## THE PROTEIN-FAT UNIT VALUE.

Add together the percentages of protein and fat and divide the sum into the price per ton; the result will be the price of the protein-fat unit in the feed.

*Example:* Two samples of cottonseed meal are offered, the one at \$40 per ton, the other at \$50 per ton. Which is the better value?

The particulars of the two brands as gathered from the guaranteed analysis are as follows:---

		A. \$10 per ton	B. \$59 per ton.
	Protein	26:50	37.62
	Fat	5*81	7.91
	Fibre	19.97	9.87
A.	$26^{\circ}5 + 5^{\circ}84 = 32^{\circ}34$		
	40.00		
	32'34 \$1.21 price of protein-fat unit.		

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**B** 37:62+7:91=45:53 50:00

45'53 =\$1.10 price of protein-fat unit

It is thus apparent from these simple calculations that the price asked for the same weight of protein and fat is 14 cents higher in "A" than in "B".

The relative value per ton of " A" as compared with " B" may be found as follows: 32.31 (protein-fat units in "A")  $\times$  \$1.10 (price of protein-fat unit in "B")= \$35.57.

Thus it is seen that with "L" at \$50 per ton, " $\Lambda^{7}$  is not worth more than approximately \$35.57, whereas the price asked for it was \$10 per ton."

In the following pages the farmer will find interesting and valuable information respecting a comparatively large number of feeds and feeding stuffs on the Canadian market. As our correspondence on this subject of feeds has of late greatly increased, it is expected that the analyses and particulars here given will be found useful to a large number of our readers.

## WHEAT: ITS BY-PRODUCTS.

## BRAN, SHORTS OR MIDDLINGS AND FEED FLOURS.

Bran, shorts or middlings and feed flour are by-products in the milling of wheat Of these, bran and shorts constitute the two most widely used and valuable "concentrates" used in stock feeding in the Dominion. They are rich in digestible protein and in addition possess considerable amounts of digestible carbohydrates and fat. Their fibre content is not high, provided they are free from foreign material, and they furnish notable amounts of the mineral elements, more particularly phosphorus and potash. This mineral matter or ash, how ver, contrary to the general impression, is not rich in lime.

Bran consists of the outer integriments of the wheat berry and in the best grades is entirely in the form of light, clean, large flakes. These characteristics, together with freedom from sweepings, weed seeds, etc., denote bran of good quality. Bran is of peculiar value for the dairy cow, promoting the milk flow, furnishing the protein and other nutrients necessary for the production of milk, acting as a mild laxative and giving bulk to lighten the ration containing heavier and coarser meals and thus assisting digestion.

<sup>\*</sup>There exists no simple method of computation whereby the farmer may strictly compare, as to nutritive value, foods of a different character and nature, as, for instance, oil-cake meni and hay. The method here described, however, and which is based on the prote'n-fat content, is particularly adapted to a close comparison of two or more brands of the same feed (e.g., brands of cottonseed meal among themselves) and is more or less applicable for the comparison of feeds of a similar nature or origin, e.g., the cereal grains.