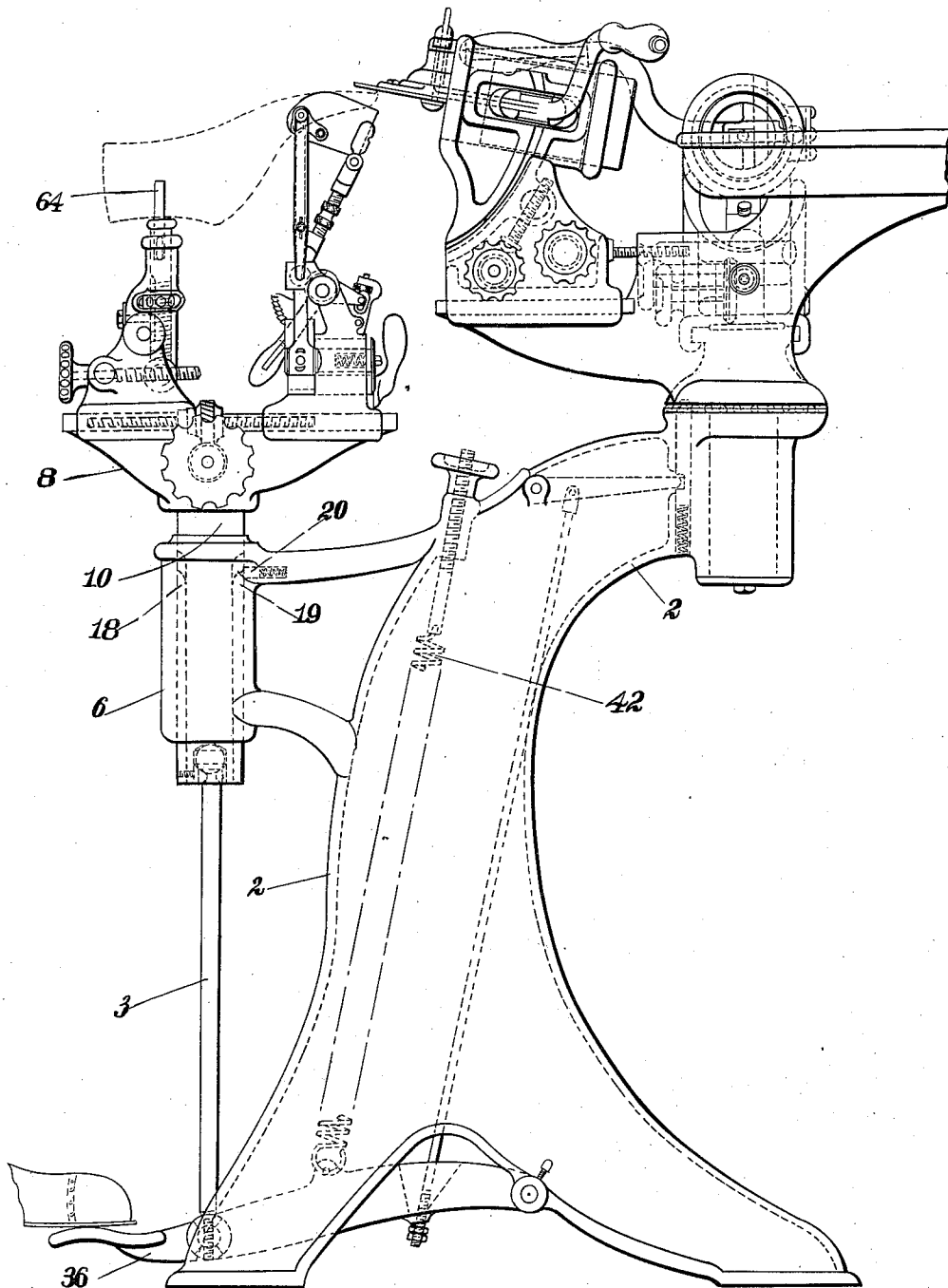


A. E. JERRAM.
SHOE SUPPORT.
APPLICATION FILED MAY 8, 1911.

1,023,318.

Patented Apr. 16, 1912.



WITNESSES.
Elizabeth C. Coupe
J. Blanche Bar Graves.

INVENTOR.
Arthur E. Jerram
By his Attorney:
Helen W. Howard

UNITED STATES PATENT OFFICE.

ARTHUR ERNEST JERRAM, OF LEICESTER, ENGLAND, ASSIGNOR TO UNITED SHOE MACHINERY COMPANY, OF PATERSON, NEW JERSEY, A CORPORATION OF NEW JERSEY.

SHOE-SUPPORT.

1,023,318.

Specification of Letters Patent.

Patented Apr. 16, 1912.

Original application filed September 26, 1904, Serial No. 225,963. Divided and this application filed May 8, 1911. Serial No. 625,688.

To all whom it may concern:

Be it known that I, ARTHUR E. JERRAM, a subject of the King of England, residing at Leicester, Leicestershire, England, have invented certain Improvements in Shoe-Supports, of which the following description, in connection with the accompanying drawings, is a specification, like reference characters on the drawings indicating like parts in the several figures.

This invention relates to shoe supports or the like and particularly to shoe holders which it is desirable shall be firmly held against angular movement at times and shall be capable of adjustment into a different angular position. It is herein embodied in a shoe support that is adapted to hold a shoe in one position for the toe to be lasted and to be reversed or turned around for the heel to be lasted, there being associated with the support lasting means for the toe and for the heel adapted to be used alternatively. This combination is claimed in United States application Serial No. 225,963, filed September 26, 1904 for lasting machines, of which the present application is a division.

An important feature of this invention consists of a shoe support spindle provided with longitudinal grooves and a locking device arranged to engage a groove to hold the support against rotation combined with means for moving the spindle endwise and automatically forcing the locking device out of the groove to permit rotation. The locking device shown is yieldingly mounted and the grooves have inclines which wedge the locking device out to a cylindrical portion of the spindle as the spindle is moved endwise. The spindle and shoe can then be rotated to bring the other end of the shoe in the place of that last operated upon. A return endwise movement of the spindle will then cause the side walls of another groove to embrace the locking device and restrain the shoe support from undesirable turning movement. It is an important characteristic of this illustrated construction that vertical movement of the shoe support involving endwise movement of the spindle may be freely made to meet the requirements of practical use of a jack without effecting release of the locking device and that an extraordinary vertical movement is required

to render the locking device inoperative by bringing the inclined groove ends to force the locking device into retracted position.

The invention will now be more particularly described in connection with the accompanying drawing, which shows a side elevation of a machine embodying the invention with the jack depressed to unlocking and rotating position, and will then be pointed out in the claims.

The apparatus comprises a frame 2 having a sliding bearing 6 for a spindle or rod 10 upon which is carried the shoe holding devices of the shoe support, said devices including a base 8, a last pin 64 and forepart supporting means as more particularly pointed out and claimed in said lasting machine application.

The spindle 10 rests upon a rod 3 which has a ball connection with it and with a treadle 36 that is normally upheld by adjustable spring 42 of adequate strength to uphold the support and shoe for the operations to be performed on the latter.

The spindle has a groove 18 shown as extending from its lower end to an interrupted annular neck at its upper end just below the base 8 and having at said upper end an incline 19 leading to said annular neck. Into this groove projects a spring pressed locking bolt 20 carried by the bearing 6. In the working position shown in the drawing and in all normal working positions of the shoe support it is locked against rotary movement, or its rotary movement is limited by the engagement of the locking device 20 with the walls of the groove 18. When, however, the work support is depressed to bring the incline 19 opposite the locking bolt the bolt is forced into its socket and out of the groove 18 into engagement with the uninterrupted annular face of the spindle above the grooves. Then the work support can be turned freely, its ball and socket connection with the link 3 permitting this movement. There are shown to be two grooves 18 with inclines 19 at opposite sides of the spindle but obviously there may be any number arranged as desired. When the support has been turned to bring a groove under the locking device, release of the treadle 36 will allow the spring 42 to raise the spindle and the shoe support and the bolt 20 will be pressed by its backing spring

into the groove and thereafter lock the spindle against rotation. As shown the lower face of base 8 forms an abutment or stop to engage the bearing 6 when the spindle has been depressed far enough to disengage the locking bolt and permit turning movement.

Having explained the nature of this invention and described an illustrative embodiment thereof, I claim as new and desire to secure by Letters Patent of the United States:—

1. In a machine of the class described, a shoe support comprising a spindle provided with longitudinal grooves and a locking device arranged to engage in the grooves for holding the shoe support against rotation, combined with means for depressing the shoe support and means for forcing the locking device out of the grooves to permit the shoe support to be turned when it has been depressed.

2. In a machine of the class described, a work support having a longitudinally grooved spindle, means for moving the post endwise, a guide for the spindle, and a spring-pressed locking device arranged to engage the grooves to prevent rotary movement of the work support, said grooves being formed at their upper ends to force the locking device out of holding engagement therewith upon endwise movement of the work support in one direction.

3. In a machine of the class described, the combination with a vertically movable shoe

support arranged for angular movement, of means operated automatically by such vertical movement for effecting the locking and unlocking of the support.

4. A machine of the class described having, in combination, a work support having an endwise movable spindle provided with a longitudinal groove, a locking device arranged to engage said groove to restrain turning movement of the spindle, means to limit longitudinal movement of the spindle, and means to disengage the locking device automatically from the groove as the limit of longitudinal movement of the spindle is approached.

5. A machine of the class described having, in combination, a work support having an endwise movable spindle provided with a plurality of longitudinal grooves 18, a bearing for said spindle, a locking bolt 20 yieldingly mounted in said bearing, an incline 19 at the upper end of each groove to press the locking bolt into the bearing, means to move the spindle to present the incline to the bolt, and means to hold the spindle normally with the inclines away from the bolt.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ARTHUR ERNEST JERRAM.

Witnesses:

KATHERINE PENTON,
ELEANOR PYWELL.