

keep his stock through the winter at the least cost for feeding value. As I have to feed straw, will it pay better to buy oilcake or cotton-seed meal instead of bran to balance the ration?"

[The U. S. Department of Agriculture issued Farmers' Bulletin No. 22, on the Feeding of Farm Animals, in February, 1895, which gives the minimum, maximum, and average composition of feeding stuffs from a large number of analyses, which bulletin will be sent to any address by applying to the Department of Agriculture, Washington, D. C., U. S. A. When the composition of a food is known, the nutritive ratio is determined by multiplying the digestible fat by 2.2, adding the product to the digestible carbohydrates, and dividing the sum by the digestible protein. That is, by making a ratio having for its first term the digestible protein, and for its second term the digestible carbohydrates plus 2.2 times the digestible fat. To illustrate, take wheat shorts: digestible fat, 3.83 x 2.2 = 8.426, plus digestible carbohydrates, 49.98 = 58.406. The digestible protein being 12.22, the nutritive ratio is 12.22 : 58.406, which, reduced to its simplest form, is 1 : 4.77. As straw is low in protein and fat, oilcake or cotton-seed meal is more economical to buy to supplement the straw than is bran, at the current prices of these products.]

LIVE STOCK MARKETS.

Toronto.

The market was a little better as regards shipment of cattle, Mr. Akin sending forward to the Old Country about 250 head, and 500 sheep of good quality. Many of them appeared to be Shropshire and Southdown crosses on long-wooled sheep.

The offerings were fairly good, embracing 68 loads, which included 1,061 sheep, 1,000 hogs, 85 calves, and a few milk cows.

The receipts for the week were 2,280 cattle, 1,263 sheep and lambs, 4,263 hogs. Butcher cattle were, perhaps, a little better than those noted in my last report. Mr. MacLellan paid 4c. per lb. for five cattle averaging 1,000 lbs. each.

Hogs.—Prices quoted to-day for best bacon hogs were from \$1.75 to \$5.00 per cwt., weighed off cars. Offerings were large, but all sold easily, with some demands not satisfied. Good lean hogs wanted, especially for bacon purposes. Thick fat hogs asked for; no inquiry for stores, only a few being taken by the cheese factories. Quite a variety were to be seen, including two or three Poland-China grades, with good long back and sides; some Tamworths and crosses; a very level lot with good, fleshy hams; all of these maintained their prices. There was some inquiry for breeding sows at 4c. to 4½c. per lb. Fat hogs bring \$4.50 to \$4.70. A very fine lot of Yorkshire, white grade, fetched \$5.00. The market was firmer, and a rise of 50c. from my previous notation, with a prospect for a further advance next week. Demand good for best bacon hogs of the long, lean, dairy-fed sort.

Some farmers spoke more hopefully to-day, and said the recent showings would help things greatly.

Now and then a few stall-fed cattle come in, and they are picked up immediately. The range of prices may be put down from 4½c. to 4½c. per lb. for good ones, with a prospect for higher prices. For butcher cattle this price still continues low; choice, \$3.50 to \$4 per cwt.

Hides.—There is a fair demand for hides; the receipts are small. Dealers are paying 8c. for green hides and selling cured at 9c.

Wool.—There is a good demand for all the wool offering, owing to increased export. There is a considerable quantity of wool passing through and if the present price is maintained the shipments will continue.

Hay.—There has been considerable activity and strength in the hay market this last week, and the feature has been the sharp advance in prices of \$1 to \$1.50 per ton. Many feeders have stored large quantities against emergencies. The volume of business transacted has been large; shipments being made to various Ontario points. No. 1 Ontario standard straight timothy is very scarce, and was asked for.

Wheat.—Only one load on offer; white selling at 82c.

Oats.—A slight rise; 300 bushels selling at 39c.

Hay.—Market steady to-day; only ten load of old selling at \$17 to \$18; new, \$11 to \$11.50. One choice lot fetched \$12.50.

Baled hay, No. 1, \$14; No. 2, \$12 to \$13.

Straw.—Three loads on offer; one lot sold at \$9.

Eggs.—In fair supply; demand good; price steady; 10c. to 12c., warranted strictly fresh-laid.

Milk feed is in good demand. City mills quote car lots at \$17 to \$18. Some bran was offered at \$12.50.

Poultry.—Chickens, 50c. to 60c. per pair. Ducks, 60c. to 70c., large size.

Prices range as tabulated:—

Milkers and springers, each	\$15.00 to \$25.00
Butchers' choice, per cwt.	3.50 to 4.00
Butchers' good, " "	3.50 to 3.90
Cattle, export, per lb., 2½c.	4c.
Sheep, " " " "	2½c.
Calves, " " " "	2c.
Hogs, thick fat, per cwt.	4.70 to 4.75
Hogs, long, lean, per cwt.	4.90 to 5.00
Eggs, " " " "	10c. to 12c.
Butter, " " " "	12c. to 17c.
Poultry, " " " "	60c. to 70c.
Ducks, " " " "	70c. to 75c.
Wheat, " " " "	80c. to 82c.
Oats, " " " "	34c. to 37c.
Hay, new, per ton	\$10.00 to \$13.00
Clover, old, " "	17.00 to 17.50
Straw, " " " "	8.00 to 8.50
Hides, " " " "	8c. to 9c.
Wool, " " " "	23c. to 23½c.

Montreal.

Trade for the past two weeks has been decidedly against drovers, and there is no doubt but many of them have dropped no little money. Owing to the steady drop in values experienced in Toronto, due to the drought, many drovers, who do not make a practice of it, have sent their cattle on east, preferring to do so rather than take the price offered. This has led to our market being overstocked and coupled with the indifference shown by butchers to take anything unless at rock-bottom prices, has caused cattle to sell at the lowest figure obtained so far this season. Another thing militating against drovers has been the presence of a large number of Manitoba cattle on the market, and from the evident reluctance of both buyers and sellers to quote figures, there is no doubt but that some sellers received a "roust."

There has been no choice export cattle offered for some time; therefore no estimate is of value; quite a few small lots of the best butcher cattle have been taken to finish space, however, for which a high as 4½c. per lb. was paid, but this was an outside figure, and has rarely been reached during the past fortnight. Good butchers' cattle can now be had at 3½c. down to 3c. per lb., culls and common stock running down under 2c. in some instances. Choice fat sheep for shipping meet a good demand at 3½c. per lb., with few offering. Butchers' stock as low as 2c. Spring lambs are also meeting with a good demand, from \$2 to \$3.75 each being realized.

Calves for some time past have met a good steady trade, the offerings being pretty well absorbed at from \$7 to \$10 for choice, \$3 to \$6 medium.

Live hogs continue to advance and contracts have been made for this week at \$5.15 per cwt. off cars, for useful, long, lean bacon hogs; thick fat from 15c. to 20c. per cwt. less.

The offerings for local use have been about 1,000 cattle, 600 to 800 sheep and lambs, and 400 to 500 calves weekly. For export, shipments continue firm; the exports for the two weeks being 6,969 cattle, 12,307 sheep and 1,047 hogs.

East Buffalo Stock Letter.

Sheep and Lambs.—The market has been the lowest ever known at these yards. Receipts have been beyond expectations; in fact, the heaviest ever known at this season of the year. This free marketing of stuff is largely attributed to the dry weather prevailing largely in Michigan, Ohio and Indiana. Two-thirds of the offerings is trash, what is selling at ruinously low prices and is so poor in quality that it cannot be sold at all. We are likely to feel the effect of this free marketing later on, and we believe that those who can take advantage of the situation will profit by so doing. Good sheep and lambs are scarce, and anything that has fat and quality will find ready sale at fair prices. The export trade has been very light. The few that did sell went at \$3.50 to \$3.75, while the good to choice handy weight sheep were all the way from 2c. to 3c. It took good culls to bring 1c. per pound, and the trashy stuff was peddled out by the head, averaging from 50c. to 75c. per hundred. The lamb trade was much slower than the sheep trade, and much more unsatisfactory. It took the very prime lambs to bring 5c. per pound, and there was a very light demand for them at that. Good bunches sold from \$3.50 to \$4.00, and common and cull grades went from 2c. to 3c. per pound. It is not likely that there will be any improvement to speak of for nearly a week. Buyers here are all overstocked, and the same seems to be the case at all large points east of us.

Hogs.—The market has declined a little, and the decline at the Western points has been about 30c. per hundred. How far this break will continue remains to be seen; but there is one thing that we have maintained all along, and that is unless we get an improvement in the demand for the product which is piled up in the cellars, we are not likely to have any higher prices. There has been no sign of improvement in the demand as yet, and until that comes we believe that prices of hogs will fluctuate and that the market is more likely to tend downward than upward. Prime heavy grades selling here to-day (July 29) at \$5.40, and the best York weights \$5.50 to \$5.55. Dairy hogs selling about \$5.25 for good weights. The market closed rather flat with a very light demand for the latter kind.

Cattle.—The market is practically in the same condition as it was two weeks ago. If anything, nice, handy butcher cattle, or nice, handy cows and heifers have been selling about 25c. higher, yet the good cattle generally are not selling any better than they were. The European markets do not offer much encouragement for buyers of export grades, and taking it all in all the outlook is not any too good. We do not believe that values in general are going any lower, and we would not be surprised to see nice, handy steers, suitable for butcher or shipping purposes, or cows and heifers of good quality sell for better prices within the next thirty or sixty days. There is a large proportion of common and cull stuff coming to market. Prime to fancy steers selling from \$5.25 to \$5.60; good ripe 1,000 to 1,200-lb. steers, from \$4.60 to \$4.80; fair to good steers, 1,000 to 1,100 lbs., \$3.60 to \$4; good to prime heifers, from \$3.50 to \$4.50; fair to good cows, \$2.25 to \$2.50; common cows, \$1.50 to \$1.75. Milkers and springers, bulls, oxen, etc., selling at about the same prices. ERICK BROS.

Chatty Stock Letter from Chicago.

(BY OUR SPECIAL CORRESPONDENT.)

Extreme top prices now, compared with two weeks and one and two years ago:—

	Present prices.	Two weeks ago.	1894.	1893.
CATTLE.				
1500 lbs. up.....	\$ 5.90	\$ 5.90	\$ 4.90	\$ 5.25
1350 to 1500.....	5.75	5.90	4.90	5.15
1200 to 1350.....	5.25	5.65	4.90	4.95
1050 to 1200.....	5.20	5.40	4.55	4.50
900 to 1050.....	5.10	5.30	4.30	4.10
Stallers.....	5.70	5.30	4.50	4.90
Feeders.....	4.25	4.00	3.25	3.25
Fat cows.....	4.50	4.40	3.60	3.60
Canners.....	2.60	2.50	2.00	2.25
Bulls.....	4.00	3.75	3.50	3.60
Calves.....	5.75	5.50	4.80	5.75
Texas steers.....	4.40	4.40	4.15	4.40
Texas C. & B.....	3.50	3.40	2.25	1.90
HOGS.				
Mixed.....	5.25	5.30	5.15	6.20
Heavy.....	5.20	5.42½	5.20	6.05
Light.....	5.40	5.25	5.25	6.40
Pigs.....	5.00	5.00	4.90	6.00
SHEEP.				
Native.....	4.30	4.25	3.65	5.25
Western.....	4.00	3.25	3.40	4.00
Texas.....	3.60	2.60	2.35	4.00
Lambs.....	5.40	6.00	4.60	5.80
Sept. Wheat.....	68½	67½	53½	63½
Corn.....	45	42½	43½	40½
Pork.....	11.20	12.15	12.52½	21.50

Chicago live stock receipts for the year so far compare with several previous years as follows:—

Period.	Cattle.	Hogs.	Sheep.
Since Jan. 1, 1895.....	1,230,200	4,332,000	1,734,000
Same period, 1894.....	1,471,000	3,925,700	1,575,400
Same period, 1893.....	1,680,756	3,172,634	1,667,738
Same period, 1892.....	1,828,425	1,639,016	1,191,611

It will be noticed that cattle are running behind quite strongly, while hogs are largely ahead of last year, and sheep are surprising everybody by being larger than ever before for a like period.

Following were some recent sales of distillery cattle: The Globe Distillery had 15 stags on the market that averaged 1,360 lbs. at \$1.75, and 85 steers that averaged 1,319 lbs. at \$3.60. The Atlas Distillery marketed 79 head of cattle to-day; 38 head, averaging 1,290 lbs., at \$5.50; and 41 head, averaging 1,303 lbs., at \$5.50.

In the main, the corn-fed cattle coming to market are of very poor quality.

On one day recently cattle sales included rough 1,450-lb. steers at \$4.50; tidy, fat, 1,100-lb. cattle at \$5.25; distillery steers, 1,339 to 1,376 lbs. at \$5.10 to \$5.60; Montana grass cattle, 300 of them, averaging 1,376 lbs., at \$4.70; double wintered Texans, 1,308 lbs., \$4.40; meal-fed, 1,089-lb. Texans, \$4.50; "through" grass Texans, \$3.25 to \$3.75.

On the London and Liverpool cattle markets, best American steers sold at 12c. against 9½c. a year ago, and 12½c. per lb., sinking the offer, two years ago.

Several cattlemen expressed the opinion that good beef cattle will sell well during the next six weeks or so.

There is quite a good demand for stock cattle and feeders, but it is not so good as it would be if the grass and hay crop were not so deficient.

Ten cars of 223-lb. Oregon wheat-fed hogs sold at \$3.40. The owner ships one or two trains of hogs a month to the East, and says the surplus there is considerably larger than the Portland, Tacoma, Seattle and Spokane butchers can use, and that Chicago prices, therefore, govern the local markets. He says those cities bought from the East last year 30 cars of meat, and thinks the packers there ought to do something to save the country from paying freight two ways half across the continent on what meat is needed in the Pacific Northwest.

The Pacific Northwest is destined to reap important benefits from increased trade relations with China, Japan, and Russia.

The recent boom in the price of hogs seemed to stir up quite a little run of hogs, the quality of which was very good. The hog-raisers evidently have been finding it cheaper to feed corn than to sell light hogs lately, and for that reason it is argued that the quality will be good right along during the summer.

There was a tremendous spurt in the demand for light hogs lately, and 170-lb. stock sold at a premium of 20c. over the best 350-lb. hogs. The fresh meat demand, and the fact that the provision market is so low, explains that fact. Just at present the market for provisions and hog products generally is very badly "out of line" with the prices for hogs.

The cash demand for provisions has improved a little; hog receipts have become very small. But stocks keep large and every one seems content to let the market take care of itself. Packers are sold up well and the only important buying will be when their cash demand springs up.

The corn prospects were never better at this season. Conditions have been so favorable for a fortnight, it is assumed now nothing can harm the crop except frost; and that, if cold weather does not overtake it, the yield will be the largest ever harvested.

There is a big demand in the country for young hogs to fatten on the old corn left over from last year.

The foreign demand for horses is very good, and prices are good for the season. The demand is chiefly for good 1,300 to 1,700-lb. chunks. Following are the latest Chicago prices for horses in the auction ring:—

Description.	Poor to Fair.	Good to Choice.
Draft horses.....	\$ 60 to \$80	\$ 100 to \$150
Ch'ks, 1,300 to 1,400.....	50 " 70	80 " 115
Streeters.....	50 " 60	65 " 75
Drivers.....	40 " 70	110 " 200
General use.....	20 " 40	45 " 65
Carriage teams.....	200 " 250	300 " 600
Saddlers.....	30 " 75	125 " 200
Plugs and rangers.....	3 " 10	15 " 30

An Illinois horse-buyer who has been very successful in buying and shipping horses from this country, says he finds the best method to put up bill-posters in a country town stating that he will be there on a certain day to buy horses. He says it takes less time than to visit the farmers; he can make his purchases at more uniform prices, and usually to better advantage, as farmers who take horses to town to sell would rather make some concession than to lead them back home.

The sheep market is in fair shape. The following were among the transactions on one day: Some good, light weight sheep, 86 lbs., sold at \$4.30; yearlings, 106 lbs., at \$4.60; medium to good sheep, \$3 to \$4; 1,739 Texans, 83 lbs., \$3.60. Lambs sold at \$3 to \$5.40, chiefly \$4.75 to \$5.15.

In the meat shops of towns in New Mexico and Arizona, the visitor from the East is apt to notice that the dressed carcasses of sheep have a tuft of wool still attached to the head and tail. This is left by the butcher to assure the customer that it is mutton and not goat flesh they are buying, for in those territories many flocks of goats are reared and pastured by the small Mexican ranchmen, to be killed for food for the poorer natives. Roast or stewed kid, with Chili pepper-sauce, is an esteemed dinner dish at the tables of many well-to-do Spanish and Spanish-American citizens.

The range cattle are coming to market in splendid condition, and the ranges of the Northwest and of Texas also never were in finer shape. With prime Western range cattle selling at \$4.70 for "natives" and \$4.40 for double wintered Texans, rangemen feel in good spirits.

SHOWS AND SHOWING.

Toronto Industrial Fair.

Never before were entries for the Toronto Industrial Exhibition as numerous and extensive so early in the season as is the case this year. Already the entire ground floor of the Main Building has been taken up, and there is not very much space left in the galleries. The interior of the building has been completely rearranged, with a view to increase the space for exhibitors and to increase the artistic effect of the general display. Some highly-tasteful and well-arranged designs will be on view, as exhibitors this season are paying more attention to displaying their goods in an attractive manner.

Machinery Hall, the Music Pavilion, and the Implement, Stove, Carriage and Bicycle Buildings are all taken up, and will be crowded to their fullest extent.

So many applications were made for space in the Music Pavilion that the management were compelled to effect a rearrangement whereby the space originally allotted to some firms was curtailed. There were eleven firms represented in this department last year; in the coming fair there will be sixteen.

In live stock, as previously intimated, there will be a splendid showing, particularly in the choicer breeds of horses and cattle. The representation of Jerseys and Ayrshires will be large, and the entries in Thoroughbred horses and Carriage and Saddle horses include some of the most celebrated stables in this country, and not a few representatives of the United States. Horse and cattle men, who have visited the grounds lately, express their satisfaction with the improvements in the way of grading, drainage, etc., in connection with this department. The improved condition of the speeding track will secure many additional entries for the popular running and trotting races.

The programme of special attractions includes many taking novelties, the most important feature being the thrilling military and fireworks pageant, "The Relief of Lucknow," with 500 performers, concluding with a magnificent fireworks spectacle.

MISCELLANEOUS.

Cutting Horse Food.

A veterinarian who has had the supervision of hundreds of Old London horses of all classes, maintains that no horse, whatever his size, can possibly consume more than 40 lbs. of food per diem (if even so much), say 20 lbs. of hay and 20 lbs. of corn, a common allowance for brewers' dray horses. A large portion of this even is wasted. The teams of large coal and brewer companies are out for a long time during the day, and often as much as one-half of their daily supply is eaten out of nose-bags, out of which about one-fifth of the food contained in these wasteful but necessary receptacles becomes spilt and spoils. "Bus horses, who only eat when in the stable, are allowed from 30 lbs. to 32 lbs. of mixed hay and corn, and even then there is considerable waste in the manger, but what they eat is found all-sufficient to keep them in prime condition with proper care and good stable management.

Mr. Herbert Gardner, President of the British Board of Agriculture under the late Rosebery Government, has been made a peer.