No. 671,697. Patented Apr. 9, 1901.

W. H. HAMMON.

PACKING RING.

(Application filed Mar. 29, 1900.)

(No Model.)

FIG. 1.

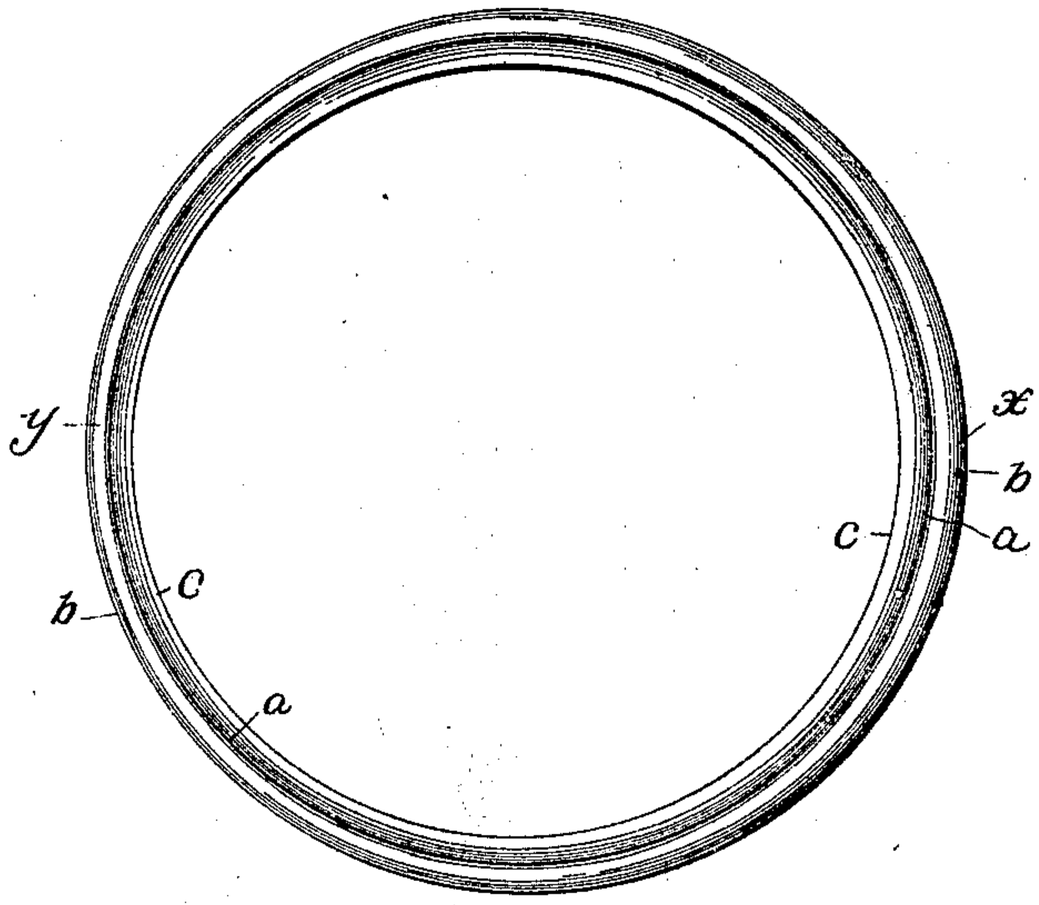
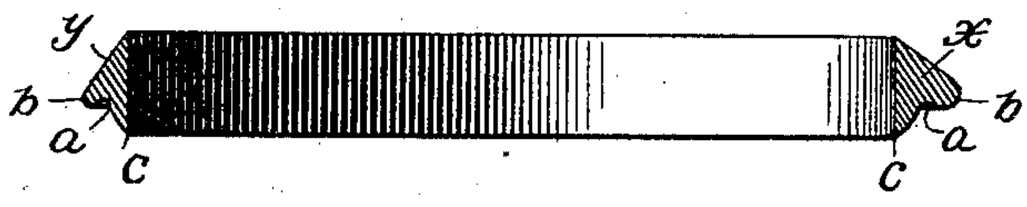


FIG. 2.



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WILLIAM H. HAMMON, OF PITTSBURG, PENNSYLVANIA.

PACKING-RING.

SPECIFICATION forming part of Letters Patent No. 671,697, dated April 9, 1901.

Application filed March 29, 1900. Serial No. 10,620. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. HAMMON, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented or discovered certain new and useful Improvements in Packing-Rings, of which improvements the following is a specification.

The invention described herein relates to certain improvements in packing-rings for pipe-joints, and has for its object a construction whereby a tight joint may be formed not only when the pipe-sections are arranged in line with each other, but also when such sections are arranged with their axes at an angle.

The invention is hereinafter more fully described and claimed.

In the accompanying drawings, forming a part of this specification, Figure 1 is a side elevation of my improved packing-ring, and Fig. 2 a sectional view of the same.

My improved packing-ring is especially applicable to the class or kind of joint in which one part is formed by a sleeve or bell and the other part by the spigot end of an added section inserted into said bell or sleeve, the annular pocket or sleeve between said parts being closed by a packing-ring forced into position by a suitable follower-ring. When the pipe-sections are arranged in line with each other, the annular pocket or recess between the spigot end of one section and the bell or sleeve on the other section will be of approximately the same radial dimensions at all points; but when the sections are arranged at an angle the pocket or recess will be larger on the outside of the elbow formed by the joint, and hence a packing-ring of the same dimensions throughout will not produce a tight-joint. In order to produce a tight joint under such conditions, I employ a packing-ring formed of yielding resilient material, such as rubber, having at one portion, as at *x*, a maximum radial thickness and gradually reduced in thickness from such portion to the diametrically opposite portion *y*. To facilitate the insertion of the packing-ring into the annular pocket or recess, which is usually V-shaped transversely, the packing-ring is made V shape in cross-section, as shown. The ring is provided in its rear face with a groove *a* for the reception of an expanding rib on the follower-ring. As this rib is forced into the groove the lips *b* and *c* are forced apart against the walls of the spigot and bell or sleeve for a tight joint by the spreading of the lips rather than by an upsetting or distortion of the whole ring.

It will be readily understood by those skilled in the art that when the pipe-sections are arranged at an angle to each other the packing-ring will be placed in the annular pocket or recess with its thickest part in the widest part of the pocket or recess. While my improved packing-ring will not fit the pocket or recess when the pipes are in alinement, or nearly so, as perfectly as when they are out of alinement, the provision of expandable lips on the rear face will permit of the formation of the tight joints under all conditions.

The wedge shape of the ring will permit of the formation of a comparatively-tight joint by the inward movement of the ring irrespective of the spreading or expansion of the lips.

I claim herein as my invention—

1. A packing-ring having a greater thickness on radial lines in one part thereof than another as and for the purpose set forth.

2. A packing-ring V-shaped in cross-section and decreasing in its cross-sectional dimensions in directions at right angles to its axis and in both directions from a point of maximum thickness, substantially as set forth.

In testimony whereof I have hereunto set my hand.

WILLIAM H. HAMMON.

Witnesses:
DARWIN S. WOLCOTT,
F. E. GAITHER.