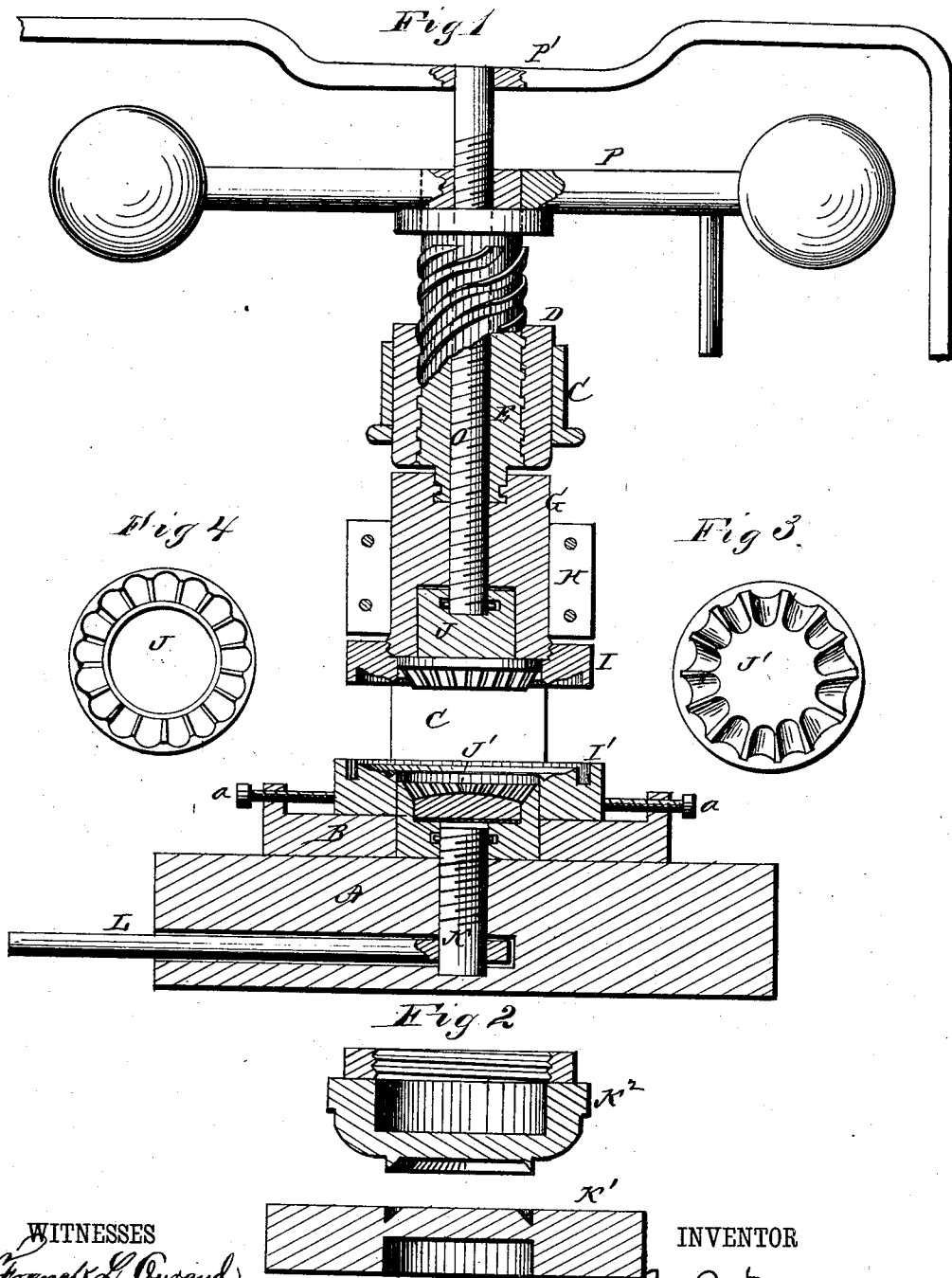


J. S. MERRIKEN.

Presses for Making Tin-Can Tops.

No. 155,098.

Patented Sept. 15, 1874.



WITNESSES

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UNITED STATES PATENT OFFICE.

JOSEPH S. MERRIKEN, OF BALTIMORE, MARYLAND, ASSIGNOR OF ONE-FOURTH HIS RIGHT TO HENRY FITZBERGER, OF SAME PLACE.

IMPROVEMENT IN PRESSES FOR MAKING TIN-CAN TOPS.

Specification forming part of Letters Patent No. **155,098**, dated September 15, 1874; application filed July 18, 1874.

To all whom it may concern:

Be it known that I, JOSEPH S. MERRIKEN, of Baltimore, in the county of Baltimore and in the State of Maryland, have invented certain new and useful Improvements in Presses for Making Tin-Can Tops; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of a machine for cutting holes in tin or other sheet metal, and for expanding the piece so cut out, so that it shall be large enough to cover and cap the hole, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a vertical section of my machine, and Figs. 2, 3, and 4 are detached views of the dies used in my machine.

A represents the base of the machine, upon which is fastened the bed-plate B. From one end of this bed-plate rises a curved standard, C, in the upper or front end of which is fastened a nut, D, for the passage of a hollow screw, E. The lower end of the screw E is swiveled in a follower, G, which moves in a guide, H, attached to the standard C. On the lower end of the follower G is screwed the die I, corresponding with a die, I', placed upon the front end of the bed-plate B, and held by means of set-screws *a a*. The dies I and I' are constructed in the usual manner to cut the top of a tin can, such as are used for putting up fruit, oysters, and other articles. The bottom die, I', has a central opening of suitable size, in which is inserted a female die, J', the concave sides of which are made corrugated, as shown. This die is swiveled to a screw, K, which passes down into the base A, and has a lever, L, attached to it, said lever working in a slot or mortise in the base, so that by working the lever back and forth the die J' will be raised and lowered, as required. J represents the male die, corresponding with the female die

J'. The die J is placed in the center opening of the die I, and extends up into a recess in the lower end of the follower G, where it is swiveled to a screw, O, which passes up through said follower and through the hollow screw-nut E, said nut being provided with interior or female screw-threads. The upper ends of the hollow nut E and screw O are provided with handles or levers P P', respectively, for operating them independent of each other.

The tin or other metal is placed on the die I' and the die I pressed down upon it, cutting the can top, and while it is held between said dies the die J is brought down in the center, which draws the metal, forming, as it were, a shallow pan with corrugated sides cut out of the center of the blank. When the die I descends to cut the blank the die J' should be elevated, and when the die J descends said die J' should be depressed or lowered. The piece thus cut out from the center of the blank is stretched and has its sides crimped or corrugated. This piece is then flattened between two dies, K² K¹, which leaves the piece larger than the hole from which it was cut, so that it can be used to cover and cap the same.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination of the hollow screw E with follower G and die I, and the inner screw O with die J, with the stationary die I', movable die J', screw-shaft K, and horizontally-moving lever L, all substantially as and for the purposes set forth.

2. A process for making tin can tops by cutting out the plate for the can-top and cutting out the central opening in said plate, and then crimping the edges of the piece last cut out and flattening it again, stretching it out larger than the opening from which it was cut, all substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 29th day of June, 1874.

JOSEPH S. MERRIKEN.

Witnesses:

J. TYLER POWELL,
JNO. D. PATTEN.