

1,319,271. Of this number, Texas is credited with the largest number, 2,933,588, and Illinois next, viz. 1,053,499. This number is largely increased at this date.

We have no reliable means of ascertaining the number of beaves slaughtered annually. The number of beaves and store cattle, which is 13,566,005 are all slaughtered probably in four years, which would be 3,391,338 annually. A part of the store cattle will doubtless be added to the number of milch cows annually, but it is probable as many milch cows will be slaughtered, which will not materially affect our calculation. The value of beaves per head in New York in 1872 was estimated at about \$75. Now, to put the 3,391,338 at ten dollars less, and we have for the yearly slaughter of beaves \$220,437,970. Now we hold that fifty per cent. may be added by the substitution of Short-horns for the cattle that are now sold as beaves, viz.: \$110,218,935. In other words, it would be equal to adding half the number of cattle to the amount now on hand.

Every farmer or cattle raiser who will substitute Short-horns for the common cattle, or even high grades, will certainly realize fifty per cent. in value over what he was receiving for common cattle, which is well worth the consideration of every farmer, and for the truth of this statement we will refer him to any shipper, feeder or butcher.

I may congratulate you, gentlemen, on what you have accomplished, and also on the prospect of what you have the prospect of accomplishing in the future. Your annual reports have already awakened public attention. This is manifest in the increased demands and increased prices paid for Short-horns. And the demand is still increasing, and should continue until our 23,520,608 cattle are all Short-horns, or some other breed equally good.

It is quite a large work to change our present stock of cattle to high grades, and this should be accomplished as speedily as possible. The number of milch cows being 9,935,332, and supposing them all common cattle, it would require, at fifty cows to the bull, 178,706 Short-horn bulls to bring them up to grades. From this it may be seen that there is little danger of an over-supply, shortly, of Short-horns.

Combined effort has ever been the most successful mode of accomplishing ends. We have the most flattering prospects of great good being accomplished by this association. The field before you is a large one. The breeding, raising, summer and winter care of cattle—food, and the best modes of preparation, etc. These subjects, with many others, are worth the consideration of breeders generally. You will pardon me, gentlemen, for detaining you so long, and I conclude by reminding you that the country is looking to you for important truths upon the subject of cattle-breeding, knowing that this association is composed of the breeders, not only of the United States, but of many of the most eminent breeders of Her Majesty's (Queen Victoria) dominions of North America.

English Scientific Agriculture.

Mr. J. J. Mechi, now well known for his enthusiasm in improved processes in agriculture, and which in many instances are necessary to success, in a recent letter to an English contemporary says:

What changes are coming slowly, but surely, over the agricultural mind. The man who twenty years ago chafed Mechi for recommending straw as food for cattle, is now found chaffing his own straw for his own cattle; so that we have in reality, a great increase of agricultural chaff. While the steam engine hum of our threshing machine was in full play to-day, and into the pulper went cabbages, mangolds, with their tops, kohlrabi, ditto; said I to my cattle feeder, "George, hand power wouldn't do for this." "No," said he, "nor horse power neither." So that we came to the conclusion that every arable farm of 150 to 200 acres should have a fixed steam engine, with its accompaniment of pulpers, crushers, chaff-cutters, pumps, sack elevators, millstones, threshing machine, cake-breaker and grindstone—a circular saw would be of no use to us, as our timber departed some twenty five years ago. How can agriculture progress without steam power? And yet its use is very partial and limited.

When I began farming here twenty-seven years ago, guano was unknown, steam was a myth, iron sheep handles were condemned as an extravagance, and even to this day nine farmers out of ten do not deepen their cultivation by following the first plough by another drawn in the same track.

Deep draining in strong, non-calcareous soil is the exception not the rule, the argument being that there is a good surface fall for the water to pass away; of course, they do not reflect that water will not run off the surface until the soil is super-saturated, and they would condemn such a practice as folly in the case of flower pots having a plug in them to stop the drainage.

Altogether, Britain is not half manured nor half farmed, and our land-owners and farmers conjointly must accept this as a true proposition, and conclude that there is an immense field open and awaiting the joint action of increased intelligence and capital to produce more abundantly and more profitably food for the British people.

I know that I have in my time shocked many prejudices and excited much anger; but has not every man done so who attacks antiquated customs and advocates change and improvements; the supporters of the old spinning wheel, distaff and flax destroyed the newly invented cotton

machinery and threshing machines. It was natural, though a mistake; the conservative sentiment in favor of old institutions is an honest and undesirable one up to a certain point, but it is the light for progress and improvement which introduces us to a new state of things more suitable to our welfare.

Why Johnson's Ram Failed to get a Premium.

Our country fair is just over; but Johnson's Cotswold ram did not take the prize that was offered for the best animal of that kind. Judge Pitman was chairman of the committee on rams, and he manifested the deepest interest in Johnson's ram; indicating clearly that if any sheep ought to take a prize that one ought to. Johnson's ram was by itself in a pen with a high board fence, and before rejudicating the prizes the Judge thought he had better go in and make a close examination of the animal for the purpose of ascertaining the fineness of its wool, etc. As soon as the Judge reached the interior he walked toward the ram, whereupon the ram began to lower his head and to shake it ominously. Just as the Judge was about to feel the fleece, the ram leaped forward and planted his head in the Judge's stomach, rolling him over on the ground. Before the Judge had time to realize what had happened, the ram came at him again and began a series of promiscuous butts, each given with the precision and force of a pile driver. It butted the Judge on the back, on the ribs, on his arms, on his shoulder-blades, on the bald place on his head, on his shins; it butted his nose, it butted his spectacles off, it butted his high hat into black silk chaos; it butted him over into the corner and up against the fence, then it butted four boards off the fence; butted down another of the committee, butted three small boys into fits, butted the money-taken at the gate, and then led out into the air. The Judge did not distribute the prizes that day. When they collected him from various parts of the pen they wiped the mud from his trousers and the blood from his nose, and sent him home with a perennial stomach-ache and a determination to start after that wandering mutton the first thing in the morning with a shot-gun.—(Max Adeler.

Communication Between Bees.

I was staying in the house of a gentleman who is fond of trying experiments, and who was a bee-keeper. Having read in some book on bees that the best and most humane way of taking the honey without destroying the bees was to immerse the hive for a few minutes in a tub of cold water, when the bees, being half drowned, could not sting, while the honey was unharmed, since the water could not penetrate the closely waxed cells, he resolved on trying the plan. I saw the experiment tried. The bees, according to the recipe, were fished out of the water after the hive had been immersed a few minutes, and, with those remaining in the hive, laid on a sieve in the sun to dry. But, by bad management, the experiment had been tried too late in the day, and, on the sun going down, they were removed into the kitchen, to the great indignation of the cook, on whom they revenged their sufferings as soon as the warm rays of the fire, before which they were placed, revived them. As she insisted on their being taken away, they were put back into their old hive, which had been dried, together with a portion of their honey, and placed on a shelf of the apary, on which were five or six other strong hives full of bees, and left for the night. Early the next morning my friend went to look at the hive on which he experimented the night before, but, to his amazement, not only the bees from that hive were gone, but the other hives were also deserted—not a bee remained in any of them. The half-drowned bees must, therefore, in some way or other, have made the other bees understand the fate that awaited them.—London Spectator.

Facts Worth Remembering.

One thousand shingles laid four inches to the weather will cover one hundred square feet of surface, and five pounds of shingle nails will fasten them on.

One fifth more siding and flooring is needed than the number of square feet of surface to be covered, because of the lap in the siding and the matching of the floor.

One thousand lath will cover seventy yards of surface, and eleven pounds of lath nails will nail them on.

Eight bushels of good lime, sixteen bushels of sand, and one bushel of hair will make enough good mortar to plaster one hundred square yards.

A cord of stone, three bushels of lime, and a cubic yard of sand will lay one hundred cubic feet of wall.

Five courses of brick will lay one foot in height on a chimney, six bricks in a course will make a flue four inches wide and twelve inches long, and eight bricks in a course will make a flue eight inches wide and sixteen inches long.—Prairie Farmer.

A BEET SUGAR FACTORY at Sequel, Cal., is now running day and night, using two sets of hands—about sixty-six men. Their entire force numbers 200 men. The mill has a capacity of sixty tons of beets per day. They have 400 acres of their own land in beets, besides large quantities of rental land. The machinery cost \$17,000.

J. WINSTOW'S corn-canning establishment in Fairfield, Me., closed for the season on the 7th ult., after canning the products of 170 acres, or 225,000 cans, being less by about 150,000 than last year. Not an ear of all this yield was injured by frost, which is something unusual.

I HAVE KNOWN farmers who toiled all day and almost every day in the field, when a daily half-hour spent in the house and garden in making homo attractive would add more to their real happiness than all their toil. For, after all, home is the true source of lasting joys. Fortunate are they who have happy homes—blessed are they who make them happy.—Geo. Booth.

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