No crude fibre is given in the above table, but it would increase as we pass from the finer to the coarser flours. The percentage of protein and fat also increases, but the carbohydrates decrease, and the difference here would be still more pronounced had the crude fibre been separated.

When the bread made from these three flours was submitted to digestion experiments the following results were obtained:

	Protein %	Fat %	Carbohydrates %	Evertor
White Bread	85.8	56.4	97.5	90.1
Entire-wheat bread	80.4	55.8	94.1	85.5
Graham Bread	77.6	58.0	88.4	80.7

DIGESTIBILITY OF NUTRIENTS AND AVAILABILITY OF ENERGY OF FRUAD.

This means that in these experiments 85.8 per cent. of the protein in the bread from the straight grade flour was digested and only 77.6 per cent. of that in the Graham bread. Furthermore, while 90.1 per cent. of the total fuel or energy value of the white bread was available, only 80.7 per cent. of the total energy of the Graham flour was of use to the person eating the bread.

The same bulletin shows that the bread from the first patent, which represents about 35 per cent. of the finest of the flour, is even more digestible than that from the straight grade flour.

In 1857 Laws and Gilbert, of the Rothamsted Institution, England,¹ studied this same question; and, in view of the fact that the roller process of making flour was not then in use, their conclusions will be of interest. Writing in 1881, Gilbert summarized their conclusions as follows:* "The higher percentage of nitrogen in bran than in fine flour has frequently led to the recommendation of the coarser breads as more nutritious than the finer. We have already seen that the more branny portions of the grain also contain a much larger percentage of mineral matter. . . . It is, however, we think, very questionable whether upon such data alone a valid opinion can be formed of the comparative values as food of bread made from the finer or coarser flours from one and the same grain. . . . Again, it is an indisputable fact that branny particles, when admitted into the flour in the degree of imperfect division in which our ordinary milling processes leave them, very considerably increase the peristaltic action, and hence the alimentary canal is cleared much more rapidly of its contents. It is also well known that the poorer classes almost invariably prefer the whiter bread; and among

Rothamsted Memoirs, Vol. 1.

2Rothamsted Memoirs, Vol. 5.