

(418) a bull used by Mr. Bates. Sweetbriar bred May Rose, that went to Ireland, and Formosa, that bred Mr. Torr's Flora, from which the Flower tribe, the finest at Aylesby, have descended. Wildair bred Caroline, Harold (291), Phoenix, Emperor (1013) and three other bulls. Phoenix went to Charles Colling, of Ketton, and there bred the celebrated bull Comet (155), sold for a thousand guineas. The third was the Beauty, or Punch tribe, originally from Mr. Best, of Mansfield. Of this were Beauty, Golden Pippin, Clarissa and Old Daisy. Beauty was from the same dam as Punch (531). Golden Pippin was by North Star, and went to Mr. Whitaker, where she bred Non-such, and both then went to Mr. Adkins, of Milcote. Old Daisy bred Ben (70) and Twin Brother to Ben (660) afterwards sold to Mr. Booth. The fourth was the Red or Moss Rose tribe, of which the origin is unknown. Red Rose was own sister to the American Cow, the first female named in the now fashionable Cambridge Rose line. This cow was bred by Robert Colling, and sold by him when a yearling, to go to America. She came back again, and passed into the hands of Mr. Bates when 17 years old, and bred Red Rose 1st, by Yarborough. Red Rose bred Moss Rose by her own sire, and proved a regular and excellent breeder, most of her calves being bulls. Among them were Miner (441), Midas (435) a fine large bull that made 1,100 guineas for Mr. Colling, and finally went to Mr. Wiley, of Brandsby, and got for him but two calves, Midas, 1230, and the famous Grazier (1085). She also bred Baronet (62), sold for 350 guineas, and Pilot, (496), sold to Mr. Booth for 270 guineas, and a heifer Rosette. Moss Rose bred Barmpton (54), Lancaster (360), and Young Moss Rose. Barmpton was a small-sized but beautiful roan, neat, wide backed and compact. He got splendid stock, said to be better than North Star's. He was by George (275), a magnificent bull that fell and broke his neck when young. Lancaster, a white bull, was of fine quality, but narrow, thin, small and lanky. He was let cheap as a yearling, but got most extraordinarily good stock, that became the talk of the country. This, coupled with the fact of his being from so grand a cow, brought Mr. Colling 621 guineas for him. Young Moss Rose went to Stockeld Park, where her descendants still remain.

Besides these leading families, Mr. R. Colling had several heifers got by Favourite (252) and Wellington (680), from cows bought from his neighbours or at the

fairs, most of which became progenitors of many fine short-horn families. Among them may be noted Cowslip, from which came the Ursula tribe of Mr. Rich of Didmorton, Empress, Princess—from which came the Gwynne tribe—Strawberry—from which came the Mantilini tribe—Jessy and Jewel (twins), Cicely, White Rose, Lady, Old Dinsdale, Countess, and Young Charlotte, besides several others, some not named.

Hubback (319) and Mansfield (404) were the first bulls used, succeeded by Broken Horn (95), Punch (531), Favourite (252), Comet (155), Phenomenon (491), Wellington 680, besides several bulls of his own breeding, as he bred to very close affinities, using Favourite very extensively for years.

At the sale at Barmpton, in 1818, eleven of the Red Rose tribe, including Lancaster (360), brought an average of £269 3s. 6d. each, and thirteen of the Wildair tribe £142 17s. 6d. each.

### Housing and Feeding Cattle

To the Editor.

SIR,—Having seen in the CANADA FARMER some articles about housing and feeding cattle, and believing that in some particulars I can suggest improvements, I send you an account of my operations.

For the accommodation of my cows I raised a house, sixty-four by thirty-four feet within, in the side of a clay bank. There is a cellar of stone and lime, eight and a half feet high, divided by a wall across, fifteen feet from one end, so as to make a cellar for roots. It is ventilated by four pipes on three sides, six by six inches, through the floor and walls, with slides to cover them. The floor is drained into a well of good sweet water. There is a ring of brick laid in cement round the well. The spare water is let out through a pipe. The floor is laid with cement. The floor of the large cellar is also well drained and laid with cement; and besides, about two and a half feet of the walls are cemented to keep bad water from the well. There are four stone pillars and two cedar posts in the cellar to support the floor above, and the purlin posts. The door for taking out the manure is level with the floor. There is no frost in the manure. The cellar will hold five or six months' manure; and the small cellar will hold roots to supply twenty-eight cows all the season, at the rate of twenty pounds daily each. The beams for the first floor are cedar, resting on the walls, and on the pillars mentioned as being in the cellar. There is some care needed in placing these beams to answer the different inclines of the cattle floor. The floor is of two inch pine. There are four rows of cows, seven in each. There is a passage the length of the house. There are two doors in the side. Fourteen cows go in at

each door, and stand with their tails to each other. The upright scantlings that form the stalls are fastened to the floor below and the beams above. The feeding troughs are made, the bottoms of two inch pine and sides of one and a half inch pine; the divisions between them being four and a half feet high: the inside of the feeding box is sixteen inches wide, the front eight inches high, the back thirty-one inches above the bottom. The back of the box inclines outward seven inches, this is important, as it prevents the beast wasting the food. There are pieces of three or four inch scantling put between the floor and the bottom of the box. The distance between the front of the feeding box and the gutter may be six feet; the two gutters, with the open space between them of fifteen inches, will be three feet eight inches. The gutters are two inches below the floor; where the cow stands pieces of three inch scantling are put across the open space of fifteen inches, and a two inch plank, twenty-two inches wide, covers it; all excrements pass into the cellar below this plank. There is no trouble to keep the cows dry and clean, and no waste of manure; there is no excess of water in winter. Some black earth or dry earth, not much, is wanted in summer to absorb the excess of water. There are five windows in the back of the house, and three in the front, with the two doors. There are six openings, thirteen by fourteen inches, through the upper floor, and pipes set on them that reach up through the hay. In the roof there are two windows and two ventilators, which draw off all smell or bad air, and in addition, there is a window high up in each gable. The windows are all alike, six lights, eight by ten, and boards, ten by twelve, on hinges. The house is a frame, with cedar sills, the posts being eight by eight inches, and sixteen feet high; covered with good boards—the joints covered with dressed stuff, one inch by three, nailed every two feet. It is lined inside with inch boards, and filled in with tanners' bark. The floor above for hay is eight and a half feet to the roof, and thirteen and a half feet to the purlin beams; it will hold hay for the twenty-eight cows. The roof got two coats of coal tar, and the siding two coats of fire-proof paint. Hay may be taken in at either end with a horse-fork. There is a space above the turnip. Har, fourteen by thirty-three feet, for preparing food; in it there is a pump, a turnip-cutter, a bin for holding broken grain, and three boxes, five feet by seven and four feet deep, to hold the food.

After a good deal of experience, and some study and calculation, I have come to the conclusion that the following quantities and mixture of food are about right for a fair-sized cow giving milk: Twenty pounds clover hay, twenty pounds turnips or beets (fine cut), two pounds bran, five pounds broken oats, two pounds pea-meal (equal altogether to 15 pounds hay). Some small cow will eat less, and large ones more. The mixed food being placed in the box, put in