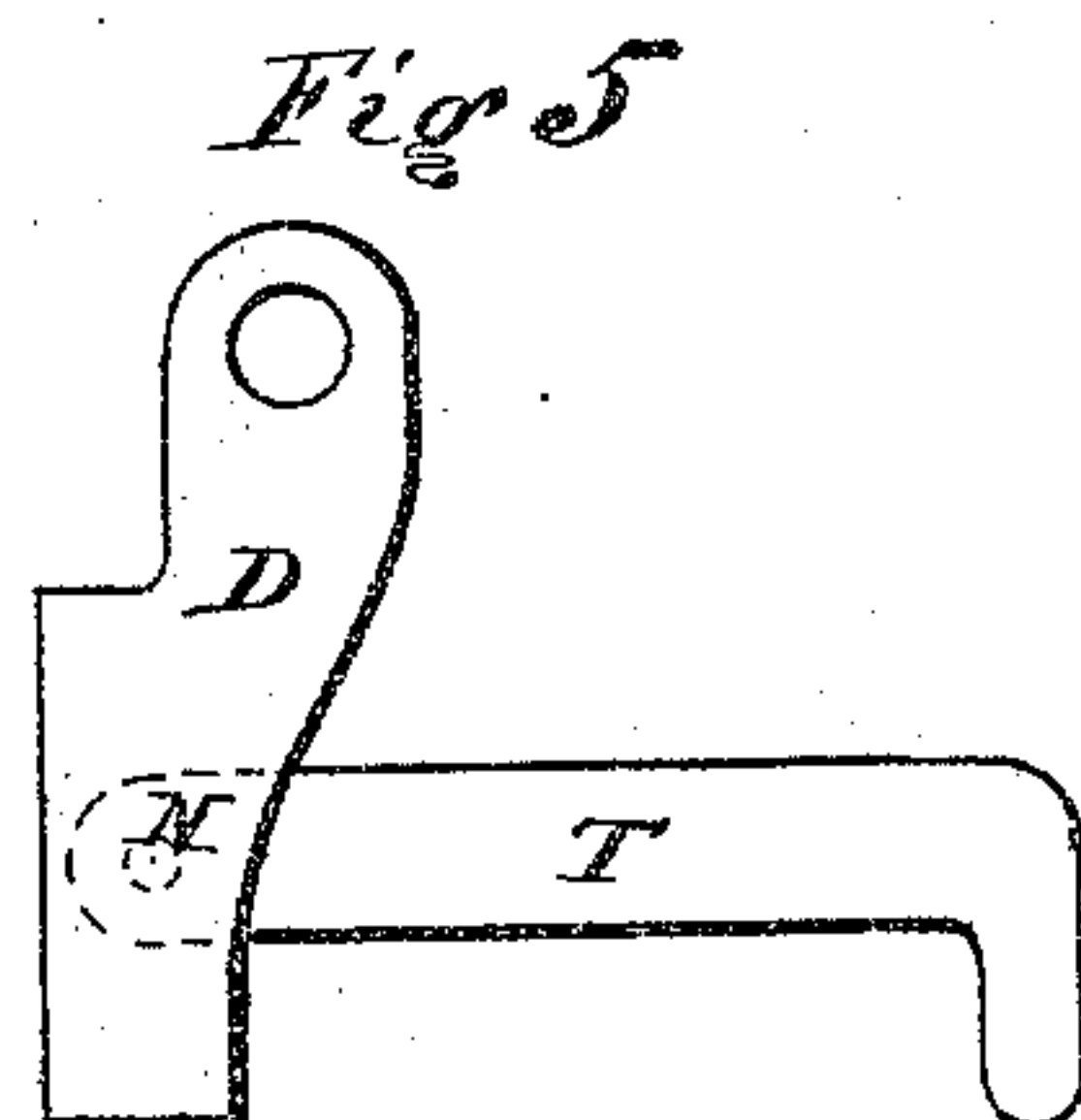
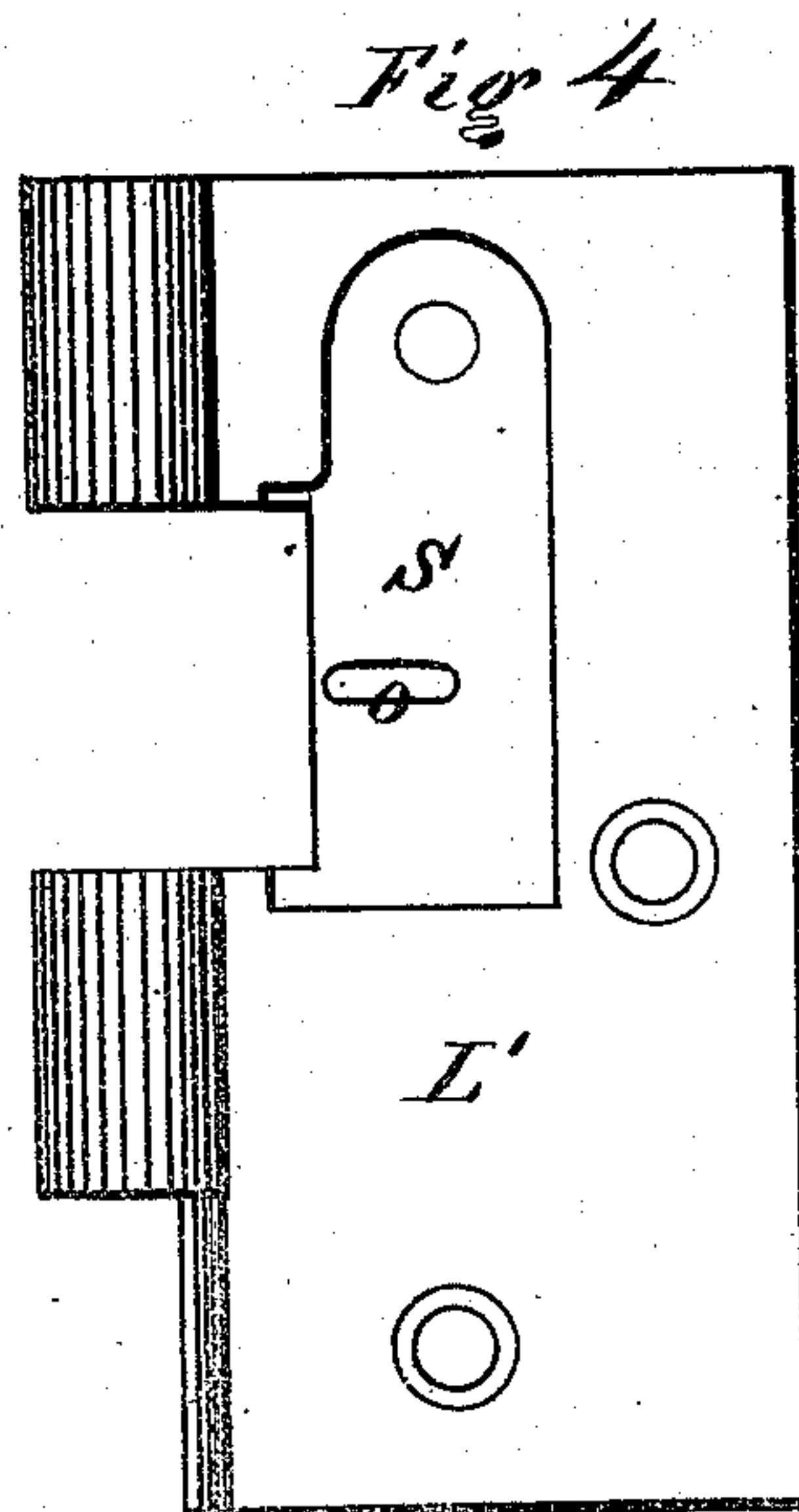
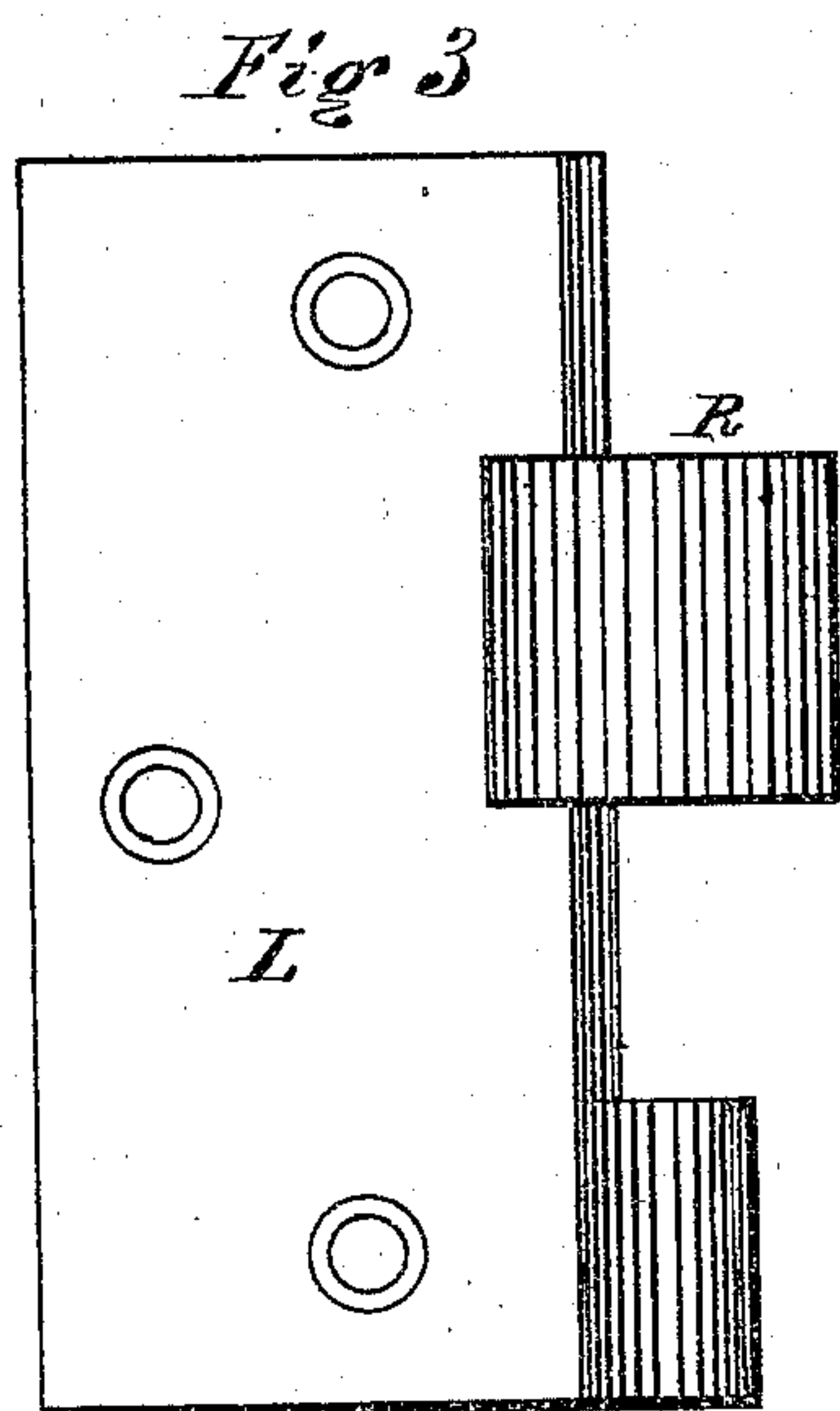
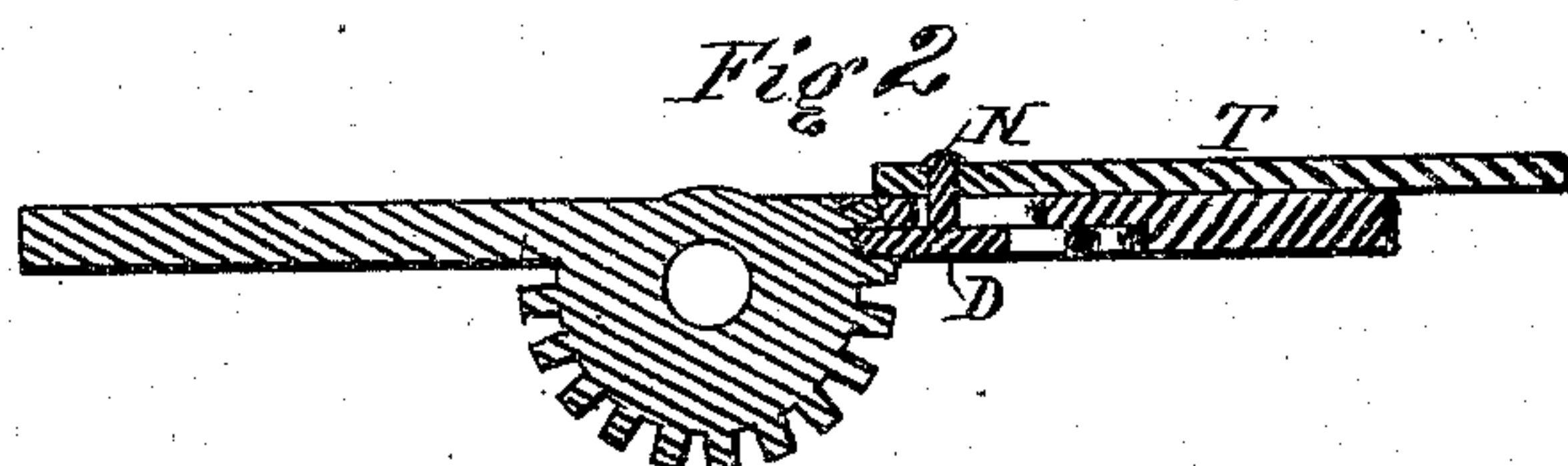
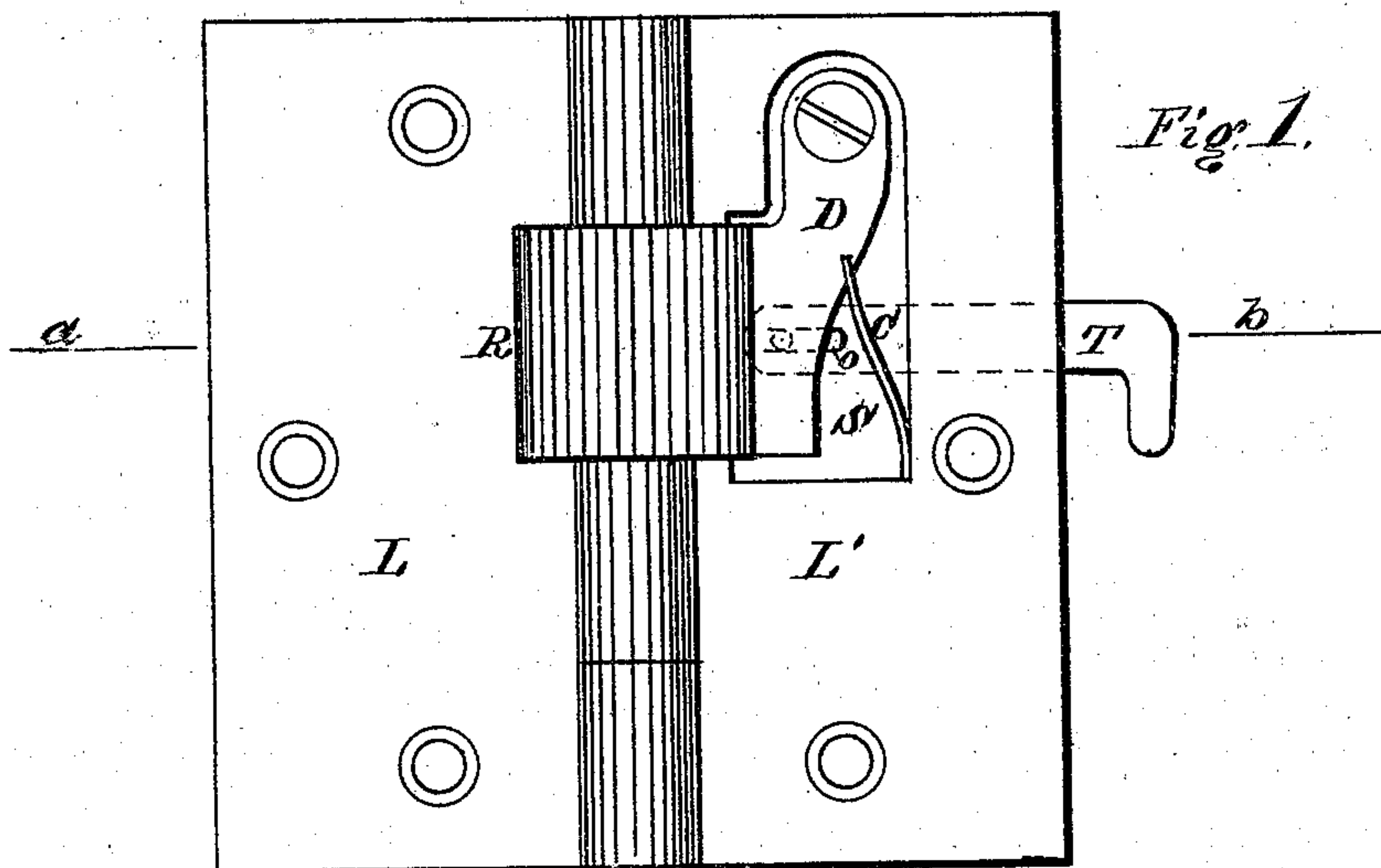


Alfred A. Oats - Improvement in Hinges.

No. 119,944.

Patented Oct. 17, 1871.



Witnesses.
Isaac R. Oakford,
Chas. J. Macquenn

Inventor.
Alfred A. Oat

UNITED STATES PATENT OFFICE.

ALFRED A. OAT, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF HIS RIGHT TO CHARLES D. MACQUEEN, OF SAME PLACE.

IMPROVEMENT IN HINGES.

Specification forming part of Letters Patent No. 119,944, dated October 17, 1871.

To all whom it may concern:

Be it known that I, ALFRED A. OAT, of the city and county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Hinges, of which the following is a specification:

My invention consists of a pawl provided with a spring and pivoted in a recess formed in one of the leaves of the hinge, the whole being inclosed by means of a suitable plate secured to the face of the leaf. The said pawl engages with the teeth of a ratchet formed on the corresponding leaf, and has attached to it a sliding bolt, by means of which it is drawn backward and out of contact with the teeth. The object of my invention is to lock a door or shutter in a firm position when opened or closed, or when lowered at any angle desired.

Reference is had to the accompanying drawing, in which—

Figure 1 is a side view of my improvement in hinges. Fig. 2 is a sectional view on line *a b*. Figs. 3, 4, and 5 are views of the various parts of the hinge separated.

The ratchet R is formed or attached on the leaf L of the hinge, in the position shown in the drawing, with a circular opening made axially through it to accommodate the pintle, which joins the leaves of the hinge. The pawl D, made in the form as shown in the drawing, is pivoted in a recess, S, formed in the leaf L', and engages with the ratchet R, a sliding bolt, T, being attached to it by means of a pin, N. The pin N is secured to the back part of the pawl, and passes through a slot, O, made in the leaf, and is riveted to the bolt T. One end of the said bolt projects a short distance beyond the outer edge of the leaf, and is turned in the form of a hook. The pawl D is

provided with a spring, C, to insure its retention in the teeth of the ratchet, and the recess S is made of such a depth as to permit the pawl to be perfectly flush with the outer surface of the hinge, and is inclosed by means of a suitable plate secured to the leaf. The ratchet R is of a segmental form, and has sufficient teeth formed on it to permit the pawl to remain in contact when the shutter is open to its full extent. This form of ratchet also allows the back part of the hinge to remain flush and even.

To open or close the shutters to which this device is applied it is only necessary for a person to take hold of the hook, formed on the rod T for this purpose, and draw it back sufficiently to release the pawl from the ratchet, and then rotate the shutter as far as desired, releasing the rod the moment the required position is obtained. When the shutter is opened to its fullest extent the pawl, engaging with the ratchet-lock, locks it in a steady position, thus dispensing with the turn-buckles now used for holding the shutters against the wall of a building. The ratchet and pawl will also retain the shutters in a rigid position when bowed at any angle.

This device is applicable to straps as well as butt-hinges for shutters or doors.

I claim as my invention—

The pawl D pivoted in an inclosed recess, S, formed in the leaf L' of the hinge, and provided with a spring, C, pin N, and sliding bolt T, in combination with the ratchet R on the leaf L, all constructed and operating substantially as and for the purpose described.

ALFRED A. OAT.

Witnesses:

ISAAC R. OAKFORD,
JOHN RICHARDSON.

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