

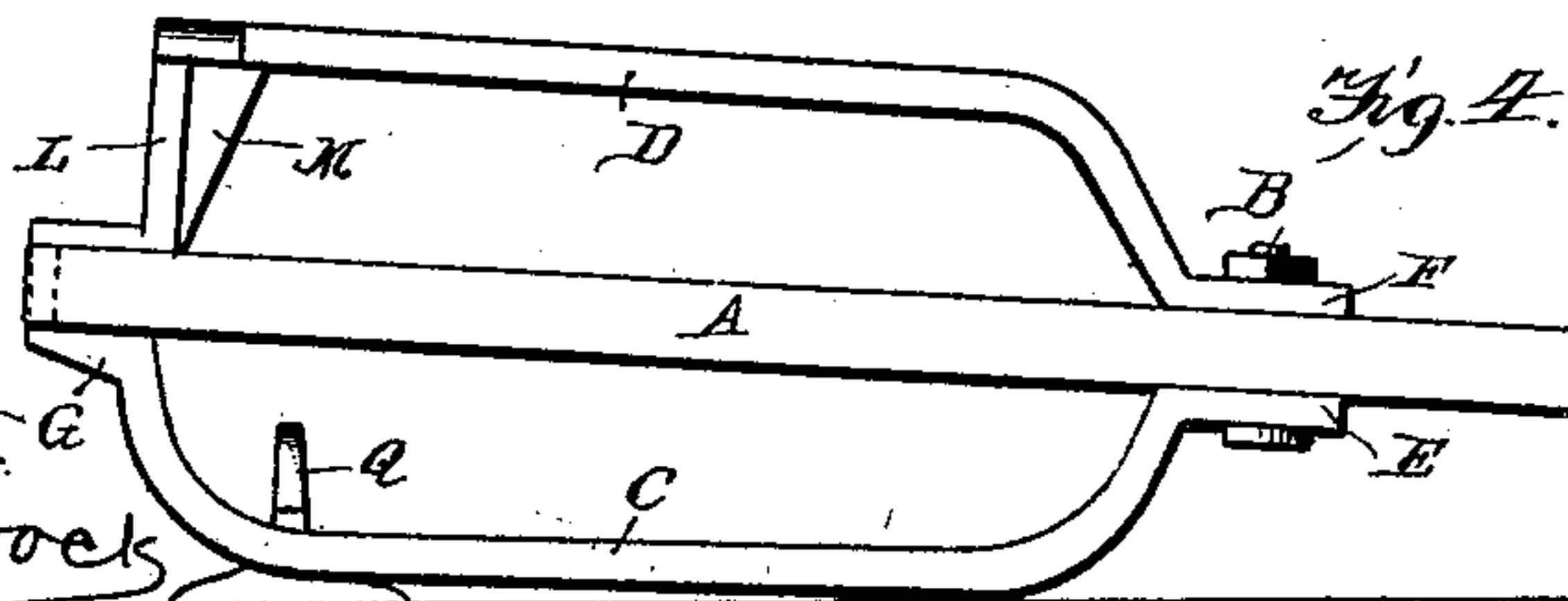
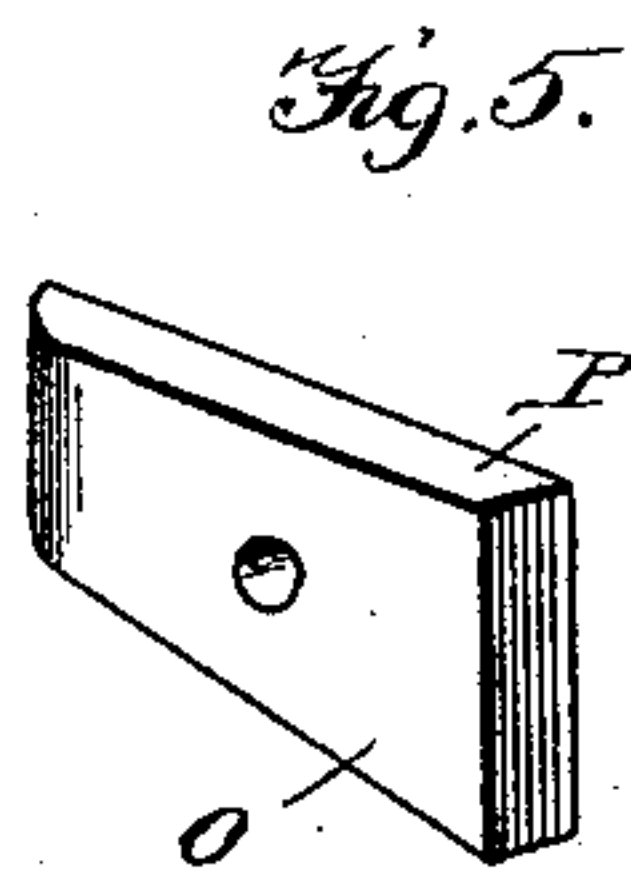
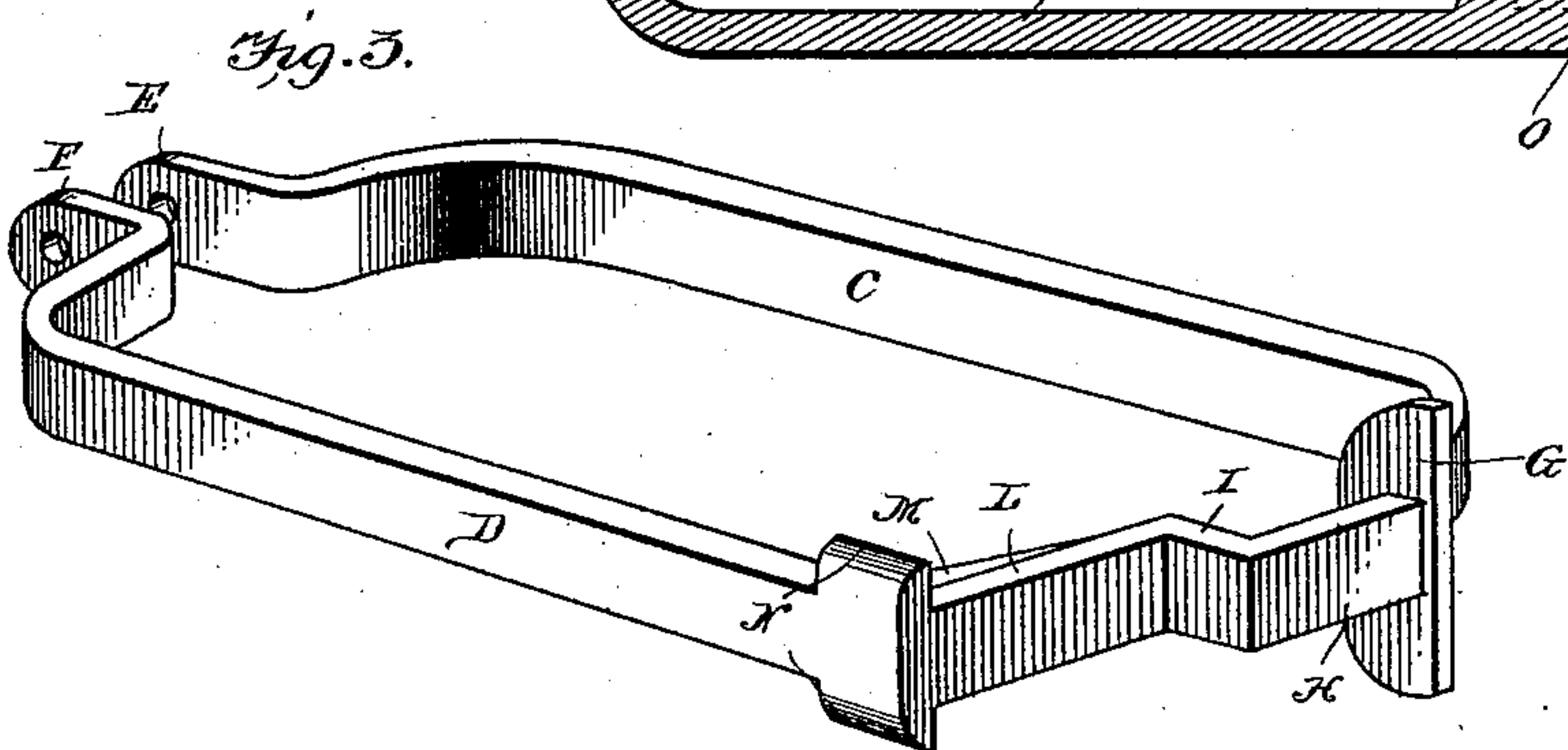
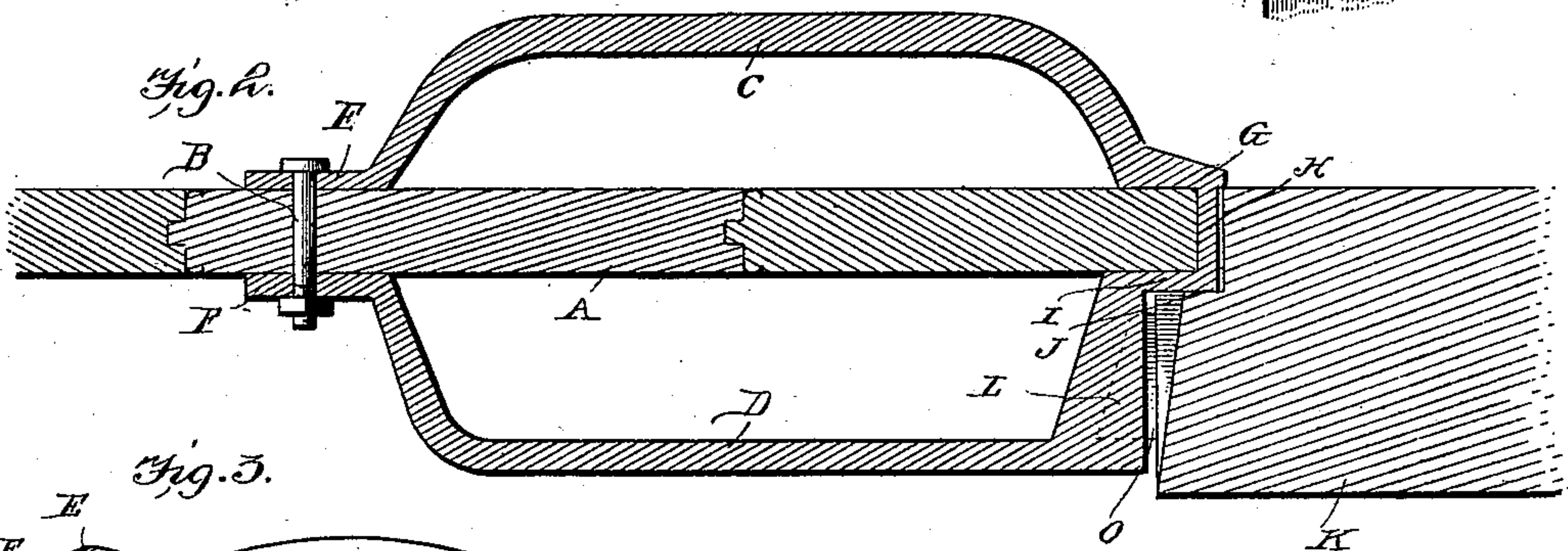
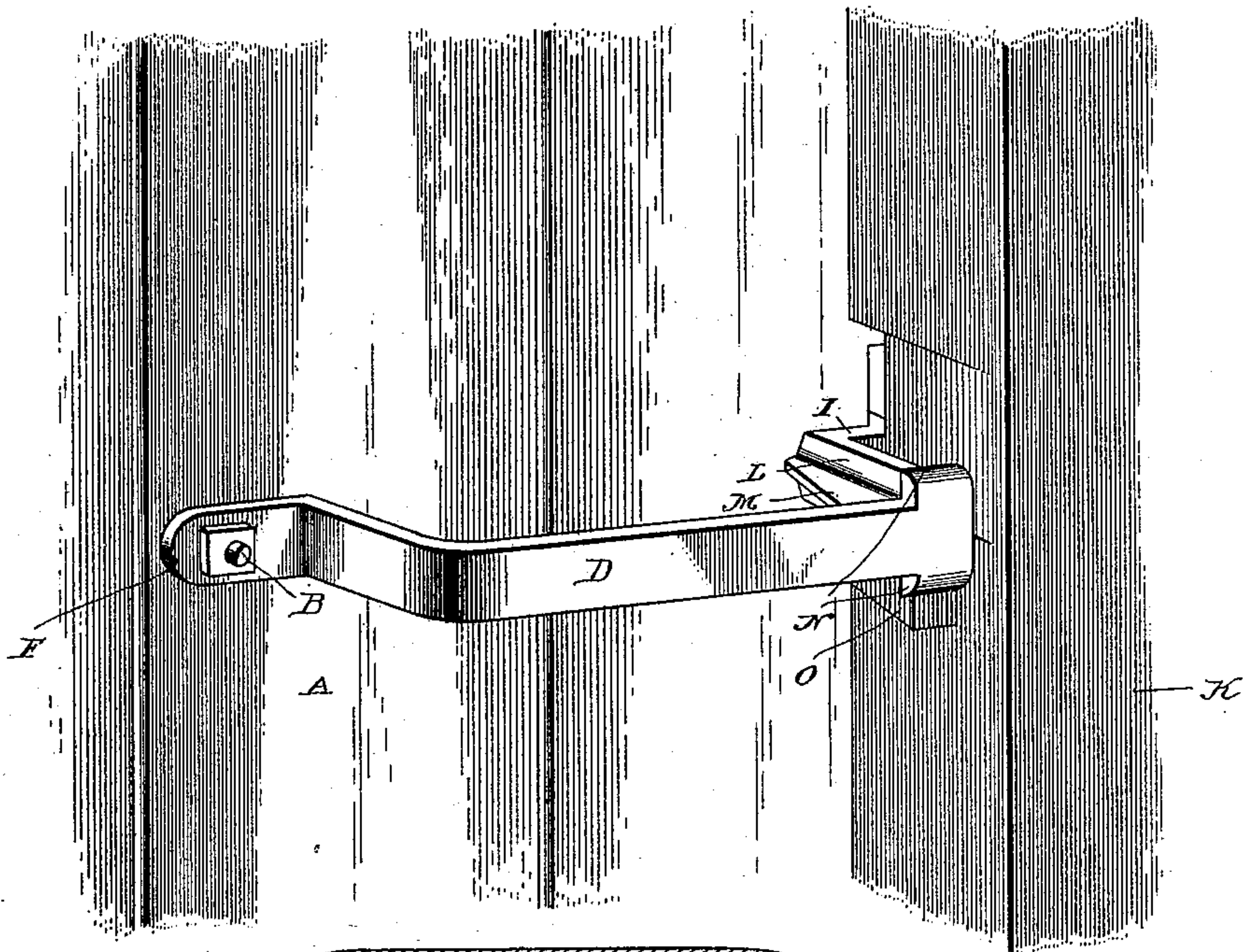
(No Model.)

J. L. DUITMAN.
LATCH.

No. 600,952.

Patented Mar. 22, 1898.

Fig. 1.



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UNITED STATES PATENT OFFICE.

JOHN L. DUITMAN, OF ALTO, WISCONSIN.

LATCH.

SPECIFICATION forming part of Letters Patent No. 600,952, dated March 22, 1898.

Application filed June 19, 1897. Serial No. 641,486. (No model.)

To all whom it may concern:

Be it known that I, JOHN L. DUITMAN, residing at Alto, in the county of Fond du Lac and State of Wisconsin, have invented a new and useful Barn-Door Latch, of which the following is a specification.

My invention relates to locks and latches and is in the nature of a specially-designed latch for use on barn-doors.

The object of my invention is to furnish a barn-door latch made of a single piece, which may be readily operated from the inside of the door to secure the door. It is easily put on, it contains no abrupt or rough projections to injure the horse or catch the harness, and is simple, strong, and cheap.

With these objects in view my invention consists in a barn-door latch made of a single piece of metal, embracing the edge of the door, and hung by a single bolt without keepers or guards, said latch being arranged to engage with the keeper on the door-jamb and provided with inward and outward extending loops or hand-bars made of the same piece of metal, whereby it may be operated with equal facility from the inside as the outside, one of said loops acting in conjunction with the proper catch secured to the wall in position to engage therewith and hold the door in its open position.

My invention further consists in the improved construction, arrangement, and combination of parts hereinafter fully described, and afterward specifically pointed out in the claims.

In order that persons skilled in the art to which my invention most nearly appertains may make and use the same, I will now proceed to describe its construction and operation in connection with the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a perspective view of so much of a barn-door and its jamb, looking from the inside, as is necessary to illustrate my invention, my improved latch and catch being attached thereto in position for practical operation. Fig. 2 is a horizontal section through the same. Fig. 3 is a perspective view of my improved latch detached from the door. Fig. 4 is a top plan view of the outer edge of the door having my improved latch secured thereto, the

door being represented as open and held by a catch in the wall of the barn. Fig. 5 is a detail perspective view of the catch-piece to be secured to the jamb of the door.

Like letters of reference mark the same parts wherever they occur in the different figures of the drawings.

Referring to the drawings by letters, A is an ordinary barn-door, to which my improved latch is pivotally secured at its rear end by a bolt B. My latch consists of two main bow portions C and D, the portion C being located on the outside and the portion D on the inside of the door, each being provided with a flange, as E and F, to lie against the surface of the door perforated to receive the pivotal bolt B. These two bows C and D are connected together at their forward ends, said connection consisting of a flange G to lie across the outside of the door, a transverse bar H to lie in a recess on the front edge of the door, said recess acting as a keeper to limit the vertical movement of the latch, a bend I at right angles to the cross-bar H to lie against the inside of the door, an angle at the junction of the parts H and I abutting against the shoulder J of the door-jamb K, and a transverse connecting portion L, extending to the outside of the bow E and braced by an inner flange M. The end of the bow D, which joins the portions L, is provided at its top and bottom with beveled projections N, which when the door is closed engage and ride over the upper edge P of the catch-piece O, secured to the door-jamb, and dropping behind it secure the door in its closed position.

A catch Q is secured to the wall of the barn in position to be behind the door when opened. The bow C rides over the inclined top of said catch when the door is thrown open and dropping behind the catch secures the door in its opened position.

The whole latch is to be preferably molded in a single piece of cast-iron; but, if preferred, it may be forged out of a single piece of wrought-iron, making it cheap, strong, and durable, with no joints to require additional labor in connecting them or to shake loose or break apart from ordinary usage.

The only preparation necessary to set the latch is to make a small recess in the front of the door and bore a hole to receive the piv-

otal bolt. The point where the greatest strain comes upon the latch is at its inner corners N, and this point is thoroughly strengthened by the addition of a brace M.

5 There are no angular projections exposed when the door is closed to catch the harness or injure the horse. The door closes solidly, the bend I striking against the shoulder J of the jamb. The door will catch when thrown
10 open and will be held until released.

While I have illustrated and described the best form now known to me for carrying out my invention, I desire it to be understood that I do not restrict myself to the exact de-
15 tails of such form, but hold that any such slight variations or changes of form as might suggest themselves to the ordinary mechanic would properly fall within the scope and limit of my invention.

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

1. A barn-door latch made of a single piece of metal comprising two bows adapted to
25 straddle the outer edge of the door, a bolt passing through rear end flanges and the door to pivotally connect the latch with the door, and a front connecting portion shaped to engage a suitable keeper on the door-jamb,
30 the two bows being suitably formed to act as

handles and the outer bow constructed to act as a latch to engage a catch on the wall of the barn to hold the door open, all substantially as described.

2. The herein-described barn-door latch 35 consisting of the outer and inner bows C and D having rear flanges E and F perforated to receive the pivotal bolt, said bows being connected at their forward ends, such connection consisting of a flange G to rest on the 40 outside of the door, a cross-piece H to enter a keeper-recess in the outer edge of the door, a right-angle portion I to engage a shoulder on the jamb, the connecting-piece L joined to one end of the bow where the bow is pro- 45 vided with inclined catch-piece N, and a suitable brace M, the whole latch being constructed of a single piece of metal and adapted to straddle or embrace the front edge of the door, the bows being on opposite sides of the 50 door and the inner one serving as inner handhold and the outer one as a handhold and as a latch to engage a catch on the outer wall of the barn to hold the door in its open position, substantially as described.

JOHN L. DUITMAN.

Witnesses:

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