"There exists in many minds a prejudice against cabbage, arising from the belief that it is an exhausting crop, or that it requires expensive manuring or good land, or that the labour connected with its planting or required in its cultivation makes it an expensive crop. My experience, after many years of growing the crop, is the reverse of all these. I have for many years grown it on poor land without any manure, and in no instance found it to fail as a paying crop The greatest money value I ever made off any land was with a crop of cabbage on a piece of very poor chalk land, with only 20 loads per acre of dung, in which case I sold 3 acres of cabbage for over £100 per acre; that, of course, was an exceptional case, and near a good market. But in ordinary cases, I find that cattle cabbage will grow profitably on the poorest land, and that nothing leaves the land in better heart if the crop is fed on the land. Nothing feeds sheep or cattle better in the autumn, and no root will produce an equal weight of food at so small a cost. My plan is to plough very foul ground early in spring. When mellow, run the heavy drags across it. Follow with a drill with coulters set 30 inches apart. I provide two men with a line each 50 to 60 yards in length, and a stick each, carefully measured to 30 inches in length. I provide an active lad or boy to drop the plants The two men stretch their lines the full length across the drill-marks at the distance apart of their sticks. The boy drops a plant at each drill track, the men start planting at each end of one line, and presently meet in the middle; they then shift over to the next line, and work away from each other till they reach the end of the line again, they are then in a position to shift their line, and the boy has in the meantime laid a fresh set of plants ready for them. In this way two men and a boy will plant in a day from 6000 to 10,000 plants, according to the state of the land. The plants will be in drills at right angles to each other, and consequently in the best possible position to allow for hoeing up and down or across, or if desired at any other angle, and all the future cultivation required is hoeing; and the more frequently this is done the larger will be the crop, the cleaner will be the land, and the larger will be the present and future profit therefrom I have grown them on some of the poorest clays of Surrey, on some of the poorest chalk, on some of the poorest stone brash of Somerset, and on some of the best loam of the same county, and in every case I may say with profit. The last crop I grew was on a poor stone-brash without any manure, and when I was carting off two thirds of a 25 ton crop to my cows, a neighbour passing said, "Well, I would not have given 5s an acre for those three months ago. (1)

FEEDING COTTONSEED MEAL.

ITS PROPER OFFICE—CARE NEEDED.

In reply to J. L. (page 666), I will tell what I know of cottonseed meal as a stock feed, both from my own experience during six years since it was extensively introduced by the present dealers in the Northern States, and also from reports from the best sources in England.

About six or seven years ago I began to feed cottonseed meal to my cows and have continued its use ever since. My cows are kept for making butter, and it is necessary to be careful of the effect of the feed both upon the quality of the butter and upon the health of the cows, so that it required a long time and careful noting of effects to learn what I have discovered in regard to this feed. In the first place it may be said that it cannot be compared with corn or any other feed, excepting for the purpose of estimating or fixing a mixed ration for an animal, just as we cannot compare beef with potatoes, or butter with bread, excepting so far as to proportion the quantity of one to be used with the other in our ordinary diet. No person can consume beefsteak or essence of beef solely, and remain healthy, and no more can one feed only cottonseed meal and keep his stock in good order, excepting for a short time when finishing them for the butcher. This will be obvious when we consider the nature of this highly concentrated food. I take the following table from Prof. Atwater's valuable Report of Work of the Connecticut experiment Station—1877 8:

COMPOSITION OF FEEDING STUFFS.

	Organic Matter.				*Vegetable Matter.*			
Substances..	*Albuminoids.*	*Fiber.*	*Other carbhydrates.*	*Fat.*	*Albuminoids.*	*Carbhydrates.*	*Fat.*	*Nutritive ratio.*
Cottonseed meal...	41.5	3.1	24.4	18.0	33 2	17.6	16 2	1.8
Corn meal..	8.9	2.0	70.8	4.1	8.2	66.8	3.1	9.2
Bran.....	12.6	2.5	67.0	2.2	10.1	50.0	2.3	5 3.

This offers at a glance what I want to show, viz., that although cottonseed meal contains a great deal more nutritive matters than corn, it cannot therefore be used in place of it with corresponding advantage. In estimating fat as nutriment, in place of starch, gum, &c., one equivalent of fat is help to be equal to 2½ of starch. so that we have—

Cottonseed meal equals 91.3 per cent. of nutritive equivalents.

Corn meal equals 82.7 per cent. of nutritive equivalents.

But we must not lose sight of the fact that cottonseed contains nearly five times as much albuminoids as corn meal, and right there is its most important characteristic to the feeder, because therein it becomes analogous to the flesh meat of human food.

Nitrogen cannot be used in the animal economy in anything like the quantities in which carbon can, because a very large portion of carbon is needed for the sustenance of vital heat, and if nitrogenous food is too largely given, it unduly enriches the blood, and produces an excessive strain upon those organs whose office is to remove excess of nitrogen from the system—chiefly the kidneys. In feeding cows too largely with cottonseed meal, then, we might expect the circulation to be unduly stimulated; and this is precisely what happens, and it appears very quickly in an increase of milk and cream, and, if anything goes wrong, in an attack of garget. In pigs and horses it appears as congestion of the brain, which we call staggers. Now I know this, because I have experienced it, and therefore maintain that for horses and pigs cottonseed meal is a most dangerous food, and should never be given; besides, they do not want it, having other feeds that are better. For cows and sheep it is the most valuable feeding stuff we possess, *if given in moderation*, just as I find a beefsteak is the most valuable food for a man, but it will not do to consume it voraciously, or all the time, to the exclusion of starchy food, as bread, potatoes, rice, &c.

After several years' feeding, I have found one quart of cottonseed meal - free from husk—one quart of corn meal, and one of bran, to make the best and safest feed-ration, given twice daily, for a cow in full milk. The husk of cottonseed is indigestible, and will make trouble very surely if

(1) Worth reading, particularly as to the advice not to manure *too* heavily for cabbage to be kept over the winter. I do not try to grow very large cabbages; but setting them only a foot apart, I get about 18,000 to the acre, and if they weigh only 5 lbs. a piece, that amounts to forty-five tons! A. R. J. F