(No Model.)

J. W. BIXBY.

BELT TIGHTENER.

No. 308,051. Patented Nov. 18, 1884.

Fig. 1.

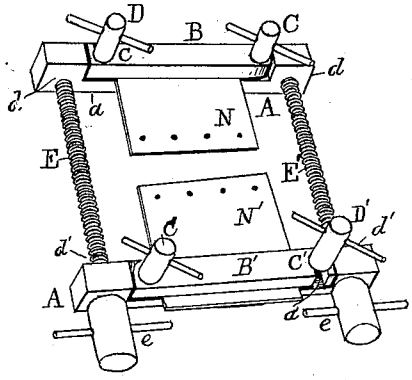
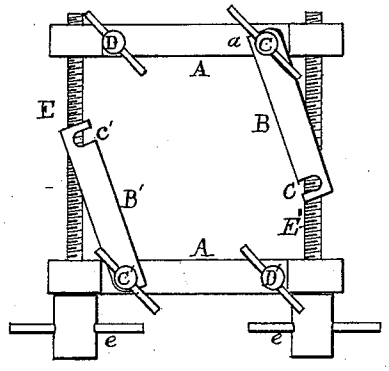


Fig. 2.



Witnesses

Milt. Hamilton

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UNITED STATES PATENT OFFICE.

JAMES W. BIXBY, OF ATHENS, MAINE.

BELT-TIGHTENER.

SPECIFICATION forming part of Letters Patent No. 308,051, dated November 18, 1884.

Application filed September 2, 1884. (No model.)

To all whom it may concern:

Be it known that I, JAMES W. BIXBY, a citizen of the United States, residing at Athens, in the county of Somerset and State of Maine, have invented certain new and useful Improvements in Belt-Tighteners, of which the following is a specification, reference being had to the accompanying drawings.

Figure 1 is a perspective view of the device. Fig. 2 is a plan view.

The invention relates to improvements in belt-tighteners; and it consists in the construction hereinafter set forth.

In the annexed drawings, the letters A A′ indicate two bars having recesses *a a′* on one side. Placed in these recesses are securing-strips B B, having at one end holes through which pass pivotal pins C C′, holding them to the bars, and hooked ends *c c′*, which engage locking pins D D′, that take into the bars A A′. The bars A A′ have at their ends screw-threaded perforations *d d′*, into which are screwed the straining-bolts E E′. In use the bars are placed on these bolts, so that the hooked ends *c c′* of the strips B B′ shall be on opposite sides of the frame thus formed.

To use this device, the locking-pins D D′ are loosened and the strips B B′ swung on their pivots C C′. The meeting ends N N′ of the belt are then placed in the recesses *a a′*, the strips B B′ swung back on top of the belt, and the pins D D′ tightened down, holding the belt firmly in place. By operating the straining-bolts E E′ the ends of the belt are brought close enough together to take up the slack in the belt and to tighten the latter. The strips B B′ can be adjusted to and from the bars A A′ to suit different thicknesses of belt.

I am aware of Patent No. 222,896, for a belt-tightener. This consists of clamps made in two parts, between which the tightening-bolts pass, and which two parts are held on the bolts and to the belt by screws with washers, also the tightening-bolts are provided with beveled wheels, which mesh into bevel-wheels placed on a counter-shaft, the bevel-wheels on such counter-shaft being arranged so that they may be thrown in and out of gear with the wheels on the tightening-bolts. In my device the straining-bolts pass through the threaded perforations in the bars A A′ and have nothing to do with the strips B B′. These are hinged to the bars, are not to be removed therefrom, and are swung in and out of position to allow the device to be placed on a belt.

The simplicity of my device and the ease and rapidity of adjustment, and the fact that its parts are not to be separated render it desirable in tightening belts, as this is usually done while the belts are in position for use. Especially is it desirable in tightening belts in mills when they are underneath machinery which renders them difficult of access, where it is almost impossible to cast them, and take up by guessing the amount to be cut.

Having described my invention, what I claim is—

The belt-tightener consisting of the combination of the bars A A′, recessed at *a a′*, and having the threaded perforations *d d′*, the strips B B′, hinged in the recess *a a′*, pivotal pins C C′, locking-pins D D′, and the straining-bolts E E′, engaging the perforations *d d′*, all constructed, combined, and arranged as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES W. BIXBY.

Witnesses:
MYRON L. MARR,
ARTHUR E. AUSTIN.