

(No Model.)

G. H. JONES & J. M. CHILCOTE.

BELT STRETCHER.

No. 299,795.

Patented June 3, 1884.

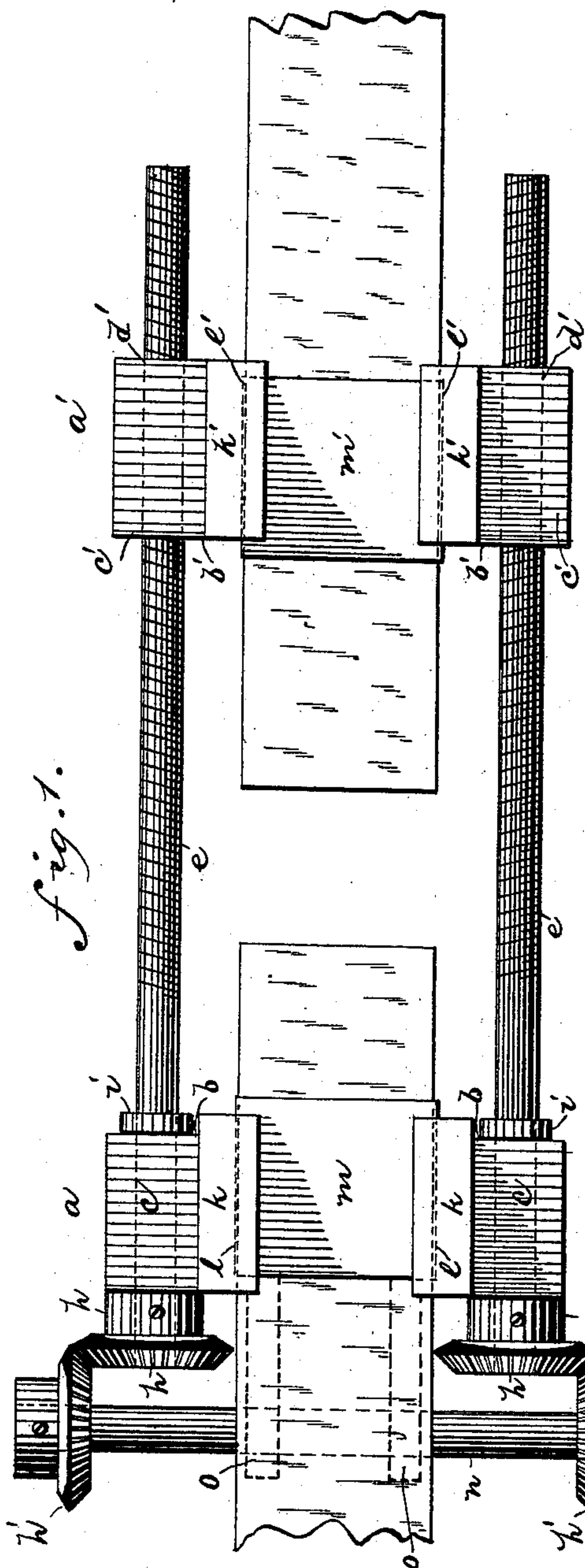


fig. 1.

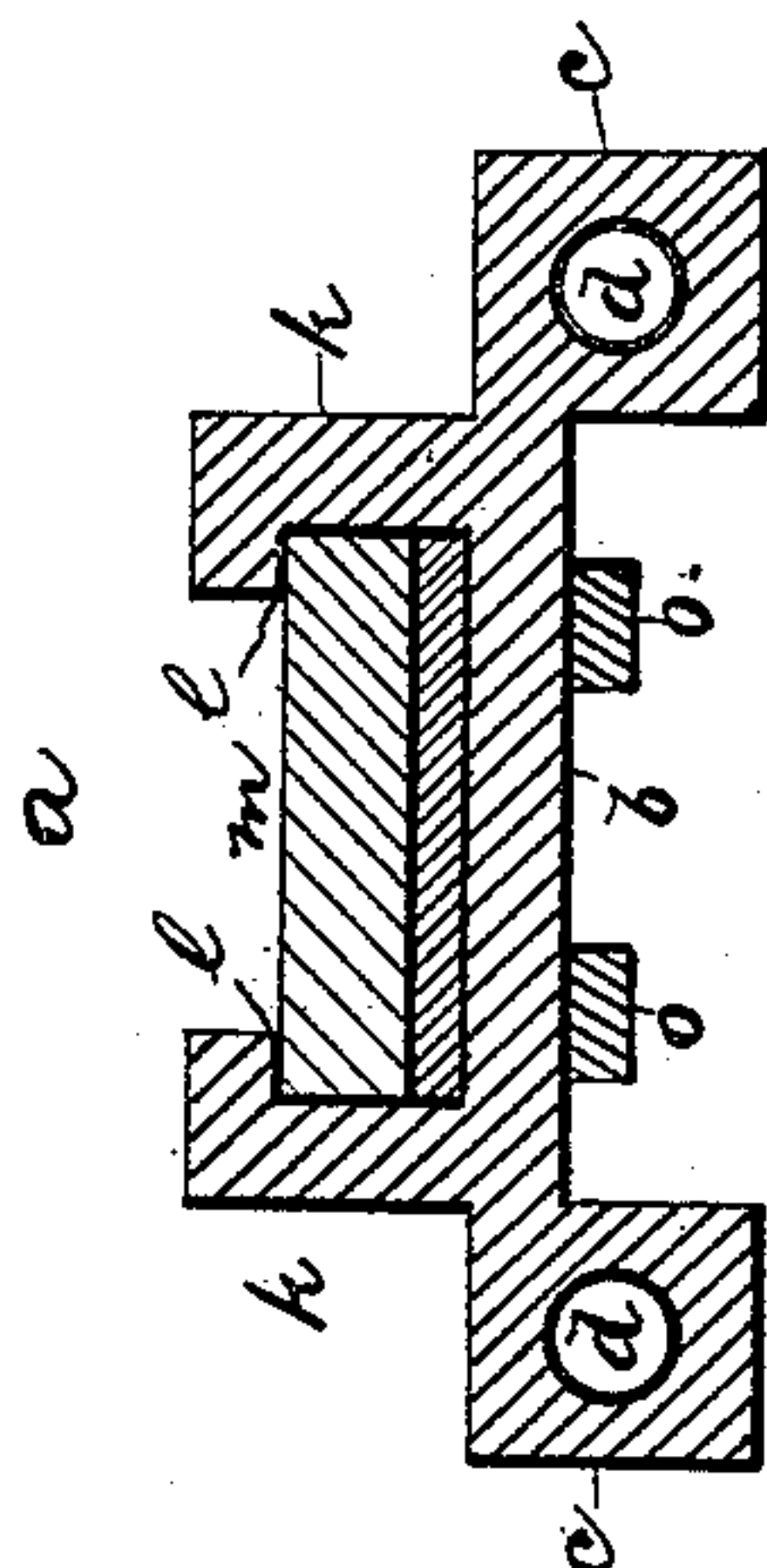


fig. 2.

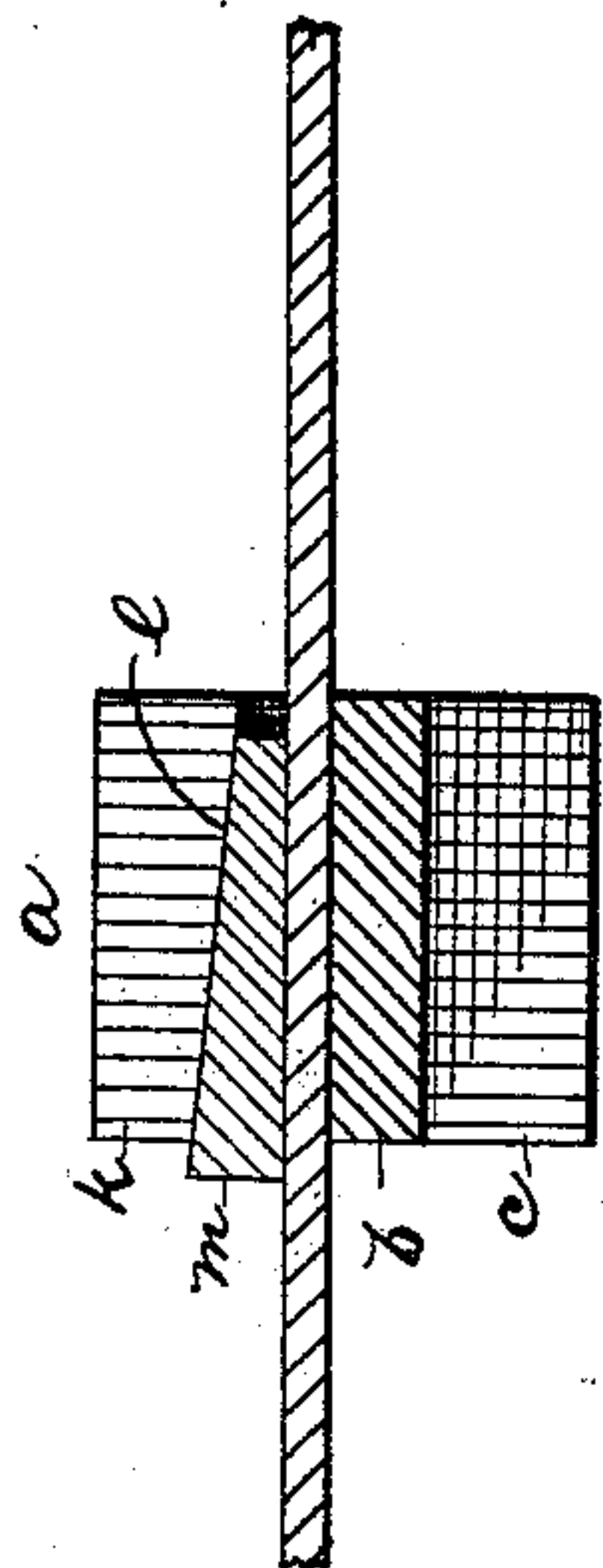


fig. 3.

WITNESSES:

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UNITED STATES PATENT OFFICE.

GARRISON H. JONES, OF LARWILL, INDIANA, AND JAMES M. CHILCOTE, OF
EDGERTON, OHIO.

BELT-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 299,795, dated June 3, 1884.

Application filed November 8, 1883. (No model.)

To all whom it may concern:

Be it known that we, GARRISON H. JONES, at present residing in Larwill, Whitley county, Indiana, and JAMES M. CHILCOTE, citizens of the United States, said CHILCOTE residing at Edgerton, in the county of Williams and State of Ohio, have invented certain new and useful Improvements in Belt-Stretchers, of which the following is a specification.

10 The object of our invention is to stretch and take up the slack in belts without removing them from their pulleys; and our invention consists in the peculiar construction and arrangement of the parts for stretching a belt or taking up its slack, without removing it from its pulleys, as hereinafter more fully set forth, and pointed out in the claims.

Figure 1 is a plan view, and Figs. 2 and 3 are detail sectional views.

20 Referring to the drawings, *a* represents a stationary head-block or belt-clamp, which is composed of a body, *b*, provided at its ends with projecting blocks *c c*, each having a central longitudinal orifice, *d*, for the passage of bolts *e e*, which are threaded at their opposite ends, the threads extending some distance along the bolts *e*. The outer ends of the bolts *e e* extend beyond the outer ends of the blocks *c c*, and are each provided with a bevel-pinion, *h*, at their outer ends. Each bolt *e* is provided with a flange, *i*, against which the inner end of the projecting blocks *c* abut.

35 *k k* represent parallel lugs, secured to the body *b* on the face of the head-block *a*, opposite that to which the blocks *c c* are secured. The lugs *k* are at right angles to the body *b* of the head-block *a*, and each lug *k* is provided on its inner face with an inclined plane, *l*, having the highest part of each at the outer ends of the lugs *k*.

40 *a'* represents a reciprocating head block or clamp of the same construction as the stationary head block or clamp *a*, and is composed of the body *b'*, having end projecting block, *c' c'*, provided with threaded orifices *d'*, and lugs *k'*, provided with inclined planes *l'* on their inner faces, having the highest parts of the inclined planes at the outer ends of the lugs *k'*.

50 *m m'* are wedges inserted between the lugs *k k'*, respectively, and bearing upon the inclined planes *l l' l'*.

n represents a shaft having its bearings in

orifices at the outer ends of arms *o*, secured at their inner ends to the body *b* of the head-block or clamp *a*. 55

h' h' are bevel-pinions on the shaft *n*, which engage with the bevel-pinions *h* on the ends of the bolts *e*, and operates the movable head-block *a'*, when rotary motion is imparted to the shaft *n* by the crank *p*, on one end of shaft *n*. 60

The operation of the device for stretching belts or taking up the slack in them without removing them from their pulleys is as follows: Remove the wedges and place the clamps on the under side of the ends of the belt at the splice, then introduce the wedges from the inner side of the space between the lugs *k k' k'* and press them into place on the inclined planes, then impart rotary motion to the crank, when the slack of the belt will be taken up after which the belt may be cut and laced or hooked or riveted together at its ends as desired and the wedges and stretcher removed. 75

It will be observed that in this construction the wedges are introduced into the clamps from the inner sides of the latter, so that the strain of the ends of the belt on the wedges tightens each wedge on the inclined planes on which it rides. 80

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination of the head-block *a*, 85 provided with the parallel lugs *k k*, having inclined planes *l l* on their inner faces, the highest part of said planes being at the outer ends of the lugs *k*, and wedge *m*, substantially as shown and described, whereby the outer strain on the end of the belt in stretching it will tighten the wedge, as set forth. 90

2. The combination, with the stationary head-block *a*, provided with the orificed end, projecting blocks *c*, and lugs *k*, having inclined planes *l l*, constructed as set forth, and reciprocating head-block *a'*, of the same construction as head-block *a*, of the wedges *m m'*, bolts *e e'*, each threaded near one end, pinions *h*, and shaft *n*, carrying pinions *h' h'*, 100 substantially as shown and described.

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Witnesses:

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