

which is given below. The aggregate total of the sale, £19,002, as well as the average of those sold, establishes a record. Throughout both sale days the interest never flagged, and the biddings were as keen at the end as at the commencement, but the females were throughout more sought after than the males. Fourteen stallions over four years averaged £95 17s. Ten four-year-old stallions, £133 4s. 10d.; highest price, £315. Twenty-three three-year-old stallions averaged £98 14s.; highest, £262. Thirty brood mares, £100 15s.; highest, £630.

The champion stallion of the year, Mr. Walwyn's two-year-old stallion, has been sold to the Earl of Ellesmere privately, and it has been reported that the price paid was \$10,000.

The Ideal Export Steer.

BY D. E. SMITH.

The export trade in beef cattle is rapidly becoming an important factor in the wealth of this country, and bids fair to rival many of the other great industries of North America. Whilst there has been a greater production of beef cattle in many parts of the world during the past decade, there has also been better markets, and the prices, as a rule, have been good. The quality of beef from North America has been quite satisfactory wherever it has had a fair trial, and an open door for beef and beef products is found in all parts of the civilized world. Last year there were exported from Chicago alone 934,649 head of cattle, and these found ready sale across the waters. In fact, it may safely be said that North America has become the breeding, rearing and feeding grounds of cattle for the world's largest and best markets. The beef industry has enriched its thousands, and many of the most prosperous and wealthy districts in Canada and the United States can point with pride to this industry as the source of their wealth and happiness.

Therefore, it is most befitting that we should carefully consider what is the best and most profitable steer to raise for the home as well as the foreign markets. The Britisher requires a steer of excellent quality; in fact, nothing is too good for him, and his cousin on the other side of the great waters ranks in the same class. They want an animal thoroughly fattened; not too fat, but fed for a long time, so that the flesh and fat are firm. They lay great stress on the quality of the beef, and are willing to pay a high price if they can rely on its superiority. It will be my first endeavor to give in concise form an outline of what I consider the Englishman wants in an ideal steer. The steer should be of superior quality, and from two to two and a half years old. At this age the carcass has a brightness and whiteness not found in older animals. I may also say right here that steers at this age are the most profitable for the producer as well. Many choice steers are exported as yearlings, and they have been found to be most satisfactory. As a rule, the weight ranges from 1,200 to 1,500 pounds, but most run from 1,300 to 1,400 pounds. The ideal steer should possess a short and lean head, broad between the eyes, with a medium-sized, quiet eye. The head should be small and gracefully formed. The neck should be short, and not by any means thick or coarse. The shoulders should be fairly broad across the top, and the part just back of the shoulders should be well fleshed. The loin and ribs are the expensive parts, and should be deep-fleshed and broad. The flesh on these should be firm and deep. This depth of flesh is opposed to the shelly carcass so frequently seen in a steer of inferior quality or not well fattened. The hind quarters should be broad, square, and well let down to the hocks, and also good in the twist, and the hooks should not be too prominent. The bone should be medium fine and the legs short. There has been a tendency to breed too close and produce a steer with too fine a bone. This is done at the expense of the constitution, and so an animal is produced that has not the strength of constitution to fatten well. It seems to me that many of our farmers and breeders are making a serious mistake in using males that do not possess sufficient quality and vigor. It does not seem to count for much that the male should have long legs, or a coarse head, or be too flat on the sides, or have large coarse hip bones, but when the steers from these come to market, the price obtained is a sure indication that something is wrong. It then dawns upon the owner that his bull had not the standard of quality requisite for a good breeder.

Buyers and butchers have different ways of telling when an animal is ripe and ready for the market, and I wish to remark on a few of the commonest ways. The butcher, as a rule, relies on the flank, and whilst it is a good indication, yet it is by no means infallible. Many buyers lay great stress on the purse as the most reliable test, and no doubt it has its merits. Others, again, require a thick, firm rib, well covered, and are satisfied if the animal possesses them. That the hips should be well covered is also a good indication. An animal that is ripe shows a thickness in front of the shoulders on the neck. As this is about the last place a steer stores away fat, it indicates that he is fat, and that he has been fed a long time. Then, in addition to these, there is the general appearance. These all combined are a safe guide in determining whether a steer is ready for the best market.

London Hackney Show.

The 17th annual show of the above-named society opened on March 5th. The entries were twenty in excess of last year, and comprised of Hackneys, 163 stallions, 82 mares, 59 geldings, and 31 harness horses. The average merit was well up to the standard of former years, and there can be no question of the uniform soundness of the breed as a whole. The result of veterinary examinations at the Hackney Show from 1890 to 1900, inclusive, reveals that 3,268 stallions and mares have been thoroughly examined by the four veterinary inspectors appointed annually, and of this number, 3,111 have been passed as sound.

Stallions 4 years old and over, exceeding 15 hands 2 inches, were the strongest class of this section of the show, no fewer than 52 entries being made, as against but 21 last year. There was a wonderfully good lot of horses included in this large class, and as an evidence of the quality of the class, we may mention that in addition to awarding four prizes and the *r. n.*, five others were *h. c.* and three *c.* There was neither doubt nor hesitation as to the destination of the first prize, for last year's champion, Mr. H. Livesey's McKinley, came out in grand form, and was, without much question, put to the front. Next him came Rosellan, now owned by Mr. J. Rowell, but bred by Mr. F. W. Buttle, and sired by Rosador. Third fell to Mr. Tennant's Revival, by Ganymede, whose height is recorded as 1 inch over 16 hands.

Stallions 4 years old and upwards, over 15 hands, not exceeding 15 hands 2 inches, made 26 entries, an exceptionally good class, no less than ten of them being included in the award list. Royal Danegelt, a champion in 1898 and *r. n.* for his honor last year, again went easily to the top of his class, his form and movement being as near perfection as can be, whilst his increased age has given him more development and substance, that has materially added to his good looks. Langton Masher, by Garton Duke of Connaught, came in for second honors, a real typical Hackney, with good front and hock action. He occupies the same place as last year. Acid Drop, who comes third, was in that position last year. Rosador, first in his class last year, when a year younger, has, in this year's contest, to be content with *r. n.*

Three-year-old stallions, not exceeding 15.1 hands, were led by Knowle Stratford, a splendid bay son of Garton Duke of Connaught, shown by Mrs. Edmondson. Ryedale Sensation, from Mr. B. Wilson's stud, was a good second, the third winner being Atwick Junior, by Chocolate Junior. This class was followed by another, for the same age, exceeding 15.1 hands, in which there were 23 entries. The winner, a grand one, Bonny Danegelt, by Royal Danegelt, came from Sir Walter Gilbey's stud, and he is a worthy son of a noted sire. Close on his heels, however, came a real good colt, the property of F. W. Buttle, by Rosador, Garton Sidar by name.

In the 2-year-old class, Fitz Rose, by Sir Walter Gilbey's Royal Danegelt, won the first prize easily for Mr. Wrench; a grand colt, with capital movement. Another of Royal Danegelt's sons came in for second honors; this time exhibited by Sir Walter himself.

The Championships.—The champion cup for best stallion went to Mr. Livesey's McKinley, and the reserve number to Sir Walter Gilbey's Royal Danegelt. The championship for younger stallions went to Sir Walter Gilbey's Bonny Danegelt, and reserve to Mr. Buttle's Garton Sidar. The champion cup for best mare went to Mr. C. E. Galbraith's (Dumfries) Rosadora, last year's champion, by Rosador. She is 5 years old, 15 hands 3 inches high, well proportioned, having brilliant action, and won first in the class for mares 5 years or over and over 15 hands 2 inches. Her stable mate, the first-prize 3-year-old mare, Rosarene, was the reserve number. Queen of the West, by Garton Duke of Connaught, won first in her class for 5-year-old mares over 15 hands and not exceeding 15 hands 2 inches. She is owned by Mr. Galbraith, who also secured the junior female championship with the first-prize 3-year-old filly, Rosarene, by Rosador. These female championship winnings stand as a notable triumph for the Scottish exhibitors at this year's show.

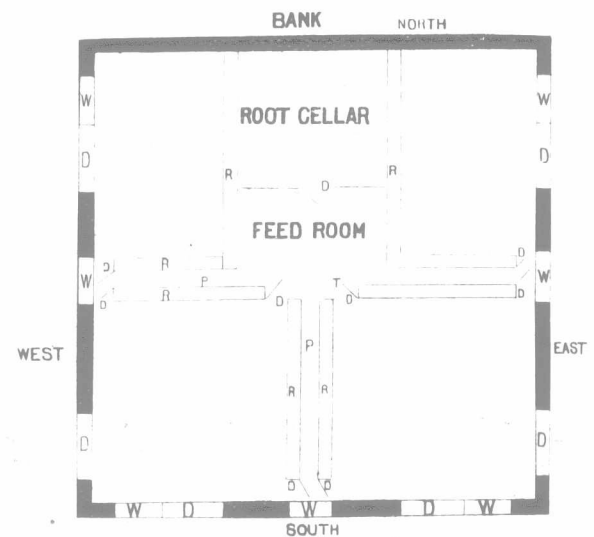
Air Space in Byres.

American and Canadian newspapers announce a return to sanity on the part of a good many people across the Atlantic on the subject of the tuberculin test, and county councils on this side are also becoming more reasonable in connection with the air-space question. At a recent meeting, Colonel Maude mentioned that in one district in Yorkshire a demand was made that each cow in a country byre should have 1,800 cubic feet space, while in another district the demand was for 900 cubic feet. The folly of these demands is seen in the fact that all parties have united on 600 cubic feet per animal—a reasonable working compromise, and one which, in most cases, is capable of being realized. In a fine byre which the Duke of Argyll is erecting for Mr. Howie on Rosneath Farm, 600 cubic feet of air space is being aimed at, and the whole fittings and roofing, with ventilation, are so arranged that it is expected the byre will be both warm and well ventilated. Mr. Roy's byre at Baillieston, erected in accordance with ideas suggested by Mr. John Findlay, is fitted and planned in the same way, and is understood to be a great success.—*Scottish Farmer.*

Sheep Barn Plan.

To the Editor FARMER'S ADVOCATE:

SIR,—As requested, I have forwarded you a plan of our sheep barn. The sheep are housed in a stone basement, 50x50 feet, 9 feet high. It is well plastered inside, and special attention is given to lighting and ventilation. Besides the windows shown in plan, which are double sash, sliding back and forth, there is one above each door, hung on hinges and operated with weights, rope and pulley, so that any desired amount of ventilation can be given, whatever direction the wind blows from, without creating a draft. We can carry 40 to 50 breeding ewes, with their lambs, and as many more yearling rams and ewes, in this barn. For 100 breeding ewes, considerable more room would be required during and after lambing time. The feed is stored in barn, overhead, the drive floor of which is reached by a bank, made against north side of root-cellar wall, affording



GROUND PLAN OF JOHN CAMPBELL'S SHEEP PEN.

protection against frost. As the feed is dropped into feed-room, convenient to feeding passages, labor is saved. The root cutter, pulper, grain and bran boxes, with water tap, are all located in feed-room. The feeding racks divide the barn into four divisions, and they are movable, with the doors wide enough to admit a team, so that the manure can be loaded directly for the fields. There is a yard for each of the four pens, with high, dog-proof, tight board fence, to insure sound sleep at night, not so much for the sheep as the shepherd. The passageways between racks provide for feeding without going among the sheep, thereby saving waste. Having used the barn for nine years, we are well satisfied with the arrangements and can suggest nothing different in the way of improvement.

JOHN CAMPBELL.

Woodville, Ont.

Plan of Root House.

To the Editor FARMER'S ADVOCATE:

SIR,—In your issue of March 1st, D. C., Pontiac Co., wishes to get points about building a root house. The following is a description of one I built in the summer of 1898: The whole structure is above ground. My cattle stable is a stone building 46 feet long, with large hayloft overhead, running north and south. The root cellar is built at the east side of cattle stable. The foundation trench was dug 2½ feet deep and filled with stone. The stonework was carried 2 feet above ground surface, then a brick wall 9 inches thick and 5 feet high was built on top of stonework at outer edge of wall, and a 4 inch wall same height was built inside, leaving an air space of 2 inches between walls. The 4-inch wall was built first, and received a coat of mortar (¾ inch) on the outside as it was being built. The two walls are held together by hoop-iron hooks built into the walls at intervals. Over this, for a roof, we erected a lean-to hayloft that will hold 6 tons of hay. The whole building is 46 feet long by 12 feet wide at outside of walls. There are two windows to fill it from, 10 feet from each end, at side wall. This has proved a very satisfactory root cellar, it being, so far, frostproof.

A. J. RUSSELL.

Northumberland Co., Ont.

To Remove Warts and Lice from Cattle.

To the Editor FARMER'S ADVOCATE:

SIR,—Let me give you our plan of taking warts off stock: Mix sulphur and lard (equal quantities) and apply twice weekly for three or four weeks, and to your surprise the warts will disappear, leaving no scars, nor does it hurt the animal. It is far ahead of a dull pair of scissors.

Lice again. Lice on cattle can be easily taken off by dusting a little ashes on the backs of the cattle once or twice during winter. If you will notice, these lice breathe, not through their heads, but through holes along their sides, and the dust of the ashes simply clogs up these pores, or breathing tubes, and they die at once. Why do we seldom see lice on cattle in summer? Simply because they will get in some ash pile or dust and throw it over their backs and kill the lice, if there are any.

I wait anxiously for every issue of your paper. Father has taken it for over thirty years, and could not do without it.

ARTHUR KELLY.

Brant Co., Ont.