No. 631,376. Patented Aug. 22, 1899.

J. McCREERY.

PIPE COUPLING.

(Application filed May 27, 1898.)

(No Model.)

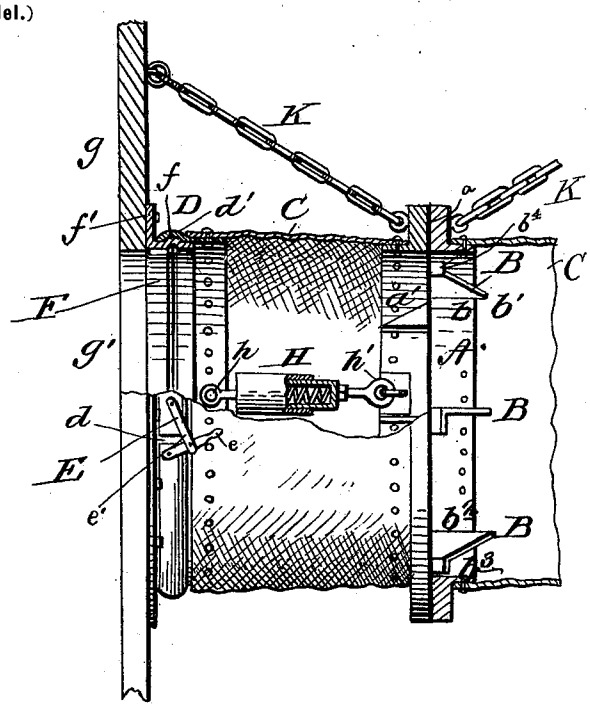
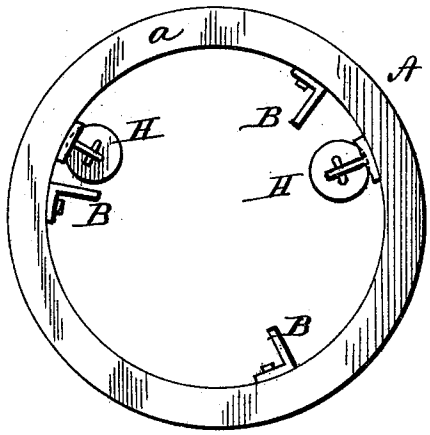


Fig. 1.

Fig. 2.



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UNITED STATES PATENT OFFICE.

JOSEPH McCREERY, OF TOLEDO, OHIO.

PIPE-COUPLING.

SPECIFICATION forming part of Letters Patent No. 631,376, dated August 22, 1899.

Application filed May 27, 1898. Serial No. 681,951. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH McCREERY, 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 Pipe-Couplings; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to a coupler for pipes, more especially for a pipe to be used in a system of ventilation for cars.

The invention consists in the construction hereinafter pointed out.

In the drawings one-half only of the device is shown, as the two parts composing the coupler are duplicates and a description of one fits the other.

In the drawings, Figure 1 represents a side view, partly in section, of one-half of the coupler. Fig. 2 represents a front view.

In the drawings the letter A represents a rigid ring having the flange *a*. Secured to the flanged face of this ring A are several (three or more) guide and securing plates B. These plates are made alike, and a description of one will suffice for all. Each plate has a main portion *b*, having a point *b'* and the two sides b^2 and b^3 at an angle to each other, the side or edge b^3 running obliquely back. At the rear, just at the ring A, the securing-plate B has a lip b^4 at an angle to the main portion *b*. Secured to the body portion *a'* of the ring A is a flexible piece of tubing C. The other end of this piece of tubing C is secured to a split ring D, having a device E, fastened to opposite sides of the split *d*, whereby the split ring D may be enlarged or reduced in size. The fastening device E consists of a handle-piece *e*, which is pivoted to one end of the split ring D, and a strip *e'*, which is pivoted at one end to the handle-piece *e* and to the other end of the split ring D. This ring D has an interior groove *d'*, which fits over an exterior rib *f* of a rigid ring F, which is secured by its flange *f'* to the end *g* of the car to be ventilated, such car having an opening *g'*, alined with the coupling. Attached to the rings A and D by its ends *h h'* is a barrel-spring H, the spring acting by elongation. As shown in the drawings, two springs are used; but any number may be employed.

The coupler may be held to the end of the car by a chain K, which is made detachable at one end.

As stated before, the halves of this coupler are duplicates. When two cars, each containing one half of the coupler, are run together, the two parts of the coupler meet and abut. The peculiar shape of the guide and securing plates B cause the two parts of the coupler to aline, the oblique sides or edges b^3 entering into the mouth of the adjacent part of the coupler. At the same time the guide and securing plates B, resting against each other, prevent lateral movement of the coupler. The flexibility of the coupler enables it to accommodate itself to the longitudinal movement of the cars in traveling. Each part or half of the coupler is held to its end of the car by means of the split ring D, which is clamped over the rigid ring F and is secured in place by the device E.

Having described my invention, what I claim is—

1. A pipe-coupling provided at one end with guide-plates having a main pointed portion, *b*, and the lip, b^4, at an angle to such main portion, as set forth.

2. The combination of a pipe-coupling having a rigid ring, a split ring, and a flexible tubing connecting the two, the split ring being provided on the inside with a groove, and a clamping device with a ring having on the outside a rib adapted to the groove of the split ring, as set forth.

3. The combination of the rigid ring, A, the flexible piece of tubing, C, secured at one end of such ring; the split ring, D, to which the other end of the tubing, C, is secured, such ring having a device, E, secured to the opposite sides of the split, *d*, of the split ring, D.

4. The combination of the rigid ring, A, the split ring, D, the flexible tubing, C, held between them, the ring, D, having an interior groove, *d'*, and a device, E, secured to opposite sides of the split, *d*, of the split ring, D; and the rigid ring, F, having the exterior ring, *f*, adapted to the interior groove, *d'*, of the ring, D.

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

JOSEPH McCREERY.

Witnesses:
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