

(No. Model.)

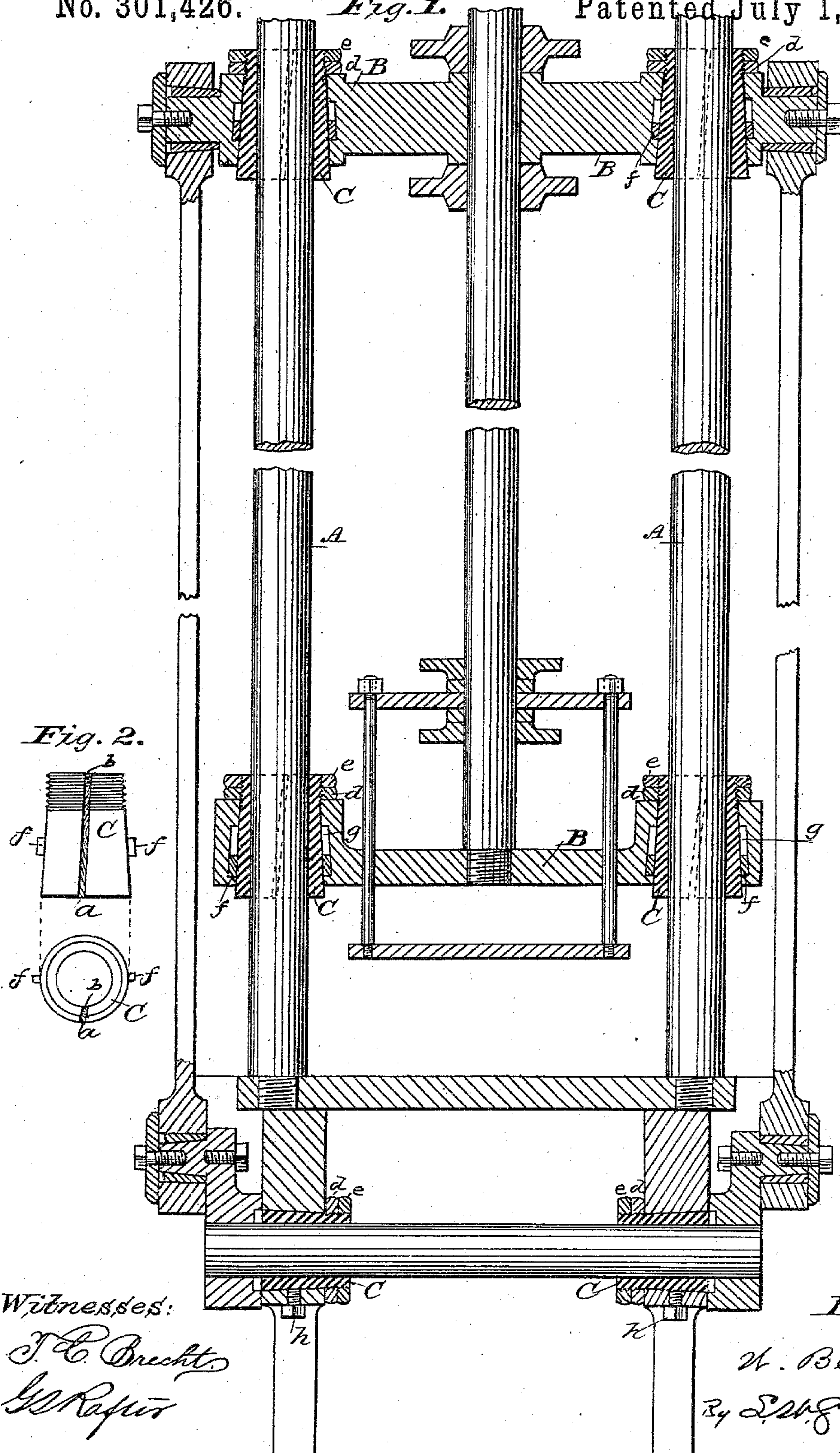
W. BECK.

PACKING RING OR BUSHING FOR GLASS PRESSES.

No. 301,426.

Fig. 1.

Patented July 1, 1884.



Witnesses:

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UNITED STATES PATENT OFFICE.

WASHINGTON BECK, OF PITTSBURG, PENNSYLVANIA.

PACKING-RING OR BUSHING FOR GLASS-PRESSES.

SPECIFICATION forming part of Letters Patent No. 301,426, dated July 1, 1884.

Application filed May 10, 1884. (No model.)

To all whom it may concern:

Be it known that I, WASHINGTON BECK, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Packing-Rings or Bushings for Glass-Presses, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to certain improvements in packing-rings or bushings for glass-presses.

The object of my invention is to provide a means for compensating for the wear of the guide-rods and bushings of the cross-heads which carry the plunger of the press, so that the plunger will be carried in a straight line and guided properly into the mold.

My invention consists in providing the cross-heads, which slide up and down on the guide-rods of the press, with a split and tapering packing-ring adapted to be drawn up by a screw-nut, so that the bearings of the cross-head can be tightened and caused to work snugly at all times on the guide-rods.

My invention consists, further, in making a bushing or packing-ring the external surface of which is tapering and screw-threaded to receive a tightening-nut, said bushing being provided with a diagonal slot, the function of which will more fully appear.

My invention consists, further, in placing a piece of wood or soft metal as a filling in the diagonal slit of the bushing.

Figure 1 is a sectional view of a portion of a glass-press with my improvements thereon. Fig. 2 is a side elevation and top view of the split ring or bushing.

In the drawings I have shown the main portions of a glass-press with my improvements thereon, and shall refer to such parts only as are necessary to describe my invention.

A A are the guide-rods secured to the base or floor of the press, on which the cross-rods B B, which form the frame for carrying the plungers, are adapted to slide up and down, as is common in glass-presses.

It is important in this class of machines that the plunger, which gives form to the article in the mold, shall rise and fall in a direct line; but by much and frequent use the guide-rods A and the bearings of the cross-heads which

embrace the guide-rods become worn in a short time, so that the plunger will not enter the mold properly. To obviate this difficulty I provide the cross-heads, and such other portions of the machinery as are subject to wear, with adjustable packing-rings or bushings C. The rings or bushings C are made tapering or wedge-shaped on their outer peripheries, and adapted to fit within a corresponding cavity in the cross-head or other portion of the machine subjected to wear. The bushings or rings C are provided with diagonal slits *a* throughout their entire length, into which I place a piece of wood or soft metal, *b*, which will not wear the guide-rods or journals, and the upper ends of said rings are provided with external screw-threads to receive the operating-nuts *d* and jam-nuts *e*, by which means the rings or bushings are compressed and drawn forward in their bearings, so as to fit more closely around the guide-rods or journals. The bushings or rings C are provided with lugs *f*, which fit into corresponding but larger recesses, *g*, in the cross-head. The object of having the lugs thereon is to prevent the rings or bushings from turning while the nuts *d* and *e* are being tightened. A set-screw, *h*, or other equivalent device, may be used to prevent the ring from turning; or the lower portion of the ring may be squared or otherwise shaped so that it can be held with a wrench while the nuts are being screwed down. The object of the diagonal slit is to prevent the guide-rods from being worn unequally, or to prevent a rib or tongue from being formed thereon, as would be the case if the slit were perfectly straight; and the object of filling the slit with a piece of wood or soft metal is also a further guard to prevent the guide-rods or journals from wearing unevenly, while by the operation of drawing up the bushings or rings by means of the nuts the strips of wood or soft metal are compressed within certain limits.

While I have shown my invention as applied to a glass-press, I do not wish to limit myself to this class of machines, as it is obvious that it can be used on all machines where a bushing or packing-ring is desired, whether for piston-packing, cross-heads, or journal-boxes.

It will be noticed that by the constant and repeated moving of the cross-heads B up and

down on the guide-rods A the tendency is for the guide-rods and bushing or packing-rings to wear and become loose, so that the pressing-plunger is liable to move to one side, and not enter the mold in a straight line. Where such a condition of affairs occurs, all that is necessary to be done is to loosen the nut *c* and tighten the nut *d*. This will draw up the packing-ring, compressing it onto the wooden strip, and bring the ring to a close impingement against the rod C, thus making a snug and tight-fitting joint.

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

1. A packing-ring or bushing for glass-presses or other machines, provided with a diagonal slit or opening and tapering sides, and adapted to be drawn up and tightened around the guide-rods or journal by means of a screw-nut fitting over the tapering sides of the ring or bushing and impinging against the cross-head or journal-box, as set forth.

2. A packing-ring or bushing provided with

tapering sides and a diagonal slit or opening to receive a strip of wood or soft metal, and a screw-nut adapted to mesh with screw-threads on the exterior of the ring, which, when screwed down, contracts the ring or bushing, as set forth.

3. A split packing-ring or bushing provided with lugs adapted to fit in recesses in the cross-heads or bearings, and a screw-nut and jam-nut adapted to be screwed down over the tapering sides of the ring or bushing.

4. A split packing-ring or bushing, substantially such as described, having tapering sides, and provided with a screw-nut adapted to mesh with screw-threads on the periphery of the ring, in combination with the cross-head or journal-support and guide-rods or journals, as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

WASHINGTON BECK.

Witnesses:

J. M. YZNAGA,
GUY L. DE MOTTE.