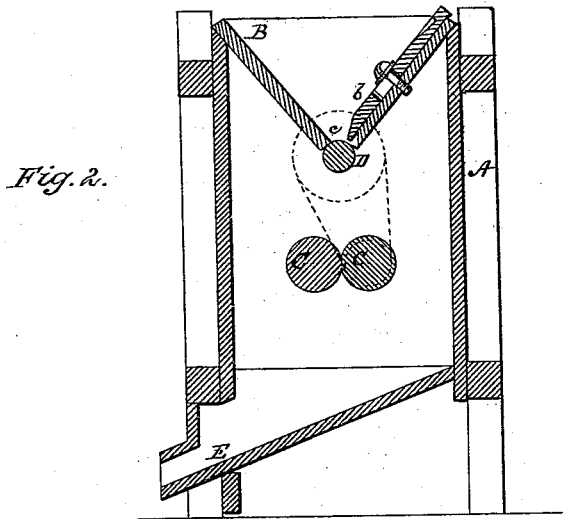
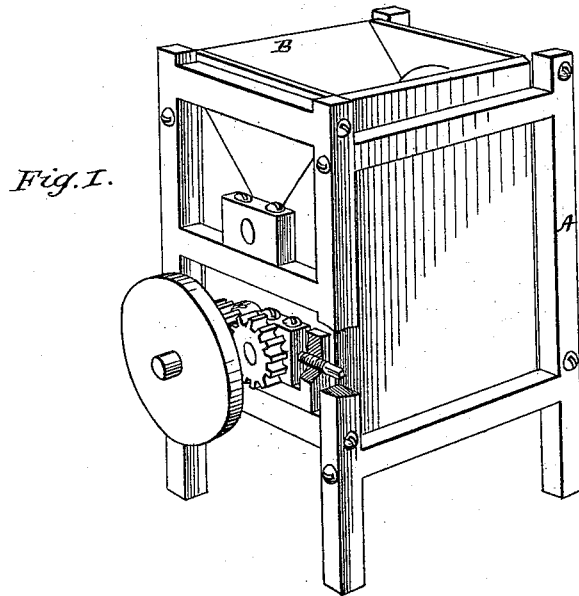


E. O. PEASE.

PROCESS OF TREATING BRAN.

No. 186,871.

Patented Jan. 30, 1877.



Witnesses:

C. Clarence Poole
David S. Weems

Inventor:

Edwin O. Pease
per *atly.*
A. H. Evans & Co.

UNITED STATES PATENT OFFICE.

EDWIN O. PEASE, OF MINNEAPOLIS, MINNESOTA, ASSIGNOR OF ONE-HALF HIS RIGHT TO GEORGE H. EASTMAN, OF SAME PLACE.

IMPROVEMENT IN PROCESSES OF TREATING BRAN.

Specification forming part of Letters Patent No. **186,871**, dated January 30, 1877; application filed November 16, 1876.

To all whom it may concern:

Be it known that I, EDWIN O. PEASE, of Minneapolis, Minnesota, have invented a new and useful Process for Treating Bran, of which the following is a clear, full, and exact description, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view of the machine for treating the bran; and Fig. 2 is a cross-vertical section of the same.

It is well known to millers that a portion of the flour contained in the grain of wheat adheres to the bran, after grinding, in a light, spongy form, and it has been common to re-grind the bran, and pass it again through the bolting-cloths, with a view of liberating the flour; but the spongy, yielding character of the bran causes it to pass through the mill without material change, and, as a necessary consequence, the flour fails to be ground sufficiently fine to pass the bolting-cloths. To overcome this difficulty is the object of my invention, which consists in passing the bran between rollers set so as to compress and solidify it, but not to crush or disintegrate, and thus reduce the individual particles to a hard, compact, resistant condition, in which the mill-stones are enabled to take hold of and re-grind, liberating the adhering flour.

To enable others skilled in the art to make and use my invention, I will proceed to describe the exact manner in which I have carried it out.

In the drawings, A represents a frame-work

provided at the top with an ordinary hopper, B, into which the bran is poured. This hopper is provided with an adjustable slide, *b*, by which to regulate the passage *c* of the bran to the compressing-rollers C C. Immediately below the passage *c* I place the feeding-roller D, by means of which the bran is caused to feed down to the compressing-rollers. On one end of the compressing-roller is secured the necessary driving and cog gear, as shown in Fig. 1, to operate the compressing-rollers, and from these rollers motion is transmitted, through any well-known means, to the feeding-roller D. Below the compressing-rollers I place the inclined chute E, to receive the bran thus treated, and pass it out, ready for re-grinding. It is evident that bran thus treated and re-ground may be retained as shorts, or may be rebolted, and the flour separated from the bran, as may be desired.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The process herein described for treating bran, the same consisting of compressing and solidifying it between rollers preparatory to re-grinding it, substantially as and for the purpose set forth.

In testimony that I claim the foregoing I have hereunto set my hand.

EDWIN O. PEASE.

Witnesses:

LEWIS MAISH,
VERNON BELL.