

United States Patent Office.

GEORGE MOTLEY, OF ROCHESTER, NEW YORK, ASSIGNOR TO HIMSELF
AND JIRAH B. MOSELY, OF SAME PLACE.

Letters Patent No. 113,079, dated March 28, 1871.

IMPROVEMENT IN MAKING FLOUR.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern :

Be it known that I, GEORGE MOTLEY, of the city of Rochester, county of Monroe and State of New York, have invented a certain new and improved Process of Making Flour, of which the following is a specification.

Nature of the Invention.

This invention consists, as the preparatory step to grinding, in removing the "chit" or sprout-germ of the grain, also impurities that exist in the seam of the berry, by first cracking the wheat coarsely, then sifting it out by a rotating-screen or otherwise, or passing it through a light blast, thereby leaving only the solid part of the berry, as hereinafter described.

General Description.

The process is as follows:

I pass the wheat through stones, or any other mechanical arrangement by which it will be simply split or cracked, to open or divide the berry, the action being as light as possible to avoid crushing or unnecessary attrition. With the proper adjustment of stones the berry will be simply split or divided in two parts, the division following the natural seam of the longitudinal axis. This action loosens or frees the chit or germ end of the berry, which is simply a bit of gum, and is injurious to the quality of the flour. It also frees the impurities in the seam of the berry, which is a film of bran that collects the dust, and cannot be removed by any ordinary process of beating or cleaning.

When this is accomplished I place the broken mass in a cylindrical or other screen and agitate it. This loosens the chits and the film of the seam and sifts them out, thereby leaving the grain itself free and clear. It is then subjected to a light blast, and is then in condition for grinding, in the ordinary way, for producing flour.

The novelty in this invention consists essentially in this method of removing the chit and other impurities of the grain.

These chits and impurities, it is well known, are an injury to the flour, as they make it dark-colored when ground up, and constitute an inferior quality of the substance of the berry. In fact, the chits are simply gum; while the finer part of the berry lies in the outer walls, which are fine, white, and hard. By removing this gumming matter and other impurities I produce the best quality of flour, and in far greater quantity with a given amount of grain, than by any other process in use.

I am aware that it has been proposed to crush the grain preparatory to grinding; but such is not the equivalent of my invention, as it would defeat the very object I have in view. In that case the gummy material would be crushed and thoroughly incorporated in the mass, and could not be subsequently eliminated.

I am also aware that it is common to simply crack wheat, but without reference to grinding. Neither could this be the equivalent to my invention, as it has not been subsequently sifted with the object of grinding in view. My invention is a complete process, in which the cracking of the wheat is but one step.

This preparatory process enables the grinding to be done more effectually, as the stones do not become gummed, and less action is required, so that heating or sweating is not produced. Less power is also required in grinding.

Claim.

What I claim as my invention, and desire to secure by Letters Patent as a process preparatory to the grinding of grain into flour, is—

The removal of the chits and seam impurities of the berry by first cracking and then sifting or subjecting to a light blast, as herein described.

In witness whereof I have hereunto set my hand this 22d day of December, 1870.

GEORGE MOTLEY.

Witnesses:

R. F. OSGOOD,

G. HENRY ROBERTS.