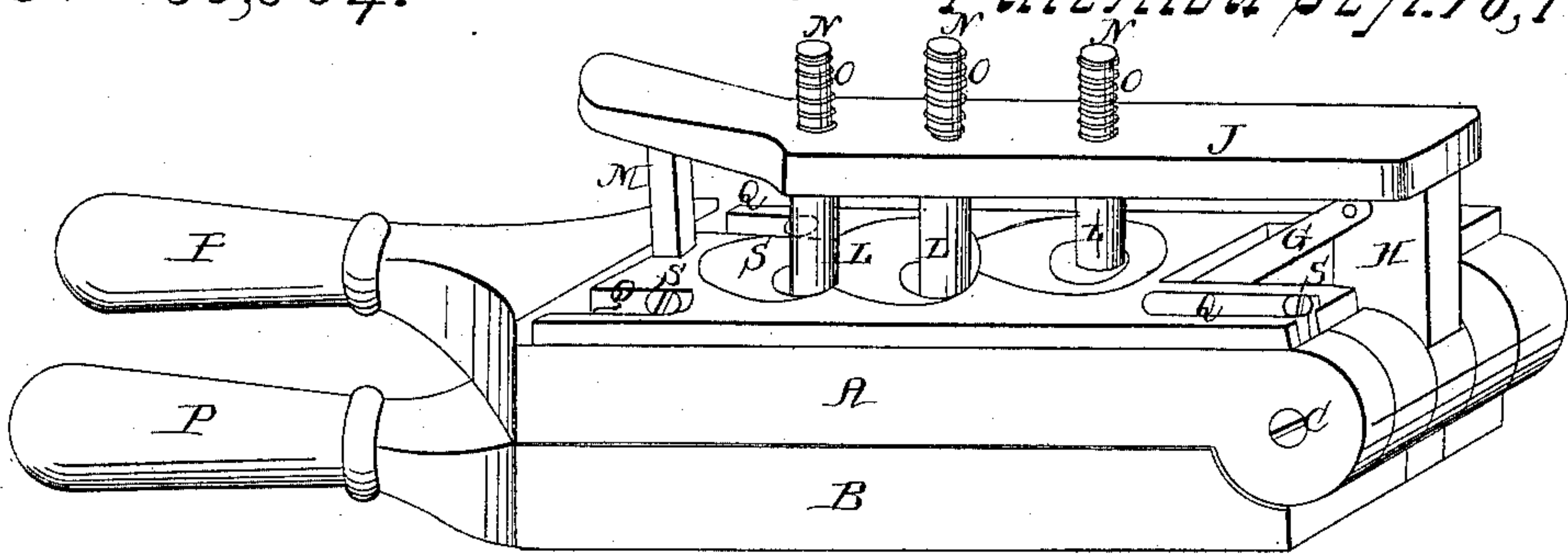


L. Evans,

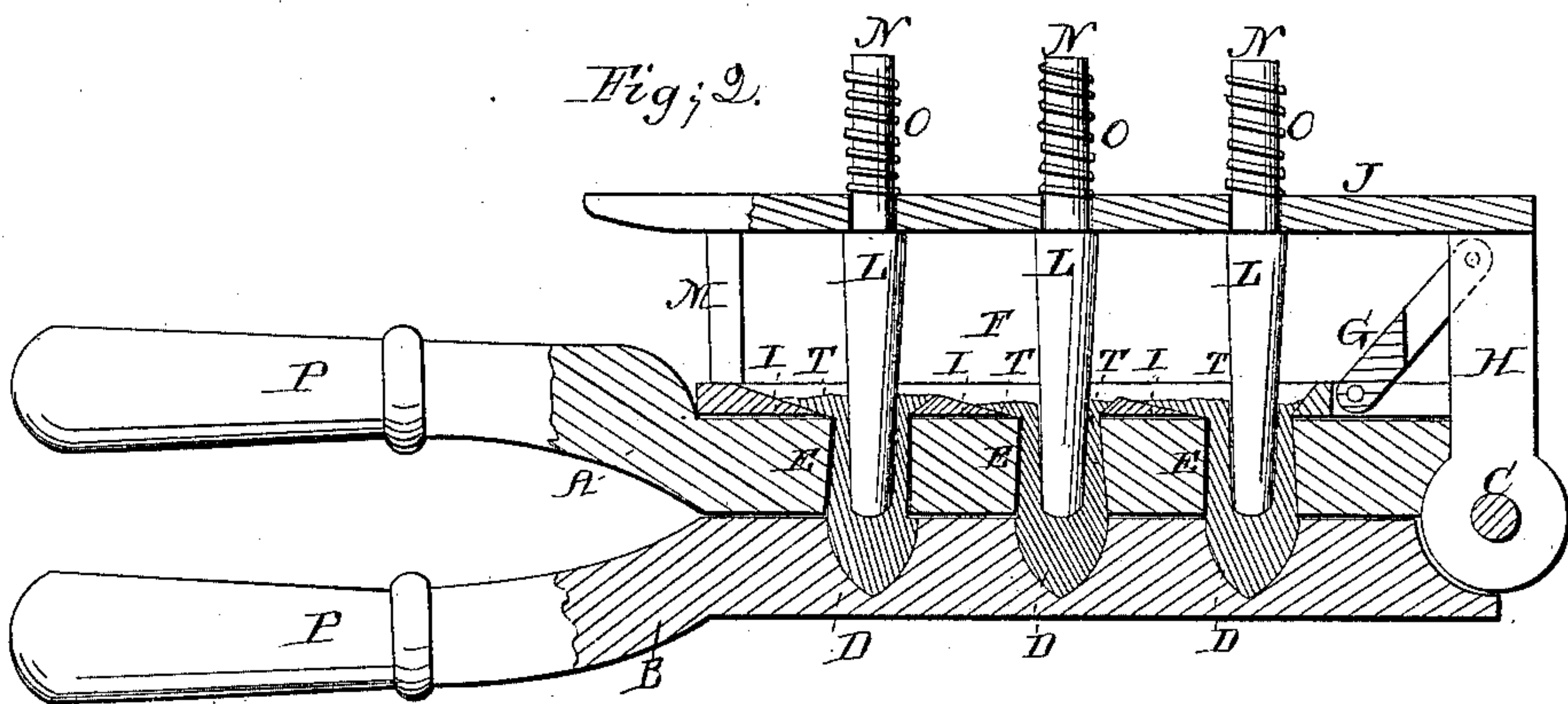
Bullet Mold.

N^o 30,054.

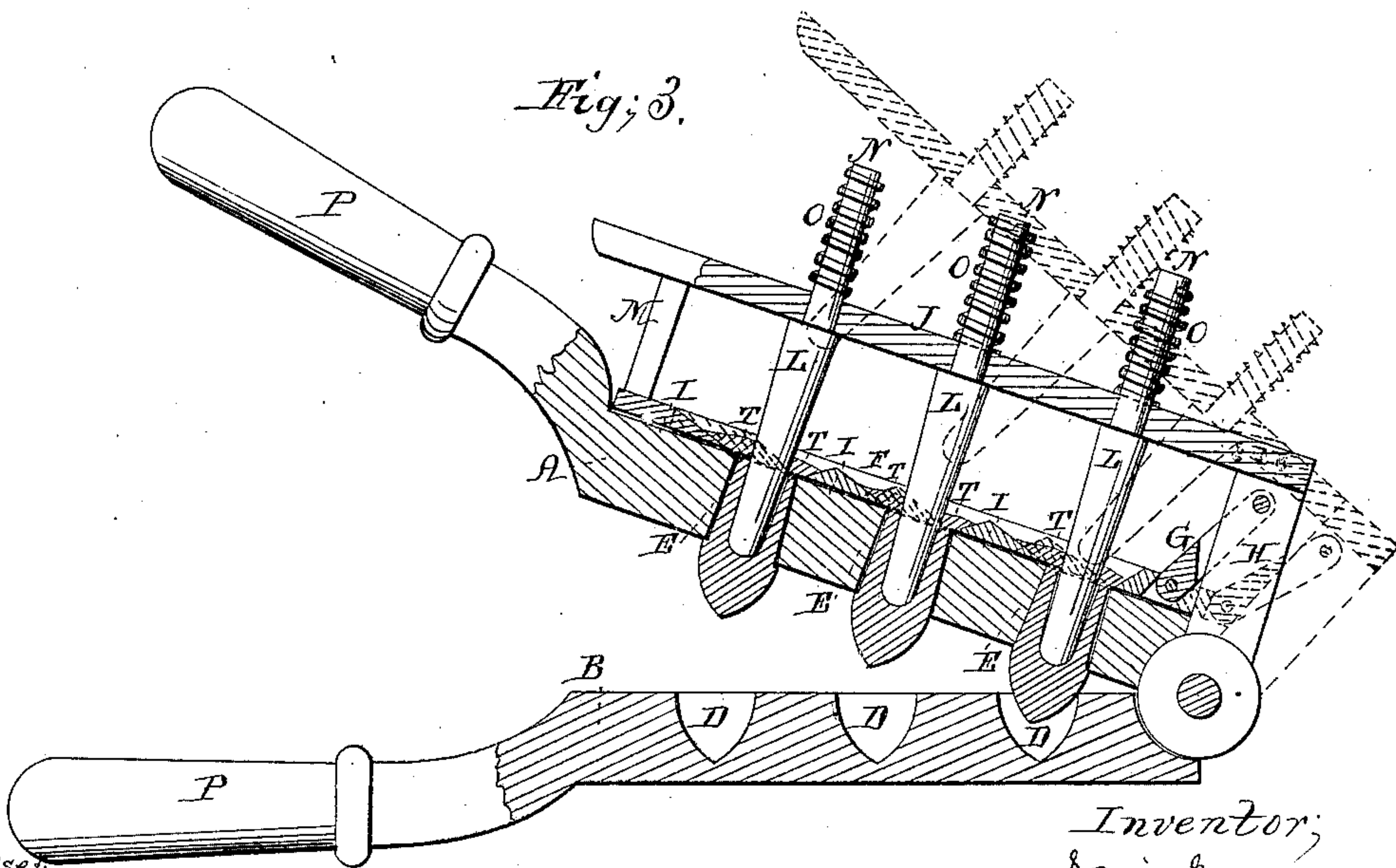
Fig; 1. Patented Sept. 18, 1860.



Fig; 2.



Fig; 3.



*Witnesses,
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S. B. District*

*Inventor;
Louis Evans
by Munn &
Attorneys*

UNITED STATES PATENT OFFICE.

LEWIS EVANS, OF MORGANTOWN, VIRGINIA.

IMPROVEMENT IN MOLDS FOR RIFLE-BALLS.

Specification forming part of Letters Patent No. 30,054, dated September 18, 1860.

To all whom it may concern:

Be it known that I, LEWIS EVANS, of Morgantown, in the county of Monongalia and State of Virginia, have invented a new and useful Improvement in Molds for Molding Rifle-Balls; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a perspective view. Figs. 2 and 3 are vertical sections showing the parts of the implements in different positions.

Similar letters of reference in each of the several figures indicate corresponding parts.

The nature of my invention consists, first, in two flasks of a bullet-mold and a die-carrier, furnished with dies, hinged together substantially as hereinafter described.

It consists, second, in the combination of a sliding cutter with the flasks and die-carrier and dies in the manner hereinafter described.

By my invention hollow bullets are cast, swaged, and trimmed.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

The two flasks A B, forming the bullet-molds, are hinged together at C and provided with handles P P, by means of which the flasks can be opened (see Fig. 3) or closed. (See Figs. 1 and 2.) The upper flask, A, is made with cylindrical holes E, extending clear through the flask, while the lower flask is provided with conical recesses D, the centers of the recesses D being in line with the centers of the holes E when the flasks are closed. The diameter of the holes E is somewhat smaller than the diameter of the top of the conical recesses, so that the metal when poured into one of these molds will form a bullet the shank of which is of somewhat smaller diameter than the base of its conical top. This affords a convenient means for securing the packing around the bullet. A bar, J, extending from an arm, H, hinged to the flasks at C, carries the dies L, one for each bullet-mold. The shanks N of the dies project through holes in the die-carrier, and are held upward by means of spiral springs O. A stop, M, at the forward end of the die-carrier regulates the depth to which the dies enter the molds.

It will be observed that the metal to form the bullets is poured into the large end of the mold instead of at the small end, as usual. Thus pouring in the metal enables me to have a sharp conical end on the ball without finishing by hand. A plate, F, is made with slots Q at its ends. Guide-pins S, projecting from the flasks A through said slots, confine the plate to a horizontal motion. The rear end of the plate is hung to the arm H by means of a link, G. The plate is also provided with holes—one to each bullet-mold—the front edge of each of these holes being beveled so as to form a sharp cutting-edge, I. The bullets having been cast, the parts of the implement being in the position seen in Fig. 2, the dies are struck a smart blow, so as to swage or make the ball more solid. The die-carrier is then swung back on its pivot C, (see Fig. 3,) so as to withdraw the dies from the bullet-molds, and thus leaving a hole in the center of the bullet-shank extending about the whole length of the shank. The springs O allow the dies to yield slightly while being loosened and withdrawn from the center holes of the bullets.

While the die-carrier is being swung back, as above described, the link G moves back, together with the arm H, and draws the plate F back with it, so as to cause the sharp edges I to move across the tops of the holes E, thereby cutting off the superfluous metal T and forming a smooth base of the bullet-shank. The bullets can then be withdrawn from underneath the flask A, after the flasks have been opened, as seen in Fig. 3.

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

1. Two flasks, A B, of a bullet-mold, and a die-carrier, J H, furnished with dies L, hinged together at C, substantially as and for the purposes set forth.

2. The combination of a sliding cutter, F, with the flasks A B, and die-carrier J H, and dies L, substantially as and for the purposes set forth.

LEWIS EVANS.

Witnesses:

GOODWIN Y. AT LEE,
G. F. G. DIETERICH.