

W. H. HIBBARD.
STAMPING AND OTHER PRESS.
APPLICATION FILED JUNE 4, 1909.

992,771.

Patented May 23, 1911.

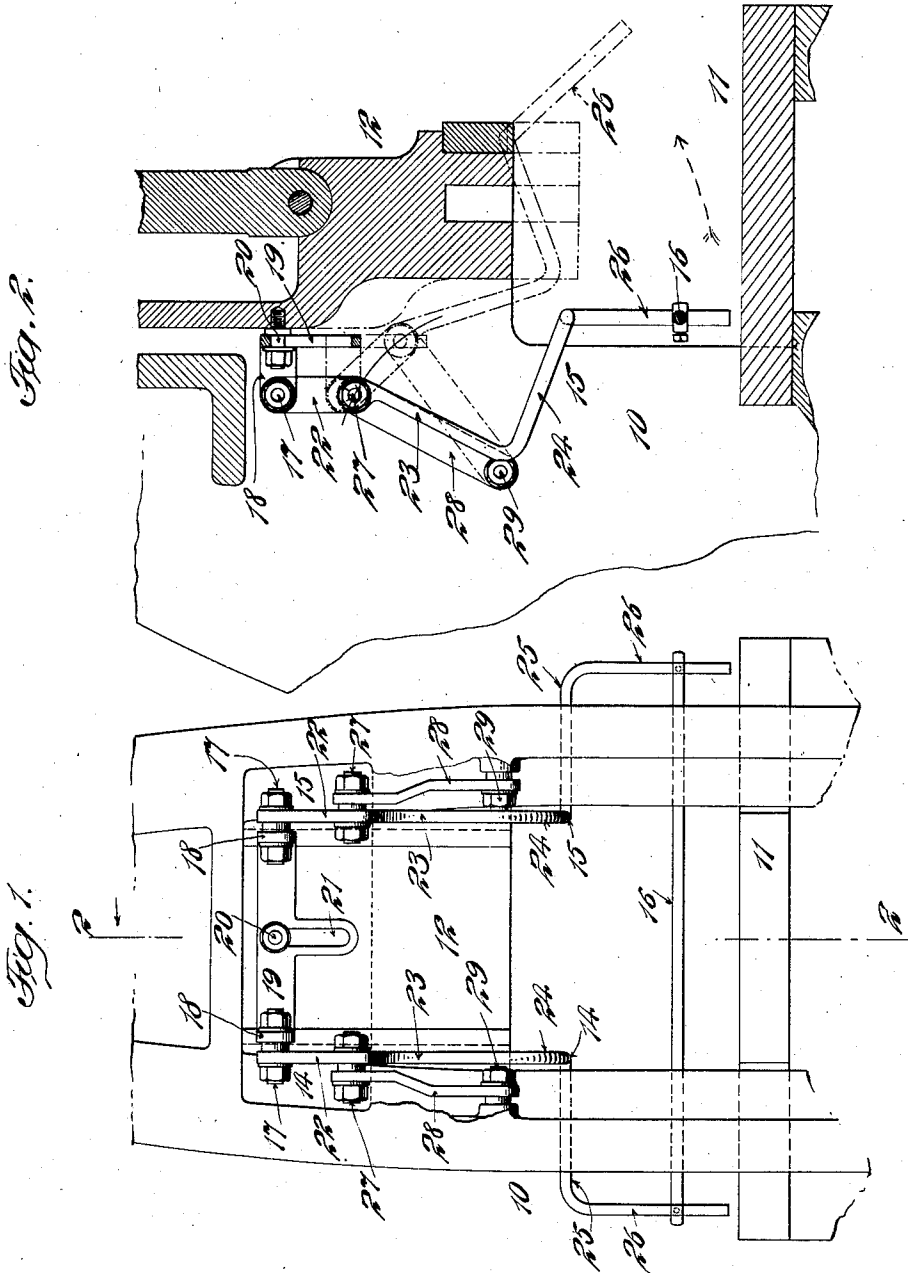


Fig. 2.

Fig. 1.

WITNESSES.

Julius H. Hink
Arthur Marion

INVENTOR

William H. Hibbard

BY *Chas. C. Gill*
ATTORNEY

UNITED STATES PATENT OFFICE.

WILLIAM H. HIBBARD, OF BROOKLYN, NEW YORK, ASSIGNOR TO W. H. HIBBARD
M'FG CO., OF BROOKLYN, NEW YORK, A CORPORATION OF NEW YORK.

STAMPING AND OTHER PRESS.

992,771.

Specification of Letters Patent.

Patented May 23, 1911.

Application filed June 4, 1909. Serial No. 500,084.

To all whom it may concern:

Be it known that I, WILLIAM H. HIBBARD, a citizen of the United States, and a resident of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Stamping and other Presses, of which the following is a specification.

The invention relates to improvements in presses, such as are employed for stamping up metal and the like, and it consists in the novel features, arrangements and combinations of parts hereinafter described, and particularly pointed out in the claim.

The object of this invention is to provide the presses with safety devices for preventing the operatives from having their hands or arms injured, as so frequently happens, by not removing them quickly enough from below the slide of the press.

In carrying out my invention, I provide the press with a rod or guard in other form for pushing outwardly from below the slide, the hand or arm of the operative, should the same be left below the slide, said means moving across under the slide and toward the front or toward the operative during the descent of the slide and during the upward movement of the slide returning to a position in rear of the vertical plane of the same.

The means for carrying out my invention may be modified in some respects without departing from the spirit and scope of the invention, since the purpose is to equip presses with means which will pass below the slide and drive from such location the hand or arm of an operative, if left there, during each downward movement of the slide, and recede to its inoperative or rear position during each upward movement of the slide.

The invention will be fully understood from the detailed description hereinafter presented, reference being had to the accompanying drawings, in which:

Figure 1 is a rear elevation, partly broken away, of a press of ordinary construction equipped with safety devices embodying my invention; and Fig. 2 is a vertical section of the same on the dotted line 2-2 of Fig. 1, the safety devices being shown in their normal inoperative position by full lines and in their operated position by dotted lines.

In the drawings, 10 designates the frame of a press, 11 the bed-plate thereof and 12 the usual slide adapted to carry the male die. The press need not be specifically described since it is of usual construction and my invention has to do with safety-devices adapted for application to presses already in use or to presses to be built for use.

Referring to Figs. 1 and 2, 14, 15 designate two corresponding pivotally mounted crank-arms connected at their lower portions by a transverse rod 16 which constitutes the medium for pushing from below the slide 12, on its descent, the hand of the operative should the same be left below the slide. The crank-arms 14, 15 are pivotally secured by bolts 17 to rearwardly extending arms 18 of a bracket 19 carried by the slide 12, said bracket being secured to the slide by means of a bolt 20 and preferably being rendered vertically adjustable by having a slot 21 through which said bolt passes. The crank-arms 14, 15 are of irregular shape and considering them in their normal inoperative position shown by solid lines in Fig. 2, they each have a vertical section 22 extending downwardly from the bolt 17, a rearwardly and downwardly inclined section 23 of less width than the section 22, a downwardly and forwardly inclined section 24, a laterally extending section 25, and a downwardly extending terminal section 26. The transverse rod 16 is adjustably secured on the sections 26 of the crank-arms 14, 15. The crank-arms 14, 15 at the lower ends of their upper sections 22, are pivotally secured, by bolts 27, to the upper ends of the links 28, whose lower ends are pivotally secured, by bolts 29, to the side frames of the press in rear of the vertical plane of said bolts 27.

It may be seen on reference to Fig. 2 that the transverse rod 16, when the slide 12 is up, stands in rear of the vertical plane of the same and suitably above the bed-plate 11. When the slide 12 descends to perform its work, the bracket 19 and arms 14, 15 are carried downwardly by the same, and at such time said arms are rocked forwardly by the turning toward the front of the upper ends of the links 28, as indicated by the dotted lines in Fig. 2, with the result that during the descent of the slide, the rod 16 is driven forwardly below the same in a path to force

the hand of the operative, should it have been left there, forwardly from the danger zone. Upon the return of the slide 12 to its upper position, the arms 14, 15 are carried
5 upwardly thereby and at the same time rocked rearwardly to their initial position, carrying the rod 16 to a location in rear of the vertical plane of the slide, by the links
10 28. With each downward movement of the slide 12 the rod 16 is driven forwardly below and beyond the same, and with each upward movement of the slide said rod is carried rearwardly below the same to its initial position. The forward movement of the
15 rod 16 is to prevent the hands of the operative from remaining below the descending slide and to thereby avoid the accidents which have so frequently occurred by the carelessness of operatives in not withdrawing
20 their hands clear of the descending slide and die carried thereby.

What I claim as my invention and desire to secure by Letters-Patent, is:

In combination with a stamping press and the like, a safety device comprising two 25 crank-arms pivotally secured at their upper ends to the slide and carrying at their lower ends a connecting transverse rod, and links pivotally secured at their lower ends to fixed parts of the press and at their upper ends to 30 said arms, whereby on the descent of the slide said rod will be rocked forwardly below the same and on the ascent of the slide returned to its initial position; substantially as set forth. 35

Signed at New York city, in the county of New York and State of New York, this 3rd day of June A. D. 1909.

WILLIAM H. HIBBARD.

Witnesses:

ARTHUR MARION,
CHAS. C. GILL.