

(No Model.)

C. W. GLIDDEN.
HEEL SHAPING OR COMPRESSING MACHINE.

No. 454,428.

Patented June 16, 1891.

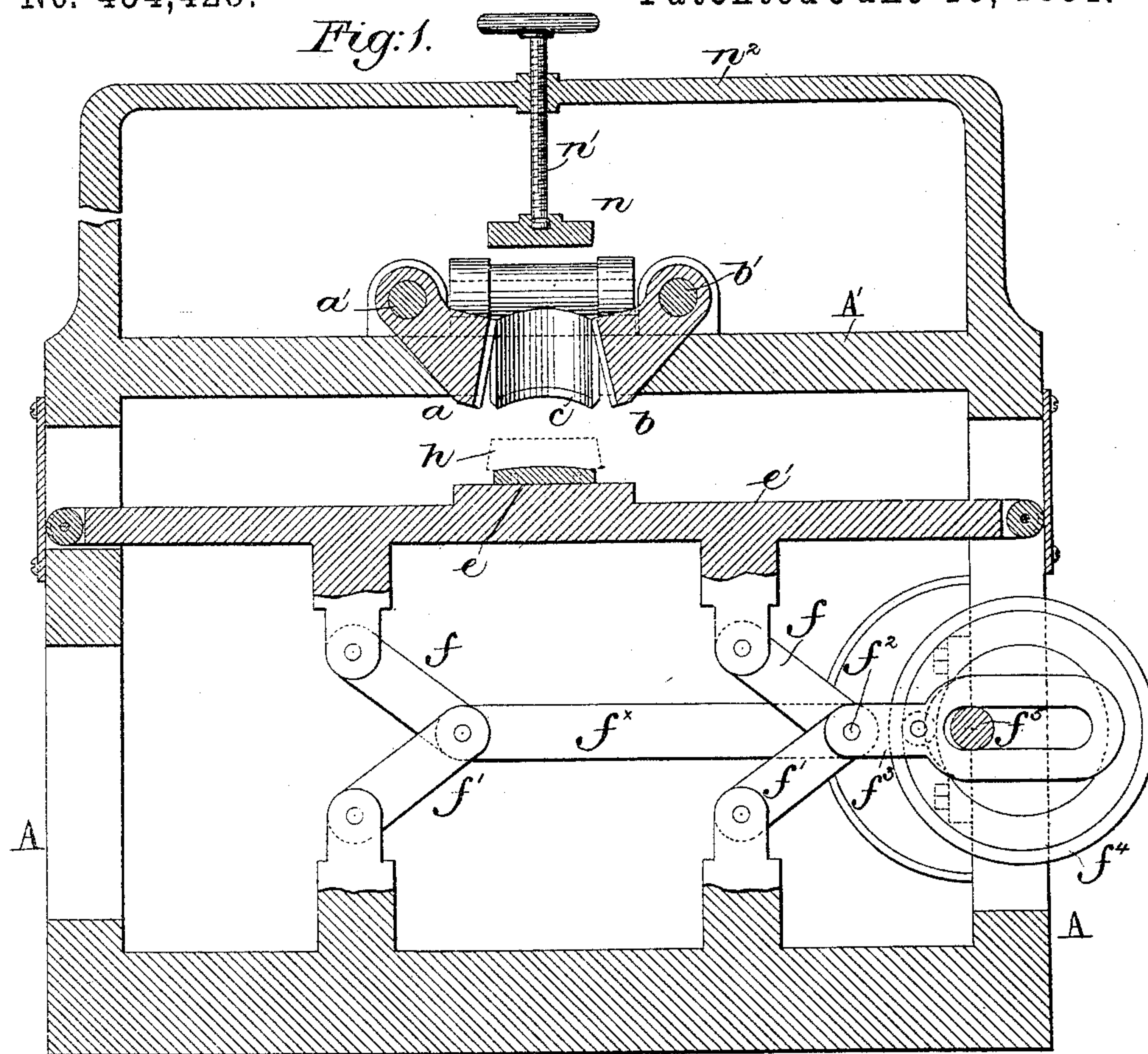


Fig: 2.

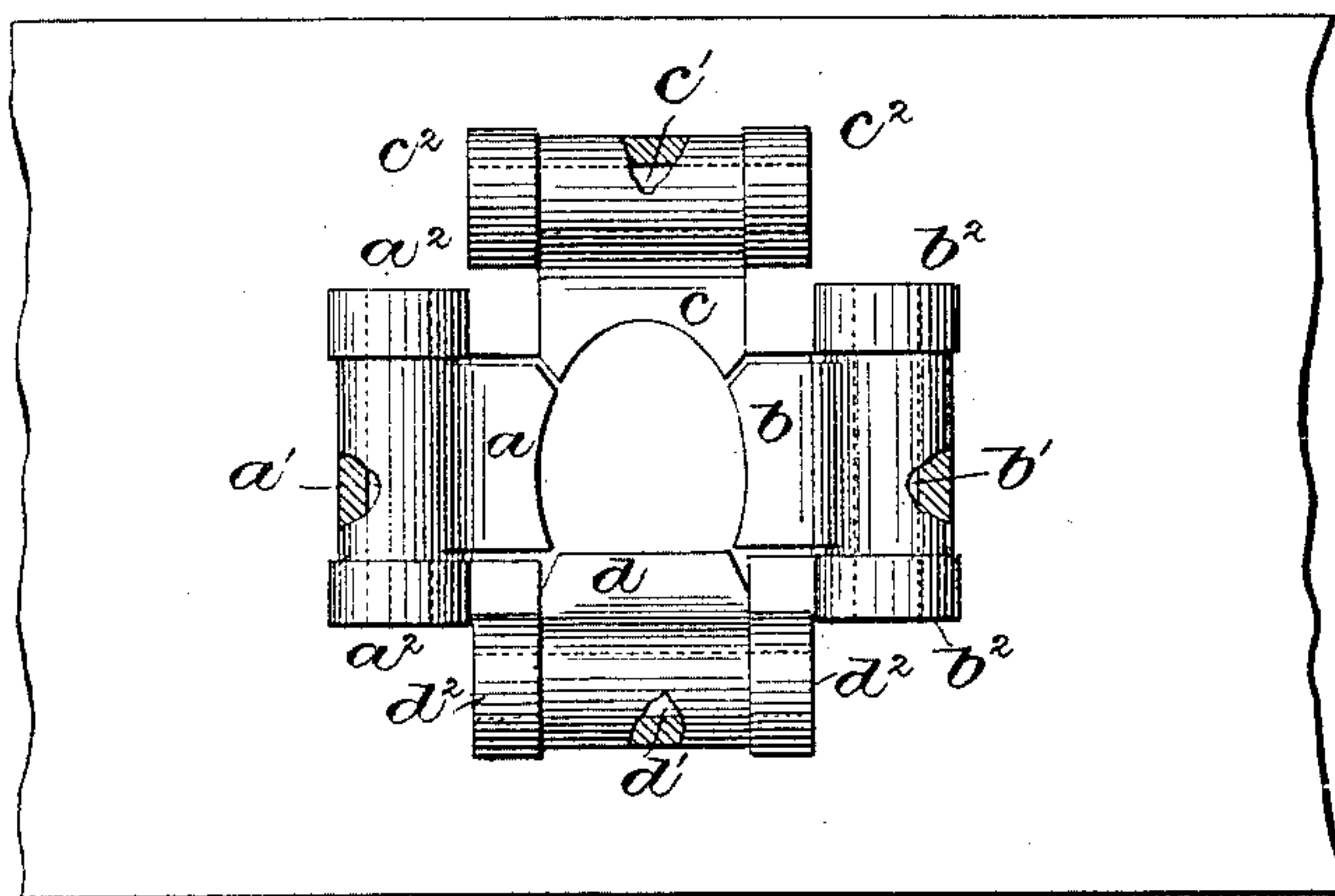
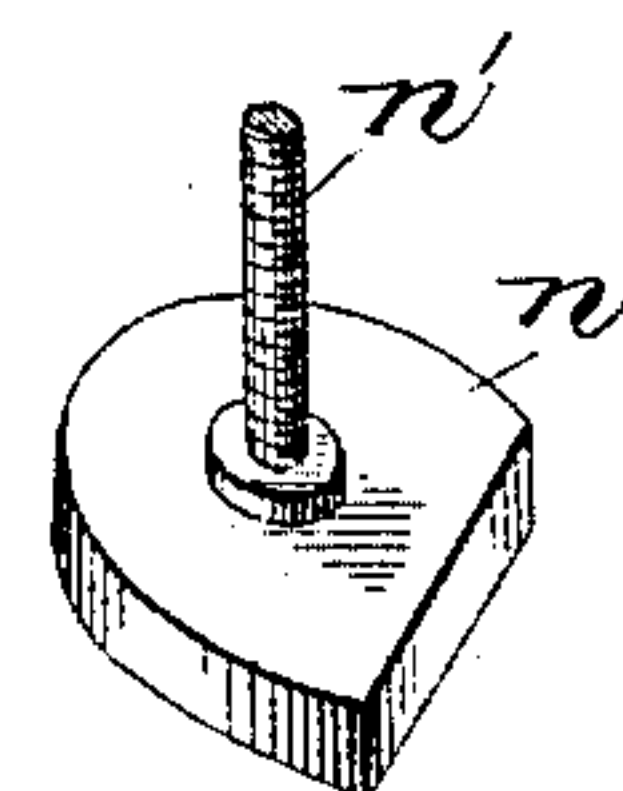


Fig: 3.



Witnesses:

Fred S. Greenleaf
Edward F. Allen

Inventor:

Charles W. Glidden
by George H. Gregory
Attorney

UNITED STATES PATENT OFFICE.

CHARLES W. GLIDDEN, OF LYNN, ASSIGNOR TO JAMES W. BROOKS, TRUSTEE,
OF CAMBRIDGE, MASSACHUSETTS.

HEEL SHAPING OR COMPRESSING MACHINE.

SPECIFICATION forming part of Letters Patent No. 454,428, dated June 16, 1891.

Application filed November 4, 1890. Serial No. 370,341. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. GLIDDEN, of Lynn, county of Essex, State of Massachusetts, have invented an Improvement in Heel Shaping or Compressing Machines, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

In the formation of heels for boots or shoes the tread end of the heel is concaved and the peripheral edges or outer walls of the heel are shaped by pressure.

This invention has for its object the production of a novel form of machine for this purpose.

In accordance with my invention I have provided a series of rocking or vibratory heel edge or wall compressors or jaws, the acting edges of which, as the compressors are rocked or turned on their pivots, approach each other, thus squeezing the heel placed between them. With these toggle-like rocking jaws or compressors I have combined a heel-seat-supporting plate, the acting face of which will preferably be convexed in usual manner to concave the heel-seat.

Figure 1 in vertical section shows a machine embodying my invention in its simplest form; Fig. 2, a top view of the compressors or jaws, and Fig. 3 is a detail showing the top lift or tread-plate with part of its attached screw.

The frame-work AA' is and may be of suitable shape to sustain the working parts. The upper part A' of the frame-work, as shown, has pivotally mounted thereon a series of toggle-like compressors or jaws $a b c d$, represented as four in number, each mounted on a suitable pivot, as $a' b'$, &c., in ears $a^2 b^2$, &c., the said compressors or jaws being adapted to be swung or turned about their said pivots, the faces of the compressors or jaws in their normal position being most separated to permit the ready entrance between them of the heel-blank h (shown in dotted lines, Fig. 1) to be compressed.

The heel-seat block or plate e is mounted on the vertically-movable slide e' , herein shown as actuated vertically by two pairs of toggle-levers $f f'$, having a bar f^3 , jointed to

the central pin of one of them, a link f^x connecting the central pins of both toggles. The said bar has a roller or other stud actuated by a cam f^1 on a shaft f^2 , adapted to be rotated in suitable bearings on the frame-work.

A heel-blank h to be compressed and shaped is placed against the heel-seat plate e , and the machine is started. The heel at first contacts with the inner edges of the compressors or jaws, and as the blank is being compressed the jaws or compressors are made to rock or turn on their pivots, which brings their acting faces closer together to thus squeeze or compress between them the heel, the edge or the periphery of which is to be compressed. During this movement the acting faces of the toggle-like jaws travel with and in the direction of movement of the heel. To prevent the heel from being lifted too high between the jaws, I have provided a top-lift plate or abutment n , shown as attached to the lower end of a screw n' , by which the position of the plate may be adjusted to the thickness of the heel. The screw n' is mounted, in the present instance, in a yoke n^2 , mounted on the top bar A' .

I am aware that a heel has been compressed at its sides by means of jaws having only a sliding movement toward the center of the heel, as in United States Patent No. 361,414, and also that a series of radially-movable dies carried at the ends of pivoted levers have been caused to move toward the center of the heel, as in United States Patent No. 410,677; but in this my invention the compressing-jaws are so pivoted with relation to the dies contacting with the opposite ends of the heel that the jaws normally stand open, and when they close upon the heel, travel with the heel in the direction of its movement while being subjected to compression, the acting faces of the dies at the same time closing or moving toward each other.

I claim—

In a machine for compressing heels, a heel-seat plate and tread-plate, one of which is stationary and one movable, combined with a series of toggle-like compressing-jaws pivoted at or near their ends near that one of the said plates which is stationary, whereby the said jaws are adapted to open away from the sta-

tionary toward the movable plate and away
from each other, the said jaws in their closing
movement traveling with and in the direc-
tion of movement of the heel while being com-
5 pressed, the acting edges of the said jaws at
the same time approaching each other, sub-
stantially as described.

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

CHARLES W. GLIDDEN.

Witnesses:

ALBION VEAZIE,

ELBRIDGE B. STAPLES.