

A. C. BRANTINGHAM.

PACKING.

APPLICATION FILED MAR. 25, 1903.

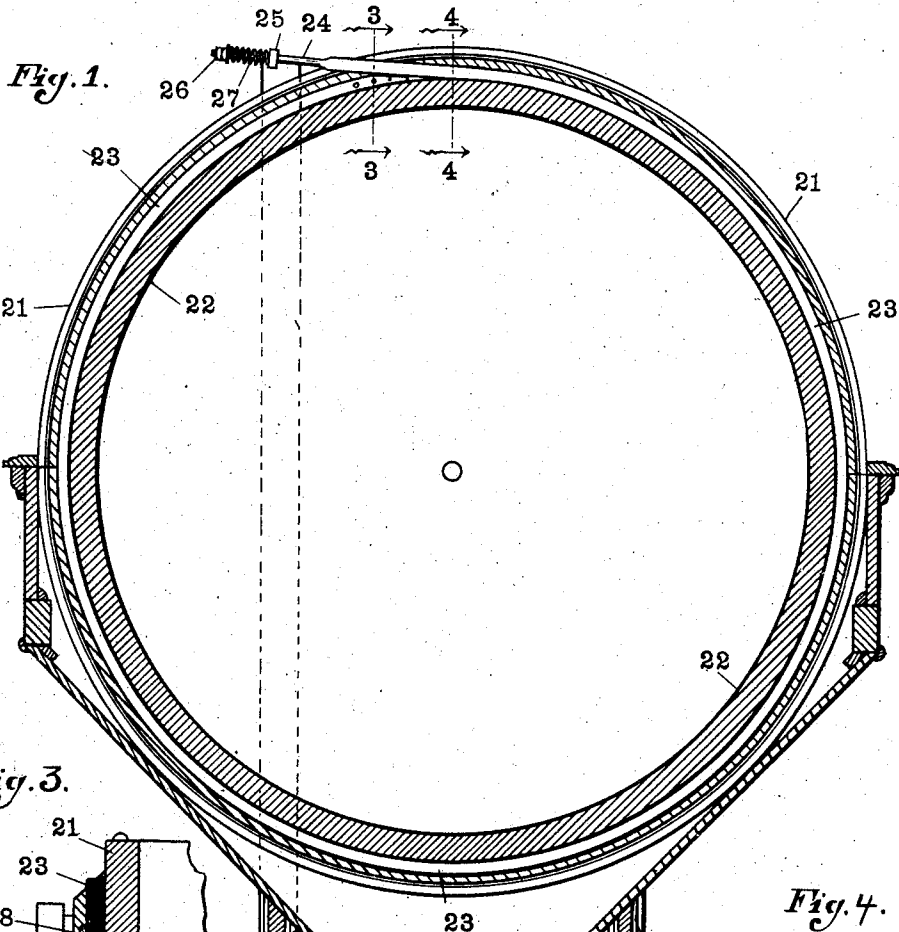


Fig. 3.

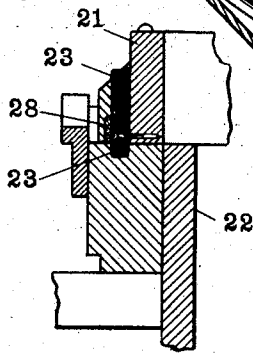


Fig. 4.

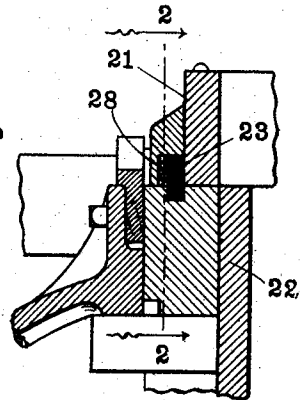
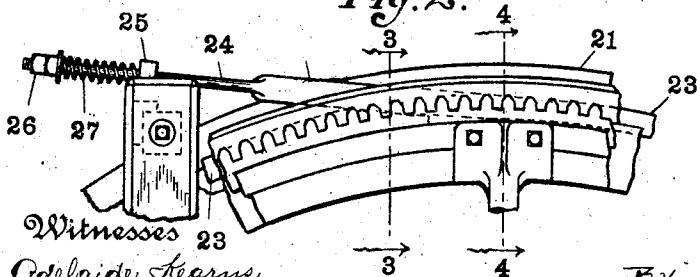


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

ALLEN C. BRANTINGHAM, OF TOLEDO, OHIO.

PACKING.

SPECIFICATION forming part of Letters Patent No. 790,282, dated May 23, 1905.

Application filed March 25, 1903. Serial No. 149,527.

To all whom it may concern:

Be it known that I, ALLEN C. BRANTINGHAM, a citizen of the United States, residing at Toledo, in the county of Lucas and State of Ohio, have invented certain new and useful Improvements in Packing, of which the following is a specification.

The object of my present invention is to produce a self-adjustable packing for the joints between rotary and stationary structures. It is designed especially for that class of machines or apparatus used in grinding-mills—such as reels, dust-collectors, grading and separating machines, and the like—in which it is desired to prevent the passage of dust or air through the joints where moving and stationary parts come together, although it is applicable to any machine where there are joints of this character.

Referring to the accompanying drawings, which are made a part hereof, and on which similar reference characters indicate similar parts, Figure 1 is a transverse vertical sectional view through the frame of a dust-collector provided with a packing embodying my said invention, all the mechanism of said machine being, however, purposely omitted; Fig. 2, a detail view, on an enlarged scale, showing especially the point where the two ends of the strip of packing come together; and Figs. 3 and 4, transverse sectional views through the said packing and the two adjacent portions of the structure at the points indicated by the dotted lines 3 3 and 4 4, respectively, in Figs. 1 and 2.

In said drawings the portions marked 21 represent the stationary frame surrounding the revolving structure, and 22 said structure. The adjacent surfaces of these parts are grooved where they come together to receive the packing. Said packing consists of a strap of flexible material 23, preferably leather, secured at one end to the stationary frame 21 and continuing around thence (in the grooves) in the direction of the rotation of the rotating parts until it passes the fixedly-secured end, its other end being also secured to an adjacent portion of the framework. The packing should be held yieldingly to its seat, and I have provided a means

for doing this consisting of a screw-rod 24, attached to the otherwise free end of the packing-strip and extending through an eye 25 on an adjacent frame portion, with adjusting-nuts 26 thereon and a spring 27 interposed between said nuts and said eye. As is obvious, the tension can be adjusted by turning up the nuts on said screw-rod. The inner edge of the packing-strip is kept in close contact with the bottom of the groove in the revolving structure by the force of the tension. Closeness of contact is maintained in the groove in the surrounding frame by making said groove a little wider than the thickness of the packing and in inserting therein a lining 28, of soft flexible material, such as wool, which will permit the slight movement incident to the use of a packing of this character and at the same time keep the joint perfectly tight.

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

1. The combination of a frame, a revolving structure, and a flexible packing-strip secured to said frame at one end and extending around and in contact with the revolving structure and yieldingly secured to said frame at its other end.

2. The combination of a frame, a revolving structure mounted therein, grooves in the adjacent faces of the frame and the structure, and a flexible packing-strip fixedly secured to the frame at one end and extending thence around between the frame and the structure in said grooves in the direction of rotation of said structure without attachment at intermediate points in its length.

3. The combination of a frame, a revolving structure mounted therein, grooves in the adjacent faces of the frame and the structure, a flexible packing-strip fixedly secured to the frame at one end and extending thence around between the frame and the structure in said grooves in the direction of rotation of said structure, and a tension device on the other end of said strip.

4. The combination of a frame, a revolving structure, a packing placed in the joint between the frame and the revolving structure

and consisting of a flexible strip one end of which is fixedly secured to the frame and the other of which extends around past said fixedly-secured end, and a tension device secured 5 to the end thus arranged, whereby a close contact between the flexible strip and the revolving structure is maintained.

5. The combination of a frame, a revolving structure mounted therein, and a flexible 10 packing-strip one end of which is attached to the frame and which extends thence in the direction of rotation of the revolving struc-

ture and in peripheral contact therewith but free from attachment thereto, whereby the said flexible packing-strip is drawn upon by 15 said rotation and frictional contact maintained.

In witness whereof I have hereunto set my hand and seal, at Toledo, Ohio, this 10th day of March, A. D. 1903.

ALLEN C. BRANTINGHAM. [L. s.]

Witnesses:

G. M. ALEXANDER,
T. L. HOLMES.