

and his figures make these breeds compare very unfavorably with the large Dutch cows.

It must, however, be remembered that quantity of milk, although a great factor in dealing with a dairy animal, is not everything, the crucial test being the amount of butter, cheese, or fat (I mean beef) which each produces for a given quantity of food, under equal conditions. Looked at in this light, the order of breeds was almost reversed at the last milking trials held lately in London. The subject is as yet very imperfectly understood, and deserves considerably more attention than has yet been devoted to it. The movement, however, lately taken by our show-yard directors in giving prizes for the heaviest milkers—date of calving, quality, and quantity being taken into account—is undoubtedly a step in the right direction. Should their endeavors be met with approval, and turn out a success, they might give prizes for the heaviest milkers, say, three and six months calved, undisputable evidence of date of calving being made as sure as possible before competition; as it is well known the most profitable dairy cow is not always the one which gives the most milk shortly after calving, but the one which keeps her quantity well up on to the sixth, seventh, or eighth month, and in exceptional cases even later. The subject is a pretty wide one, and has been little attended to, so that an open and untrodden field in research is yet open to those who care to tread it.

#### PHALLAS AND MAXEY COBB.

The *Turf, Field, and Farm* furnishes the following graphic description of the great stallion race:—

"In one of the boxes sat Mr. Case, a trifle restless, and gathered around him were members of his family, his wife and daughters wearing purple bows, evidently cut from the silk out of which the jacket of Bither was made. In a box higher up was Mr. Cohnfeld, the picture of anxiety. He was on his feet more than three-fourths of the time, and with the aid of a field glass he followed every movement of his horse. The bell tapped, the band ceased playing, and the drivers took their seats behind the famous stallions. The first score Phallas came down ahead, and the recall was sounded. As the horses jogged back the contrast between their gaits was striking. Phallas shuffled along on his toes, as if sore, while Cobb stepped out with the grace of perfect action. In the second score Phallas left his feet, and a sob bordering on the hysterical rose from the Case box. On the third score Phallas again went into the air, but it was such a nervy, snappy break, that the critics accepted it as an evidence of fine feeling instead of soreness on the part of the horse. But to the less practiced eye of the daughter of the owner of the stallion it foreboded disaster, and a half-suppressed sob again floated on the air. On the fourth score Maxey Cobb grabbed a scalping boot and left his feet, and now agitation ruled the box higher up in the stand. Mr. Cohnfeld rushed down and across the track, held a brief consultation with Murphy, and returned with more deliberation to his seat. In the fifth score Phallas was ahead, but Murphy nodded for the word, and President Edwards gave it clear and strong. Before the first turn had been reached the brown son of Dictator made a snappy lunge into the air, but while the "Ohs!" were dying away Bither settled him, and sent him to the front with a lightning-like rush, cutting in somewhat sharply to the pole, and taking that position from Cobb. Murphy seemed to be satisfied with a slow pace, because the watches showed that the first quarter was trot-

ted in 35 seconds. At the half-mile pole, which was reached in 1.08½, there was plenty of daylight between the two stallions, and at the third quarter, time 1.41, Maxey Cobb was still behind. Murphy now began to drive his horse, evidently hoping to rush his antagonist off his feet, but Phallas was equal to the increased flight, and he did not weaken. The whip fell sharply on the back and shoulders of Maxey Cobb, but Bithers shook out Phallas, and he crossed the score a winner of the heat by a length in 2.14. The last half was trotted in 1.05½, a 2.11 gait. The result, although unexpected, moved the vast throng to cheers. Bither admitted that Phallas had surprised him, and the lament of the stable was that the money had not been put on prior to the start. The groom was the only one who rejoiced. He had risked his savings at \$100 to \$90, and he felt happy. The letting on the second heat was tame, Phallas being an immense favorite. The purple in the Case box was worn more boldly now, and the only spot in the broad park where the sun did not shine was on the chair which held Mr. Cohnfeld. In the second heat the word was given on the second score, and as soon as the horses were in full motion it was plain that Murphy had changed his tactics. Instead of saving his burst for the finish, he tried to take the lead from Phallas at once, feeling confident that Maxey Cobb would fight a gamer battle if allowed to show the way. The clip to the quarter pole was a merry one, 33½ seconds, and the flight to the half was rapid and electrical. The time was 1.06. Something had to crack, and it was the heart of Maxey Cobb. Phallas began widening the gap, and he had to lengthen the best of it at the quarter pole in 1.40½. Down the homestretch Bither drove the son of Dictator with one hand, looking back half mockingly, half sympathetically, at Murphy laboring with the son of Happy Medium. The time, as taken by George W. Short and Roddy Patterson, was 2.15½. In the orchard the crowd surged around the ring where Phallas was cooling out, and Carlisle and Harvey and De Mass looked sorrowfully at Crawford for having allowed such a good thing to slip through his fingers. They had come to Cleveland on purpose to back Phallas, but had waited in vain for the bounding odds off the second heat. It is true they had their money in their pockets, but they grieved because they did not have the other man's money on top of it. Maxey Cobb's hair looked harsh and dry and he was a tired horse. The third heat was tame. Bither held Phallas back and Murphy trailed after him. The time was: 35½, 1.11½, 1.46½, 2.20½. Although the sun still shone from a cloudless sky and the green grass smiled in its golden kiss, it was night, and black night at that, for Mr. Cohnfeld and his party. The stallion crown had been staked and lost, and in slower time than was predicted. Maxey Cobb possibly got off a little in being shipped from New York to Cleveland, but at his best he could not have lived the pace with Phallas in the fourth of July."

#### BREEDING ROADSTERS.

Dr. S. H. Adams in New England Homestead.

The great essentials of a good roadster are endurance, gameness, and speed. Without these three qualities he can never be a first-class road horse; though, of course, if you superadd to these qualities beauty, docility, and style, you materially increase the value of the animal. Experience, the best of teachers, has shown us that no horse can possess endurance, speed, and game without being well bred. Starting, therefore, on this theory, that no horse is fitted to get, and no mare is fitted to bear, a colt in-

tended for a road horse, unless he or she be well bred, let us inquire what are the qualities most to be desired on the part of each. A horse, to be a mover of the right sort, must have his mechanism as perfect as a chronometer watch. A certain style is necessary to go fast and to stay. We all know that those horses that have gone fastest, and been noted stayers, have been possessed of wonderful power across the loins. I have never seen a successful trotting horse in this country without a powerful quarter, and I have seen most of the famous ones. Of course it is necessary to perfection to have, with this powerful lever behind, a sloping shoulder, deep chest, a good rib, and good legs; but unless you have the powerful quarter, these qualities are of no avail. I would, then, endeavor to have both dam and sire provided with this great essential, and if not both, at least one of them. Then the attempt should be to get the sloping shoulder, blood-like neck and head. It is true with an upright shoulder a horse may be fast, but there is not the same ease of action which is so essential for endurance as in the sloping shoulder.

#### VEGETABLE CULTURE IN BERMUDA.

From the American Cultivator.

Consul Allen says that onions, potatoes, and tomatoes comprise almost the entire production of Bermuda, and give employment to the greater portion of the inhabitants, and the prosperity of the colony depends largely upon the success of the crop and the demands of the markets.

In onion growing the seed used is grown in the Canary Islands, and is imported in the months of August and September; it is sown in the months of September, October, and November, thickly in beds, the ground having been heavily manured with stable manure two or three months before sowing. The white seed is sown first, and produces the earliest crop, the shipment of which commences in March. When the plants are sufficiently large—about six to eight inches high—they are transplanted into beds about four feet wide, the plants being set about seven inches apart each way. The plants from the white seed are transplanted as soon as they are large enough, but those from the red seed are not usually transplanted until the beginning of January, and the ground requires to be only moderately manured. If transplanted too early, and the soil is too rich, the bulb is likely to split into several pieces, and is worthless. After transplanting, the soil requires to be lightened once or twice and the weeds removed before they mature. As soon as the top begins to fall, the onions are pulled and allowed to lie on the ground for two or three days, when they are cut and packed in boxes of fifty pounds each and sent to market.

All the onions are delivered at the port of shipment in boxes, ready for the market, and for the past two years the producer has been compelled by law to place his name or initials conspicuously on each package. It is estimated that a large profit on the outlay is realized when the crop is large and the market good, an acre of ground sometimes returning as much as \$550 to \$800.

For the cultivation of potatoes the seed was formerly nearly all imported from the United States, but of late years has come largely from New Brunswick, Nova Scotia, and Prince Edward Island. The ground for potatoes is usually ploughed or broken up with the spade and raked, the seed cut into pieces with one or two eyes, and planted by forcing into the ground with the finger to the depth of about