

condition, which, when purified, forms the wheat farinas that are sold as breakfast foods under a great number of fanciful names, such as Meat of Wheat, Hearts of Wheat, Wheat Crystals, etc. It is from this same part of the wheat that the whitest and strongest flours are made. The germ is the richest part of the grain in protein and fat; the inner bran layers are the next richest, and the starchy endosperm contains the least of these constituents. It naturally follows that if flour is made from the endosperm it will be whiter, and lower in protein, fat, and crude fibre than if the whole grain was included, or somewhat poorer than if all the flour made from the wheat was left in one grade, as was done in the old stone process, or as is done to-day in making a straight-g ace flour.

The names assigned to the various grades of flour are very numerous, as practically every flour miller has special names for his products. But, while there are a number of variations, nearly all flour may be graded as "patent," "bakers'," or "straight." The well known flours, Royal Household, Five Roses, and Purity, are patents which probably form about 35 per cent. of the total flour. Sometimes, however, the term "standard patent" or "long patent" is used to designate a flour which forms about 90 to 95 per cent. of the total flour, and is, consequently, only a little better than a "straight." The "bakers'" grade, or "clears," usually represents about 55 per cent. of the flour after the patents have been taken off. A good bakers' grade of flour will yield about as much bread as a "patent," but the bread is not of so good a colour. The low grade is got by grinding still closer to the bran layers, and represents the remainder of the flour, or about 10 to 15 per cent. of a total flour. The "straight" grade is the whole, or 100 per cent., of the flour from the wheat left in one grade. Of course, the percentage amount of the flour left in the various grades are not fixed, but are varied by every miller, according to the quality of the wheat he is using and the strength and colour of the flour he wishes to produce.

To show the difference in the composition of these different grades of flour the following tables, taken from Bulletin No. 17, part 9, of the Bureau of Chemistry, Department of Agriculture, Washington, are given:

**PERCENTAGE COMPOSITION OF WHEAT AND THREE GRADES OF FLOUR  
MADE FROM IT.**

	Moisture	Fat	Carbo- hydrates	C. Fibre	Ash	Proteids	Gluten	
							Wet	Dry
Wheat	9.07	2.74	70.37	1.68	1.79	14.35	32.31	11.88
Patent	11.48	1.45	73.55	.18	.39	12.95	36.14	10.85
Bakers'	12.18	2.00	69.99	.83	.62	14.88	5.11	16.97
Low grade	12.01	3.86	63.26	.93	1.99	17.95	10.91	4.26