

## Breeder and Grazier.

### Feeding Value of Indian Corn.

The corn crop is our chief dependence for fattening all kinds of stock, from a chicken to a steer. We feed it in the most indiscriminate manner and under all conditions and circumstances, and in nearly all cases unground and uncooked. That our methods of feeding are anything but economical must be admitted. The English farmers are more careful and feed with far greater economy. If they did not they could not manage to exist. It is well known that feeders of stock in England have never placed a very high value upon Indian corn to feed alone, and Mr. Horsfall has lately made some analysis, from which he concludes that it is unsuitable for feeding alone to growing stock.

He gives the composition of corn as follows: Oil, 7 per cent; starch, sugar, etc., 60; nitrogen 2.25; phosphoric acid and potash, 36. The albuminous compounds required to furnish 2.25 per cent. of nitrogen would reach nearly 14 per cent., which leaves about 18 per cent. for water and indigestible matter. From the above he concludes that Indian corn is rich in fattening rather than flesh-forming properties; and he might have added also, or milk producing properties. The very small percentage of mineral indicates that alone it is unsuitable for growing stock, or for milk.

In the *Journal of the Royal Society* are published experiments by Mr. Lawes on feeding pigs, the result of which was that corn meal fed alone was not satisfactory. The report of the experiment says:

"One of the pigs gained more than two pounds a day during the first fortnight of the experiment, but the other two only about half as much. It was observed, however, before the end of the first period, that this fast gaining pig and one of the others, No. 3, had large swellings on the sides of their necks, and that at the same time their breathing had become labored. It was obvious that the Indian corn meal alone was in some way a defective diet; and it occurred to us that it was comparatively poor both in nitrogen and mineral matter, though we were inclined to suspect that it was a deficiency of the latter rather than the former that was the cause of the ill effects produced. We accordingly determined to continue the food as before, but to try the effect of putting before the pigs a trough of some mineral substances, of which they could partake if they were disposed. The mixture which was prepared was as follows: Twenty pounds of finely sifted coal ashes, four pounds common salt, and one pound superphosphate of lime. A trough containing this mixture was put into the pen at the commencement of the second period, and the pig soon began to lick it with evident relish. From that time the swellings, or tumors, as well as the difficulty in breathing, which probably arose from the swellings of the former, began to diminish rapidly, and at the end of this period were very much reduced and at the end of the third period had disappeared entirely. Notwithstanding this serious drawback, it was found that the animals were satisfied with less of this food, though so poor in nitrogen in proportion to their weight, than, with one exception, any of the others; and it will be found that the increase is satisfactory when compared with the food consumed."

The conclusion is that when this grain can be bought for from 4s. to 5s. (sterling) per quarter under grinding barley, it will be worth notice. Lately prices have ruled high. Up to £5 a ton it is a reasonably cheap food, which may be used in combination with other substances. Thus our neighbors talk across the water; and we may profit by their conclusions. We believe that every intelligent feeder knows very well that a mixture of food is better for both growing and fattening stock than corn alone, though their practice in this particular may not correspond with their convictions.

**TREATMENT FOR CURB.**—The *Live Stock Journal* says. Clip the hair from off the entire surface of the enlargement, and then apply a mixture of hog's lard, 4 dr.; cantharides, 1 dr.; bismuthide of mercury, 1 dr.; spread a thin coating of the above over the part and rub in for fifteen minutes, then tie the animal so as he may not bite or rub the curb, at the same time give as much rest as possible. On the third or fourth day apply a little lard or sweet oil if a nice scab has formed.

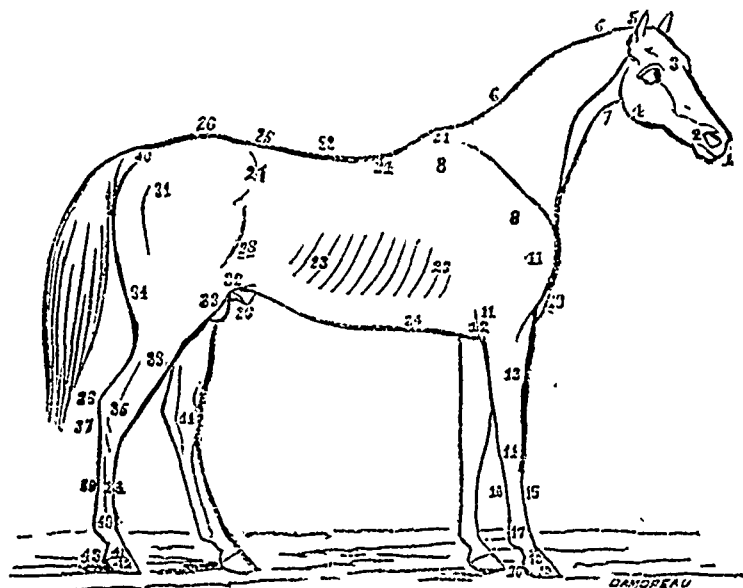
### The Anatomy of the Horse.

(To the Editor of the CANADA FARMER.)

SIR:—I read with much profit and satisfaction the articles which appear from time to time in the "Breeder and Grazier" and "Veterinary" departments of your valuable publication, and it has frequently occurred to me that a drawing illustrative of the various "points" mentioned by veterinary and

other writers would be very useful for reference, more especially to beginners like myself. I am informed that such a drawing—of the horse, if I mistake not—appeared in the CANADA FARMER some years since. If so, would you kindly reproduce it for the information of A YOUNG FARMER.

The cut referred to by our young correspondent appears on page 49 of the CANADA FARMER for 1870. Here it is.



#### HEAD.

1. Muzzle.
2. Nostril.
3. Forehead.
4. Jaw.
5. Poll.

#### NECK.

6. Crest.
7. Throat, or Windpipe.

#### FORE-QUARTER.

8. Shoulder-blade.
9. Point of Shoulder.
10. Bows, or Breast.
11. T. to arm.
12. Elbow.
13. Forearm (arm).
14. Kneecap.
15. Cannon bone.
16. Back sinew.
17. Fetlock.
18. Coronet.
19. Hoof or Foot.
20. Heel.

#### BODY, OR MIDDLE-PIECE.

21. Withers.
22. Back.
23. Ribs, (forming together the barrel or chest.)
24. Girth.
25. The Loin.
26. The Croup.
27. The Hip.
28. The Flank.
29. The heath.
30. The root of the dock or tail.

#### THE HIND QUARTER.

31. The Hip joint.
32. The Stifle joint.
33. Lower Thigh or Gaskin.
34. The Quarters.
35. The Hock.
36. The point of the Hock.
37. The Curb place.
38. The Cannon bone.
39. The back shew.
40. Pastern or Fetlock joint.
41. Coronet.
42. Foot or Hoof.
43. Heel.
44. Spavin-place.

### Causes and Cure of Quarter-Evil in Calves.

One of our correspondents was lately deploring his losses from quarter-evil, and asking counsel thereupon. I too have been a sufferer, but latterly, from some cause, it has quite left me. This I in part attribute to careful feeding, more particularly to the use of salt in the food. I believe the wild cattle of the prairies travel many miles to the salt licks, which would seem to show that, without extraneous assistance (and Mr. Bunge's recent experiments substantiate the fact), there is not sufficient soda in their diet to counteract the quantity of potash. Now it has occurred to me that this inflammatory fever may be in some cases produced by the paucity of soda in the blood. Can it be so?—A SOUTHERN FARMER. [Common salt is a very essential article of food; none of the higher animals do well without it, some sorts of food containing it in limited amount are greatly more palatable and healthful when salt is added to them. As pointed out by your correspondent, many wild animals instinctively seek salt as if it were a necessity of life. Boussingault many years ago made some interesting experiments regarding the dietetic value of common salt. Mr. P. Dunn, in his "Veterinary Medicines, their Actions and Uses," gives the following abstract of these experiments:—"Six cattle, as equal as possible in weight and appearance, were selected and fed in exactly the same manner, except that three received each 12 ounces of salt daily, whilst the other three got none. In about six months the skin and hair of those without salt became rough, dry, and staring, presenting a striking

contrast to the smooth, silky coats of the others, which though not much superior to their neighbors in weight, were more lively and of so much better appearance that they brought a somewhat higher price. The cattle receiving salt exhibited throughout much greater appetite and relish for their food, consumed it in a shorter space of time, and also drank larger quantities of water" (p. 491). Careful reiterated observation has led good managers of every description of farm-stock to keep a portion of rock salt in the rack crib, or feeding box. It is especially a valuable addition to cooked or steamed food, and for animals recovering from acute disease. But important as salt undoubtedly is as an article of diet, its absence in the dietary does not appear to produce symptoms resembling those of quarter-evil. The animal becomes dull and unthrifty in its coat, but even in cases where for experiment the animal has been purposely kept on food containing as little salt as possible, no symptoms have been produced of congestion, which is the prominent condition of quarter-evil. Indirectly ether soda, potash, or other saline substances appear to counteract the tendency to quarter-evil, probably by maintaining in some way, not very easily explained, a healthy condition of the blood, and further promoting an active state of those important purifying channels—the bowels, skin, and kidneys. The chief reliable knowledge at present possessed regarding the causes of quarter-evil is that consisting of a form of blood-poisoning; it is brought on by the retention in the circulating fluids of some noxious material, probably elaborated from some rapid tissue change. It is very notorious that quarter-evil most frequently attacks well-thriving cattle or sheep which a few weeks previously have