2nd, C. C. West; 3rd, W. A. West; 4th, W. T. Wright. Best Hubbard squash-1st, Chesley Smith; 2nd, Henry A. Peck; 3rd, Silas Bishop; 4th, Job Stiles. Best pumpkins-1st, W. A. West; 2nd, Jos. Keiver; 3rd, W. L. Peck; 4th, C. C. West.

DOMESTIC MANUFACTURE. Butter, Cheese, Apples, Etc. (Judges-C. J. Osman, J. G. Wilbur, A. D. Smith.)

Best crab apples-1st, W. L. Peck; 2nd, R. C. Bacon; 3rd, Henry A. Peck; 4th, C. C. West.

A. W. Peck; 3rd, W. L. Peck; 4th,

Luther Archibald; 5th, Henry A.

Best celery-1st, Luther Archibald;

Peck.

Best eating apples-1st, W. T. Wright; 2nd, Luther Archibald; 3rd, A. S. Mitton; 4th, J. E. Peck. Best cooking apples-1st, W. T. Wright; 2nd, J. E. Peck; 3rd, Luther Archibald; 4th, Fred E. Rogers. Best tomatoes-1st, Chesley Smith; 2nd, J. E. Peck; 3rd, W. L. Peck; 4th, W. A. West.

Best onions-1st, Chesley Smith; 2nd, Silas Bishop; 3rd, Luther Archibald; 4th, W. A. West. Best table corn-1st, W. T. Wright; 2nd, W. A. West; 3rd, Henry A. Peck; 4th. C. C. West.

Best ensilage corn-1st, Allen Robinson; 2nd, W. A. West; 3rd, C. C. West; 4th, Job Stiles. Best butter, packed-1st, C. C.

West; 2nd, A. W. Peck; 3rd, W. T. Wright; 4th, Henry A. Peck; 5th, W. A. West. Best butter, loose-1st. W. A. West: 2nd, C. C. West; 3rd, A. W. Peck; 4th, Henry A. Peck. Best cotton and wool cloth-1st. A.

West. Best pair mittens-1st, A. W. Peck; 2nd, Henry A. Peck.

Best pair socks-1st, A. W. Peck: 2nd, Job Stiles. Best fancy work, Berlin-1st, Ches-

ley Smith. Best fancy work, other than Berlin

-1st, Job Stiles; 2nd, W. A. West; 3rd, Chesley Smith. Best quilt-1st, J. E. Peck; 2nd, A

W. Peck. Best counterpane-1st, Job Stiles;

2nd, Chesley Smith. Best hearth rug-1st. W. L. Peck; 2nd, J. E. Peck; 3rd, Chesley Smith. Best private dairy cheese-1st, Henry A. Peck.

APPLE PACKERS TAKE CARE.

A few badly packed barrels of apples will seriously affect the price of a large consignment sent to the British market.' A gentleman who was present when a large lot of Nova Scotia apples were landed in an English dock, told a Sun reporter, the other

day, that the manner in which the barrels were sized up by an expert : opened his eyes to the necessity of exercising the utmost care in packing. He noticed that the expert could tell by the sound made by the rolling of a barrel past him whether it had been properly packed or not, and that when a poorly-filled barrel came up he put a mark on it. The barrels were put Best pair steer calves, more than six months old-ist, Job Stiles: 2nd, A. S. of those bearing the expert's mark

Mitton. were placed in each lot. When the Best pair steer calves, less than six months old—1st, C. C. West; 2nd, W. were opened by the auctioneer, and B. Keiver: 3rd. W. L. Peck. he bidding was based on the inferior quality thus shown, with the result Best two year old heifer-1st, W. B. that not one lot brought the price that Kelver; 2nd, W. L. Peck; 3rd, A. W. Peck; 4th, C. A. Moore; 5th, Job its general quality warranted. The Sun's informant further said that he Stiles. was forced to the conclusion that the Best yearling heifer-1st, Henry A. expert acted solely in the interest of Peck; 2nd, A. S. Mitton; 3rd, Job Stiles; 4th, A. W. Peck; 5th, Allen the English buyers and against the Robinson. would be wise and pay shippers to Best heifer calf, more than six have a live agent (one of their own months old-1st, A. S. Mitton; 2nd, people) on the spot, and not to depend Job Stiles. Best heifer calf, less than six on the none too tender mercy of the months old-1st, A. S. Mitton; 2nd, C. consignee. C. West; 3rd, Henry A. Peck. THE CHEESE PRODUCT. Best dairy cow-1st, W. L. Peck; 2nd, W. A. West; 3rd, Henry A. Peck. (Woodstock Press.) Best stock cow-1st, A. W. Peck; The quantity of cheese made this 2nd, W. A. West; 3rd, A. S. Mitton. year in the province is likely to fall GRAIN, ROOTS AND POTATOES. considerably below what was made (Judges-Hial Bennett, Levi Dowlast year. This is owing to the dryney, W. H. Newcomb.) ness of the season and short pastur-Best half bushel black oats-1st. A age. Below is given the output, in S. Mitton; 2nd, W. L. Peck; 3rd, W. pounds, of the several factories so B. Keiver. far as we could gather at this date: Best half bushel white oats-ist, T Kings county-Havelock 40.000; Sus-A. West; 2nd, C. C. West; 3rd, W. B. sex Dairy Co., 100,000; Oak Bay, 10,-Keiver. 000; Corn Hill, 45,000; Berwick, 30,000; Best half bushel rough buckwheat-Petitcodiac, 35,000; Newtown, 20,00; 1st, Job Stiles; 2nd, A. W. Peck; 3rd, Jeffries Corner, 40,000; Upham, 8,000; Jos. Keiver; 4th, W. L. Peck. Waterford, 35,000; Springfield, 20,000; Best half bushel smooth buckwheat Bellisle, 20,000; Lower Ridge, 20,000; -1st, W. L. Peck. Norton, 10,000. Best half bushel barley-1st, A. W. Queens-Sheffield, 10.000; Hame Peck; 2nd, W. B. Keiver; 3rd, W. L. stead, 20.000. Peck. York - Southampton, 17,000; Prince Best half bushel timothy seed-1st, William, 20,000; Douglas and Bright, Job Stilles; 2nd, A. S. Mitton; 3rd, W. 12.000. B. Keiver. Carleton - Avondale, 12.000; Water-Best half bushel beans-1st, Henry ville, 12,500; Jacksonville, 16,000; Rich-A. Peck; 2nd, Job Stiles; 3rd, A. W. mond, 15,000; McKenzie Corner, 16,-Peck; 4th, C. A. Moore; 5th. W. A. 000; Bloomfield, 7.000; Glassville, 25,-West 000; Wakefield Centre, 8,000. Best half bushel peas-1st, Chesley Victoria-Salmon/hurst, 13,000. Smith; 2nd, W. A. West; 3rd. Job Madawaska-St. Helaire, 8,000. Stiles. Best half bushel Early Blue pota toes-1st, J. E. Peck; 2nd, A. W. Peck; 3rd, Chesley Smith. CASTORIA Best half bushel Beauties of Hebron-1st, W. L. Peck; 2nd, W. T. Wright; 3rd, Job Stiles. For Infants and Children. Best half bushel Copper potatoes-1st, Chesley Smith; 2nd, Luther Ar-

The fa

Chart Alletchers

NEW DIVISION ORGANIZED.

G. W. P. Maxwell and Grand Scribe

Armstrong addressed a public tem-

perance meeting in the school house

day evening last, and afterwards or-

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WEEKLY SUN, ST. JOHN N. B. OCTOBER 28, 1896.

# FACTS ABOUT MILK. The U.S. Department of Agriculture an-

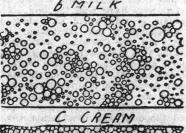
Its Most Recent Bulletin. "Facts about Milk," is the title of a

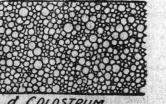
very interesting bulletin just issued by the dairy division of the United States Department of Agriculture, and pre-pared by R. A. Pearson, the assistant chief of the division. Most of the matter in this bulletin is not new, but it it is put in good shape for popular use. We select the following from it, on the characteristics of milk, and have had the illustrations reproduced, showing the appearance of different grades of milk, magnified 300 times:

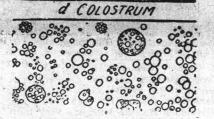
Milk is a whitish, opaque liquid. To the ordinary observer it appears to be a perfect solution, and is common-ly regarded as such, being bought and sold by liquid measure, but when plac-I have heard complaints from some ed under the microscope it is seen to who have tried furnishing butter to consist of a clear, transparent fluid containing many minute globules of various sizes. (See cut, b.) The fluid part, called the milk serum, consists of water and all the other constituents of milk except the fat, and these other constituents, although solids when separated and dry, are practically all dissolved in the water, or, as is said, in solution. The globules are little bodies of pure fat scattered through the serum and not dissolved; they are semi-solid and form with the serum a mixture called an emulsion. The solid constituents present in the serum in largest quantity are sugar and casein; albumen and mineral matter are present in small quantity, and there is also a little fibrin resembling the fibrin of blood. There is more sugar in milk than any other solid component, but it is in solution. This

SKIM MILK

••••••••• °° · · · · • • • • • 。 84 0.00 BMILK







varies in quantity more than any other part of the milk, running as low pendicular wall and gnaw throu Good ventilation should be provided as two parts in one hundred and as high as seven; the larger the pro-portion of fat the richer is the milk. a door at one end and a window the other, and for protection from c: in zero weather the window should Most of the states and many cities have a legal standard for the comarranged for double sash, and a sto door be built outside of the door 't' position of milk, any falling below this building should be located near standard is legally regarded as adul-terated, although it may be, in fact, barn, or if there is room. it may partitioned off in a basement or un. the pure and natural product. The a hay bay, but in cold regions when laws usually require 3 or 3 1-2 per cent. mercury remains for weeks below ze of fat, and 9 or 9 1-2 per cent. of "solids not fat." (This term is com-monly used to designate all the solid I would prefer the separate 'buildioutside, and would build a flue a: set up a stove so that a fire could b substances of milk other than fat.) The "total solids" thus required vary built once a day in severe weather In feeding beets to cattle or hogs W from 12 to 13 per cent. according to do not cut them at all as long experdifferent laws, which means, of course, ience has shown that it is useless. that in every 100 pounds of milk there cow sometimes get choked on a trian shall be 12 or 13 pounds of solid matgular piece of beet that has been cutter. These legal requirements are but no cow ever choked on a piece that justified by the fact that it is the solid she bit out of a beet herself, and they matter and not the water which gives will eat them without danger or wast value to milk. if fed whole. I value beets for feeding

# PRIVATE CUSTOMERS

Why Mrs. Reckwood Prefers Their Trade to Story Business, out, putting them there ten days be-

private customers. They say their customers are over particular and given to fault finding. In short, that can be moved to the hog house -- Waldo F. Brown in Chio Farmer. it is more trouble to cater to their tastes than the butter is worth. In all my experience I have not had the least trouble in this respect. Our cus-tomers all understand that if at any time a crock of butter does not suit they are expected to return it at our expense and it will be replaced by another. I think it is no more than right that a person paying such a price for butter should get what they want, and I have found none who are any more exacting than I should be under the circumstances. I may have been particularly fortunate in obtaining unusually desirable customers, but certainly there is no fault or complant. In our correspondence, year after year, I have ever received most courteous treatment from both men and women. There has been nothing which would indicate the difference, socially speaking, between the wealthy patron and the poor farmer's wife, who supplies them with their dairy butter. We take great pains to make the butter look neat, and, although butter in a crock does not appear to habitants are engaged in agriculture, growing especially wheat and corn. the eye in the way that printed butter does, some difference is discernible even there. It is the practice of some butter-makers to tie bits of ! old muslin over the butter. This is altogether too suggestive of its former period of usefulness to please the fastidious person. It is better to buy parchment paper, which comes cut in circles to fit the different sizes of crocks for this purpose. Pack the crock full to overflowing, then with a piece of wire cut off the butter directly at the top edge of the crock. Remove the surplus, place a circle of the parchment over it and smooth down and see how neat it looks. In summer sprinkle a layer of fine salt over the top to prevent the heat from melting the butter and soiling the paper. We buy new light yellow paper to tie over the outside and think it looks much better than old newspapers. The name and address was formerly written on an express tag and tied to the crock, but our express agent favors writing it upon the top with pen and ink, as the tags are liablie to get torn off in transit. Always give full weight, and a little more if any-



7

## A DREADED PEST.

The Apple Maggot, or Railroad Worm, and How to Deal With It.

The apple maggot or railroad worm is a serious pest that is rapidly spreading from the east to the west, says the American Agriculturist. The mature insect is a fly, which cannot readily be poisoned, and it is supposed that the eggs which produce the maggots are deposited by the flies in the pulp cf the apple beneath the skin so that the young maggots are secure within the fruit from the time the eggs are laid until they are mature and emerge from the apple to go into the ground. The maggot is very small and honey-combs the fruit without material injury to the skin or exterior appearance, but causes streaks of rot in the flesh of the fruit that are very repugnant to the consumer. The soil beneath infected trees was examined at the Rhode Island Experiment Station last fall (bulletin 37, L. F. Kinney), and the number of maggots that were secreted under different trees was estimated to be from 1600 to over 12,000. When hens were penned under the trees they worked faithfully and seemed to get enough food from the ground to sustain them during three or four days. It appeared as if few of the maggots were likely to be overlooked by the hens. It is probable that the apple maggots remain in the pupa state in the soil beneath the trees, in that latitude, from the time they leave the apple in the fall until the following spring, so that confining poultry in the orchard is the most

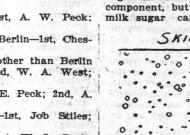


THE DREADED PEST OF THE APPLE. Fig. 1. The apple maggot, when full grown, being one-fifth to one-fourth inch in length. Fig. 2. Pupa, or chrysalis. Fig. 3. The mature apple maggot fiy.

practical treatment for this pest that can now be suggested. It is important to ascertain the distribution of the pest, and all who observe it will please report to us. Carefully feeding all windfalls or refuse apple to hogs or the stock is advised. Sheep, hogs and poultry should be kept in the orchard after haying, if not before. Clean culture is also advised. Spraying is no protection' against this pest, because it does not affect the fly that lays the egg.

## Roses From Cuttings.

The best time to start roses from cuttings is during the months of August and September, says a writer in Park's Floral Magazine. Make the cuttings with a sharp knife, allowing three eyes to each. Strip off the two lower leaves and insert the cutting in moist sand, leaving only the upper eye out, and cutting off the tip of the leaf remaining. Keep the air and bright sun from the cuttings till roots form, then pot the plants and encourgoes in the sausage tub." The head age growth. When the small pots are of the Man galicza is short and broad. full of roots, bed the plants out and nose cylindrical, depressed at the back; place a board frame around them, come established. On the approach of winter, fill in the frame with evergreen trughs and cover with boards slanting and full arched: the withers are wide | north in such a manner as to turn off all rain and snow water, and see that the water drains off the bed. In late setting it is very important to have the soil well firmed to keep the frost from acting too severely upon the roots. Do not uncover till the Easter flowers are in bloom in the spring, as the alternate freezing and thawing of early spring often destroys the plants



W. Peck; 2nd, W. A. West; 3rd, C. C. milk sugar can be separated and

sident of the order, Mr. Convannah, Ga., also eulogized le concluded by handing Caroons a check for \$50,000 for ment of the Irish chair. lock the ceremony occurred ng the gift of \$50,000 from the order of Hibernians for a Celtic language.

## LED FROM LONDON.

the Big Advance in Wheate Nelson Celebration.

Oct. 21.-The fact that been sold in Manitoba for a bushel has excited much here. Few, however, suppose main so high, but the experts the low stocks and the Inands warrant the belief that eep about 70, and that that rapid filling up of the The emigration authorihat with wheat selling at 70 bushel half their troubles in the settlement of the ended, and declare that if dian government means, as Laurier's speeches suggest, a vigorous propaganda to the inducements which other countries are now ofthe British farmers, he canhis scheme or begin work

shares in the Nelson celenich is producing a wave of feeling in England today. conto branch of the navy ent a wreath which adorns column in Trafalgar square. Ontario Sons of England also eath with this message: "We p loving interest in the past and the present doings of old The Royal Colonial instieath bears the motto "Ships. and Commerce."

## HE MAINE CENTRAL

nd, Me., Oct. 21.-A: the aneting of the Maine Central here today the following dirwere elected: F. A. Wilson, Tucker, Lewis Cass Ledyard, Futtle, S. C. Lawrence, G. M. W. G. Davis, J. S. Ricker, H. ney, T. W. Hyde, H. R. Reed, re, J. H. Manley. Organization ent, F. A. Wilson; vice-presiayson Tucker; clerk, J. H. ares out of a total of 49,754.

## DILLON'S APPEAL

Oct. 22.-It is announced e Dublin Freeman of today ay) will contain John Dil-peal to Irismen chroughout id for funds to carry out the as of the recent Dublin con-

Ion. Basil Fielding, brother of of Denbigh, has entered the Catholic priesthood

chibald: 3rd. W. B. Keiver. Best half bushel potatoes of any other kind-1st, W. L. Peck; 2nd, J. E. Peck; 3rd, A. S. Mitton. Best turnip beets-1st, Luther Ar-

chibald; 2nd, S. S. Calhoun; 3rd, W. T. Wright; 4th, Job Stilles; 5th, W. L. Peck Best long blood beets-1st, Chesley

Smith; 2nd, A. W. Peck; 3rd, Job Stiles; 4th, Silas Bishop; 5th, Henry at Lakeside, Kings county, on Fri-A. Peck. Best mangel wurtzels-1st, Chesley ganized Lakeside division, No. Smith: 2nd. A. W. Peck: 3rd. Silas Sons of Temperance, with the follow-Bishop; 4th, Job Stiles; 5th, W. T.

ing officers, for the ensuing term : H. J. Evans, W. P.; J. W. Fowler Wright. Best table carrots-1st, Job Stiles; W. A.; Webster Stewark. Rec. S. 2nd, Chesley Smith; 3rd, W. L. Peck; 4ch, W. B. Keiver; 5th, J. E. Peck. Margaret Evans, A. Rec. S.; W. D. Fowler, Fin. S.; H. F. Smith, treas. Best feeding carrots-1st, John Stiles; 2nd, Chesley Smith; 3rd, A. S. J. R. Crawford, chap.; Percy Stew-art, Con.; Lena Crawford, A. Con. Mitton. John Purdy, I. Sent.; John Hill, O Best parsnips-1st, W. T. Wright;

Sent.; Mary Fowler, Supt. of Y. F 2nd, Job Stilles; 3rd, A. W. Peck; 4th, work; Mrs. John Crawford, P. W. P. Chesley Smith; 5th, Henry A. Peck. J. W. Fowler, D. G. W. P. Best turnips-1st, Jos. Keiver; 2nd, Chesley Smith; 3rd, J. E. Peck; 4th,

A molice in the Bank of Montreal states that for the present American currency will not be accepted either on deposit or in pay-ment of notes. W. B. Keiver; 5th, W. L. Peck. Best cabbage-1st, J. E. Peck; Ind,

COMPOSITION OF MILK.

brought into solid form; as sold, it resembles powdered white sugar. It is used to a considerable extent by drug Canadian shipper. He believed that it gists and in some food preparations. but is not as sweet as cane sugar and its commercial value is not sufficient to induce its manufacture in large quantities. It is the sugar which undergoes the greatest change when milk becomes sugar. The casein and albumen of milk are its nitrogenous constituents and are comparable to the white of an egg. Acid or rennet causes casein to coagulate, forming curd and, as such, it is one of the chief ingredients of cheese, constituting about one-fourth of that important food. The mineral matter in milk called ash or salts is the indestructible part that remains when milk is evaporated to dryness and burned; this consists chiefly of phosphates and chlorides of sodas, potash and lime. It is well known that when sugar is dissolved in water the solution is less limpid than pure water, and if many small bodies a little lighter than water were thoroughly mixed into the solution their rise would be more or less retarded by the stickiness of the sur-rounding fluid. Milk might be compared to a thin syrup with many fatty and light particles floating in it. as just described. It is viscous or sticky, because of the solids held in solution, and this viscosity, together with fibrin, has a considerable effect in retarding the rise of the fat globules and the formation of the cream layer. The older milk is, the more effective are these forces. The fat globules are so small that a single drop contains many millions of them. It is said that if a person should attempt to count the globules in a drop of milk it would take ten years of his time, provided he counted at the rate of 100 per minute and worked ten hours per day six days every week. Such a number is too large to be appreciated. The globules average about one ten-thousandth of an inch in diameter, and twenty-five of average size placed side by side would about represent the thickness of ordinary writing paper. Globules of different sizes are found in the milk of any cow, but with certain breeds the size is uniformly larger than with other breeds. The milk of Jersey and Guernsey cows has this peculiarity, which explains why the cream rises so readily on it and why the skim-

milk is so thin and poor, large globules naturally being able to get to the top more quickly than small ones, many of which cannot rise at all. One hundred pounds of milk contain about the following amounts of the different constituents: 87 pounds of water, 4 pounds of fat, 5 pounds of milk sugar, 3.3 pounds of casein and albumen, and 0.7 pound of mineral matter or salts. These proportions are graphically shown by Fig 2.

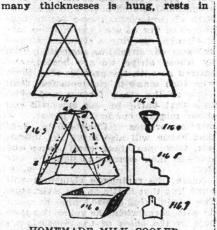
These constituents vary between wide limits; the total solids of milk may be as low as ten and as high as eighteen parts in one hundred. This

Latest news in THE WEEKLY SUN. Advertise in THE WEEKLY SUN.

thing. When you are getting a big price for butter you can afford to be generous.-Mrs. E. E. Rockwood, in Farmers' Review.

HAND / M LK COOLER Every Ingenious Dairyman Can Easily Make One at Home.

It is essential that milkmen cool their milk before it leaves the farm, and if it be air-cooled it will keep longer and win a better name. A cooler of home manufacture (Fig. 3) is a wooden frame, six or seven feet in height. The separate sides (Fig. 2) may be made of four strips, with as many crosspieces as necessary for stability (Fig. 1). A slight unevenness of structure will not affect its usefulness if it but stand firm. The funnel (Fig. 4), over which a cheesecloth strainer



HOMEMADE MILK COOLER.

the aperture at the top (a b c d). Cleats of wood are nailed on three inner sides (g h i and j in Fig. 2) of the frame to hold the tank, which clears the floor several inches or even a foot, according to the height of the frame. Thus the milk is given a fall

of two or three feet. The fourth side (f) is left open to admit the tank, which has a flaring rim, or a double strip of tin riveted around its upper edge, to catch on the cleats. The milk may be drawn off by means of a faucet, or it may be dipped from the tank (Fig. 6) into the cans. Movable steps (Fig. 5) are needed for an extra high frame, and any small boy can pour milk into the strainer-covered funnel and dip it into cans when milking is over. Stand it out of reach of flying chaff and odors. Set the milk in a spring rather than on ice-the night's milk all night, the morning's an hour or more, as convenient. A

spring, sheltered from the sun by a rude board house, or only shaded by trees, is better than any ice house. Sink a tub or box into the spring or running stream; or scoop it wider and wall it around with stone, not too deep from the cans to rest firmly on the foundation of stone. Where a spring is not available ice water is a substitute. Ice carried in the milk cart, wedged between cans, helps ward off complaints of sour milk. Tin covers or stoppers (Fig. 7), with chimneys having perforated sides, are indispen-sable. Rinse both can and cover with variation is due to several causes. lime water, strained, after washing.-some of which are given later. The fat L. L. Trott, in Orange Judd Farmer.

face ard ered with hair; jowls broad and fleshy: ears large, somewhat rounded and drooping; neck mostly short, fleshy and do not rise above the back; back straight, long and broad; loins full and deep; brisket deep and wide; ribs well sprung; belly wide and straight, nearly touching the ground in well fattened animals; hams large and full; lower part of legs fine-boned but strong: skin soft, thin and pliable, of

to the brood sows, and think they are

worth more for this purpose than for

any other. If you want early pigs.

from which the beets have been fed

fore farrowing, and you can save all

the pigs in the worst weather, and by

the time the pigs are ten days old they

HUNGARIAN SWINE.

Into the Sausage Tub.",

TYPICAL MAN GALICZA HOG.

The greater part of its 14,000,000 of in-

and raising all kinds of farm animals,

among which the horse and the hog

occupy first place. The stock of the

present Hungarian swine was origin-

ally brought from the Mongolian des-

ert, when Attila with his hordes left

that overpopulated land. Undountedly

this stock origizated from the wild

hog, which, during the long warring

peregrinations of its owners, was sub-

jected to the most remarkable changes

of form, without losing its principal

and fine fattening properties, Among

good qualities, hardiness in keeping

the four principal breeds raised in

Hungary none excel the Man galicza.

The extensive oak and beech forests

on the mountain slopes of Hungary

furnish unequaled swine pasture, and

have largely aided in giving the Man

galicza swine a leading position in the live stock markets of north and middle

Europe. Many thousands of their hogs

are each week disposed of in Berlin

and Hamburg, because, as a Berlin butcher told the writer, "the whole hos

A Breed in Which "the Whole Hog Goe

Hungary in its climate and so

greatly resembles our Middle State

bins

move your sows into the empty

a yellowish or black color. During win-ter the skin is thickly covered with curled hair: at the neck, withers and along the back the hair is somewhat coarse, but not long. During the summer the hair growth is thin, some animals being nearly bald. A full-grown Man galicza hog stands at least three feet high and measures from tip ot the snout to the root of the tall about four feet. Ordinarily fed animais at the age of one year weigh from 150 to 160 pounds; but when well fattened the weight of a full-grown hog increases to from 500 to 600 pounds. They are not very prolific breeders, producing seldom more than from seven to eight pigs in a litter, but they are very careful in treating their young, and therefore the loss of pigs is but inconsiderable. The hardiness of this breed enables it to thrive even under unfavorable conditions, and to winter in the open air without suffering. If taken to the pen, after pasturing in fields and forests is over, and fed with corn and other grain, it produces a firstrate lard, which is not surpassed in flavor and keeping quality by that made from any other breed.-American Agriculturist.

**A** Sweepstakes Stallion We re-engrave from the London Agricultural Gazette the accompanying portrait of Hedon Squire 4306, winner of the sweepstakes cup as best stallion at the London Hackney Show of the



present year. He is a son of Rufus 1343. dam 494 Pollie by Triffit's Fireaway 249; and was shown by Sir Walter Gilbey. Commenting on the award

the Live Stock Journal said: Sir Walter Gilbey's horse has improved of late almost out of recognition, his head having fined down to the beau ideal of what a Hackney's napper should be like. His back and quarters are simply perfect, and his legs. supported on the best of feet, are like bars of steel. This stallion is also a superb mover, and at the walk there was probably no horse in the show that could surpass him. His victory, therefore, was particularly well received.

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ROSES FROM CUTTINGS.

After the first winter they will be entirely hardy without protection. Hardy roses are often propagated by taking cuttings in October, making them six inches long and inserting in soil in a protected frame. In the spring they will be calloused, will soon form roots and begin to grow. They should be left where they are till the following spring, then set where they are to bloom.

A Bark Scraper.

Hundreds of old orchards have the tree trunks covered with loose, hanging bark, that serves as breeding places for borers and other injurious insects. Such old loose bark should be carefully scraped off. A most convenient implement for this purpose is the shank of an old, worn-out hoe. Cut off as shown in the cut, and sharpen to an edge. With this an entire tree. even to the smaller limbs, can be scruped in a few minutes. One sees hundreds of old neglected orchards about the country that ought to have the trunks of the trees thoroughly scraped, the "suckers" and superfluous limbs removed, the remainder grafted to good fruit, and the sod broken about the roots and fertilized. With such treatment these old orchards would soon be



A BARK SCRAPER

paying a profit instead of producing, as now, barely enough fruit to pay for gathering.-Country Gentleman.

Varieties in American Apples. It is stated that Benjamin Buckman, of Farmingdale, Ill., has an experi-mental orchard of apples in which there are over 550 named varieties. The dif rences are in many cases so slight as to be unappreciable to any but an ex-pert, but the 550 different varieties are vcuched for.

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