

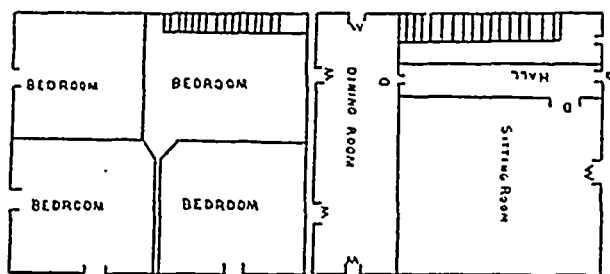
the figures indicating thousands of tons, and the percentage which beet supplied the total world's product at each period named :

| Year.     | Cane sugar. | Beet. | Per cent.<br>supplied by beet. |
|-----------|-------------|-------|--------------------------------|
| 1840..... | 1,100       | 50    | 4.35                           |
| 1850..... | 1,200       | 200   | 14.29                          |
| 1860..... | 1,510       | 389   | 20.43                          |
| 1870..... | 1,585       | 831   | 34.40                          |
| 1880..... | 1,852       | 1,402 | 43.08                          |
| 1890..... | 2,069       | 3,033 | 63.70                          |
| 1900..... | 2,862       | 5,575 | 66.08                          |

## Suggestions Wanted.

Mr. James Larden, Cache Bay, Ont., sends us the accompanying plan of his house, and writes for information regarding it as follows :

I have a log house, 28x26, divided off as below. I want to put a kitchen to it about 20x16, with a second story to



Plan showing upper and lower floors of Mr. Larden's house

it. As I am a poor hand at designing and planning I would thank any of the readers of your popular journal for a suggestion or two with a view to convenience and ornament, and, of course, keeping within fair economy.

## Raising Calves for Profitable Beef Production

In press bulletin No. 11 issued by the Nebraska Experiment Station a very interesting experiment is reported as to the cost of raising calves for profitable beef production. A number of cows were purchased in 1897 of good quality, showing evidences of either Shorthorn or Hereford blood, and weighing from 650 to 1,010 pounds in fair condition. When selected they were in herd with two bulls, one a pure-bred Shorthorn and the other a pure bred Hereford.

These cows and heifers were bought at \$30 per head. By February 1st, 1898, they had made fine growth, were in fine order, and would fairly be worth \$40 per head, and therefore the cost of calf production was figured on that basis. As all the calves were dropped subsequent to Feb. 1st, 1898, that date was used as the starting point in figuring the cost of the calves and the expense of keeping the cows for one year.

The total cost of feed for the cows for the year (Feb. 1st, 1898, to Feb. 1st, 1899) was \$70.09, consisting largely of alfalfa, fodder corn and pasture. Calves were allowed to run with their dams from date of birth to April 25th. On that date two calves were put in barn, and each calf started upon six pounds of alfalfa hay and one pound of mixed feed per day. Feed mixture was composed of one pound of corn and oats together, of which  $\frac{2}{3}$  oats and  $\frac{1}{3}$  corn by measure, 1 pound bean and  $\frac{1}{4}$  pound oil meal. On Oct. 22nd, 1898, all the calves were weaned and started upon alfalfa and feed mixture, composed of corn and oats ground together in proportion of  $\frac{1}{3}$  oats and  $\frac{2}{3}$  corn by measure. Feed was gradually increased to 20 pounds alfalfa and 4 pounds of ground corn and oats per day to each calf, and continued till Jan. 25th, 1899. At that date one pound of bran was added to the daily ration, and this feed was continued to April 1st, 1899.

The financial statement of the cost of the six calves is as follows :

Total feed consumed by calves to April 1st, 1899, was as follows :

|                                                                   |         |
|-------------------------------------------------------------------|---------|
| 17,320 lbs. alfalfa of medium quality, valued at \$3 per ton..... | \$25 98 |
| 36 bush. corn, at 25c. per bush .....                             | 9 00    |
| 23 $\frac{1}{3}$ bush oats, at 25c. per bush.....                 | 5 83    |
| Cost of grinding 2,760 lbs., at 5c. per cwt.....                  | 1 38    |
| 460 lbs. bran, at \$9 cost per ton .....                          | 2 07    |
| 18 lbs. oil meal, cost \$1.45 per cwt.....                        | 26      |

Total cost feed consumed ..... \$44 52

At a very conservative estimate these calves are now worth \$4.50 per cwt., or a total for present weight of 4,355 lbs. of say ..... \$195 98  
Or \$32.66 per head.

Deducting cost of production, including cost of keeping cows, say ..... \$70 09

Interest on value of cows at \$40 per head, \$240 for 1 year at 7 per cent..... 16 80

Value of feed consumed by calves..... 44 52

Makes total cost of calves to date. \$131 41 131 41

And leaves estimated net profit on six head to date \$64 57  
Or say \$10.76 per head.

From statement of weights and gains it will be noted total gain for 160 days, October 22nd to April 1st, was 1,405 lbs., or an average daily gain of 1.46 lb. per head per day. For the 95 days, October 22nd to January 25th, the gain was 745 lbs., or an average daily gain per head of practically 1.3 lb., while for 65 days, January 25th to April 1st, the gain was 660 lbs., or practically 1.7 lb. per head per day.

Deducting from the total cost of feed consumed \$44.52, the cost of the feed used by the two calves August 15th to October 22nd, \$2.30, the feed used from October 22nd to April 1st by the six head cost \$42.22. This for 1,405 lbs. gain would make each 100 lbs. of gain at an expense of say \$3. The average daily feed ration for 160 days cost say .0254 cent per day, with compensating average gain of 1.46 lb. per head per day, which at \$4 50 per cwt. would be worth .0657, practically a profit of 150 per cent. on cost of feed consumed.

The calves on June 30th were well developed for future usefulness, were in fine, thrifty condition—not very fat—and it is the intention to full feed, market in the autumn of this year, and report further results.

## Blanketing Horses

For eight years it has been my custom to blanket horses which are warm and wet after a hard drive. The results have been very satisfactory, and there are physiological reasons why they should be. Rapid evaporation extracts heat rapidly; the rapid extraction of heat causes the great network of capillary blood-vessels to contract, thus causing internal congestion. Many have observed a horse standing with front and hind feet closely together and spinal column curved upward, till he resembled a dromedary, on a cold morning after being put away warm without blanketing. The desideratum is not drying off quickly, but the application of a woollen covering, that doesn't absorb heat rapidly, but prevents rapid radiation, thereby preventing the impairment of muscular tissue, which will sooner or later be recognized in muscular soreness. Not only this, but the internal organs—liver, lungs and intestines—have to accommodate an abnormal quantity of blood if the surface is cooled rapidly, resulting in serious impairment of their functions. Retained heat on the surface keeps up a normal action of the skin. The sweat glands cease to exercise gradually, and the oil glands at the roots of the hair functionate normally, hence the smooth coat of soft and pliable hair we find in the morning on the hard driven horse which has been properly blanketed at night. These statements refer to stables not artificially heated. The writer