(No Model.)

# F. & O. KAMPFE.

## DIE AND STAMPING PRESS.

No. 264,170. Patented Sept. 12, 1882.

Fig. 2.

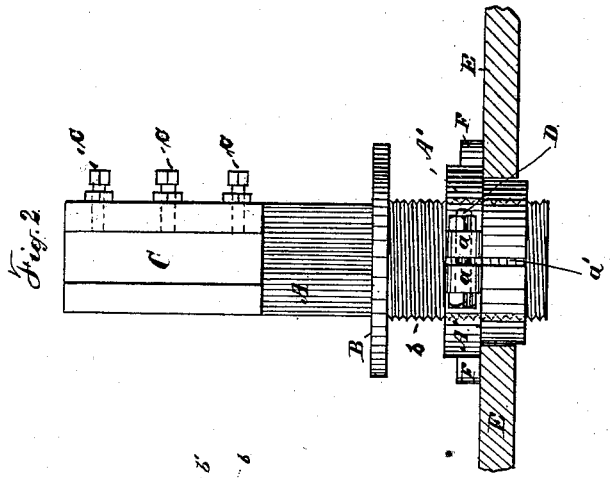



Fig. 3.

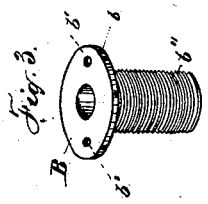
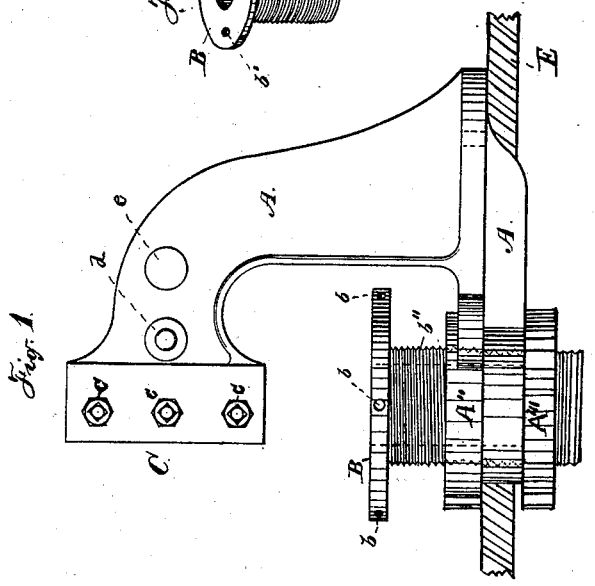



Fig. 1.

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FREDERICK KAMPFE AND OTTO KAMPFE, OF BROOKLYN, NEW YORK.

## DIE AND STAMPING PRESS.

SPECIFICATION forming part of Letters Patent No. 264,170, dated September 12, 1882.

Application filed December 28, 1881. (No model.)

*To all whom it may concern:*

Be it known that we, FREDERICK KAMPFE and OTTO KAMPFE, of the city of Brooklyn, E. D., county of Kings, and State of New York, have invented certain new and useful Improvements in Die and Stamping Presses, of which the following is a specification.

This invention relates to presses for stamping and die-cutting, and is designed to furnish an improved die bed or bolster. These presses are constructed so that considerable space is left between the lower end of the mandrel and the table supporting the press, and upon which the die is placed. The object of this is to allow for the varying thickness of different dies. It is desirable to take up any excess in this distance in order to bring the point at which the force of the tool is expended nearer to the fulcrum, and thereby increase the force of the stroke. This has been done heretofore by placing upon the table and underneath the die pieces of metal of sufficient thickness to raise the die to the desired point. The objection to this method of raising the die is the resultant delay, bother, uncertainty, and indirectness and lack of precision, together with the difficulty of preserving the cutting or stamping edges in a horizontal position, or at right angles with the cutting or stamping tool. These objections are sought to be obviated by our invention, which is fully shown in the accompanying drawings, in the several figures of which like letters indicate like parts.

Figure 1 is a perspective view of a pendulum-press embodying our invention. Fig. 2 is a sectional view of the same, and Fig. 3 is a perspective view of our improved bolster.

A is a standard for carrying the pendulum, which is not shown, and the mandrel C, together with the ways *c'*, between which the mandrel slides. *c* are bolts.

B is the head, and *b''* the exteriorly-threaded shank or body of our improved adjustable bolster. The shank *b''* operates in and is secured in position by means of the split nut or clamp A', which may be secured to the table-top in any usual way.

*a a* are projections carrying the bolt D, by which the nut is clamped upon the shank *b''*. Another method of securing my improved bolster, and which is part of my invention, is by the use of two nuts placed upon the shank of the bolster, one upon and the other beneath the table-top, as indicated in Fig. 1 by A'' and A'''. In case these nuts are used the split nut A' may be dispensed with altogether; but the clamp-nut A alone will generally be found sufficient.

As a modification affording greater strength and stability, the standard A and the split nut A' may be cast in one piece.

*b b* are respectively holes for the insertion of pins by which to turn the adjustable bolster in the nut or nuts.

*b' b'* are openings for securing the die to the face of the bolster by means of bolts or otherwise.

*d e* are centers for pivoting the pendulum or lever by which the mandrel and punch are operated. The whole of the foregoing is supported by any usual frame or support, the top of which, E, is represented in section in the drawings.

To operate our improved bolster, release the nut A', or the nuts A'' and A''', according to whichever is used, and screw the bolster up or down to the desired point, and then lock the nut or nuts.

The advantages of our improved bolster are the facility, quickness, precision, and stability with which it may be adjusted, entirely avoiding the method heretofore in use of "building up" the die to the working-point by the use of material with which it is difficult to preserve the cutting and stamping edges in the proper angle to the line of the mandrel. A further advantage of our improved bolster is that it always preserves the face of the die, without special care and attention, in a proper angle to the line of the mandrel.

Having fully described our invention, what we claim, and desire to secure by Letters Patent, is—

The improved bolster consisting of the plate B and shank *b''*, combined with a suitable nut or nuts, and designed to operate in connection with the mandrel of a die and stamping press, substantially as set forth.

FREDERICK KAMPFE.
OTTO KAMPFE.

Witnesses:
PAUL RICHARD KAMPFE,
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