

T. HEALEY.
BELT CLEANER.
APPLICATION FILED JULY 6, 1909.

936,887.

Patented Oct. 12, 1909.

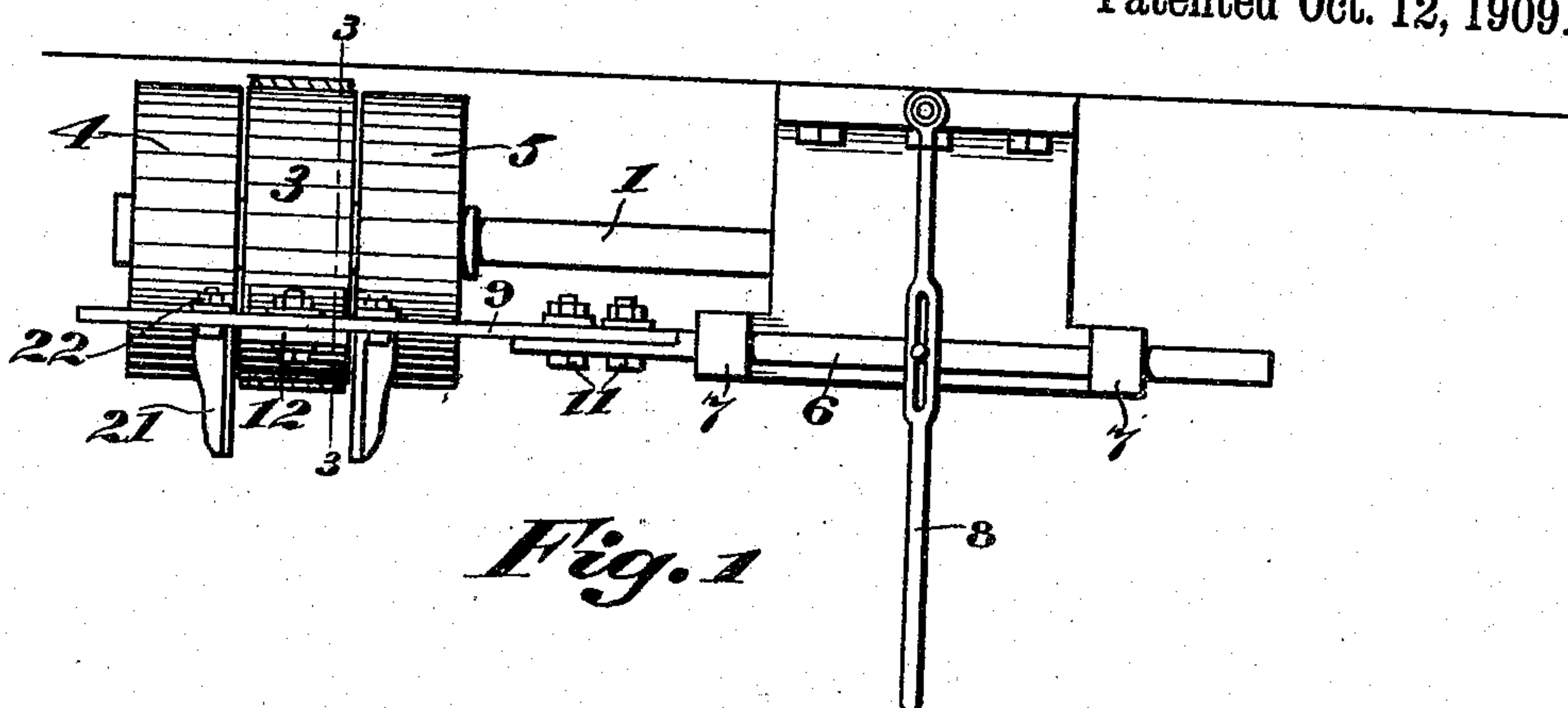


Fig. 1

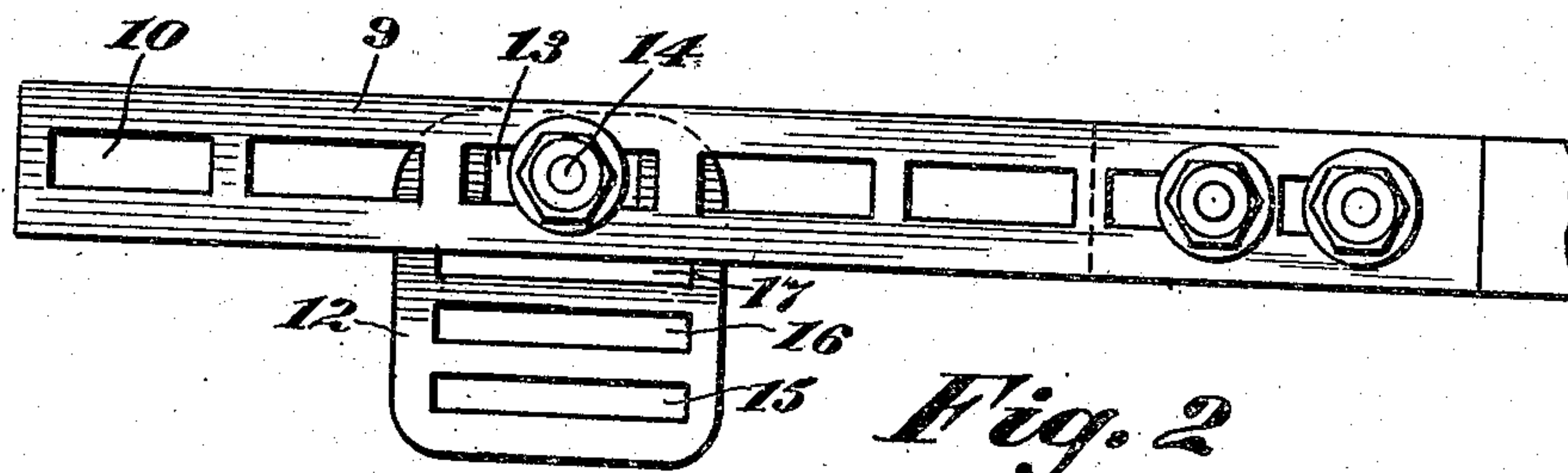


Fig. 2

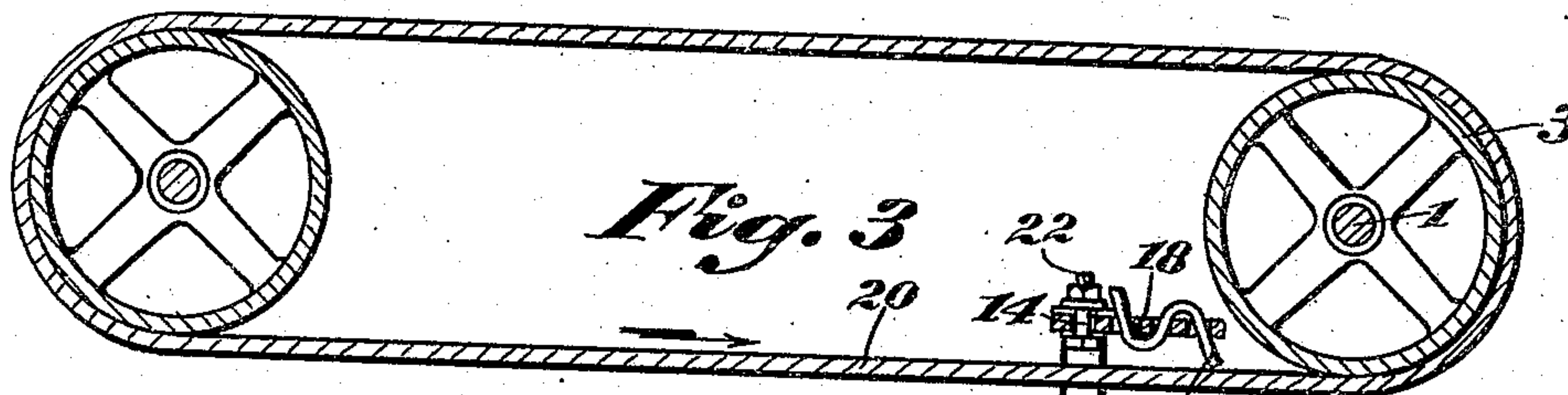


Fig. 3

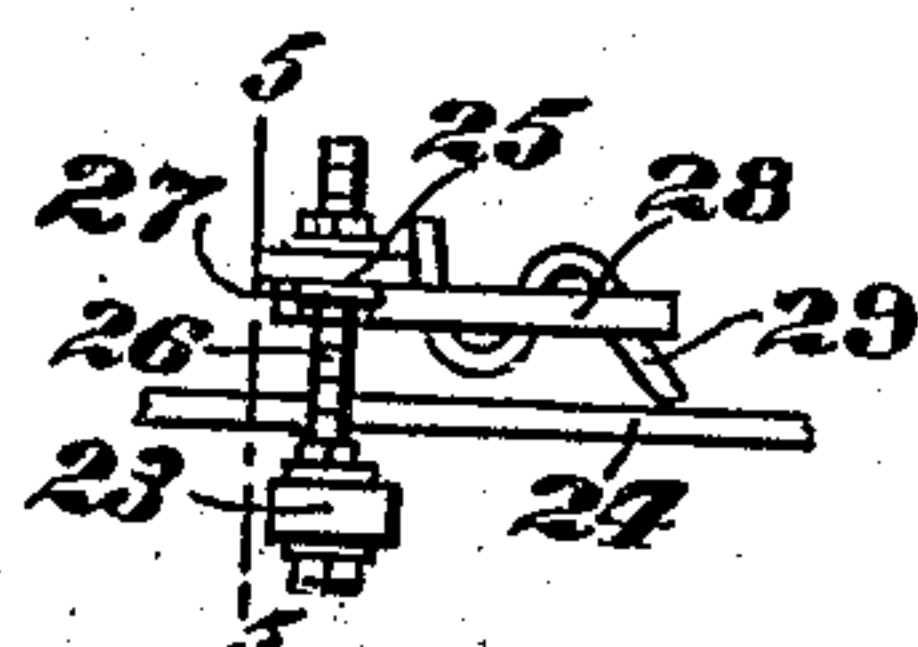


Fig. 4

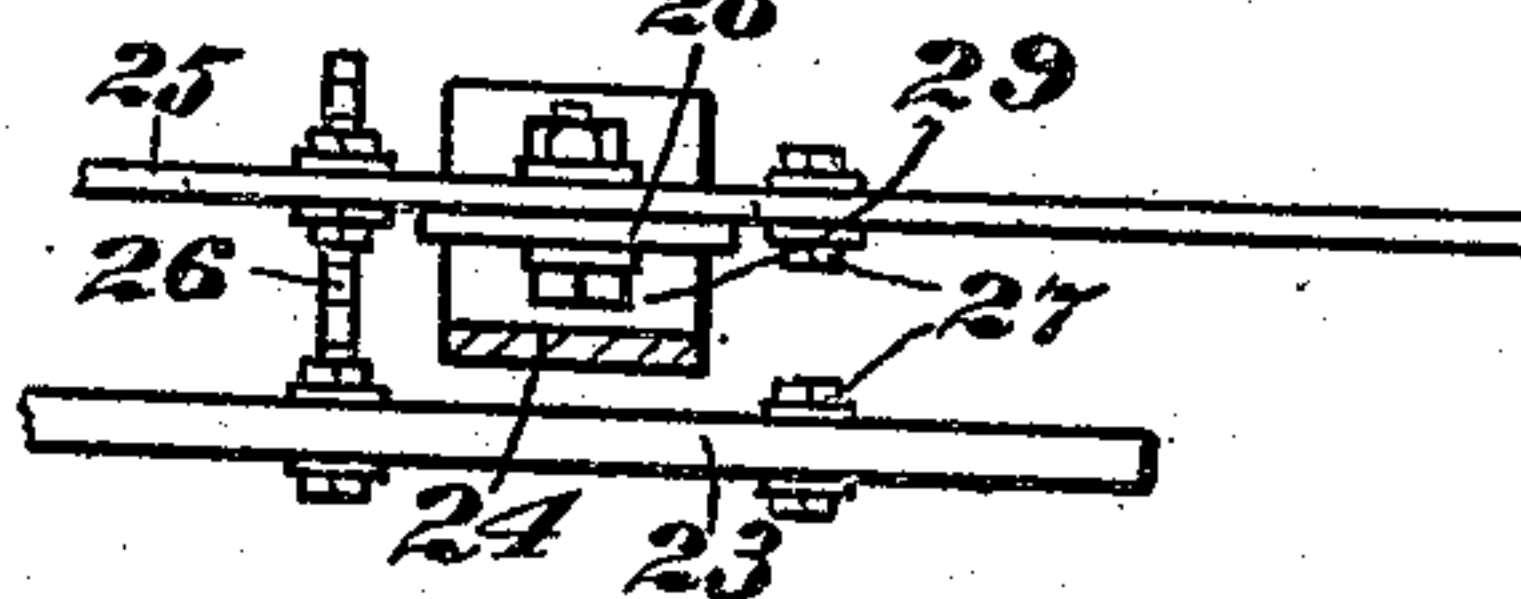


Fig. 5

Witnesses:

E. J. Gawin
E. J. Gawin

THOMAS HEALEY
Inventor,

By *Marion & Marion*
Attorneys

UNITED STATES PATENT OFFICE.

THOMAS HEALEY, OF LOWELL, MASSACHUSETTS.

BELT-CLEANER.

936,887.

Specification of Letters Patent.

Patented Oct. 12, 1909.

Application filed July 6, 1909. Serial No. 506,056.

To all whom it may concern:

Be it known that I, THOMAS HEALEY, a citizen of the United States of America, residing at Lowell, county of Middlesex, in the State of Massachusetts, one of the United States of America, have invented certain new and useful Improvements in Belt-Cleaners; and I do hereby declare that the following is 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.

My invention relates to an improved belt cleaner, and it consists in the constructions, combinations and arrangements herein described and claimed.

The object of my invention is to provide an efficient means for maintaining the working surfaces of belts in a clean condition; thereby avoiding the loss of power and operative defects occurring under the present practice of permitting belts to operate in a dirty condition during the intervals between periodic cleanings.

My invention also obviates all danger of injury to the working surfaces of belts by the employment of card clothing, or other abrading surfaces, necessary for removing the dirt from belts which are cleaned only periodically.

In the accompanying drawings, forming part of this application and in which similar reference symbols indicate corresponding parts in the several views: Figure 1 illustrates one embodiment of my invention applied to a shiftable belt; Fig. 2 is a detail plan view, on a larger scale, clearly showing the construction of the belt-cleaner support; Fig. 3 is a sectional view, on the line 3—3 of Fig. 1. Fig. 4 is a detail sectional view, illustrating a slightly modified means for supporting the belt cleaner, and Fig. 5 is a sectional view, on the line 5—5 of Fig. 4.

Referring to the drawings, 1 indicates a shaft, carrying a loose pulley 3, and having secured thereto drive pulleys 4 and 5. Any usual form of shipper rod 6 is shown reciprocatingly mounted in guides 7 and provided with a common form of operating lever 8. A bracket 9, provided with one or more openings 10 along its length, is rigidly secured to the shipper rod, as by bolts 11. Shipper bars 21 are adjustably secured to the bracket 9, as by bolts 22, to constitute a belt-fork for engaging the edges of the driving belt 20 to shift it on the several pulleys.

A supporting base 12 is provided with a preferably elongated opening 13 for receiving a bolt 14, which latter is adapted to be inserted in any of the openings 10 for securing the base at any desired position along the length of the bracket 9.

The base is provided with a series of slots 15, 16 and 17, through which a short length of belting 18 is threaded in position for pressing one end thereof against the working surface of an operating belt 20. The belting 18 is preferably formed of the same width as the operating belt engaged thereby, since such construction eliminates danger of unequal stretching of the operating belt and leaves no portion of the cleaning edge of belting 18 extending beyond the edges of the operating belt to accumulate dirt.

As shown especially in Fig. 3, the base 12 extends from its supporting bolt 14 in the direction of travel of the belt, and the portion of the belting 18 which extends through the slot 17 of the base engages the edge of the bracket 9. This constitutes an efficient construction, since the engagement of the belting 18 with the bracket 9 provides a yielding means acting evenly across the width of the operating belt 20, with the end of said belting pressed against the working face of said operating belt.

Figs. 4 and 5 illustrate a slight modification, especially adapted to construction in which the shipper rod 23 is positioned beyond the edge of an operating belt 24. In this construction, a bracket 25, similar to the previously described bracket 9, is supported on bolts 26 secured to the shipper rod; nuts 27, threaded on the bolts 26, provide convenient means for adjusting the position of the bracket 25 thereon. A supporting base 28, similar to the base 12, is secured to the bracket 25 with the cleaning end of its belting 29 in engagement with the working surface of the operating belt 24, all in a manner similar to that previously described.

I have illustrated and described my invention applied to a main drive belt, but it could obviously be applied to any form of belt. It provides a very advantageous construction for the belting of spindles in textile mills, and in all positions where belting is liable to accumulate dirt.

I have illustrated and described a satisfactory and preferred construction, but, obviously, changes could be made within the spirit and scope of my invention.

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

1. In a device for maintaining belting clean, the combination of a belt shipper, a support adjustably carried thereby, and belt cleaner carried by said support for engaging the working face of a belt arranged to be shifted by said shipper, substantially as described.

2. In a device for maintaining belting clean, the combination of a bracket, a slotted support secured thereto, and a strip of flexible material threaded through the slots of said support in engagement with said bracket to yieldingly resist displacement of said support, substantially as described.

3. In a device for maintaining belting clean, the combination of a bracket, a slotted support adjustably secured thereto, and a strip of flexible material threaded through the slots of said support in position to press said strip against the working face of a belt, said strip arranged in engagement with said bracket to yieldingly resist displacement of said slotted support, substantially as described.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

THOMAS HEALEY.

Witnesses:

JOSEPH HEALEY,

ALBERTINE BERNIER.