

with it, thus
uld not prob-
above reason,
every day or
ils, unless the
ntive is to put
the meat, that
urface, but be
contact with
ainted.

ured to their
well on two
ey vary in di-
d it is well to
ing period for
ng that upon
do not usually
n, provided it
er comes it is
on grass alone
ed soft; and
posit, the fatty



d be generous,
e blood to meet
ent conditions.
far from being
as a few years
y, there was a
onsidered that
especially for
also, was con-
e of those who
department in-
m stock, have
ing, especially
me and money
out its paying
e mill for cattle
breeding stock
feeding whole
als during the
to have a fol-
o consume the
it is liable to be
t, permitted as
in the manure
lung troubles.
ion of food will

avail little except under extravagantly liberal feeding, unless fairly comfortable shelter is provided, something to stand between the hide and hair of the breast and the inclemency without. Any attempt to make a selection of food that will, under any honest showing, make it appear that it is more economical to feed against the weather than to shelter against it, will fail signally. Any man who thinks that cooked food, fed hot, will aid an animal to resist cold, is in error. The selection of food for winter use is simple, provided shelter and bedding are supplied.

Wheat is found to contain ten parts of flesh-forming material, while it is stated to contain 70 per cent. of starchy material. Upon this latter the ability to stand cold largely depends; hence the value of wheat offal, especially the richer portions of it, should be estimated at a high figure. Even bran is well known to breeders to be far more satisfying to cattle and other stock than it has usually been credited with being. While nothing approaches oats for horses, in conjunction with a small quantity of hay, if they are required to make time on the road, or pull heavy loads, so nothing excels the offal of wheat, with a sprinkling of corn

Going to the Horse Fair.

Herewith we give an illustration of this celebrated picture, by Rosa Bonheur, and which is justly regarded as the chief work of the artist, whose fame is world-wide, and who stands unrivalled as a painter of horses. She received her first instruction from her father, an artist of considerable merit, but she owes her remarkable success in the delineation of animals to a constant study of living subjects. The artist worked eighteen months on the picture of the Horse Fair. It was a leading attraction at the Paris Exhibition in 1853, and also at the great Exhibition at London in 1855.

For the original of this picture, the late and well-known A. T. Stewart, of New York, paid \$40,000. Mrs. Stewart kindly allows visitors on certain days to view this and other valuable pictures in her gallery.

The advanced condition of agriculture at the present day makes us practically manufacturers, as well as farmers. The crops we grow—our hay, grain, roots and purchased food are the raw products, our animals are the machines that manufacture these materials into human food. Just now, at the beginning of the winter, with our stock wholly dependent upon the hay and grain and other fodders which we have or may purchase for their daily rations, how to feed them with the greatest economy and thus realize the largest possible profits demands intelligent study. It is certain that in the sharp competition of the present, if we succeed we must avail ourselves of every element of success. There has been in the past few years marked progress in the care and feeding of stock; yet there is need of still further advancement in this direction. Too many farmers waste largely the nutritive materials in the food by injudicious feeding. They do not understand the value of feeding specific foods for definite purposes.

There has been recently many carefully conducted experiments and much labor devoted to the study of cattle foods and feeding. The results



THE HORSE FAIR—BY ROSA BONHEUR.

meal and oil cake, or cotton-seed meal, for cattle; and the same is true of breeding swine.—[National Live Stock Journal.

The Queen has been very successful at local shows during the past summer with her polled cattle, reared at Abergeldie Mains, and she has given instructions to Dr. Profelt to select three of the best specimens of the herd for presentation at Smithfield. Her Majesty is anxious, says the *World*, to possess a herd of "polls" second to none in the country, and has given her commissioner *carte blanche*, whenever he sees a favorable opportunity of adding to the stock, on no account to neglect it. Abergeldie has already excited the envy of the Deeside farmers, and the personal interest the Queen takes in her cattle has led them to regard her almost as one of themselves.

"Swell head" has developed among cattle at the stock yards. The first scientific examination of this disease in this country was made under the direction of the United States Treasury Cattle Commission. It was decided that the disease is the result of lodgment of microscopic plants in the teeth. When the disease extends to the jaws it nearly always proves fatal. It can be communicated to man.

Profits from Stock Food.

Farmers often seem to disregard the fact that profit comes largely through saving. We may labor hard and grow abundant crops and harvest them securely, but if foresight and economy are not regarded in their use and disposal satisfactory results will not be realized. The season now closed has rewarded our labors with bountiful harvests. We are desirous of getting all the profit we can from our labor and we should thoughtfully consider how we may dispose of what we have securely stored in barn, bin and cellar to the best possible advantage, regarding not only the immediate cash returns, but considering also the future condition of our farm operations.

In our widely extended country, practical experience has demonstrated the fact that our agriculture, to be self-sustaining, must be based upon stock-husbandry. There are, probably, localities where crops may be sold directly from the farm, and barn manures and chemical fertilizers purchased and used to maintain the fertility of the soil, but these localities are limited, and the rule that stock husbandry is a necessity in our agriculture may be safely regarded as one of the few fixed facts in our agricultural creed.

have been tabulated and farmers who wish to keep abreast of the times in their profession, and who realize the importance of comprehending the needs of their stock and thus be able to supply each class of animals with just those rations required for specific purposes for which they are kept, will, by the study of these experiments, gain much useful information that will aid them as practical feeders.—[Maine Farmer.

One of the best cheap devices for keeping stock warm in winter is to put up a frame, cover it with poles from the woods and build a straw stack over it, leaving an opening on the side opposite the direction of the prevailing winds. With plenty of straw a shed of this character is as warm as a basement barn and much cheaper, and can be made by any farmer. It does not even require a hammer and nails, though with these and a few boards the work can be made more attractive in appearance.

It is not safe to feed potatoes, turnips or other small roots to cows without slicing. Cattle chew food very little before it goes into the stomach; hard roots are just the shape to readily choke them,