# GUERNSEY CATTLE.

EX-VICE-PRESIDENT MORTON'S MAGNIFICENT HERD.

Most Costly Barn Ever Built in the United States -Butter-Making on Scientific Principles -A New Process.

R. LEVI P. MOR-TON, late Vice-President of the United States, is the owner of the largest Guernmey herd of cattle in the world. The New York Tribune, in an account Mr. Morton's of country place of 1000 neres on the Hudson, says

An interesting fact regarding the management of the farm is that it is vested in a college man, H. M. Cottrell, a graduate of the Kansal Agricultural College. He is the superintend-ent, and Mr. Morton holds him responsible for excrything done about the place. He is a young man of unusual ability, and thoroughly profi-cient in the science of the soil.

One of the most important changes Mr. Cottrell recommended was the concentration of energy upon the cattle and poultry and the abandonment of all other stock. This was done. Another improvement was the erection of a mammath barn in place of the one that was destroyed by lightning last July. This barn is believed to be the most costly and complete ever built in the United States. The main building is about 300 feet long, or, to speak more precisely, 297 feet by 65 feet in width and 50 feet in height, with an L 89 by 52 feet. The structure includes besides three 500-ton silos, each 47 feet York and Bay State Fairs in 1889, and in depth, tool and engine rooms, grain bins, laboratory, bathing room and ample hallways, no less than 120 ordihas thirty-six prize winners among his nary stalls and forty-six box-stalls on ancestors. the main floor. An equal number are placed in the basement, which is light. 4th, 3657, declared in the Bay State Fair Report to be "one of the best and dry and airy, its bottom being level on one side with the ground, while on the most typical Guernsey cows that ever other side its windows open into a delived." pressed area that can be protected by a series of trapdoors from the incoming of snow and rain. The bays above the stalls can accommodate 400 tons of hay, without coming over the middle hallway; and the grain-rooms will hold twenty earloads. The south door, looking up through the centre of the building, is much larger than would be necessary to admit a freight train and the cars and engine would have more than ample room inside, the passage being nearly sixteen feet wide and thirty-nine feet high in the clear. The barn, which is so arranged that it can be doubled in length, will accommodate 360 head of stock, or 400 with crowding, and also house all the hay, grain and ensilage needed for this regi-ment of cows. The grain bin alone will hold twenty carloads, while three silos hold 500 tons each. The cows stand in two long rows in the basement and on the first floor. They are placed head to head with a wide feeding alley between. Back of them are the rows of large, roomy box stalls for caives, bulls and lying-in cows.

In laying out the plans, Mr. Cottrell's work, no point of hygiene, comfort or convenience seems to have been overlooked. The basement, which is made light and airy by a system of double walls, is really a cellar, but along the sides is a trench reaching to the bottom and securely walled on the other side. Windows run to the bottom of this trench, and thus let in light in abundance. The air is kept pure by means



says. Guernseys are the best barn dairy cattle in the world. They are sold from time to time, the sole perfectly at home at public shows or market product of the herd is butter, Aside from the few bull calves that by the old method. Samples were contests, while Jerseys are usually too excited and frightened to do their best. The Guernseys can be shipped and handled easier and have a greater ce-pound from a little less than seventeen pacity for turning food into milk when fed in a barn.

Of the stock in the barn Midas.

2003, the king of the herd, attracts most attention. He is a five-year-old, and is pronounced by many experts to

York State Fair that year.

MIDAS, HEAD OF THE HERD,

The belle of the stable is Beinfaitrice



and is pronounced by many experts to be the finest Guernsey bull in the world. His large, well rounded body, straight back, broad loins, fine head, well set eyes, deep, rich yellow horns and skin combine to give him a perfect form. His disposition is so mild that a child can lead him. Besides being a grand individual he traces back on both size and dam's sides to noted but-ter Guernseys. His dam, imported Bella Luce 2d, 3655, is an attractive Bella Luce 2d, 3655, is an attractive cow with well shaped body and good udder, and has given, under light feed-A composite sample of the mixed milk of the whole herd for eight milkings, just analyzed by Professor Cooke, of was reached, when the buttermilk ing, 6434 pounds milk in eleven and a half months. As a yearling Midas won first prize at the Buffalo International, half months. As a yearling Midas won first prize at the Buffalo International, Dutchess County and Bay State Fairs the Vermont Experiment Station, the New shows 5.37 per cent. fat, 3.00 per cent. He also casein and 15.18 per cent. total solids. Forty-two per cent, of the milk is from cows that have calved within the in 1889, and second prize in the New headed the first prize herd at the New

> sent to this city daily. Most of it is taken by the Windsor Hotel, the Union Lengue and some other large clubs. To witness its manufacture under the experienced eye and scientific direction [ter in the milk that comes from the of Mr. Robson is to have one's ideas cows in the moraing is ready for the on the subject completely revolution. table at noon, and we have had butter ized.

perfectly pure, is forced into the bot- butter made by the old process we take tom of the cans holding the milk by a the cream from the cooler and handle Hill's acrator. This air rises through it in the usual way. Some of our but-the milk and carries out every particle ter is sold unsalted, some has half an of animal odor in it. The pumping is onnee of sail to one pound of butter, continued from one to three minutes or in addition, won the sweepstakes at continued from one to three minutes or Baffalo as best bull of any age. Midas until the air that comes from the milk is absolutely odorless. The milk as it comes from the cow has a temperature of about ninety-eight degrees. The sweet ercam has caused a good de aerating reduces it about ten degrees. It is then run through a De Laval separator and the cream taken off. The A model of her kind, and with separator is simply a large steel bowl her huge udder, large tortuous milk set in a suitable frame. This bowl reveine, and well-sprung ribs, appears to volves 8500 times in a minute, the out-

request that they try it side by side with that made by the old process and report. With a single exception every customer wanted butter by the new method. We went to work making method. We went to work making butter with the machine, but it did not take all the butter out of the milk. The loss was about 7 per cent., and we had to devise some way to make the quality of butter demanded by our customers and at the same time save all the butter. We ran the milk through the separator, cooled the cream immediately to 60 degrees and churned it. The buttermilk from this churning was analyzed and showed about 3 per cent. butter---as much as is found in ordinery city milk. We tried again, cooling the cream to 50 degrees, and the buttermilk showed considerpounds of the mixed milk of the whole herd. The cows have never been forced, but are given what grain they are able profitably to turn into butter. showed only a faint trace of butter, usually less than 1-20 of 1 per cent. Throughout the summer we churned at 36 to 39 degrees. After the cattle were put in the stable and given dry

sent to each of our customers with the

last three months. enty-five and one hundred pounds are churning temperature 2 to 4 degrees. on table in the evening in New York The milk, as soon as it is taken from ninety miles away—made from milk the cows, is carried to the dairy. Cold air, taken from outdoors so as to be and some one and a quarter ounces of salt to one pound of butter. We make

This manufacture of butter from sweet ercam has caused a good deal of controversial writing in the dairy papers, as might be expected, and the Ellerstic people have been called upon to defend and explain their methods. They are ready to do so at all times. The main trouble, Mr. Robison says, what she is, an enormous milker, side traveling about two and a half that people have in churning cream sweet is that they put the cream into the churn, like they would do with ripe cream, and do not pay any more attention to it; second, one needs to have a thermometer for a guide.

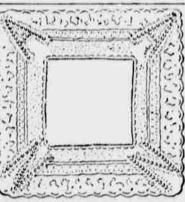
## A 87500 Handkerchief.

"Dismonds on pocket handerchiefs!" "Yes, diamonds on pocket handker-chiefs," repeated the jeweler. "The very latest fad is the jeweled handkerchief. It's just come over from Eng-

The gems dealer was speaking to a Journal reporter whose attention had been called to an advertisement in a London paper, which read as follows: LOST—At the Queen's recent Drawing Room, a white have handkershier, with the initial M, worked in diamonds on the boxier. A liberal reward offered. Address Belgrave. office of this paper.

"It's astonishing," continued the jeweler, "how quickly a fad started in England takes root here. Although London has had the start of us, I reekon that before this time next year we shall be working more diamond initials on lace handkerehiefs on this side of the ocean in a week than the Britishers will in six months."

"How do you manage to fasten the diamonds on the lace?"



### Hudson and the Hall Moon.

Now that it has been definitely settled that Henry Hudson, the English commander sailing under the Dutch



is to be New York's patron saint at the World's Fair, special pains will be taken by the World's Fair managers from this State to get up the most creditable show possible to commemorate the works and deeds of the intrepid navigntor. A contract has already been entered into for a clay model of Hind-son. This will be the model for a bronze The wells of the New York State cost. building will be embedlished with large pictures pointed thereon, representing notable scenes in the life of the navigator who met such a miserable fate after his great discoveries and noble acts. One of the scenes selected is that of the sixty-ton, round-prowed Dutch vessel the Half Moon as she lay off the Highlands. The picture selected for enlargement is from an authentic old wood cut, of which the picture here presented is a true copy. Hudson sailed in the Half Moon from Amsterdam, Holland, on April 4, 1609. He was under commission by the East in-dics Company, and his mission was to wrest from Spain the Eldorado of the nuknown New World, to destroy Spain's power to do harm, and to find, if possible, a more direct route to the Indica. This was what brought Henry Hudson to the shares of the New World. On the evening of September 3, 1609, he anchored inside of Sandy Hook; and the World's Fair Commis sioner will endcavor next winter to seenre an act making September 3 a legal holiday in this State to commemorate the discovery of the territory of New York State. On September 4 Hudson took his little vessel through the Narrows and into New York Bay, and entered the "River of the Moun-tains," as the Hudson was called by the Manhattan Monatou Indians. The Iroquois, however, called it Caholista tea; the Delawares, the Mahican-itMak (place of Mahicans), and the Mahicans,

the Shatemane. On September 19 the Half Moor reached a place opposite Albany and anchored here for four Gays. Of the Indians Hudson wrsts: "I landed in one of their boats in company of anold man, who was chief there of forty men and seventcen women. We went to a house of oak bark." On September 23 the return trip was began, and the round-nosed Dutch vessel passed out into the sea again on October 4 and

reached Dartmonth November 7. The following year Hudson discov-ered the great bay which bears his name, and in 1810 his crew thrust him into a small boat with his son and five sailors sick with scurvy and cut him adrift to perish in the great waters which bear his name.-New York Tribune.

Alfred Tennyson Dickens, a son of the novelist, lives near Melbourne, and Edward Bulwer Lyiton Diekens, a brother, is settied in a colony of New South Wales.

# Grace Darling's Boat,

The story of Grave Darling is familiar all around the world. It has been told in verse and heroic prose and put on canvas. The little craft in which the heroine went to the rescue of the passenger steamer Forfarshire on the rocks of Farne Island, September 6 and 7, 1838, was bought in 1873 by Colonel John Joicey, M. P., for South Durham, of Newton Hall. Stocksfieldon-Tyne, from Grave Darling's brother, George Darling (who is still living in Northumberland), and was with the utmost kindness pieced at the society's disposal by Mrs. Joicey for the Tynemouth Maritime Exhibition (Septembar and October, 1882) where it was eagerly visited by about 23,700 per-

# THE LABOR WORLD.

MASSACHUSETTS has 26,755 K. of L. UNCLE BAR has 2,000,000 unemployed. London hospitals employ 6000 persons. BROOMMARENS will form a National body. Lowant. (Mass.) city laborers get \$2 a day. St. Lotis is to have a \$250,000 labor tem-

New Youx Crry has a Spanish waiters'

NEW YORE stonecutters get \$4.50 for eight

Pirrishuno's new Mayor is a union iron

Is Germany Sunday work is general among ron workers. BRAZIL is about to undertake public works that will attract immigrants.

Womas clothing workers in San Francis are paid from \$5 to \$12 a week.

THERE are only a few carpenters' unlo outside the pale of the Brotherhood.

The annual eight hour labor demonstra-tions were held throughout Europe.

THE Prussian Government has erected 23,000 dwellings for the Government railway

Ar Naples, Italy, 10.0 women cigar work-ers struck against making cigars without to-

Ar Cincinnati, Ohio, a bureau of justice collects wages from the bosses wao fail to pay their hands.

A CLOAR which sells for \$20 in London shops is sewed by women who receive two cents per cloak for their labor.

At Detroit, Mich., reduced rates of fare are allowed workingmen by the railroad company between 5:30 and 7 a. m.

The Lake Shore Kallroad will give every employe transportation to the World's Fair and a vacation on full pay when the trip is taken taken

Is Germany every employer of a servant girl is obliged to contribute five cents per week, exclusive of wages, to provide a sick fund for her.

NEAR Alfred, Me., there is a woolen mill that pays twenty per cent. higher wages than any other concern in the State, and the work is correspondingly superior.

is correspondingly superior. Honcannics are on strike in Kanass City, Mo., and several wealthy contractors, who could not get anybody to take the place of their strikers, took up the hod and carried mortar and bricks for several days.

Turn British Royal Commission on labor says in a recent report that the annual rate of remuneration for farm labor in the United States is \$282, compared with \$150 in Great Britain, \$125 in France, \$100 in Holland, \$30 in Germany, \$60 in Russin, \$50 in Italy, and \$30 in Index.

## MARKETS.

THE WHOLESALE PRICES ARE GIVEN BELOW.		
WHEAT-No. 1 Red	ED. 73 @	8 74
WHEAT-No. 1 Red	72 52	73 53
High Mixed ear No. 2 Yellow Shelled	50 51	51 52
Shelled Mixed	47	48
No. 2 White	39	40
Mixed.	36	37
No. 2 Western, New	64	68 65
FLOUR-Fancy winter pat Fancy Spring patents	4 50 -	4 75
XXX Bakers	8 25	4 00 8 50
HAY-Baled No. 1 Tim'y	3 50 14 75	3 75 15 75 14 00
Baled No. 2 Timothy Mized Clover.	13 50 13 00	11 00
XXX Bakers. Rye Flour. HAY-Baled No. 1 Tim'y. Baled No. 2 Timothy. Mixed Clover. Timothy from country STRAW — Wheat.	17 00 5 50	19 00 6 00
Data	7 50	8 00 18 00
Brown Middlings	15 50	16 00 16 50
	15 50	15 00
DATRY PRODUCTS.		29
BUTTER-Elgin Creamery Fancy Creamery	23 18	25 20
Low grade & cooking CHEESK-Ohio fall make New York Goshen Wisconsin Hwiss Limburger (Fall make)	18 19 11	12 12
New York Goshen	11 12 16 14	13
Limburger (Fall mak-)	14	14
PRUIT AND VEGETARI APPLES—Fancy, ¥ bbl Fair to choice, ¥ bbl BEANS—hand picked ¥ bu. N Y & M(new)Beans¥bbl	3 00	3 25
BEANS-hand picked # bu,	2 00	3 25 2 50 2 10
N Y & M(new)Beans Pbbl Lima Beans	2 15	2 25
Lima Beans POTATOES— Fancy White per bu	90	1 00
POULTRY ETC.		
DRESSED CHICKENS-	16	17
Dressed ducks PD	17 20	18 21
Dressed ducks WD Dressed ducks WD LiVE CHICKENS- LiVE CHICKENS-	90	1 00
Live Chickens & pr Live Ducks & pr Live Geese & pr Live Turkeys & B. EGGS-Pa & Ohio fresh	60 75	65 1 00
Live Turkeys WB	12	18 15
	35	40
FEATHERS		22
Extra live Geese 2 D No 1 Extra live geese 2 D. Mixed	48	60 50
MINTELLANIOUS.	25	35
TALLOW-Country, Pb	1	5
City SEEDS—Clover	8 25	8 50
Timothy prime Biue grass.	1 40	1 70
RAGS-Country mixed HONEY-White clover	12	15
MAPLE SYRUP, new crop. BUCKWHEAT	73 10	80 12
STRAWBERRIES-per quart	5 00	5 50 15
Tennemee, 24 qt. crate CINCINNATL	1 75	2 00
	\$2 20@	\$3 20 71
WHEAT-No. 2 Red RYE-No. 2 CORN-Mixed.	40	60 45
QATS	35	34
EGGS. BUTTER	24	13
FLOUR	#3 250	84 40
FLOUR- WHEAT-No. 2. Red CORN-No. 2. Mized BUTTER-Creamery Extra. MOS-PA First	76 43	77 50
OATS-No. 2. White.	41	42
AND DEC A MALE & SECTION CALLER FOR A	15	36 16
FLOUR-Patents.	4 50	5 00
FLOUR-Patenta WHEAT-No. 2 Red RYE-Western CORN-No. 2 OATS-Mixed Western BUTTER-Creamery EVITER-State and Pann	7N 56	79 57
CORN-No. 2. OATS-Mixed Western	51 36	52
BUTTER-Creamery EGGS-State and Penn	25 15	29
LIVE-STOCK REPOR	IT.	
RAST LIBRETY, PITTSBURG BIOCK YARDS.		
Prime Steers	5 75 to 4 75 to	
Bulls and dry cows	2 50 60	5 50 4 00 5 10 4 00
Bulls and dry cows. Veal Calves Heavy and thin calves Fresh cows, per head	2 00 4	4 00
SHEEP.	25 00 ta	
Prime 35 to 100-m sheep	5 20 to 4 00 to	0 5 10
Good mized Common 70 to 75 D sheep Lambs, fart to good	3 00 to	3 50
TINGS		11.21.5
Selected Good Mixed Good Yorkers	7 90 1	0 8 10 0 7 86 0 7 80
Common Yorkers	7 80 0	0790 0790 0770 0770 0770
Pigs	5 50 t 7 00 t	0 6 50
the second se	See 1	The second second



Baffalo International, New York State, Dutchess County and Bay State Fairs, where, notwithstanding the fact that she had been in milk since February lo 10 previous, she was awarded first cream has to go nearer the middle. In To previous, she was awarded first cream has to go hearer the initiality. In prize in every instance. She has given 1067 $_{1}$  pounds of milk in a month and 6464 $_{2}$  pounds in ten months, and  $2_{1}^{\circ}$  pounds of butter in a day on regular cream is taken from the separator and rations. Like Midas, she traces to the immediately run over a Star cooler which reduces the temperature from eighty-six to thirty-eight degrees. It famous show bull and stockgetter, Squire of Les Vauxbelets. She was selected for the World's Fair, but did is churned at thirty-eight degrees in not calve at the right time to enable her summer and forty-two degrees in winter in a Diamond churn. This consists to be sent. Passagere 2d, 1528, is a fine large of a diamond-box, supported and r - volved upon trunions, and having its cow, and the champion milk yielder interior divided into two equilateral this year, giving 10,316 pounds (over five tons), of milk during the last twelve months, and 1288, pounds (more than her own weight) in thirty days. triangles by a moving centre board, which separates the cream in equa parts and produces a balance at all She was imported by J. W. Fuller. points in its revolution, illustrating An offer of \$800 for her was refused. The picture of Diss 3d, 3664, appears. the liquid-balance principle.

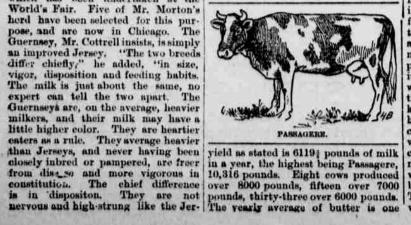
of box ventilators. Fastened above to the walls in front and back of the rows of cows are steel tracks on which run hanging cars. That back of the cows is for a manure car. The manure is thrown into this from the trench, and rolled out to the rear, where it is dumped into a wagon or sled, to be hauled at once to the field. The saving under this system as compared with the old plan of throwing the manure out through a hole in the wall back of each cow is apparent. The tracks in front of the cows carry cars from the silos and grain bins. The hay is stored directly over the cows. By means of slings and hay forks it can be unloaded and mowed by steam power.

For Guernsey stock Mr. Cottrell shares Mr. Morton's enthusiastic admiration. It is the dairy stock of the future, he believes, and he looks forward with confidence to a signal triumph for his favorites in the stock contest which has been undertaken at the World's Fair. Five of Mr. Morton's herd have been selected for this purpose, and are now in Chicago. The Guernsey, Mr. Cottrell insists, is simply an improved Jersey. "The two breeds differ chiefly," he added, "in size, vigor, disposition and feeding habits.

She is a fine cow with a model udder. She has given 71331 pounds of milk in a year. Chamoinesse 2d, 3661, whose picture

is also given, is another of the lot im-ported by Mr. Morton. She is lemon fawn and white in color, with a rich yellow skin, and has, as will be per-ceived, almost an ideal dairy form, wedge-shaped, with large space for di-gestion, a capacious udder, and plenty of room to make it comfortable. She gives from 700 to 800 pounds of milk

per month on her regular herd ration. The record of the sixty-two cows and heifers that have completed the season's work has just been compiled. It is an interesting exhibit. The average





But the most interesting feature of the Ellerslie dairy is not the mechani-cal contrivance or analytical instruments, but the new process resulting in the immediate production of butter from the warm milk instead of from the cold cream, as formerly. This is another of Mr. Cottrell's improvements, and one in which he takes great pride. He explained the discovery of it at length. "Ripened cream butter was made," said he, "from the time the dairy was started. The cream was the dairy was started. The cream was kept from thirty-six to forty-eight hours at a high temperature until a certain degree of acidity was developed powers and to shorten life." Indeed, when it was cooled tosixty degrees and if you have got the wrong kind of conchurned. This is the ordinary way of stitution for early rising the practice making butter. Early in 1892 a trial may carry you off in the flower of youth was made with a machine to produce -Chicago Times. butter directly from the new milk. The butter made in this way had a very different flavor from that made wells in California.

\$7500 DIAMOND INITIAL HANDKERCHIEF.

"First of all we strengthen that portion of the handkerchief where the initials are to go by several layers of fine linen, about the size of a postage stamp. Then we set the stones and attach them y means of thin gold wire."

These handkerchiefs are, of course, not intended for practical use. They are strictly ornamental affairs. If, in a moment of absent mindedness, a belle applied the be-diamond lace to her nose the would run the risk of scratching her skin with the stones, and so spoil her pleasure as well as her looks for a time

The accompanying sketch represents an elaborately jeweled lace pocket handkerchief, costing \$7500, and made to order for a rapid young New Yorker with a rich father. —New York Journal.

#### **Ill Results of Early Rising.**

A German doctor has discovered that the majority of the people who live long sit up late at night. Eight-tenths of the people who reach eighty never (so he says) go to bed until the small hours and take care not to get up until the day is well aired. Not only is it a very fine thing to go to bed late, but it

The census reports 3060 artesian



The little boat has reached sons. Chicago and is one of the many interesting exhibits in the Transportation building. -Chicago Tribune.

#### Dangerous Bottle Cleaning.

It is surprising, says Doctor F. Sawyer, how many people persist in clean-ing bottles with shot after the fraquent cautious that have been given. Nothing cleans bottles so easily as a handful of shot, which can be shaken into every corner until the glass fairly shines with cleanliness; but the danger of lead poi-Coning is great, even when the bottle is rinsed out with clean water, and it is doubly dangerous when there is no rinsing out at all, as is usually the case. Clean sand is a convenient and thorough bottle cleancer; especially as the partirles of sand which adhere must be afterward washed out to complete the process. When time is not an object, bottle can be well cleansed by the aid of potato parings, but as they must be corked in and left to ferment, the plan is not expeditious enough for genaral use. -- New Lork Dispatch.