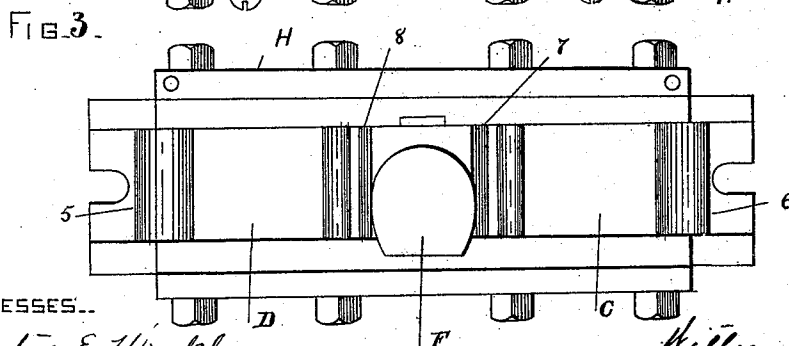
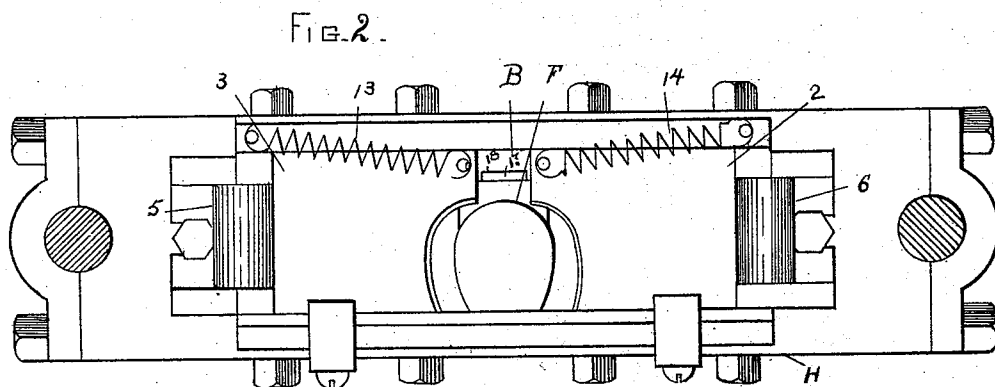
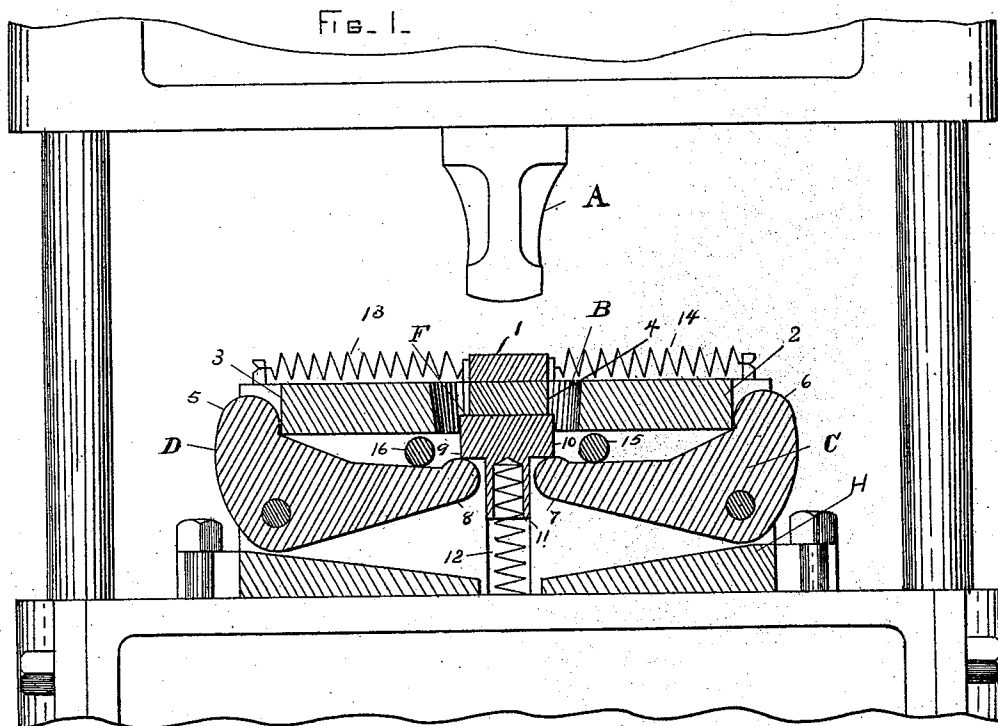


(No Model.)

W. J. YOUNG.
HEEL PRESS.

No. 486,921.

Patented Nov. 29, 1892.



WITNESSES..

Erastus E. Winkley
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UNITED STATES PATENT OFFICE.

WILLIAM J. YOUNG, OF LYNN, MASSACHUSETTS.

HEEL-PRESS.

SPECIFICATION forming part of Letters Patent No. 486,921, dated November 29, 1892.

Application filed February 15, 1892. Serial No. 421,542. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. YOUNG, a citizen of the United States, residing at Lynn, in the county of Essex and Commonwealth of Massachusetts, have invented a new and useful Heel-Press, of which the following is a specification.

My invention consists of a reciprocating plunger and yielding table working in a divided mold, the parts of which are forced inward by the downward pressure of the plunger upon the table.

My invention further consists of mechanism connecting the yielding table with the parts of the divided mold and of the devices and combinations thereof hereinafter set forth.

The object of my invention is to produce a heel-press in which the power required to vertically compress a heel will be utilized to horizontally compress the same.

My invention is illustrated in the accompanying drawings, in which—

Figure 1 is a longitudinal vertical section through a machine embodying my invention. Fig. 2 is a top view thereof. Fig. 3 is a top view with the divided mold and minor parts removed.

Similar letters and figures refer to similar parts throughout the several views.

Referring to the drawings, A represents a plunger to which reciprocating motion may be imparted by mechanism similar to that in use in common forms of heel-presses. The plunger A works in the divided mold B, the parts 2 and 3 of which are arranged to slide horizontally in ways in the frame H. Between the parts 2 and 3 of the divided mold B is mounted a yielding table F, which rests upon a spring 12, secured to the bed of the machine. The spring 12 allows the table F to sink under the pressure of the plunger A until the standard 11 is brought in contact with the bed of the machine, when the table F comes to a solid bearing.

In the frame H are pivoted the bent levers C and D, the upper ends 6 and 5 of which are cam-shaped and are held in contact with the parts 2 and 3 of the divided mold B. The lower ends 7 and 8 of the levers C and D extend beneath the shoulders 9 and 10 of the

table F, being held in contact therewith, as hereinafter set forth.

Attached to a fixed part of the machine and to the parts 2 and 3 are the springs 14 and 13, which act to hold the parts 2 and 3 against the levers C and D and by means of the cams 5 and 6 to keep said levers in contact with the shoulders 9 and 10 of the table F, the tendency of the springs 13 and 14 being to bring said parts into the position shown in Fig. 1, further outward motion of the parts 2 and 3 being prevented by suitable stops in the frame H and the upward motion of the lower ends of the levers C and D being prevented by bolts 15 and 16, which extend through the frame H. Upon the table F may be placed the plates 4 and 1, the thickness of which may be varied to secure the compression of any desired thickness of heel. The plates 4 and 1 conform to the shape of the interior of the divided mold.

As shown in the drawings, the top portion of the table F is shaped to conform to the interior of the divided mold, the lower portion being rectangular and bearing against the sides of the frame H, acting to guide the table F in its upward and downward motions. The table F is further kept in position by a tongue 17, extending from the rear portion thereof and running in a groove 18 in the frame H. The rectangular portion of the table F also acts to prevent the table F from rising above the position shown in Fig. 1, said portion being then in contact with the lower surface of the parts 2 and 3 of the divided mold.

The method of using my improved heel-press is as follows: An unpressed heel, which consists of an assemblage of lifts or pieces of leather or other suitable material of the required thickness for forming a heel, commonly called a "heel-blank," is placed upon the plate 1, the plates 1 and 4 being of the required thickness, so that when the table F comes to a solid bearing the distance between the top of the plate 1 and the bottom of the plunger A shall be somewhat less than the thickness of the heel. The plunger A is then brought down upon the blank, the pressure of the plunger A forcing down the table F, and by means of the levers C and D forcing

inward the parts 2 and 3 of the divided mold B until the standard 11 is brought in contact with the bed of the machine, when the divided mold is closed and a vertical compression completed, or nearly so. The plunger A is then raised and the springs 12, 13, and 14 restore the parts C, D, F, 2, and 3 to their original position, raising the pressed heel to the level of the upper surface of the mold, where it can be easily removed by the operator.

I do not consider my invention limited to the specific mechanism hereinbefore described; but

I claim as my invention and desire to secure by Letters Patent—

1. A heel-press consisting of a yielding table, a reciprocating plunger, a horizontally-movable divided mold, and pivoted levers, the inner ends of which support said table and the outer ends actuate said mold.

2. In a heel-press, the combination of the following elements: a divided mold B, a re-

ciprocating plunger A, and yielding table F, working therein, and the bent levers C and D, operated by the downward pressure of the plunger upon the table F, acting to force inward the parts 2 and 3 of the divided mold B, all substantially as set forth, and for the purposes specified.

3. In a heel-press, the combination of the following elements: a divided mold B, a reciprocating plunger A and yielding table F, working therein, and the bent levers C and D, the upper ends 6 and 5 of which are cam-shaped, and the lower ends 7 and 8 of which extend beneath the table F, the levers C and D acting to force inward the parts 2 and 3 of the divided mold when the table F is forced downward, all substantially as set forth, and for the purposes specified.

WILLIAM J. YOUNG.

Witnesses:

BENJAMIN PHILLIPS,
ERASTUS E. WINKLEY.