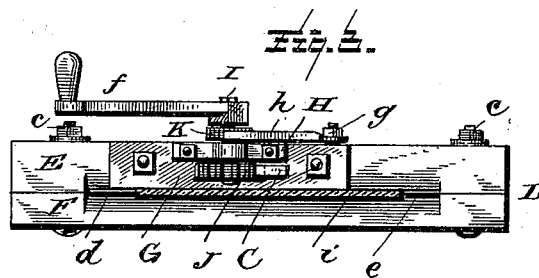
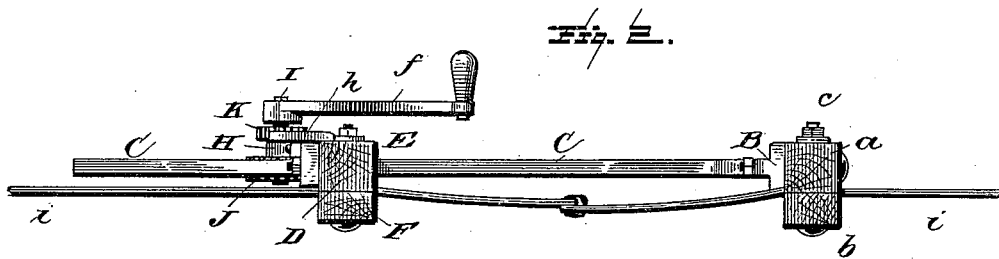
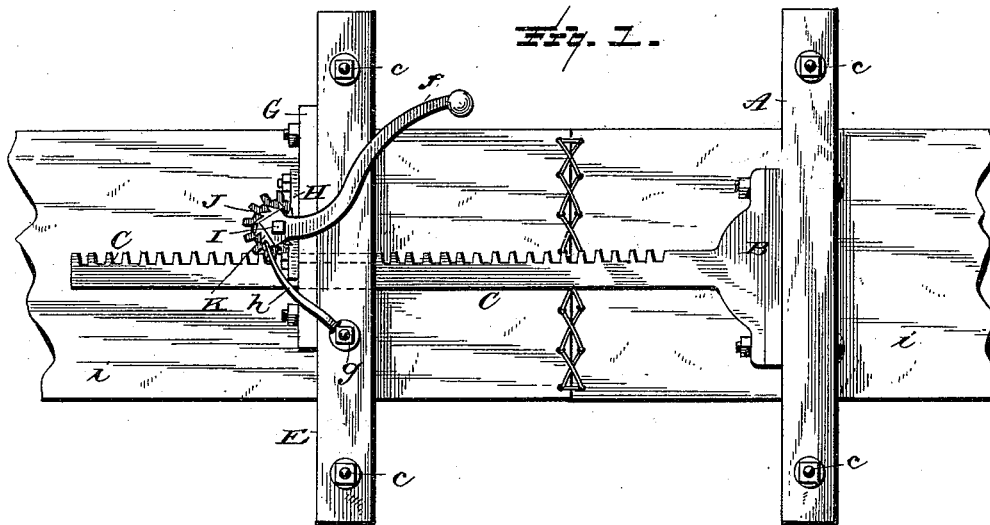


(No Model.)

P. J. GLOECKNER.
BELT STRETCHER.

No. 420,782.

Patented Feb. 4, 1890.



WITNESSES:

L. C. Hills
E. H. Bond.

INVENTOR

INVENTOR
Peter J. Gloeckner,

BY

BY
Chas H. Fowler.
ATTORNEY.

UNITED STATES PATENT OFFICE.

PETER J. GLOECKNER, OF CANTON, OHIO.

BELT-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 420,782, dated February 4, 1890.

Application filed November 29, 1889. Serial No. 331,899. (No model.)

To all whom it may concern:

Be it known that I, PETER J. GLOECKNER, a citizen of the United States, residing at Canton, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Belt-Tighteners; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters of reference marked thereon.

This invention relates to certain new and useful improvements in belt-tighteners; and it has for its object to provide a simple, cheap, strong, and durable belt-tightener of that class designed to allow of the tightening of the belt without taking it from the pulleys.

The novelty resides in the peculiar combinations of parts constituting the tightener, as more fully hereinafter described, shown in the drawings, and then particularly pointed out in the appended claim.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a top plan of my improved belt-tightener shown applied to a belt. Fig. 2 is an edge view of Fig. 1. Fig. 3 is an end view looking in the direction of the arrow in Fig. 1.

Like letters of reference indicate like parts throughout the several views.

Referring now to the details of the drawings by letter, A designates one of the clamping-plates, formed of two portions *a b*, held together by means of suitable bolts, as *c*, the adjacent faces of the two portions being cut away, as shown at *d*, to provide space for the belt, and rounded, as shown at *e*, to facilitate the insertion of the belt. Secured to the upper portion *a* is the block or plate B, to which is secured in any suitable manner the rack-bar C, extending centrally from said portion *a*. The free end of this rack-bar passes through an opening therefor in the upper portion D of the other clamping-plate E, the two portions D and F of this clamping-plate

being similar to those of the clamping-plate A, being held together by means of similar bolts *c* and having a passage-way for the belt, the entrance to said passage being rounded the same in both clamps.

Secured upon the outer face of the portion D of the clamp E is a plate G, to which is secured a bearing H for the vertical shaft I, to which is secured a pinion J, designed to mesh with the rack-bar C and a ratchet-wheel K. This shaft is provided with a suitable handle *f*, and upon the upper face of the portion D there is secured upon a vertical pivot *g* a pawl *h*, designed to engage the ratchet-wheel K, as clearly seen in the drawings.

In practice the clamps are secured upon the belt *i*, one near each end thereof, as shown, with the parts occupying the position shown in Fig. 1, when by turning the handle *f* the pinion will be caused to engage the rack-bar and draw the clamps toward each other, thus tightening the belt on the pulleys and creating a slack between the clamps, as seen in Fig. 2, the ratchet and pawl preventing retrograde movement of the parts.

The central arrangement of the rack, pinion, and ratchet and pawl is deemed essential, as the parts are thus brought within small compass and are not liable to be caught in or injured by any portions of the machinery.

What I claim as new is—

In a belt-tightener, a clamping-plate carrying a centrally-disposed rack-bar, combined with the clamping-plate E, the plate G thereon, the bearing H on said plate, the vertical shaft in said bearing, the pinion on said shaft, the ratchet-wheel on said shaft, and the pawl held by a vertical pin on the clamping-plate E and engaging said ratchet, substantially as shown and described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

PETER J. GLOECKNER.

Witnesses:

JACOB P. FAWCETT,
JOSEPH DEVILLE.