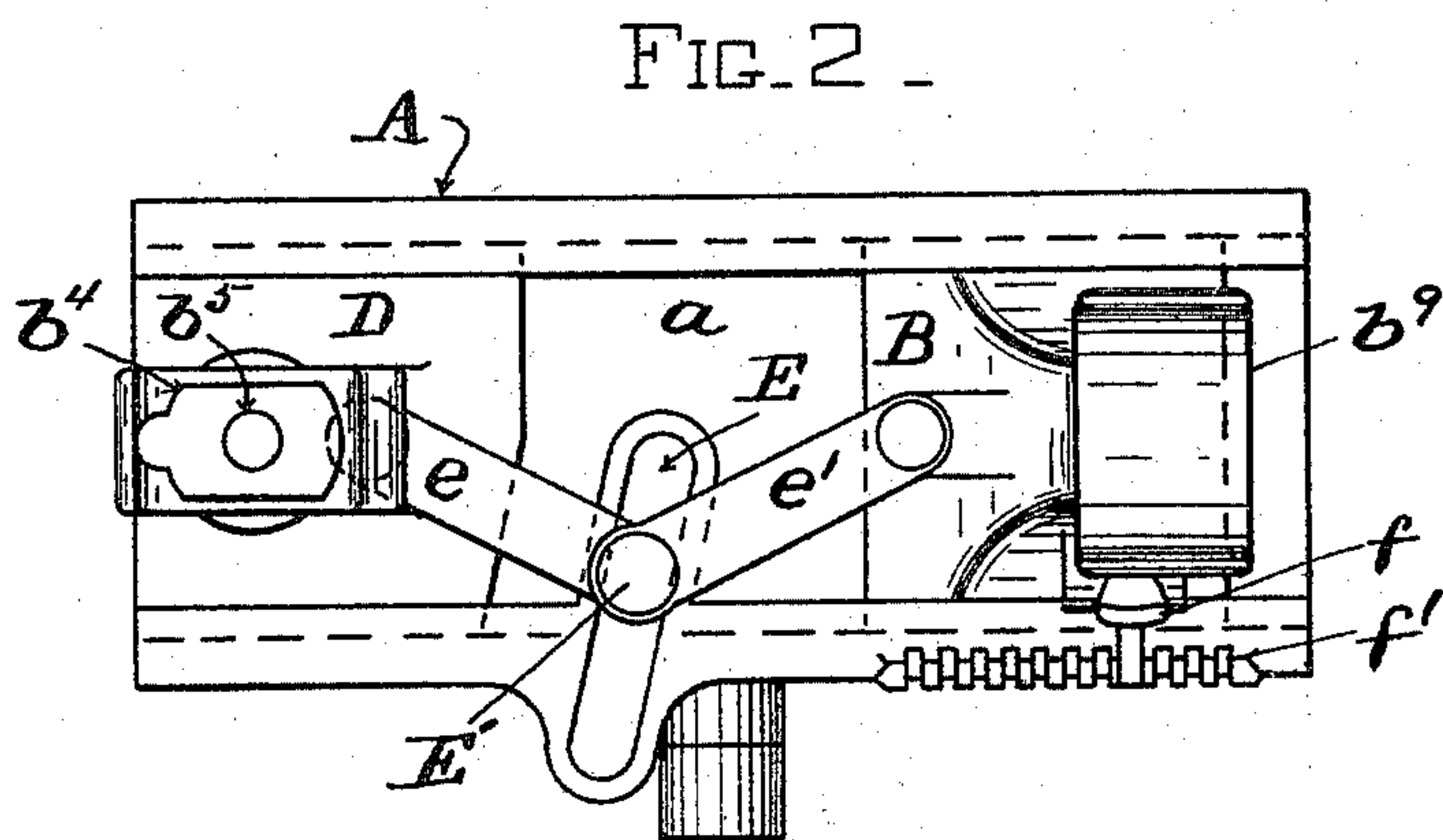
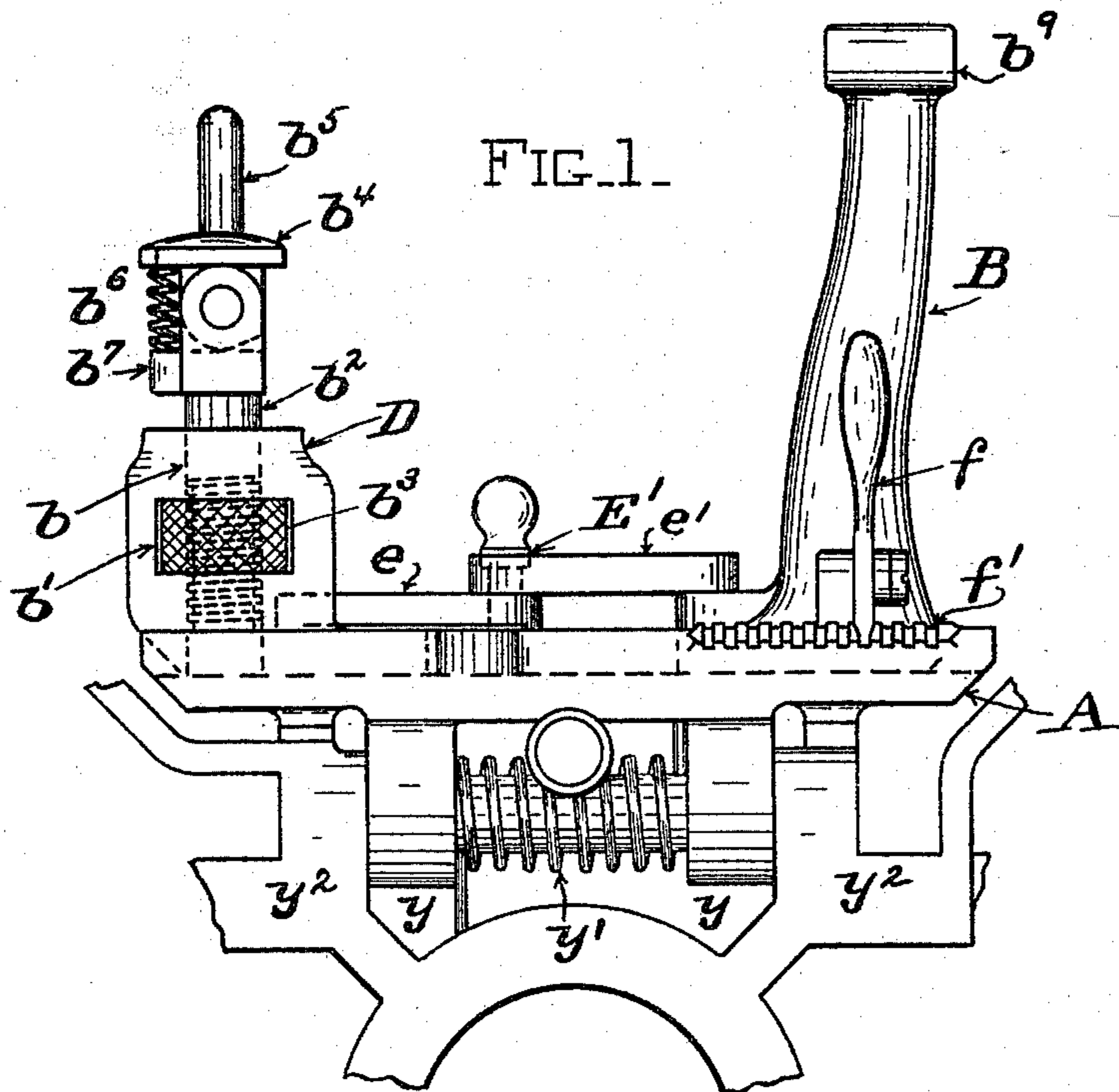


(No Model.)

E. E. WINKLEY.
JACK FOR SOLE MACHINES.

No. 573,068.

Patented Dec. 15, 1896.



WITNESSES.

Fred V. Hart.

George C. Barstow

INVENTOR.

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By his Attorney

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UNITED STATES PATENT OFFICE.

ERASTUS E. WINKLEY, OF LYNN, MASSACHUSETTS, ASSIGNOR TO THE GOOD-YEAR SHOE MACHINERY COMPANY, OF BOSTON, MASSACHUSETTS.

JACK FOR SOLE-MACHINES.

SPECIFICATION forming part of Letters Patent No. 573,068, dated December 15, 1896.

Application filed February 7, 1896. Serial No. 578,424. (No model.)

To all whom it may concern:

Be it known that I, ERASTUS E. WINKLEY, a citizen of the United States, residing at Lynn, in the county of Essex and Commonwealth of Massachusetts, have invented a new and useful Improvement in Jacks for Sole-Machines, of which the following, taken in connection with the accompanying drawings, is a specification.

As devices of the above class have been commonly heretofore constructed they have embodied in their structure a suitable support or bed and heel and toe standards movable along the bed toward and away from each other to adjust the jack for shoes of different sizes.

The present invention consists in providing in a jack of the construction above suggested an improved mechanism for accomplishing the movement of the toe and heel standards, and of certain other minor improvements hereinafter described and claimed.

The present invention is illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation, and Fig. 2 a plan view, of a jack embodying the same.

Similar letters of reference refer to similar parts in both views.

In the drawings, A represents the support or bed, and B and D, respectively, the toe and heel standards, which are movable along the bed A toward and away from each other.

As shown in the drawings, the bed A is provided with the dovetailed longitudinal groove *a*, to which the bases of standards B and D are fitted, and along which they are movable, but such specific arrangement is not essential to the present invention and is common in the art.

The toe-standard B may conveniently be of the usual form and provided with the usual toe-rest *b*¹. The heel-standard D may also be of any suitable form. I prefer, however, to use substantially the form shown in the drawings, which I will hereinafter describe, and in which I have embodied certain improvements.

In accordance with the present invention I form upon the bed A or a plate suitably secured thereto, between the standards B and D, a guideway E. The guideway E may be

either straight or curved, and is preferably oblique to the groove *a*.

I may say that by the term "guideway" I desire to include not only a groove, as shown in the drawings, but also any device capable of controlling the movement of a guide for the purposes hereinafter specified.

In the guideway E works a guide E', free to slide along the guideway E. The guide E' may be of any suitable form and is connected by suitable connections with the toe and heel standards B and D. The connections between the guide E' and the standards B and D preferably consist of the links *e* and *e'*, which are pivoted to the guide E' and to the respective standards B and D.

The above-described arrangement is such that a movement of the guide E' along the guideway E, by means of the links *e* and *e'*, effects a simultaneous movement of the standards B and D toward and from each other.

As shown in the preferred form illustrated in the drawings, the guideway E is so inclined to the groove *a* that a movement of the guide E' along the same moves the toe-standard B twice as far as the heel-standard D, which makes the shank of the shoe a positive point for any adjustment for length and is a feature of importance when the jack is used as a part of a sole-laying machine, but which I do not claim, broadly, herein, as the same is shown and claimed generically in Letters Patent of the United States, No. 557,744, of April 7, 1896, issued to me for improvements in sole-laying machines.

It will be noted in connection with the preferred form of the present invention shown in the drawings that the rods *e* and *e'* form a toggle-lever, the opposite ends of which are pivoted to the standards B and D.

I will now describe the standard D and its attachments, in which, as before stated, I have embodied improvements over the prior art.

As shown in the drawings, the standard D is provided with a vertical chamber *b* and a lateral chamber *b'*. To the chamber *b* is fitted a threaded rod *b*², and in the chamber *b'* works a correspondingly-grooved block *b*³, capable of rotation in the chamber *b'*, but held from vertical movement therein, the arrangement being such that a rotation of the block *b*³ in

the chamber b' raises or lowers the rod b^2 in the chamber b . To the rod b^2 is pivoted the usual last-block b^4 , carrying the spindle b^5 . A spring b^6 may be conveniently interposed
 5 between the back of the last-block b^4 and a lug b^7 on the rod b^2 , the function of which is to throw the spindle b^5 forward to clamp the last between the spindle b^5 and toe-rest b^9 , but such device is not essential to the present
 10 invention and is well known in the art.

The toe and heel standards B and D may be conveniently locked in position by a spring-pressed pawl f , pivoted upon the standard B and engaging the notches f' upon the bed A,
 15 but such device forms no part of the present invention, and any other suitable device may be substituted therefor.

The parts shown in the drawings and lettered y , y' , and y^2 are immediately-associated
 20 parts of a sole-machine, and a description thereof is regarded as unnecessary herein, as the same forms no part of the present invention.

Having thus described my invention, I
 25 claim as novel and desire to secure by Letters Patent of the United States—

1. In a jack for sole-machines the combination, with a suitable support and movable

heel and toe standards, of a guideway, a guide movable along the guideway, and suitable
 30 connections between the guide and standards, whereby a movement of the guide moves the standards simultaneously in opposite directions, substantially as described.

2. In a jack for sole-machines the combination, with a suitable support and movable
 35 heel and toe standards, of an oblique guideway, a guide movable along the guideway, and suitable connections between the guide and standards, whereby a movement of the
 40 guide produces a movement of the standards in opposite directions, substantially as described.

3. In a jack for sole-machines the combination, with a suitable support and movable
 45 heel and toe standards, of a toggle-lever pivoted at opposite ends to the toe and heel standards, and means to move the toggle-joint in an oblique direction.

In testimony whereof I have hereunto set
 50 my hand, in the presence of two attesting witnesses, this 5th day of February, 1896.

ERASTUS E. WINKLEY.

Witnesses:

A. E. WHYTE,
 BENJAMIN PHILLIPS.