(No Model.)

E. GLEADALL.

MACHINE BELT.

No. 371,057. Patented Oct. 4, 1887.

Fig. 2.

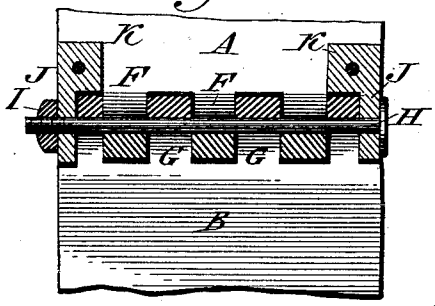
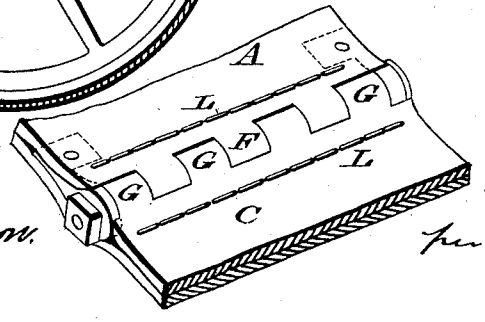


Fig. 1.

Fig. 3.

Fig. 4.



WITNESSES:

P. F. Pingle

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INVENTOR

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UNITED STATES PATENT OFFICE.

EDWIN GLEADALL, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO G. & H. BARNETT, OF SAME PLACE.

MACHINE-BELT.

SPECIFICATION forming part of Letters Patent No. 371,057, dated October 4, 1887.

Application filed February 23, 1887. Serial No. 228,494. (No model.)

To all whom it may concern:

Be it known that I, EDWIN GLEADALL, a subject of the Queen of Great Britain, and a resident of Philadelphia, Pennsylvania, have invented certain Improvements in Machinery-Belting; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the annexed drawings, making part hereof.

My invention consists of a belt provided with two or more hinged joints formed of interlocking loops of the material constituting the belt, the connecting pins or pintles of which joints can be removed, so that one or more sections of the belt can be taken out to shorten the belt or to be replaced by longer sections to elongate the belt. The outer or side loops are also protected against lateral friction with the head and nut of the pintle by fixed washers set in the outer loops.

In the drawings, Figure 1 is a side view of one of my improved belts from a pulley of one size to a larger one; Fig. 2, a detached partial sectional view of the hinge-connection; Fig. 3, a detached longitudinal sectional view of a piece of belting, showing the hinge-connection; Fig. 4, a perspective view of the same.

A is what I will call the "main belt."

B C are short sections of belting interposed to lengthen the same.

D E are pulleys, the latter being driven by the former.

F G are the interlocking loops of the main and interposed parts of the belting; H, the pintle or pin, having a head at one end and a screw-thread at the other, which pintle is passed through the interlocking loops to form the hinged connection; I, a screw-nut on one end of the pintle.

J J are washers secured to one of the ends of belting by riveted tongues K K, and guarding the sides of the outer interlocking portions of the belting from abrasion by the heads and nuts of the pintles when the belt is in use.

L L are lines of sewing to retain the bent-over part in looped form.

The flap, which is bent over to form the loop, may be arranged to lie over on the outside of the belt when the latter is in use, as shown at M, Fig. 1; or it may in each case be arranged to lie upon the inside, as at N. I prefer the latter form, as it is thus prevented from flapping outwardly in passing around the pulleys.

My improvement relates particularly to the type of belting made of leather, rubber, and textile fabrics, as distinguished from metallic-chain belting, and to indicate my belting I shall in my claim call it a "flexible belt," as distinguished from metallic belting, and I desire by the word "flexible" to indicate the material.

Instead of the sewing L, rivets or any other suitable means may be employed which will hold the turned-over end in place and not interfere with the detachability of the jointed ends.

In calling my belt "flexible," I refer to its flexibility between the detachable joints above referred to. The pintle H is not riveted at both ends, but is constructed, substantially as shown, so as to be readily drawn out and inserted without destroying it, and this renders the joint detachable.

The end of the pintle, which is inserted through the loops to connect them, may be slightly rounded to prevent its forward end catching on the edges of the interlocking loops. Belts have heretofore been constructed of numerous short pieces of leather set on edge like fire-grating, side by side, the edges of the short pieces coming in contact with the pulleys. This construction destroys its flexibility between the joints, which are made at short intervals to compensate for this; but the joints in this case are not detachable, as the pintles are riveted at both ends.

I am well aware that drive-chains have long been made of detachable links, and various forms of hinges have been used to connect the free ends of belting, and I do not claim these; but

What I claim as new is—

1. The flexible belt, substantially as above described, provided at intervals with detachable hinged joints formed by interlocking

loops F G of the flexible material, and all connected by the removable pintle H, substantially as set forth.

2. The flexible belt, substantially as above described, provided at intervals with detachable hinged joints formed by interlocking loops F G of the flexible material connected by the removable pintle H, the side loops being protected against lateral friction with the head and nut of the pintle by the fixed washers J J, substantially as set forth.

EDWIN GLEADALL.

Witnesses:
GEORGE E. BUCKLEY,
WM. H. CARSON.