

W.C. Bridges,

Belt Squeezer.

No. 101,978.

Patented Apr. 19. 1870.

Fig. 1.

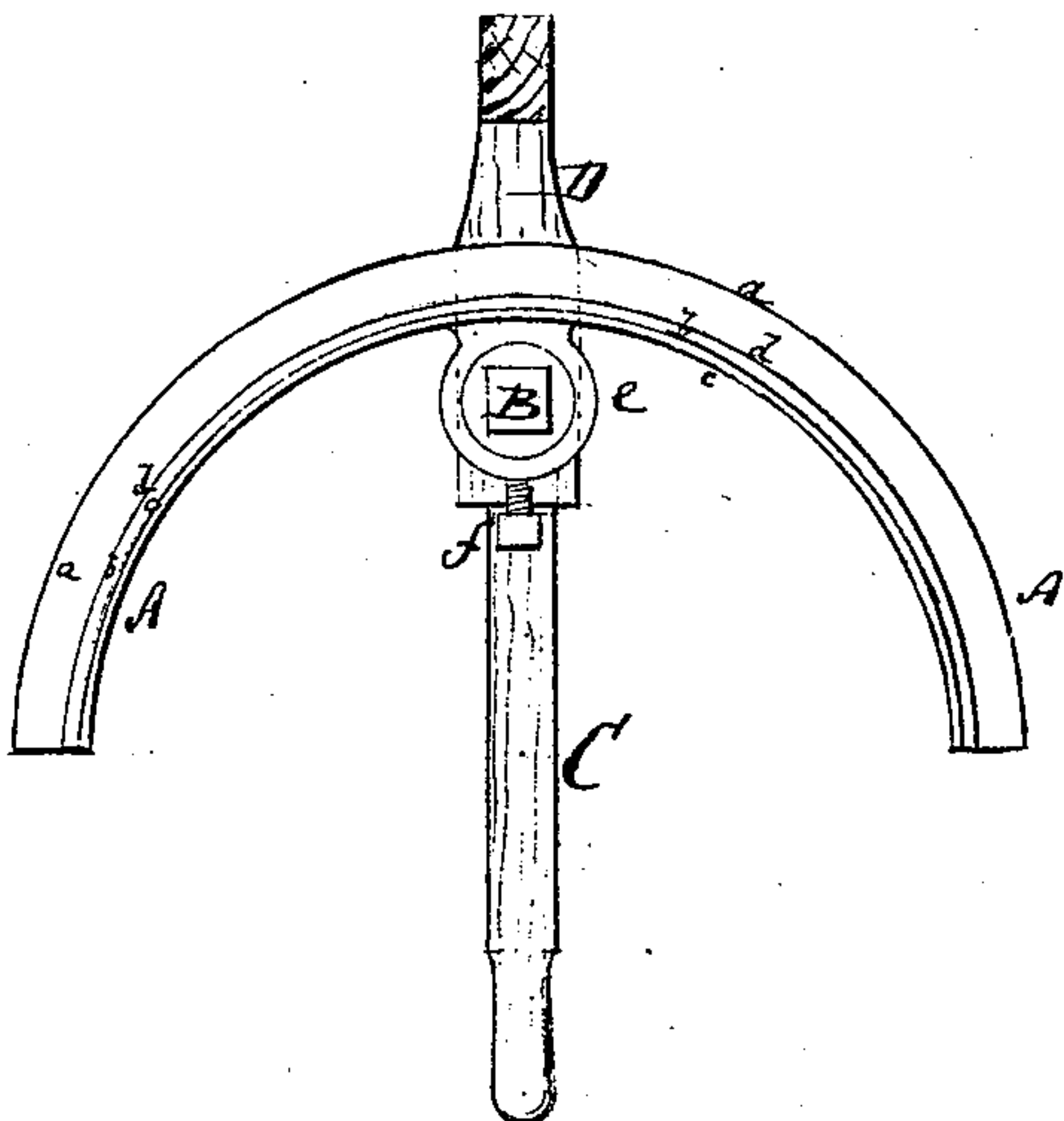
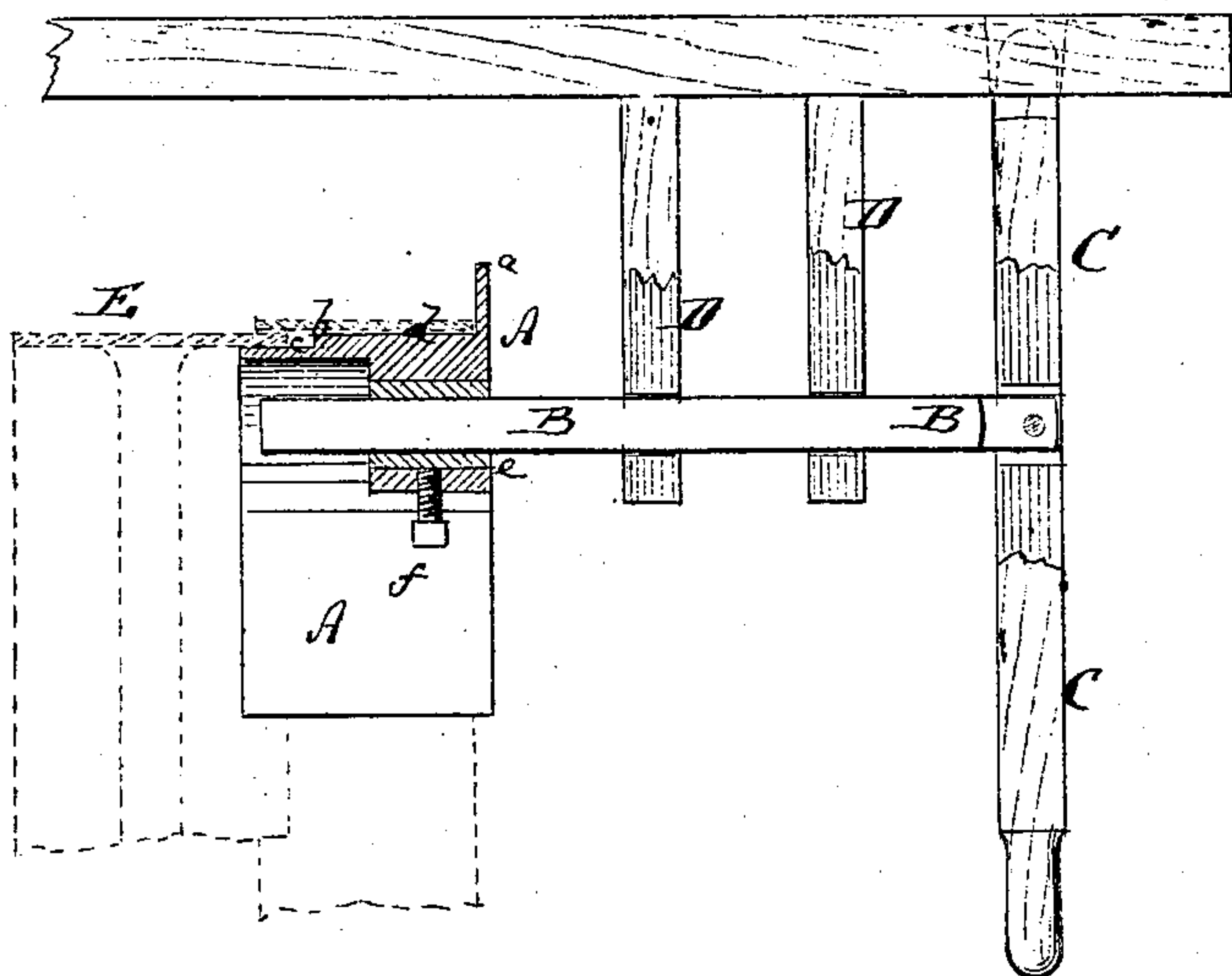


Fig. 2.



Witnesses:

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# United States Patent Office.

WILLIAM C. BRIDGES, OF MICHIGAN CITY, INDIANA.

Letters Patent No. 101,978, dated April 19, 1870.

## IMPROVED BELT-REPLACER.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, WILLIAM C. BRIDGES, of Michigan City, in the county of La Porte and State of Indiana, have invented a new and improved Belt-Replacer; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings forming part of this specification, in which—

Figure 1 represents a side view of my improved belt-replacer.

Figure 2 is a longitudinal section of the same.

Similar letters of reference indicate corresponding parts.

This invention relates to a new apparatus for adjusting belts on their pulleys, and facilitating their removal from and application to such pulleys.

It is at present very difficult to put large belts upon pulleys, and, as they require frequent repair, much annoyance and loss of time is experienced by such performances.

My invention consists in the application of a curved semi-annular belt-receiver, which is secured to a suspended lever in such manner as to conveniently receive the belt from the pulley, and reapply it to the same.

A, in the drawing, represents a semi-annular plate, made of sheet metal or other suitable material. It is made with a projecting flange, *a*, at one end, and with a shoulder, *b*, on its convex surface, so that the latter is divided into two sections, *c* and *d*, as is clearly shown in the drawing.

On the concave side of the plate A is a socket, *e*, into which one end of a rod, B, is fitted, and secured by a screw, *f*.

The other end of the rod B is pivoted to a lever, C, which is suspended from the ceiling.

Bars D D, which are also suspended from the ceiling, embrace the rod B, and serve to guide the same.

E is the pulley. The belt on the same can be slipped upon the plate A, by carrying the latter against it, in the manner shown in fig. 2.

The small part *c* of the plate A is intended to enter within the rim of the pulley, the shoulder *b* to strike the edge, and the raised part *d* to be about flush with the outer face of the pulley.

The belt can thus be moved upon the raised part *d*, and is then carried off the pulley by means of the lever C.

When the belt has been repaired it is again applied by holding the shoulder *b* once more against the edge of the pulley.

The belt is wider than the raised part *d* of the replacer, and, as it rests against the flange *a*, it projects over the part *c*, as shown, and, therefore, the belt will lap over the pulley, and rest partly upon the same, when the shoulder *b* is in contact with the pulley. By rotating the pulley it will be made to draw the belt entirely upon it.

Instead of being strictly semi-annular the plate A may be made nearly, but not entirely so.

Having thus described my invention,

I claim as new and desire to secure by Letters Patent—

1. The semi-annular plate A, provided with the shoulder *b* and flange *a*, to serve as a belt-replacer, substantially as herein shown and described.

2. The combination of the lever C with the rod B and semi-annular plate A, all arranged to constitute a belt-replacer, as set forth.

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Witnesses:

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