

Thus making your practical ration exactly equal to the theoretical ration, according to Crevat.

May I ask if it would be possible to increase your milk returns still more. 1. By giving a little cotton seed meal on grass? 2. By adding 1 or 2 lbs. of malt germs or some such highly nitrogenous food? I made the experiment this winter with malt germs (cooms) with excellent milk results.

Thanking you again for your great kindness in helping my studies on this difficult problem and the encouragement I gather from your precious letter, Believe me, Dear Sir John,

Your most respectfully  
ED A. BARNARD.

Rothamsted, St. Albans, July 14th 1890.

Dear Sir,—You have worked out some very interesting results from the figures I sent to you.

With regard to your question whether the milk can be increased by adding more nitrogenous food, the table I enclose may possibly throw some light on the subject. As however it has only been quite recently drawn up, I have not had time to study the results. In a dairy of cows, as it is well known, the yield of milk decreases, from calving to dryness, and at the same time, each cow has a yield of milk differing more or less from another cow, some cows giving 6 or 7 gallons per day as a maximum, some 4 or 5 gallons. I

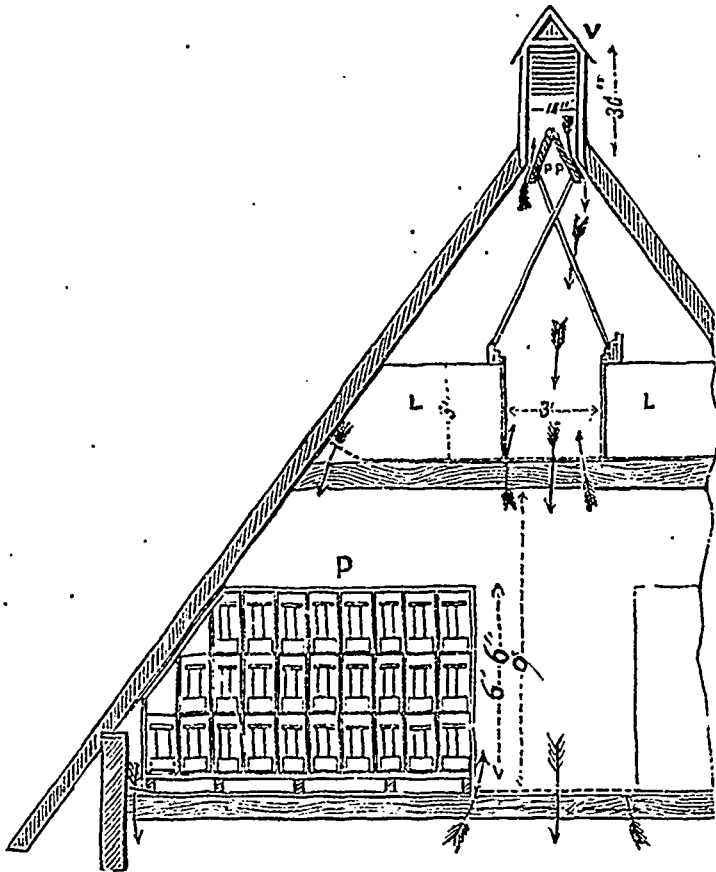


FIG. 1.

Example of one cow (33 Flora) begun to milk April 21st 1887  
dry January 16th 1888.

Weeks in milk : 38.5.  
Cake consumed 1077½ lbs.—Average per day 3.97.  
Yield of milk 7233½ lbs.  
Milk per lb. of cake 6.94.

**FATTENING POULTRY.**

The following article is written in answer to questions put to us by Professor Roberts, Director of the N. Y. State Experimental Station and Professor of Agriculture at the Cornell University, Ithaca, N. Y. See letter below :

The *Illustrated Journal of Agriculture* reproduced in May 1887, page 78, from the *Live Stock Journal Almanac*

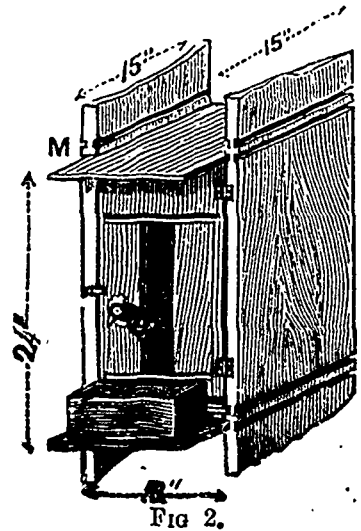


FIG. 2.

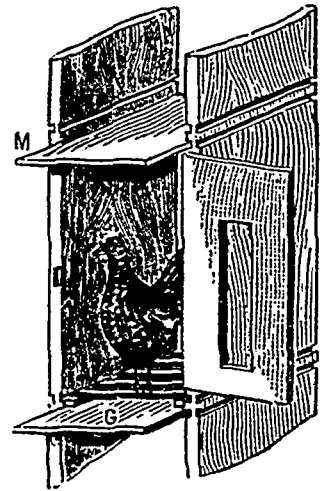


FIG. 3.

therefore ordered the cake (decorticated cotton cake) to be given to each cow in proportion to the yield of milk. At the end of each week the yield of a cow in gallons per day was ascertained, and in accordance with the yield of the week the cake was allotted for the ensuing week. Scale : 4 lbs. of cake to be given for 28 lbs. of milk yielded, and ¼ of a lb. more or less for every 2 lbs. of milk yielded. The principle is correct, but at the present time I really do not know what is the actual result in regard to economy. I merely send you the table, as you are interested in this question and beg you to return it to me when you have done with it.

Believe me yours truly, (Signed) J. B. LAWES.

1885, (England) an article on *Fattening Poultry*, by Hen-wife. Under advice, a careful experiment was made, at the Sacred Heart Hospital, at St. Sauveur, Quebec, of the system proposed, with, however, the following changes :

**THE POULTRY HOUSE.**—In order to secure heat in winter, and economy in construction, the poultry house was made under the high peaked roof of a solidly built, warm, and thoroughly ventilated piggery, one story high. This poultry house, some 9 feet from the ground and itself 9 feet high at the peak,