thus the mixture makes a well-balanced food. If a farmer has only timothy hay, and has also pea straw, cut early, let him mix pea straw with oat, wheat or barley straw before mixing with timothy hay, as the pea straw is rich in muscle-building or nitrogenous elements, and the mixed straw is a better food than either alone. Timothy hay has only ten per cent. of nitrogenous food, while clover has sixteen per cent., and common straw has only two per cent. It is easy to combine foods of different quality, so as to make them in better balance. To show the effect of combining different elements, we took bean straw, not in extra condition, and after cutting it short with a straw-cutter, mixed it in equal parts with oat straw and hay, and found it to be eaten more readily than the oat straw and hay. And it is well known that bean straw, in its ordinary state, is not relished by stock. We also found that the mixture of bean and oat straw was eaten more readily than either alone. The straw-cutter is almost indispensable to the complete mixture of different fodders, and the time of cutting with a good machine and power is very short. It mingles leaves and stalks very completely. Indeed, when properly mixed in cutting, we have seldom found any difficulty in getting every kind of fodder eaten by stock without any grain fed upon it, but we do not advise feeding poor qualities of fodder alone except when that is necessary.—*Country Gentleman.*

American Shorthorn Breeders' Association.

SIXTH ANNUAL MEETING.

The Association met in Kentucky on Oct. 31st, with only about sixty members present. Canada, New York, Ohio, Iowa, Illinois, Indiana, Kentucky and Tennessee were represented. Hon. D. Christie, Ontario, President; S. F. Lockbridge, Indiana, Secretary.

An address was delivered by the President. He congratulated the members on this their sixth annual meeting, and on their meeting in Lexington, in what has been long the classic ground of American Shorthorns. He congratulated them also that in the face of the most stringent financial year through which the present generation had passed, Shorthorn sales have been reasonably good. A large number of well-bred cattle have been sold at fair prices in the United States and in Canada, while in England some sales of English and Canadian cattle have brought higher averages than ever before. He feared that little good has resulted from undue discussion as to the standard for the record of pedigrees. While a vigilant regard to the purity of blood is a duty incumbent on the Association, we should not be unduly stringent in setting up a higher standard than is meet.

It is cause for wonder that so large a percentage of American cattle are only second-rate, while so many well-bred bulls are almost unsaleable, and while it is certain that the only quality of beef which will pay to export is our best. He doubted if the exportation of any part of the carcass but the hind quarters will be found to be remunerative. It will be better to preserve the fore quarters and to export them salted. His conviction is that the exportation of live cattle to Great Britain is too hazardous and the shrinkage too great to render that a reliable and profitable trade.

He then referred to the statistics of the trade in fresh beef during the past year, stating that the exports of all kinds of meat showed in two years the enormous increase of $28,071,582.

He referred to his efforts as President of the Association to induce the U. S. Government to take effective measures to prevent the introduction of the "Rinderpest." His efforts were unavailing.

Referring to Canadian exports to Great Britain, the aggregate for live cattle was $193,100 in 1876, and for live cattle, beef and mutton in 1877 an aggregate of $695,455, being an increase of $502,345, or 250 per cent.

Judge Henry Craven, of Indiana, then delivered an address on pedigree. He asked—Are we not blind enough in some cases to follow pedigree without giving individuality the attention it deserves? He did not want to be construed as an enemy to pedigree, as he was a warm advocate of it; no reliability in breeding can be had without it. A good animal with a pedigree tracing to a long line of ancestry of good animals, was a guarantee that to breed from this animal will produce good ones. He denounced the modern idea of obliterating the milking qualities of the Shorthorns, a quality that in former years was highly esteemed, and should be preserved. He said that the Shorthorns could never strongly commend themselves to the common stock man and farmer without a well developed milking quality, as the general farmer naturally looked upon a cow that gives little or no milk with distrust and suspicion.

Mr. Jones said he would like to call their attention to a later period, the present, and to the undeniable fact that the prices of Shorthorns at present were largely reduced. He asked why was this? He said it could not be attributed to the general depression of times, as it was acknowledged that the general business was better than for years, and it can not be attributed to the fall in price of beef, as it was higher now than it had been for years. He also showed that feeding steers and beef cattle of all kinds were higher than they were when Shorthorns were selling at twice the prices that they are selling for to-day. He said in substance that for two years past the breeders have been cutting their own throats by so severely criticising pedigrees. Such things had frightened the general public and barred the necessary outlet for the surplus. He said that it was high time we abandoned the idea that there was a commercial value in a pedigree alone. He came back to the question of how are we to profitably utilize the vast amount of pure blood, or to infuse this superior blood among the common stock of the country?

Prof. Knap, of Iowa, attributed this to the lack of merit. He said that animals with fancy pedigrees but no individual merit had got through bringing from $500 to $5,000 in his State; that cattle of inferior size and quality had been sold at high prices, which had driven the common sense, steady going men out of business, and the speculators have been bolstering each other until they have ruined themselves. He closed by saying that the thousands of farmers and legitimate stock men of Iowa still believed in and had faith in the Shorthorns as the great beef-producing cattle of the world, and also that they believed that they would soon be more popular than ever, but all hoped that the time of severe discrimination and unreasonable fancy prices was obliterated forever.

Mr. L. F. Allen argued that the cause of the depression in Shorthorns was largely due to the deception and chicanery that had been so liberally practised at the numerous public sales, which had destroyed confidence. He also condemned the unwarrantable discrimination that had existed about pedigrees, and scoffed the idea that a drop of the 1817 blood should ruin a good animal. He said the Shorthorn had superior value that never can be obliterated and can not fail to find appreciation from the inteiligent American farmer, and that the breeding of this race must and will continue to be both creditable and profitable.

During the second day's sessions rules concerning the registry of pedigrees in the Shorthorn Herd Books were confirmed. Was any one color of Shorthorns any advantage over another? was discussed. It was resolved: That color in Shorthorns is simply a matter of taste, fancy and fashion, not affecting the quality of the animal or the meat or milk; that the public taste preferring red as a color, to the exclusion of other colors, is injurious to the Shorthorn interest.

A discussion on the proper age to breed ensued; it was the general opinion that for milk purposes early breeding was best; for beef, after or near maturity.

Fancy Points of the Jersey Cow.

That the Jersey cow has fancy points none will deny. By these points she is readily distinguished from all other varieties of cattle. In addition to those fancy points, the Jersey scale awards nearly 50 points to the hide, udder and escutcheon, and while it may be true that all Jerseys may not have all of these points fully developed, yet the breeder should have this in view in breeding. We regard this first of greater importance than breeding for fancy colors exclusively. While solid colors are desirable, it is a fact worthy of note that some of the best milk and butter cows that have been imported from the islands or bred in this country have been brown and white or fawn and white. As the Jersey cow is a superior only as a producer of rich milk and fine butter, let this be the prominent point in breeding. Take away from her these noble qualities, and she becomes worthless, or only an animal to remind one of the deer.

We are glad to see that the best breeders not only on the islands, but in this country, are giving their attention to the important points above mentioned. But we are sorry to see, as stated in a previous article, that the inferior calves and heifers are being brought to Kentucky and sold to our people, who suppose that they are getting the best. If any one wishes to satisfy himself on this point, just let him do as the writer has done—send to our best breeders in the Eastern and Northern States for price list of their best Jersey cows, and they will have to pay from $300 to $1,000 per head, and on heifers and calves in proportion. One more point: there should be more attention paid to the sire that we breed to. If he is a descendant of inferior stock, then we may expect inferior stock. Calves from our best milk and butter cows should be kept as breeders only.

It is to be hoped that the above suggestions may lead to a little more care in selecting and breeding the pure Jersey cow.—*Kentucky Live Stock Journal.*

A recent case of "splenic apoplexy" quickly followed upon the allowing thriving bullocks to have access to "port-wine-colored water" from a burn contaminated by sewage. The operation of foul water upon the health of cattle and horses merits more attention than it receives.—*English News.*

Exports of Meat From America to Europe This Season.

The increased facilities for sending fresh meat to Europe have caused the shipments of beef this year thus far to reach a value of $8,082,036, against only $1,755,101 for the same period last year; and of mutton, $113,500, against none in 1876. The live sheep sent in 1877 are valued at $61,110; in 1876 at nothing. Live cattle this year at $2,060,950; in 1876 an insignificantly small quantity. The bulk of these have been sent from New York, although Boston, Portland, and Philadelphia have made contributions. The total shipments of butter from Jan. 1 last, to Sept. 29 consisted of 12,250,690 pounds, against only 5,919,073 last year; and of cheese, 89,650,350, against 53,706,530.

The Horse.

Horse Feed.

The London *Live Stock Journal* says:—Every good groom knows that sound oats and beans and peas, in due proportion, and at least a year old, are the very best food for a galloping horse—the only food on which it is possible to get the very best condition out of a race horse or hunter. It also has recently become known that horses do slow work and get fat on maize, Indian corn, which is frequently one-third cheaper than the best oats. In the East horses are fed on barley, and it is a popular idea with English officers who have lived in Persia and Syria that the change of food from barley to oats often, when imported, produces blindness in Arabian horses. Now, although no men understand better, or so well, how to get blood horses into galloping condition as English grooms, they do not, and few of their masters do, know the reason why oats and beans are the best food for putting muscular flesh on a horse. The agricultural chemist steps in here, makes the matter very plain, and shows that if you want pace, Indian corn, although nominally cheaper, is not cheap at all. When we feed a bullock, a sheep or a pig for sale, after it has passed the store stage, we want to make it fat as quickly and as cheaply as possible; but with a horse for work the object is, give him muscle—in common language, hard flesh. There are times when it is profitable to make a horse fat, as, for instance, when he is going up for sale. For this purpose an addition of about a pound and a half of oil cake to his ordinary food has a good effect. It is especially useful when a horse that has been closely clipped or singed is in a low condition. It helps on the change to the new coat by making him fat. A horse in low condition changes his coat very slowly.

When from any cause there is difficulty in getting a supply of the best oats, an excellent mixture may be made of crushed maize and beans, in the proportion of two-thirds of maize and one of beans, which exactly afford the proportions of flesh-forming and fat-forming food. Bran is a very valuable food in a stable for reducing the inflamatory effects of oats and beans. Made into mashes, it has a cooling and laxative effect, but used in excess, especially in a dry state, it is apt to form stony secretions in the bowels of the horse. Stones produced from the excessive use of bran have been taken out of horses after death weighing many pounds.