(No Model.)

H. SCHAAKE.

PRESS STRIPPER.

No. 473,889. Patented Apr. 26, 1892.

Fig. 1.

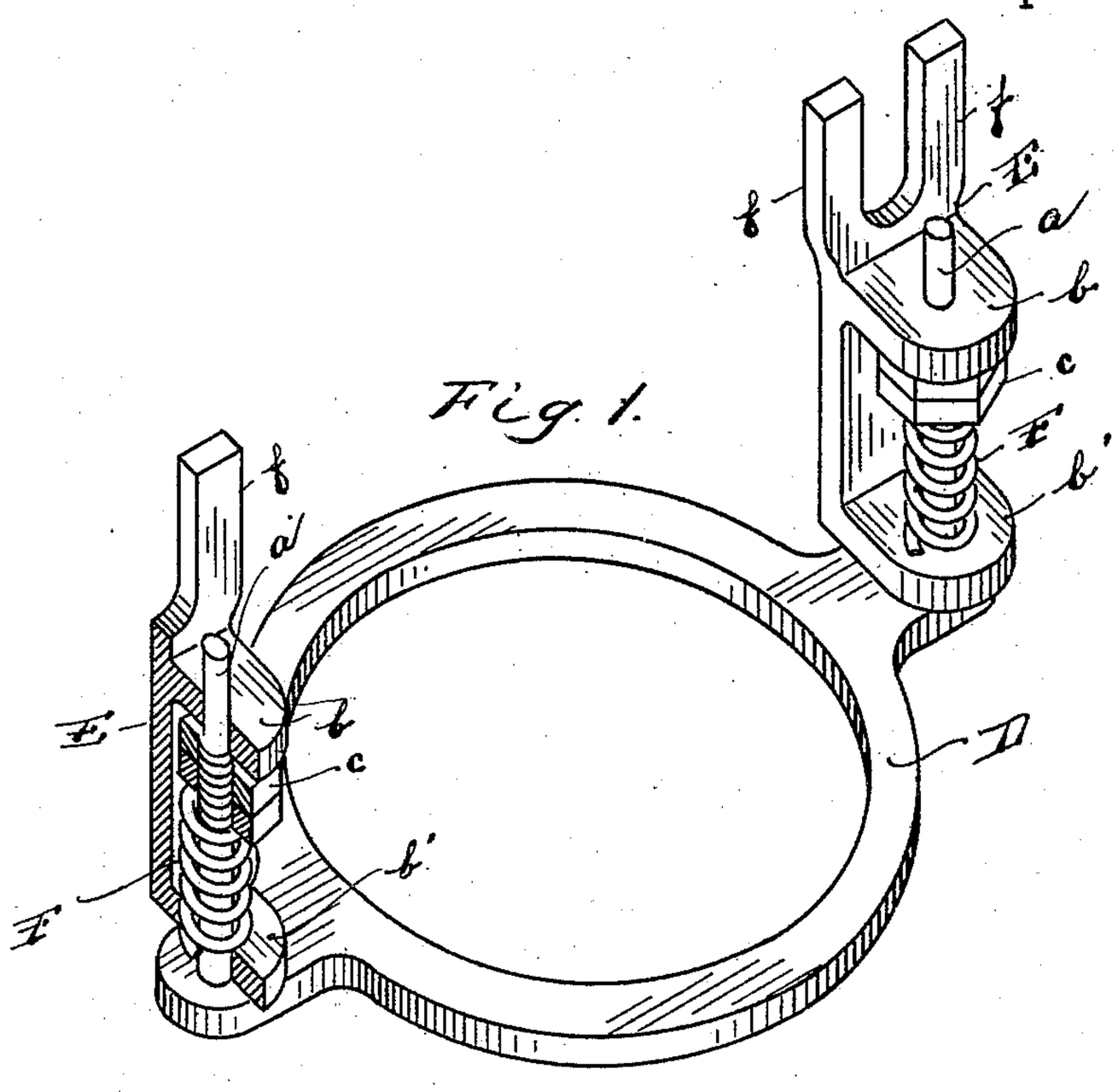


Fig. 2.

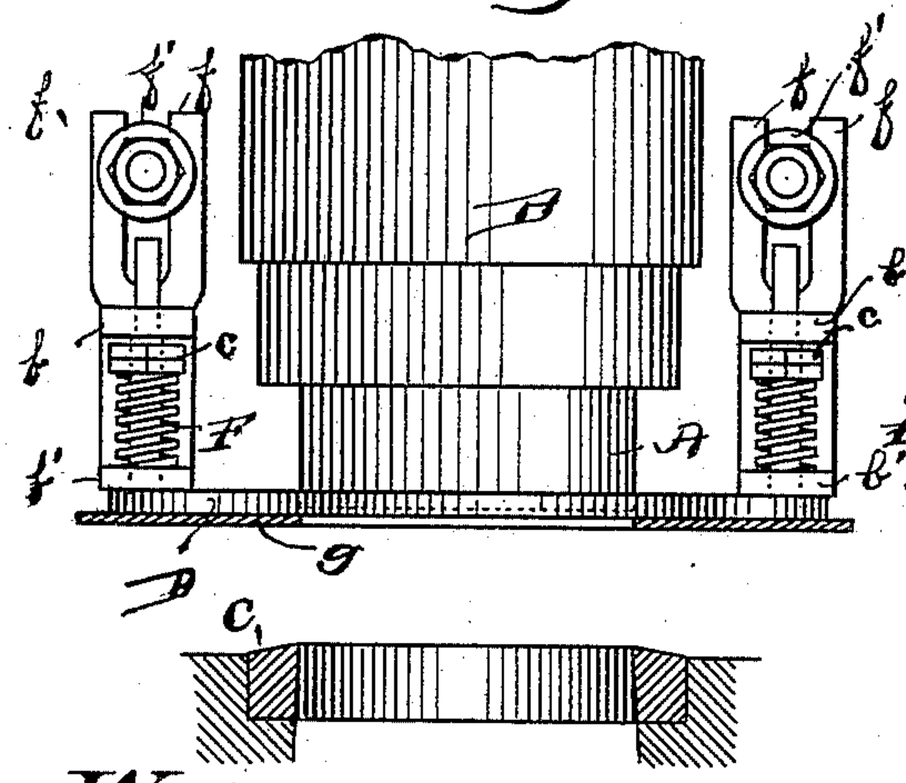
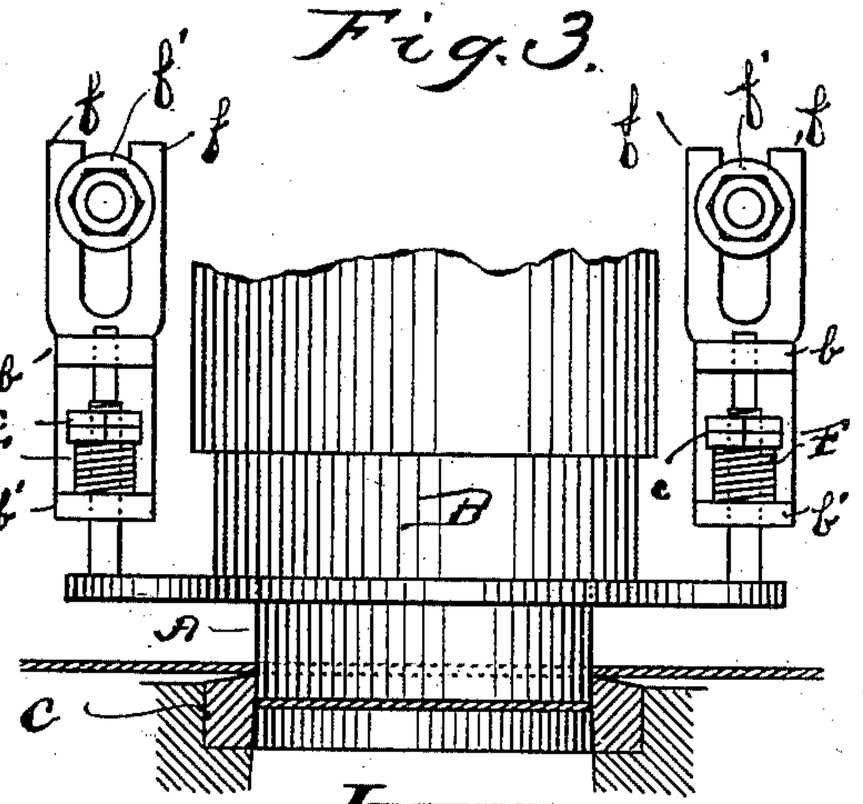


Fig. 3.



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PRESS-STRIPPER.

SPECIFICATION forming part of Letters Patent No. 473,889, dated April 26, 1892.

Application filed December 14, 1891. Serial No. 414,967. (No model.)

To all whom it may concern:

Be it known that I, HENRY SCHAAKE, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Press-Strippers; and I do hereby declare the following to be a full, clear, and exact description of said invention, such as will enable others skilled in the art to which it most nearly appertains to make, use, and practice the same.

My invention has relation to certain new and useful improvements in press-strippers, which consists in the arrangement of parts and details of construction, as will be hereinafter more fully set forth in the drawings, described, and pointed out in the specification.

The object of my invention is to provide a spring-actuated stripper adapted to be secured within the press-head, so as to surround the male die in order to release the same of cut sheets of metal after cutting off heads or caps therefrom upon the return stroke of the male die, thus allowing ample and free room or space between the male and female dies for the operator to work and obviating liability of the sheet metal being fed between the stripper and male die, consequently providing against the binding or mashing of the die, thus overcoming undue wear thereof.

Referring to the drawings, forming a part of this application, wherein similar letters of reference denote corresponding parts throughout the entire specification and drawings, Figure 1 is a perspective view showing the spring-actuated stripper. Fig. 2 is a front elevation showing position of stripper upon the full upstroke of the male die, and Fig. 3 is a similar view showing position of stripper upon the downstroke of the die in order to punch the metal.

The letter A is used to indicate the male die of the press, which is secured to plunger B in any suitable manner and is adapted to fit or pass upon its full downstroke within female die C. The stripper D surrounds male die A and is provided with standards or vertical rods *a*, which fit or pass through openings formed in arms *b b'*, projecting from brackets E. The stripper is held within said arms by means of collars *c*, which fit upon the rods or standards *a*. Said standards I surround by springs F, which are located between collars *c* and arms *b'*. By means of standards *a* the stripper is allowed vertical movement upon the downward or upward stroke of the male die. The upper portion of brackets E, I bifurcate in order to form arms *f*, and said brackets are secured to the press by means of screw-bolts *f'*, which work between the arms *f*. By loosening the screw-bolts the brackets may be raised or lowered so as to move the stripper toward or from the die. The stripper is so adjusted through the medium of adjustable brackets that when the male die has reached its full upstroke the lower end thereof will rest between the walls thereof, as shown in dotted lines, Fig. 2, so that when the metal contacts with face of stripper it will be freed from said die.

In Fig. 2 I have shown the cut sheet of metal *g* carried upward by the upstroke of the die until brought into contact with the strippers, which, being unable to move, owing to contact with lower arms of brackets, forces the sheet from the die.

Fig. 3 illustrates the die after the metal has been punched and shows the cut sheet surrounding the male die, upon the upstroke of which the cut sheet is carried upward, as shown in Fig. 2. As the die moves downward the stripper is carried therewith and upon its upstroke is forced to follow by reason of resiliency of springs F. However, the stripper does not move the full stroke of the male die, thus allowing the latter when at rest to fit between the walls thereof slightly above the under face, consequently allowing for said die to free itself of the metal sheet. By providing for the lower end of the male die to rest between the stripper-walls I effectually obviate danger of the sheets of metal being fed between the male die and stripper, which, in the present machines, due to the rapidity of feeding, frequently happens, thus necessitating frequent delays in order to extract the same, besides loss of metal destroyed thereby.

Having thus described my invention, what I claim as new, and desire to secure protection in by Letters Patent of the United States, is—

1. The combination, with a die-press, of a

supporting-bracket and a vertically-movable stripper surrounding the male die and provided with upwardly-extending guide-arms working in said bracket, said stripper being adapted to be moved with the movement of the die.

2. The combination, with a die-press, of a vertically-adjustable bracket, a movable stripper supported by said bracket surrounding the male die and adapted to be depressed with the movement of the die, and means for automatically returning the stripper on the upstroke of the die.

3. The combination of a supporting-bracket provided with forwardly-projecting arms, a movable stripper having standards working in said arms and provided with rigid collars between the same, and springs coiled around said standards between the collars and the lower arms.

In testimony whereof I affix my signature in presence of two witnesses.

HENRY SCHAAKE.

Witnesses:

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