

No. 730,245.

PATENTED JUNE 9, 1903.

W. H. FORD.
RING STAMPING APPARATUS.
APPLICATION FILED SEPT. 13, 1902.

NO MODEL.

Fig. 1.

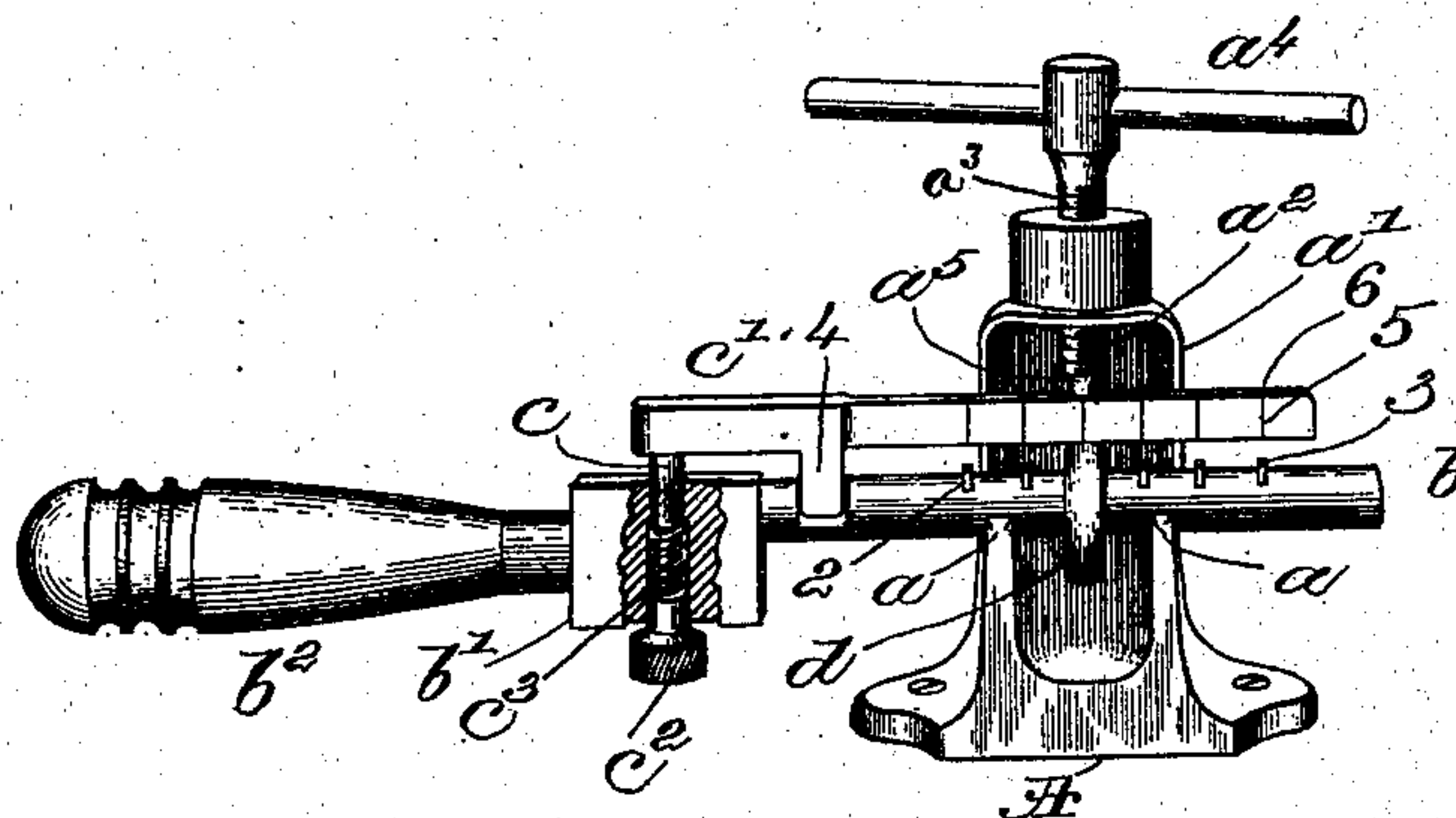


Fig. 2.



Fig. 3.

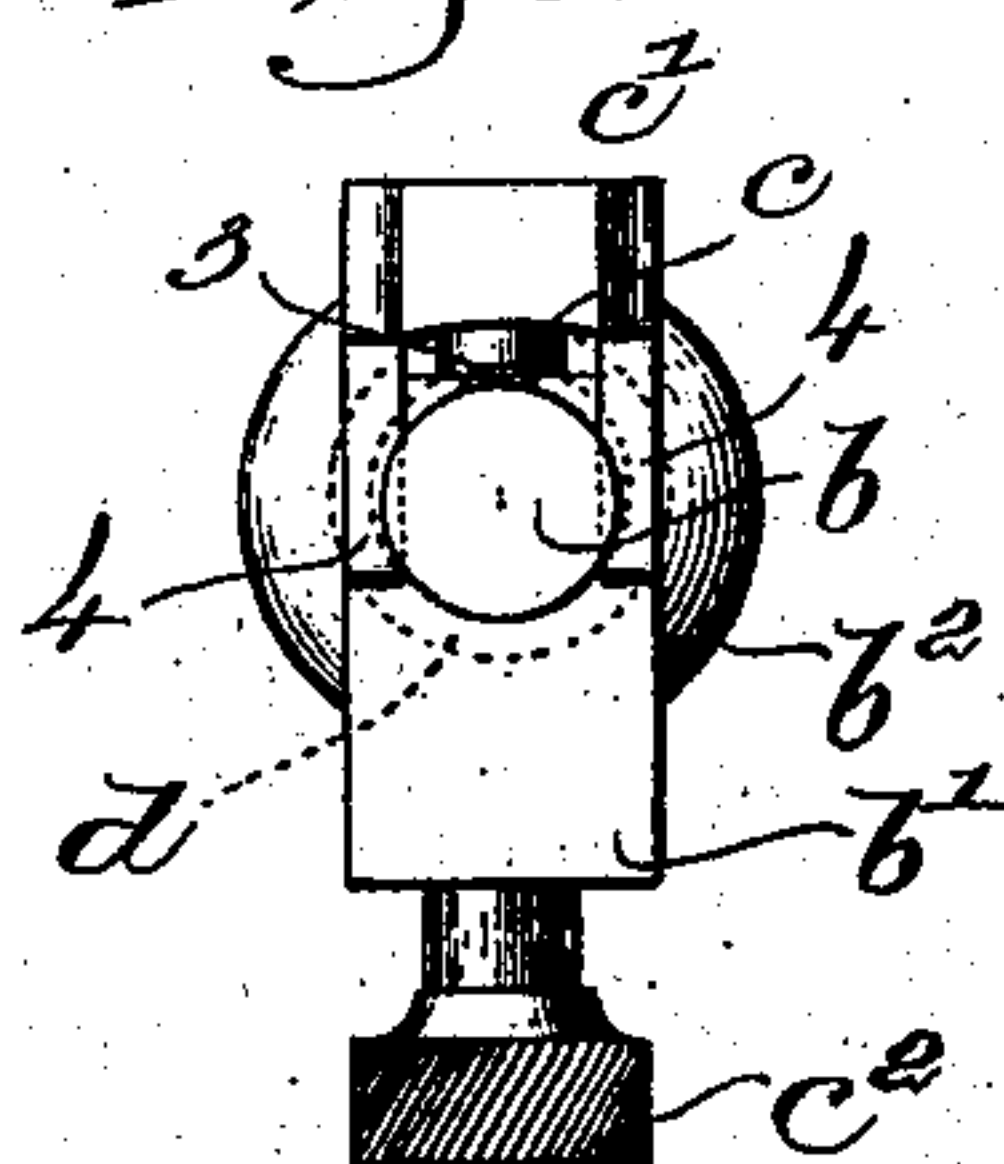


Fig. 4.



Witnesses:

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UNITED STATES PATENT OFFICE.

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RING-STAMPING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 730,245, dated June 9, 1903.

Application filed September 13, 1902. Serial No. 123,232. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. FORD, a citizen of the United States, residing at Lowell, county of Middlesex and State of Massachusetts, have invented an Improvement in Ring-Stamping Apparatus, of which the following description, in connection with the accompanying drawings, is a specification, like characters on the drawings representing like parts.

This invention relates to a novel apparatus for stamping inside a finger-ring a number indicating the carat of the gold in the ring or an initial letter or letters or the trademark of the maker of the ring; and the object of my invention is to provide an apparatus of this general character that shall be simple yet effective in operation, as will hereinafter appear.

My apparatus comprises, essentially, a die-carrying mandrel and a connected presser movable toward and from the longitudinal axis of the mandrel and capable of acting on the exterior of any ring embracing any die of the mandrel. The presser is shown as spring-sustained on the handle to thereby enable the presser and mandrel to pinch a ring inserted between them and hold the ring in position to be stamped.

Figure 1 of the drawings shows a stamping apparatus embodying my invention. Fig. 2 shows different styles of dies that may be used. Fig. 3 is an end view of the mandrel and presser removed from the stand, and Fig. 4 is a section of the mandrel through one of the cuts holding a die.

The stand A has two rests *a a* and an overhanging neck *a'*, provided with a forcing device *a²*, (shown as a screw *a³*,) having a handle *a⁴* and provided at its end with a conical or blunt point *a⁵*.

The mandrel *b*, (shown as extended from a head *b'*, to which is attached a suitable handle *b²*,) is shown as provided with a series of cross-cuts in which are forced suitable dies 2 3. The mandrel is shown as having a series of holes *b⁴*, each of which intersects a cut holding a die, so that a die may be easily driven out of a cut by inserting a tool in a hole *b⁴*. The head *b'* is bored at right angles to the longitudinal axis of the mandrel and

receives a threaded hollow stud *c*, extended from a presser *c'* at right angles to its length. The stud *c* is entered by the threaded end of a shouldered screw *c²*, surrounded by a spiral spring *c³*. The under side of the presser is shaped to occupy a position substantially parallel with the longitudinal axis of the mandrel. The presser is provided next to the mandrel with two legs 4, that straddle a slatted-off part of the mandrel, said legs guiding the presser and keeping the same substantially parallel with the longitudinal axis of the mandrel. The parts are put together with the outer end of the spring *c³* abutting the shoulder of screw *c²*, and said spring acts normally to draw the presser toward the mandrel with a force due to the strength of the spring. To place a ring *d* on the mandrel and between a die 2 or 3 of the mandrel and the inner face of the presser, pressure may be exerted on the head end of the screw, thus compressing the spring and moving the presser away from the mandrel sufficiently far to provide a space of suitable dimensions to enable the ring to be located centrally over the particular die 2 or 3 to be used. Releasing the pressure on the stud or nut permits the spring to act and moves the presser toward the mandrel far enough to effect the grasping of the ring between the face of the die of the mandrel and the presser, so that holding the handle in the hand the ring will remain in the position in which it was placed.

It will be noticed that dies 2, used to stamp the interior of a wedding-ring, have each a flat face; but the dies 3, used to stamp stone rings, have an inclined face. Making the face of the die 3 on an incline enables the die to be forced into the interior of a stone ring at a point where the ring is of substantially its greatest width.

The presser has a series of lines 5, that are located each opposite the center of a die, and by placing the median line of a ring in juxtaposition to one of said lines insures that the die will enter the ring exactly in its median line.

When the ring has been put on the mandrel and while the ring is held clamped between the mandrel and presser, the mandrel is laid in the rests *a* of the stand, as shown in

Fig. 1, and that one of the depressions 6 in the back of the presser immediately above the center of the ring is located just under the point of the screw, and the screw is turned sufficiently to cause the presser acting on the exterior of the ring to be moved far enough to cause the ring to be forced into the die sufficiently to leave an impression in the interior of the ring of the depth desired. Instead of a screw, which I prefer to use for simplicity and strength, I may employ any other equivalent device to act on the presser and force it toward the mandrel.

I do not claim, broadly, a mandrel with a series of dies, as such is shown in United States Patent No. 658,736, granted to me September 25, 1900; but I am not aware that a die-carrying mandrel has ever been provided with a presser capable of coacting therewith, as has been described.

By connecting the presser permanently with the die-carrying mandrel having the attached handle *b*² it is possible to hold the mandrel and presser in one hand and by moving the presser temporarily away from the mandrel insert a ring in position over either one of the series of dies arranged at one face of the mandrel and parallel to the longitudinal axis thereof.

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

1. In a ring-stamping apparatus, a mandrel having a series of dies, a presser connected with said mandrel, and means acting normally to move the presser toward the mandrel to clamp and hold a ring on said mandrel in stamping position.

2. In a ring-stamping apparatus, a die-carrying mandrel, and a coacting spring-controlled presser adapted to pinch between them the ring to be stamped.

3. In a ring-stamping apparatus, a die-carrying mandrel having a series of cross-cuts for the reception of dies, and having bored holes intersecting said cuts.

4. In a ring-stamping apparatus, a die-carrying mandrel, and a presser having legs to embrace a part of the mandrel.

5. In a ring-stamping apparatus, a die-carrying mandrel, a bored head from which said mandrel is extended, a presser having a threaded stud extended through said head, and a spring surrounding said stud, said presser being movable bodily laterally toward and from said mandrel.

6. In a ring-stamping apparatus, a die-carrying mandrel, a presser connected with said mandrel, a spring acting normally to move the presser toward the mandrel to clamp and hold a ring between the mandrel and presser in stamping position, and a stand to sustain the mandrel.

7. A mandrel adapted to sustain at one side of the longitudinal center thereof a series of detachable dies, combined with a presser connected to and movable with said mandrel and having a face overlapping all of said dies.

8. A mandrel having an attached handle and adapted to sustain at one side of the longitudinal center thereof a series of detachable dies, combined with a presser connected to and movable with said mandrel and having a face overlapping all of said dies.

9. A mandrel having an attached handle and adapted to sustain at one side of the longitudinal center thereof a series of detachable dies, combined with a presser connected to and movable with said mandrel and having a face overlapping all of said dies, and means to insure the retention of the presser parallel with the mandrel while a ring is being inserted between the dies and the inner side of the presser.

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

WILLIAM H. FORD.

Witnesses:

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MARGARET A. DUNN.