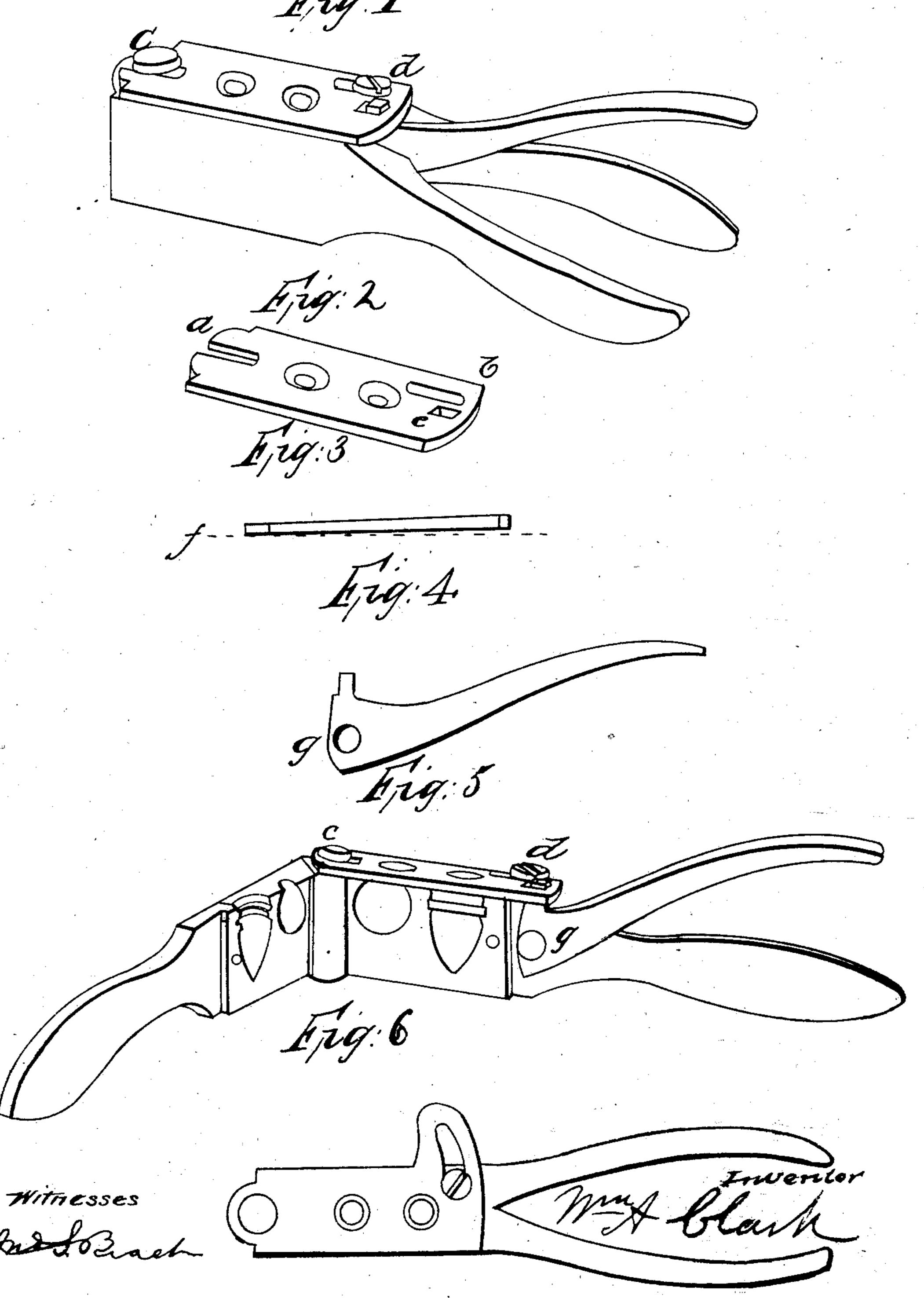
M. A. Clark, Bullet Mold Joseph Jane 15, 1862. Eng 1



United States Patent Office.

WILLIAM A. CLARK, OF BETHANY, CONNECTICUT.

IMPROVEMENT IN BULLET-MOLDS.

Specification forming part of Letters Patent No. 34,944, dated April 15, 1862.

To all whom it may concern:

Be it known that I, WILLIAM A. CLARK, of the town of Bethany, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in the Construction of Bullet-Molds for the Casting of Bullets; and I do hereby declare that the following is a full and exact description thereof, referring also to the annexed drawings as explanatory thereof.

My invention consists in an improved mode of operating the cut-off which separates the

bullet from the sprue.

The cut-offs are usually constructed to play horizontally upon the pivot which forms the hinge of the mold, as shown in Fig. 6, and operated by striking the projection on the upper side, as shown in the drawings, against some foreign substance, and repeating the process until the handles become too hot for manipulation.

My cut-offs—a drawing of which is given in Fig. 2—are made with two slots, one in the rear, marked a, which plays under the head of the stationary pivot c, and the other, marked b, which plays under the head of the screw d. The pivot c and the screw d are like those used in the ordinary molds, and serve the same purpose, the former being the hinge on which the jaws of the molds move, and the latter serving to hold the cut-off in place, and enabling it to be removed at pleasure. A lever, as shown in Fig. 4, turning on a pivot at g, is attached to the front part of the cut-off by a catch at e, so that when the lever is raised the apertures in the cut-off correspond with and form the sprue-holes for the mold, as shown in Fig. 1. The molds now being filled, the lever is de-

pressed, and the cut-off, thus moved in the line of the direction of the length of the mold, separates the lead in the flue from that in the mold. The advantages resulting from this simple arrangement are obvious. Among them it may be noted that the mold being placed upon any level surface, the cut-off may be operated without the necessity of manipulating the handles.

A difficulty also is experienced in ordinary molds, from the fact that, as it is necessary the cut-off should be closely in contact with the upper surface of the molds during the process of cutting, there is a tendency in the lead of the bullet at its point of contact with the plate of the cut-off to bind against the cut-off, and thus prevent its easy separation from the mold. I am enabled in my improvement to obviate this difficulty by slightly curving up the front end of the cut-off, as exhibited in Fig. 3, and by making the extreme rear end slightly thinner than the rest of the plate, as shown at f in Fig. 3, so that when the lever is depressed and the sprue removed, there will be sufficient space between the heads of the pivot and screw and the upper surface of the mold to allow a slight play of the cut-off, thus relieving the bullet from the friction of the cut-off plate. ne mold being then opened, the bullet will readily drop out.

What I claim as my invention, and desire to

secure by Letters Patent, is—

The mode of operating the cut-off of bullet-molds, made to slide longitudinally by a lever, substantially as and for the purposes set forth.

WM. A. CLARK.

In presence of— JNO. S. BEACH, CHARLES N. JOHNSON.