

No. 798,238.

PATENTED AUG. 29, 1905.

W. VOLKEL.
BELT REPLACER.
APPLICATION FILED APR. 15, 1905.

Fig. 1.

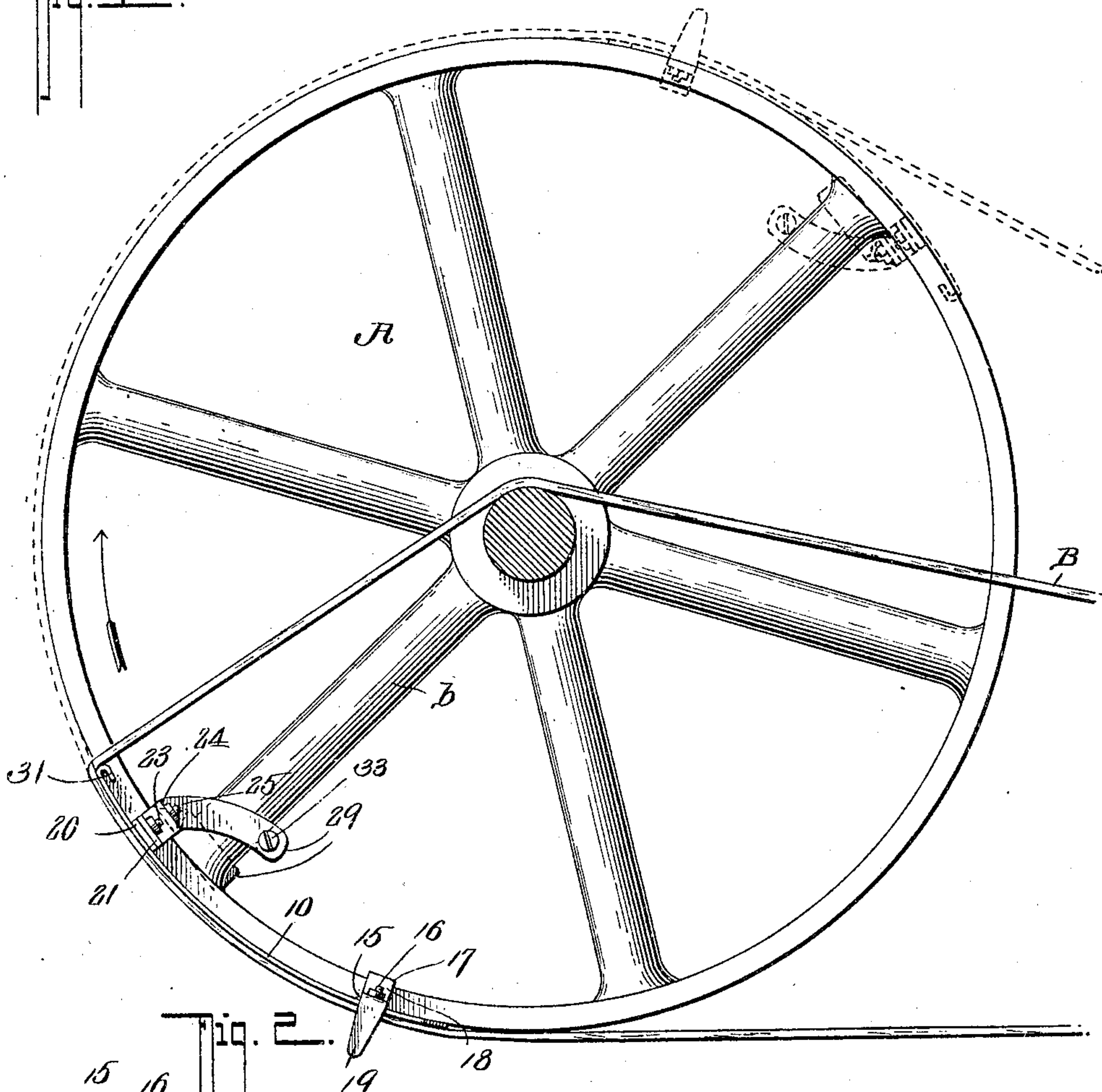
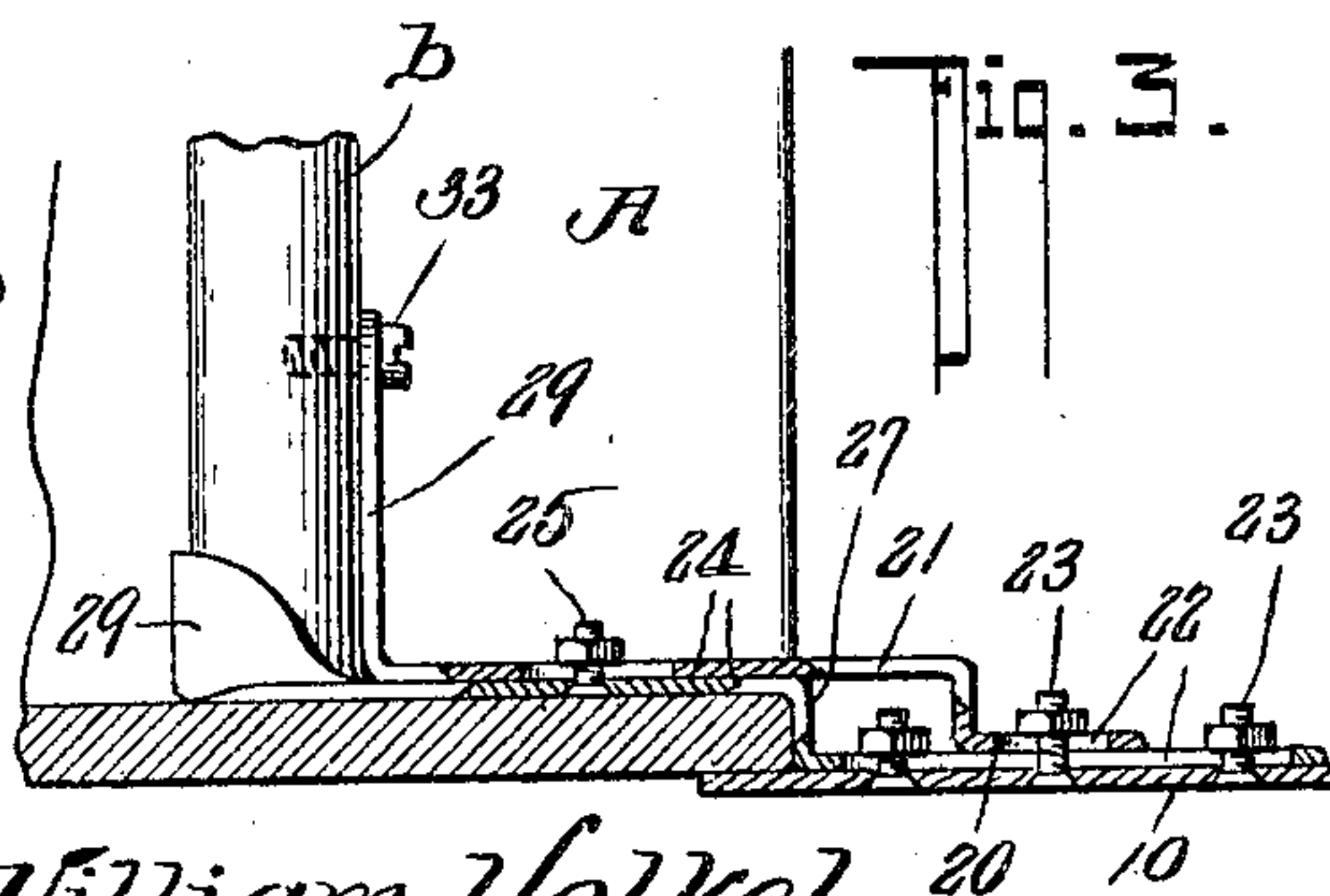
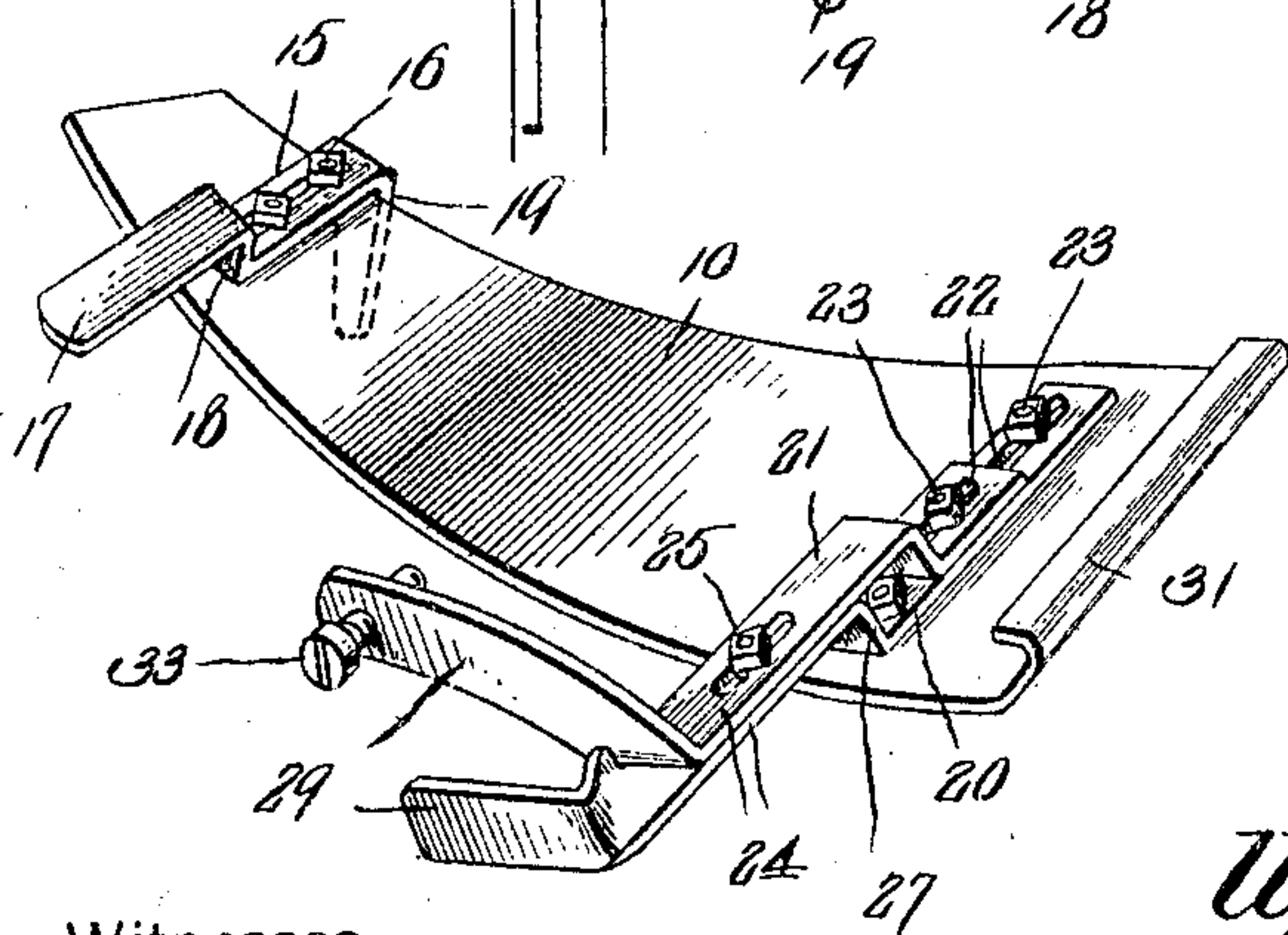


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM VOLKEL, OF PERRYSVILLE, INDIANA.

BELT-REPLACER.

REISSUED

No. 798,238.

Specification of Letters Patent.

Patented Aug. 29, 1905.

Application filed April 15, 1905. Serial No. 255,785.

To all whom it may concern:

Be it known that I, WILLIAM VOLKEL, a citizen of the United States, residing at Perrysville, in the county of Vermilion and State of Indiana, have invented a new and useful Belt-Replacer, of which the following is a specification.

This invention relates to belt-replacers, and has for its principal object to provide a device of simple construction by which a belt may be quickly placed on the driving-pulley of a traction or other engine.

A further object of the invention is to provide a device of this character which may be instantly placed in position and which will be held in operative position during the replacing operation by the stress of the belt, any auxiliary securing means being unnecessary.

A still further object of the invention is to provide a novel device of this character which may be readily adjusted to suit belts and pulleys of different size.

With these and other objects in view, as will more fully hereinafter appear, the invention consists in certain novel features of construction and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and particularly pointed out in the appended claims.

In the accompanying drawings, Figure 1 is a side elevation illustrating a pulley provided with a belt-replacer constructed in accordance with the invention, the full-line position showing the starting of the operation and the dotted-line position the completion thereof. Fig. 2 is a detail perspective view of the belt-replacer detached. Fig. 3 is a transverse sectional view of the device, showing the same in position on the rim of a pulley.

Similar characters of reference are employed to indicate corresponding parts throughout the several figures of the drawings.

The belt-pulley A is of any ordinary type and is designed to receive the belt B.

The belt-replacer forming the subject of the present invention is in the form of a metallic plate 10, which preferably is curved on a line corresponding to the periphery of the pulley and is preferably tapered in width. The plate 10 when in position extends partly over the rim of the pulley and to its inner face are secured rim-engaging brackets, the connections

being preferably adjustable in order that the device may be applied to pulleys of different size. The bracket near the narrower end of the plate is formed of a strip 15, having a slot for the passage of securing-bolts 16, and one end of the strip is bent to form a tongue 17, that bears against the inner face of the pulley-rim, the shoulder 18 at the end of the tongue forming a stop for engagement with the edge of the rim. The opposite end of the strip 15 is bent outward to form a guard 19, which engages against the edge of the belt B and serves to force the belt laterally onto the periphery of the pulley. Near the wider end of the plate 10 is arranged a bracket formed of two members 20 and 21, the shank portions of which are superposed and are provided with slots 22 for the passage of securing-bolts 23. These brackets are bent to form tongues 24, which bear against the inner face of the rim of the pulley, and the tongues are slotted for the passage of a bolt 25 to permit independent adjustment of said brackets. One of the brackets is provided with a shoulder 27, which engages against the edge of the pulley-rim, and at the inner end of each tongue is an arm 29, the said arms being disposed in spaced relation and arranged to engage, respectively, at opposite sides of one of the spokes *b* of the pulley, the spoke serving as a means for carrying the belt-replacing plate around with the pulley. The wider end of the plate is beaded, as indicated at 31, in order to prevent injury to the belt, and when the device is to be employed to replace a belt it is adjusted to the position shown in full lines in Fig. 1, the belt being passed over the beaded end of the plate and within the line of the guard 19. The pulley is then turned in the direction indicated by the arrow, and movement is transmitted to the plate by means of the spoke *b*. The belt is thus carried around the pulley, and by the time the device has reached the position shown in dotted lines in Fig. 1 the belt will be fully on the pulley, it being necessary to engage only the edge of the belt with the periphery of the pulley, the belt climbing to the central position in the usual manner. When the belt-replacer reaches the position shown by dotted lines, it may be readily removed by hand or may fall from position. In some cases, where the belt is exceptionally

heavy, a set-screw 33 may be employed for locking the replacer to one of the spokes of the pulley.

5 The plate 10 is preferably formed of metal of a more or less yieldable nature in order that it may automatically conform to the curvature of pulley-rims of different diameter.

Having thus described the invention, what is claimed is—

10 1. A belt-replacer including a curved plate adapted to extend partly over the rim of the pulley and held in place by engagement of the belt therewith, said plate being provided with means for engaging the inner face of the
15 pulley-rim.

2. A belt-replacer including a curved plate having a portion arranged to overlap the pulley-rim, said plate being tapered in width and provided near its narrowest end with a
20 guard for engaging the edge of the belt.

3. In a belt-replacer, a curved plate having a turned or beaded end a portion of which is cut away to permit said plate to partly overlap the pulley-rim, and brackets or tongues
25 carried by the plate and arranged to engage against the inner face of the rim.

4. A belt-replacer in the form of a curved

plate having laterally-adjustable members for engagement with the inner face of the pulley-rim.

5. A belt-replacer in the form of a curved plate tapering inward and provided at its narrower end with a belt-engaging guard, and brackets or tongues secured to the plate and arranged to engage the inner face of the pulley-
35 rim.

6. A belt-replacer comprising a curved plate having a beaded end for engagement with the belt, and a pair of bracket members having arms for the reception of one of the spokes
40 of the pulley.

7. A belt-replacer comprising a curved plate formed of yieldable or elastic material and adapted to extend partly over the rim of the pulley, and into engagement with the periph-
45 ery thereof, and provided with members for engaging the inner face of the pulley-rim.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

WILLIAM VOLKEL.

Witnesses:

ALFRED W. SPANDAN,
PERRY MOODRUM.