J. H. POPE.

COMPRESSING MACHINE.

APPLICATION FILED JULY 6, 1909.

1,012,007. Patented Dec. 19, 1911.

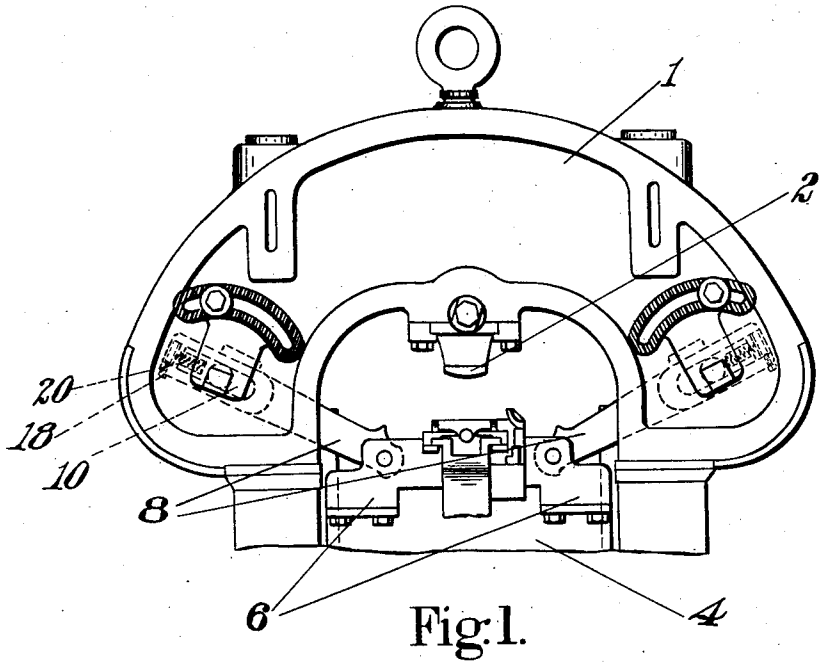

Fig. 1.

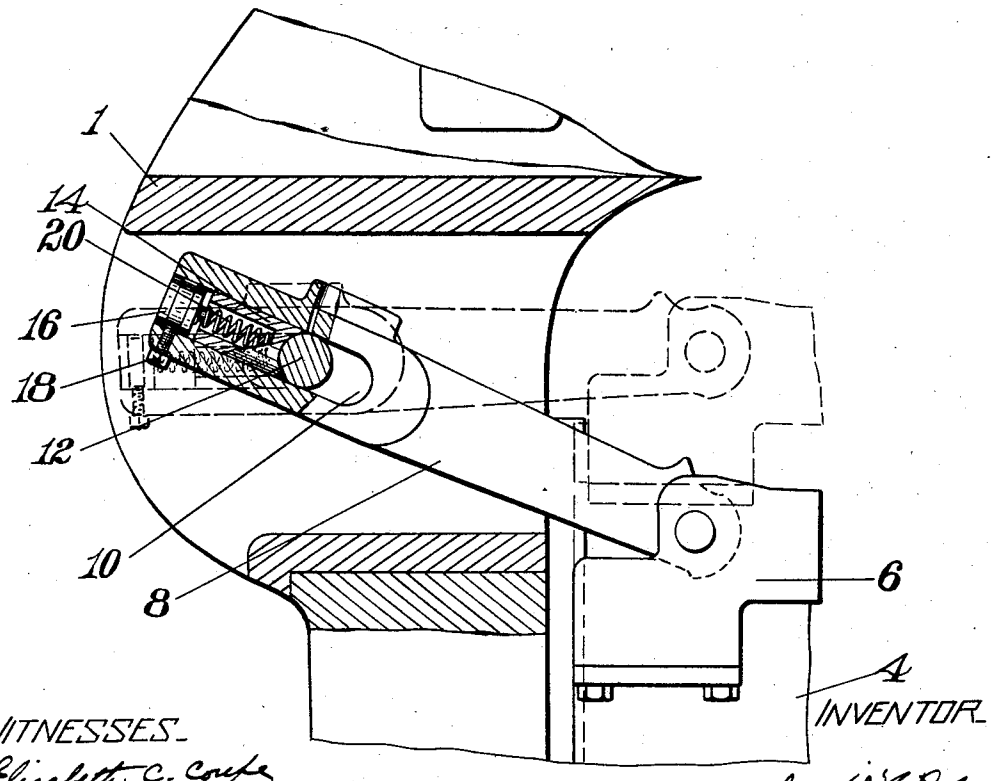

Fig. 2.

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JOSEPH H. POPE, OF SOUTH HAMILTON, MASSACHUSETTS, ASSIGNOR TO UNITED SHOE MACHINERY COMPANY, OF PATERSON, NEW JERSEY, A CORPORATION OF NEW JERSEY.

COMPRESSING-MACHINE.

1,012,007. Specification of Letters Patent. **Patented Dec. 19, 1911.**

Application filed July 6, 1909. Serial No. 506,089.

To all whom it may concern:

Be it known that I, JOSEPH H. POPE, a citizen of the United States, residing at South Hamilton, in the county of Essex and State of Massachusetts, have invented certain Improvements in Compressing-Machines, 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 improvements in machines for compressing heels or the like.

A well-known type of heel compressing machine includes a stationary follower and a head arranged for vertical movement toward and from the follower and provided with a heel receiving mold. The mold includes side dies arranged for rectilinear sliding movement upon the head, the movement of each die being effected by the movement of the head through a link connected at one end to a die carrying slide and at the other end to the fixed frame of the machine. In order that movement may be imparted to the dies during only a portion of the vertical movement of the head, the connection between the links and the frame of the machine has provision for a limited amount of lost motion. Springs have been provided for opening the mold during the first portion of the descent of the head, these springs having been interposed between the slides which carry the dies.

The object of the present invention is to provide an improved construction and arrangement of the parts heretofore employed for opening the mold in the descent of the head.

To this end the invention consists in the features of construction and combinations of parts hereinafter set forth and referred to in the appended claims.

In the drawings,—Figure 1 is a view in front elevation of a portion of a heel compressing machine having applied thereto one embodiment of the present invention; Fig. 2 is a vertical sectional view with parts in front elevation of a portion of the machine shown in Fig. 1.

The machine herein disclosed is of the general type of that set forth in United States Letters Patent 776,823, granted December 6, 1904, to C. L. Allen. Reference may be had to this patent for a full disclosure of parts of the machine not shown or not fully described in the present application.

Referring to the drawings, 1 indicates the frame of the machine upon which is sustained in fixed position a former 2.

The reference numeral 4 indicates a head arranged for vertical movement toward and from the former 2 and having upon its upper face slides 6 to which are secured side dies not shown. Each slide 6 is provided with an actuating link 8 pivotally connected at its inner end to the slide. The outer end of each link 8 is provided with a longitudinal slot 10 through which passes a fixed stud 12 secured upon the frame 1. The outer end of each link 8 is provided with a longitudinal bore intersecting the slot 10, said bore receiving a cylindrical plunger 14. In the outer end of the bore is arranged a plug 16 held in place by a set screw 18. A coiled spring 20 bears at its outer end upon the plug 16 and enters a cylindrical recess formed in the plunger 14. The outer end of the spring 20 is shown as arranged about a boss upon the plug 16.

Fig. 2 of the drawings shows in full lines the position of the parts in the lowermost position of the head 4, and in dotted lines the position of the parts at the limit of the upward movement of the head. As the head rises, it will be seen that the links 8 seat upon the inner sides of the studs 12, the springs 20 holding the plungers 14 in engagement with said studs. As the head descends the springs 20 move the slides 6 apart. The slides 6 at the limit of their separating movement come in contact with the frame 1, as in the prior patent referred to. After the separating movement of the slides 6 is arrested further movement of the links 8 occurs on account of the continued downward movement of the head 4.

It will be seen that with the construction shown the springs 20 may be inserted or removed without disturbing the slides 6 or the links 8. In the prior machine referred to it has been necessary to remove the slides 6 in order to replace the springs interposed between them.

Having described my invention, what I

claim as new and desire to secure by Letters Patent of the United States is:—

1. In a machine of the class described, the combination with a vertically movable head, of a die carrying slide arranged for rectilinear movement upon said head, a stationary stud, a link pivotally connected at one end to said slide and provided at its other end with a longitudinal slot receiving said stud, and a spring accessible from the end of said link arranged between said stud and a part of the link for holding said link yieldingly in its outermost position.

2. In a machine of the class described, a link provided with a longitudinal bore entering one end and with a transverse slot intersecting said bore, a plunger arranged for sliding movement in the bore, a removable plug for closing the end of the bore and a spring interposed between the plunger and the plug.

3. In a machine of the class described, the combination with a vertically movable head and die carrying slides mounted for movement upon said head, of a plurality of stationary studs, links pivotally connected to the slides and the studs, the connections between said links and studs permitting a limited amount of lost motion therebetween, and springs accessible from the ends of said links interposed between said studs and links for maintaining said links yieldingly in their outermost positions relatively to said studs.

4. In a machine of the class described, a stationary stud, a link provided with a longitudinal bore entering one end and with a transverse slot intersecting said bore, said stationary stud being located in said slot, a plunger arranged for sliding movement in the bore, a removable plug for closing the end of the bore, a spring interposed between the plunger and the plug, and a die carrying slide connected to the opposite end of said link.

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

JOSEPH H. POPE.

Witnesses:
BERNARD BARROWS,
ALLAN H. BARROWS.