

Now look at fig 2 which shows a perpendicular section lengthwise, one foot from the back side of building. You will notice the muck box *h*, which runs clear across from front to rear, over *b b*, (fig. 1). The front of this box, *g*, falls back at the bottom so the muck lies only over the back part of *b*. From the dotted line forward is a shelf to shovel on. The muck can be put in over the top of *g*, filling to the roof.

Where one has it, there is nothing better to use as an absorbent than dry muck. Where one can not get this, road dust or dry earth can be used. This box will hold some 30 or 40 bushels, enough we think for a year. When the first dry spell comes, in the summer, we hope to fill it once for all, for a year, and have no more bother. It will be as handy as possible to get it to use, daily, even to the last shovelful; *d d* are galvanized iron pails. They are 14½ inches high (seat 15) 10 inches in diameter at the bottom and 13 at the top. They are made of the best iron and have handles, of course, that shut over outside the pails. One can lift up *e* very easily and take them out, when they can be carried to any point desired and emptied. The pails were made largest at the top so the contents could be got out easier in cold weather. A little hot water poured on the outside of pails will probably make them empty easily.

In fig. 2, *f* is the floor which goes right across the building, all tight. The size of building

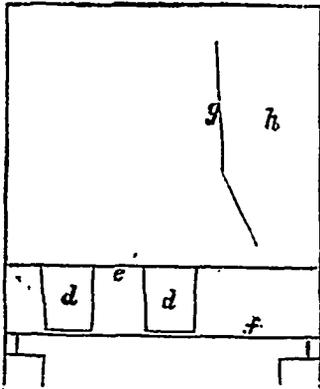


Fig. 2.

is 4½ feet by 7, and scale of drawings four feet to inch. I built entirely of matched flooring, planed on both sides, except that 2 by 4 pieces were used for sills and plates and rafters. This makes a cheap, neat, tight job. The building is painted all over, outside and in. The floor and roof boards (planed) are painted. Entire cost about \$25, which includes carpenter's bill, pails and all.

The muck box arrangement, so far as I know, is original. For the idea of using pails I am greatly, indebted to the New-York Tribune, which some years ago gave the experience of some gentleman who had used them. I made a note of it, right then, that they were just what I wanted as soon as I could get around to it.

A ventilating pipe of tin may be found useful, leading from a hold in the back part of *b* down under the seat, and then up out of top of building.

T. B. TERRY.

Summit County, O.

We re-engage from the London Live-Stock Journal a sketch of a cross-bred steer which attracted great attention at the late Smithfield Fat-Stock Show. This animal, appropriately named "Chillingham," was calved Jan. 17, 1885, his dam being a wild cow from the noted herd belonging to the Earl of Tankerville, and his sire a white Short-Horn bull, Baron

Bruce 47387. He was grass-fed in an open park, supplemented only by artificial food since it was decided, three months ago, to send him for exhibition, and is considered a great curiosity. He was three years ten months and two weeks old; weighed 16 cwt. 2 qrs. 24 lbs., and had a strong resemblance, except in color, to a crossbred Highlander. The judges awarded him the reserve number and high commendation. See *March*.

DAIRY BREEDS.

The various classes at the Dairy Show practically define which are, and which are not, the dairy breeds of cattle in Great Britain. It may be safely said that though individuals of other varieties are good milkers, yet if the general standing is not good enough to warrant the opening of a class for them under this head at Islington, then they must be reckoned as unsuitable for the purpose. Professor Sheldon in his great work on "Dairy Farming" describes nearly all the breeds in the British Islands, and states all that there is to be said in their favour from a dairy point of view, but still it must be acknowledged that many are purely beef breeds alone, and nothing else is claimed for them even by their warmest admirers. The beef breeds have been figuring at Smithfield during the past week, together with several which are noted for both beef and milk. The seven following are those of most importance from the dairyman's point of view:—Shorthorn, Red Polls, Ayrshire, Jersey, Guernsey, Welsh, Kerry. Some of these have several subdivisions into distinct varieties, such as the Welsh and Kerry, while the Dutch cow is a famous breed, though not exactly a British one.

The dairy qualities of some breeds over others have been brought about mostly by breeding and selection, as it is doubtful if soil and climate have had very much to do with it. Those varieties which have not been celebrated for milking powers, owe this deficiency quite as much to their masters who allowed it to drop out of sight as to anything else, as there is no inherent defect in any variety in this respect. This is proved by two facts—viz., that some individuals, or even whole herds of a non-dairy breed, have been known to milk quite as well as those which have always had a dairy name; and secondly, that all breeds must have been derived in remote ages from "a common ancestor," even although we may trace their descent in comparatively recent times from several varieties of the genus *Bos*.

It follows, therefore, that those which are not good milkers at present could be, in course of time, made so by selection and breeding. It would be doubtful, however, if this were worth the trouble for anyone try nowadays, when types are so firmly fixed, and when there are dairy breeds enough to choose from suitable to every part of the country. Of course one great object is to have animals which will fatten after they have done with milking, and though many oppose this idea, there does not seem any reason why selection should not develop this property as well as any other.

At the same time those breeds which are beefers only must give some milk, if it were only to rear their own young. Some years ago it was a notorious fact that pedigree cows sometimes could not give milk enough to suckle their own calves, and had to be helped with the yield of "common animals." Breeders are more enlightened in this matter now, however, and we have pedigree animals (as the Shorthorns at the Dairy Show) which cannot be surpassed, or even equalled in this respect. Those who work with other breeds than the seven mentioned above, therefore, while not going so far as to convert them into dairy animals, will yet do well to make them as good milkers as possible, and where other things are equal to retain for breeding purposes those cows which naturally yield most.