United States Patent Office.

WILLIAM FREUDENAU, OF ST. LOUIS, MISSOURI.

Letters Patent No. 99,427, dated February 1, 1870.

IMPROVEMENTS IN MANUFACTURE OF FLOUR.

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

To whom it may concern:

Be it known that I, WILLIAM FREUDENAU, of St. Louis, in the county of St. Louis, and State of Missouri, have invented certain new and useful Improvements in the Manufacture of Flour from Cereals; and I hereby declare the following to be a full, clear, and exact description of the same.

The ordinary method of manufacturing flour from wheat, corn, rye, barley, and other cereals, by grinding the same on a burr, is attended, as is well known, with many disadvantages. Not only much time is lost in dressing the stone, and many months and even years of practical experience are required before one can become a good grinder, but in the process of grinding itself, as modern chemistry has disclosed, the nutritive quality of the flour is, to a considerable extent, destroyed or impaired.

For these and other reasons, the object I have in view is to dispense, as far as possible, with the operation of grinding in the manufacture of flour; and to this end,

My invention consists in crushing or flattening the grain between rollers, or in apparatus of a like nature, before and in contradistinction to merely grinding it in a burr, the latter being used afterward to mainly remove or separate the body of the grain from the husk or shell and other refuse.

The apparatus used for this purpose need not be complicated, consisting only of a pair of rollers, or two or more pairs, as may be desired, placed over each burr.

Between these rollers the wheat or other grain is mashed or crushed into flour, still surrounded by and united with the bran or exterior shell, to a certain extent, and then fed into the eye of the stone, which separates the particles and rubs off the bran from the flour already formed by the passage of the grain through the rollers. The latter, therefore, perform the most essential portion of the work, while grinding by the burr is used, as just stated, mainly, if not only, to separate the flour from the bran and refuse.

The remainder of the process is conducted in the

ordinary manner.

Other apparatus for crushing or mashing the grain, in contradistinction to grinding it, may be employed in lieu of the rollers, and I do not limit my claim to the precise apparatus or arrangement of the same herein described; but

What I do claim, and desire to secure by Letters

Patent, is-

The manufacture of flour by first crushing the wheat between cylinders, and then running it through burrs, substantially as herein described, and for the purpose of completing the flouring-operation.

In testimony whereof, I have signed my name to this specification, before two subscribing witnesses.

WILLIAM FREUDENAU.

Witnesses:

L. WETTEROTH, WM. KOMBRINK.