

No. 858,866.

PATENTED JULY 2, 1907.

C. H. FOSTER.
GATE LATCH.

APPLICATION FILED MAR. 29, 1906.

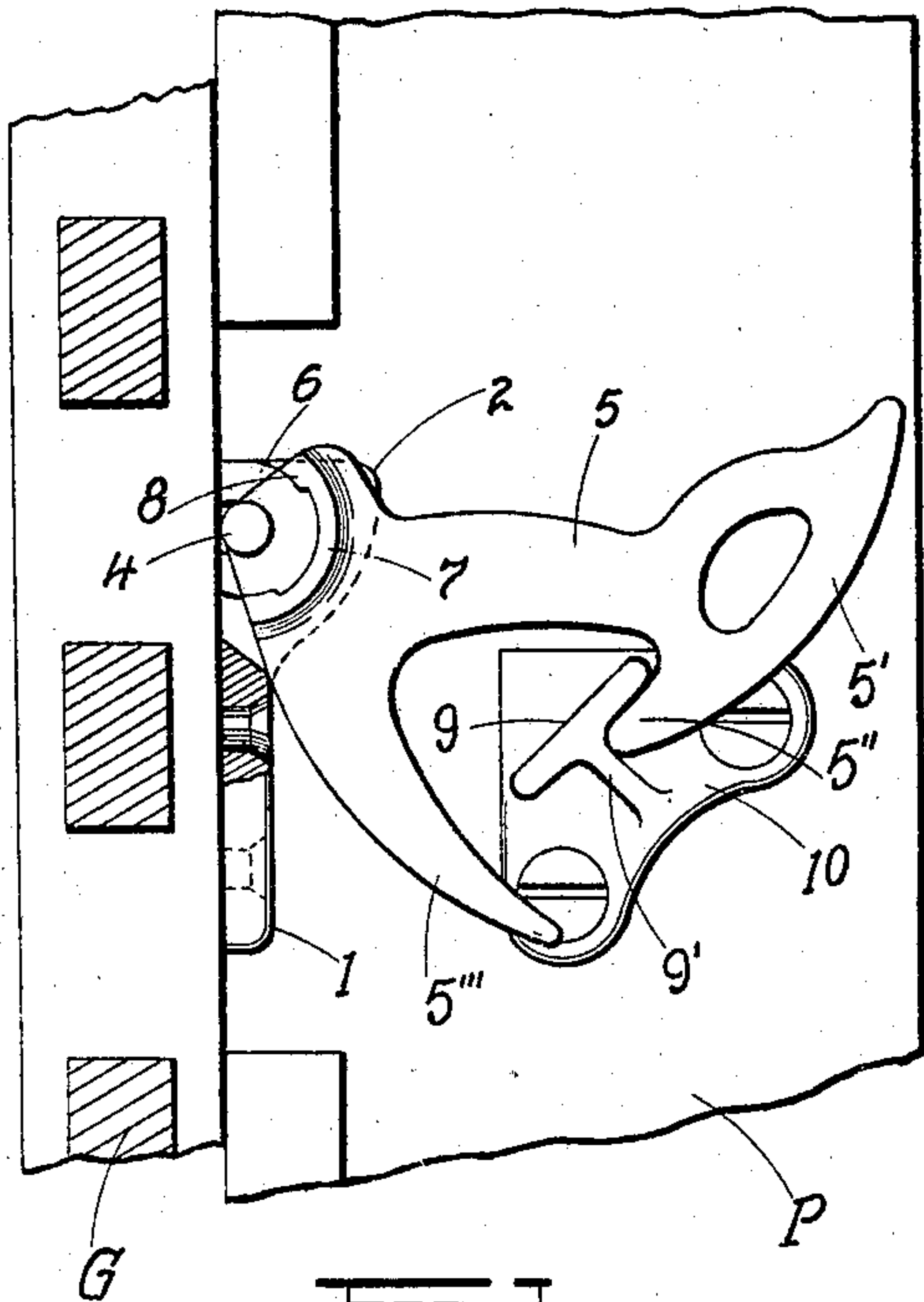


FIG. 1.

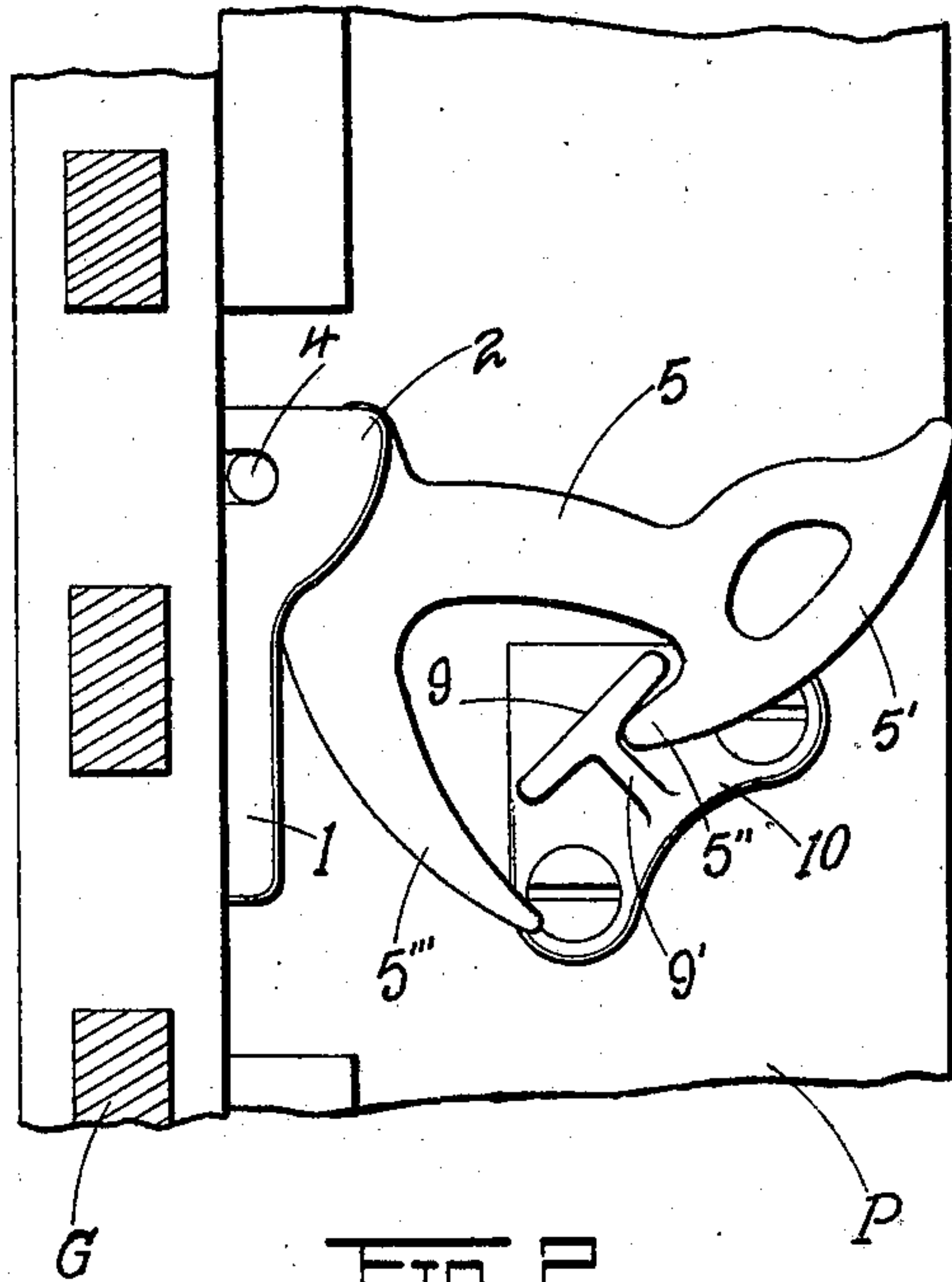


FIG. 2.

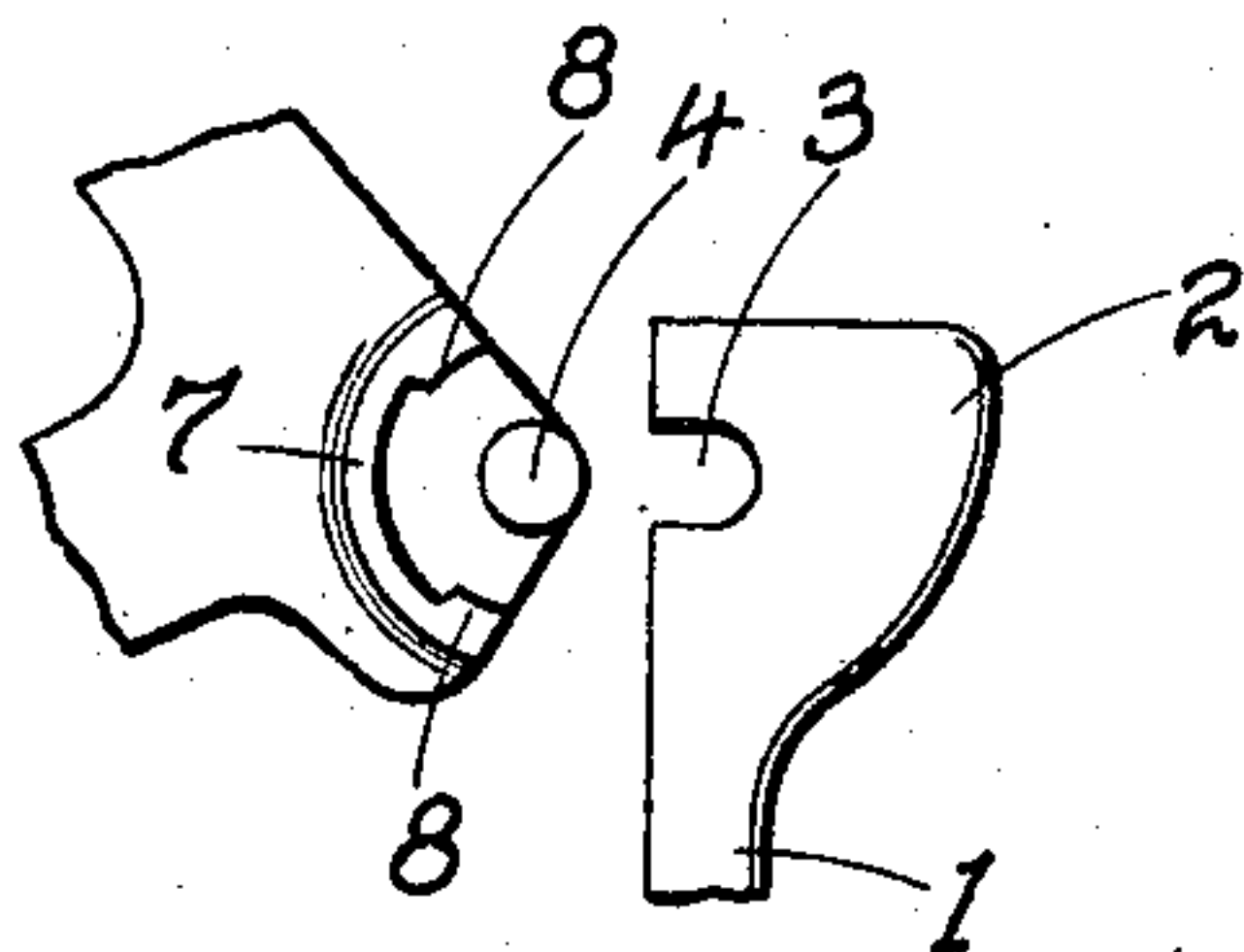


FIG. 3.

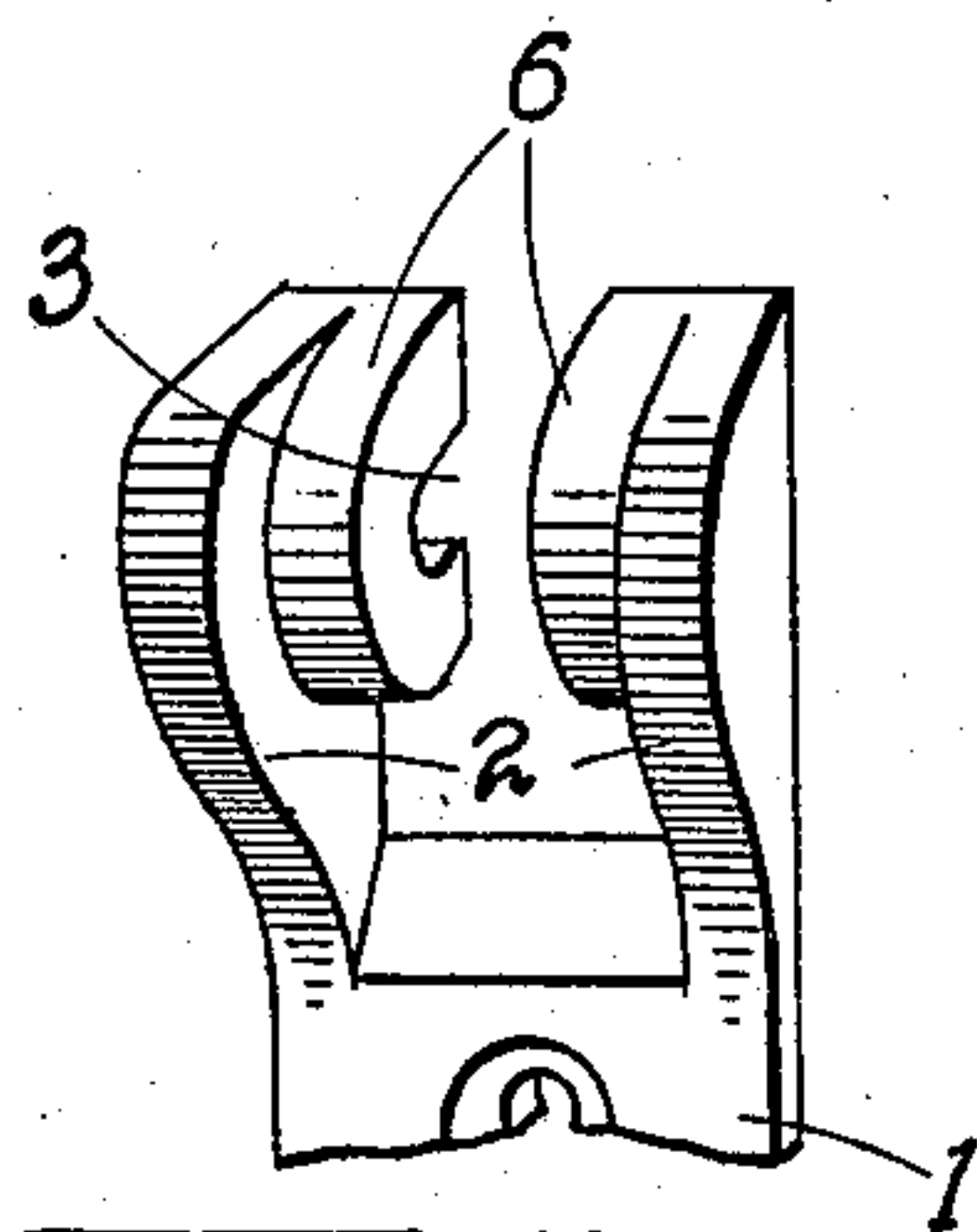


FIG. 4.

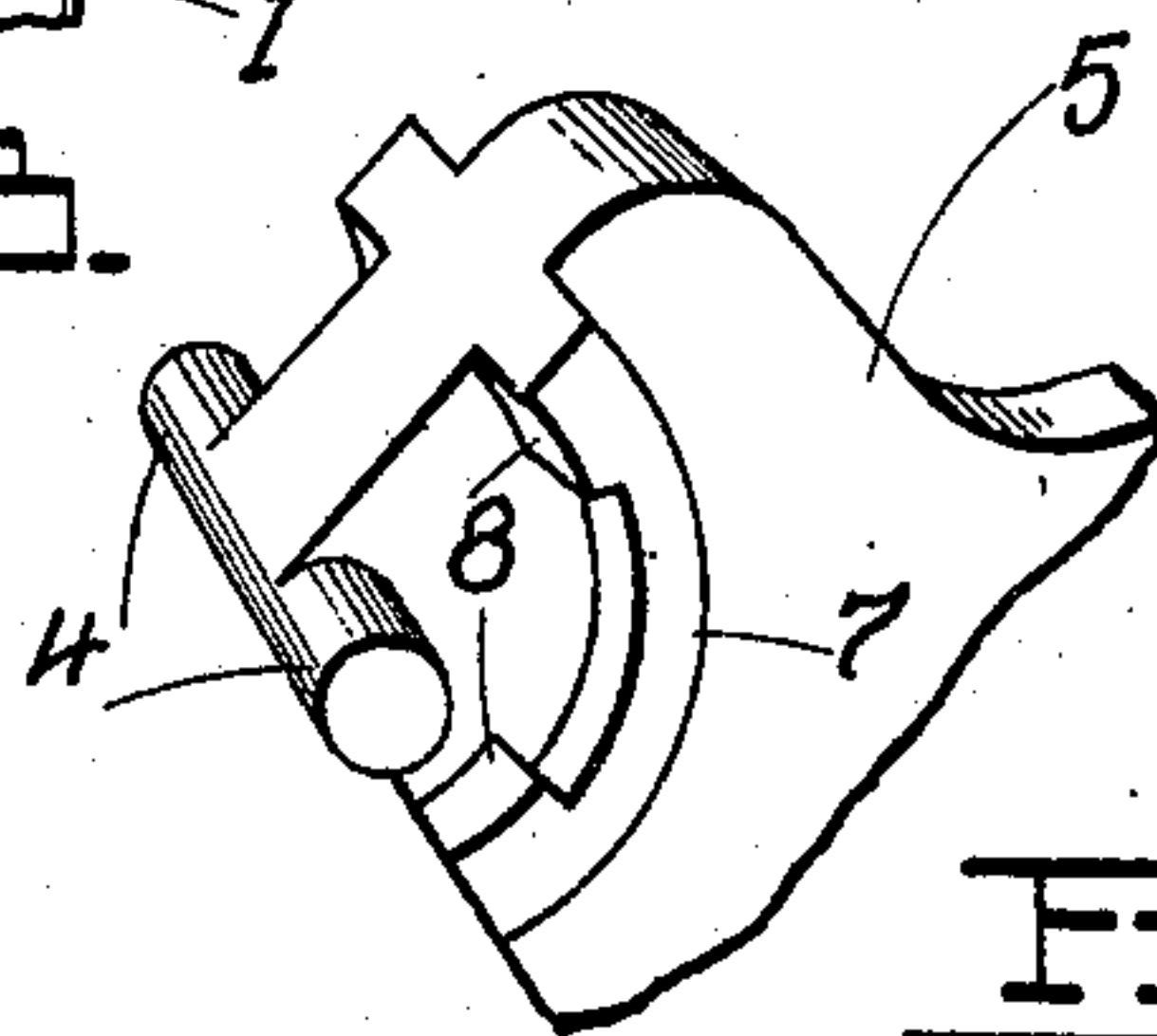


FIG. 5.

WITNESSES:

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GATE-LATCH.

No. 858,866.

Specification of Letters Patent.

Patented July 2, 1907.

Application filed March 29, 1906. Serial No. 308,804.

To all whom it may concern:

Be it known that I, CHARLES H. FOSTER, a citizen of the United States, residing at St. Louis, State of Missouri, have invented certain new and useful Improvements in Gate-Latches, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention has relation to improvements in gate-latches; and it consists in the novel construction of latch more fully set forth in the specification and pointed out in the claims.

In the drawings, Figure 1 is an elevation showing the latch in its locked normal position; Fig. 2 is a similar view showing the latch slightly dropped and gripping the under surface of the keeper upon a slight elevation of the gate by a hog or other animal; Fig. 3 is a detail elevation showing the latch in position for insertion into the socket of its supporting plate; Fig. 4 is a perspective of the upper portion of the latch-supporting plate; and Fig. 5 is a perspective of the pivotal portion of the latch.

The present invention is an improvement on the construction of latch forming the subject-matter of my pending application Serial Number 293,589, filed Dec. 28, 1905, and while contemplating the several objects of said pending application, the present device is materially simplified in minor details the advantages of which will be more fully apparent from a detailed description of the invention which is as follows:

Referring to the drawings, 1 represents a plate provided at one end with lateral wings 2, 2, formed integrally therewith, the plate and wings having a socket 3 formed therein for the reception of the lateral studs or trunnions 4 of the gravity latch 5. Disposed about the socket 3 on the inner adjacent faces of the wings are circular shoulders 6, and formed on the faces of the latch around the trunnions 4 are curved ribs 7 so formed as to terminate in offsets or legs 8, said legs serving to ride over the curved shoulders 6 in the oscillations of the latch. The latch is mounted in position on the plate 1 by inserting the trunnions or pivotal studs 4 into the socket 3, whereupon by swinging the latch toward the plate the legs 8 will ride over the shoulders 6, the latter serving as a bearing or riding surface and at the same time preventing any rearward displacement of the latch, so that there is no possibility of the rear end thereof abrading or working into the wood of the gate G to which the plate 1 is screwed. The keeper consists of a flat arm 9 projecting from a base 10 screwed to the fence post P, said arm presenting an inclined

face to the (preferably) curved or riding free edge of the latch-head 5', said rounded edge riding over the inclined face of the keeper as the gate is closing, when the latch eventually drops over the keeper causing the latter to pass inside the hook 5'' of the latch. The under surface of the keeper is formed with a rib 9' disposed substantially at right angles to the face of the keeper, the hook 5'' when locked resting with the base of the hook against the under surface of the keeper, the nose of the hook engaging the rib 9', (Fig. 1). The present latch is likewise provided with a lower arm or extension 5''' for the same purpose as specified in my pending application aforesaid.

The inclination of the arm 9 is such that in the event an attempt is made by any domestic animal to lift the gate (for purpose of disengaging the latch from its keeper in order that the gate may swing open) the raising of the gate will depress the free end of the latch sufficiently to cause the hook (or rather the terminal nose thereof) to grip or bite the under face of the keeper, and thus preventing the gate from being raised sufficiently to disengage the latch (Fig. 2). The latch thus becomes thoroughly hog-proof as in my pending application aforesaid, but without the necessity of a special post or arm coöperating with the keeper. In other respects the present device does not differ materially from that shown in my pending application.

Having described my invention, what I claim is:

1. In combination with a plate having terminal wings provided with a socket and circular ledges disposed on the inner faces of the wings about said socket, a swinging latch mounted between the wings and having bosses or trunnions engaging the socket, and rib formations on the opposite faces thereof adjacent the trunnions for riding over the ledges aforesaid, substantially as set forth.

2. In combination with a plate having terminal wings provided with a socket and circular ledges disposed on the inner faces of the wings about said socket, a swinging latch mounted between the wings and having bosses or trunnions engaging the socket, and rib formations having terminal offsets located adjacent the trunnions for engaging the ledges during the oscillations of the latch, substantially as set forth.

3. In combination with a plate having a socket, a swinging latch having trunnions for engaging said socket, and suitable coöperating formations on the plate and latch serving as bearings for the latch and preventing rearward displacement of the latch, substantially as set forth.

In testimony whereof I affix my signature, in presence of two witnesses.

CHARLES H. FOSTER.

Witnesses:

EMIL STAREK,
MARY D. WHITCOMB.