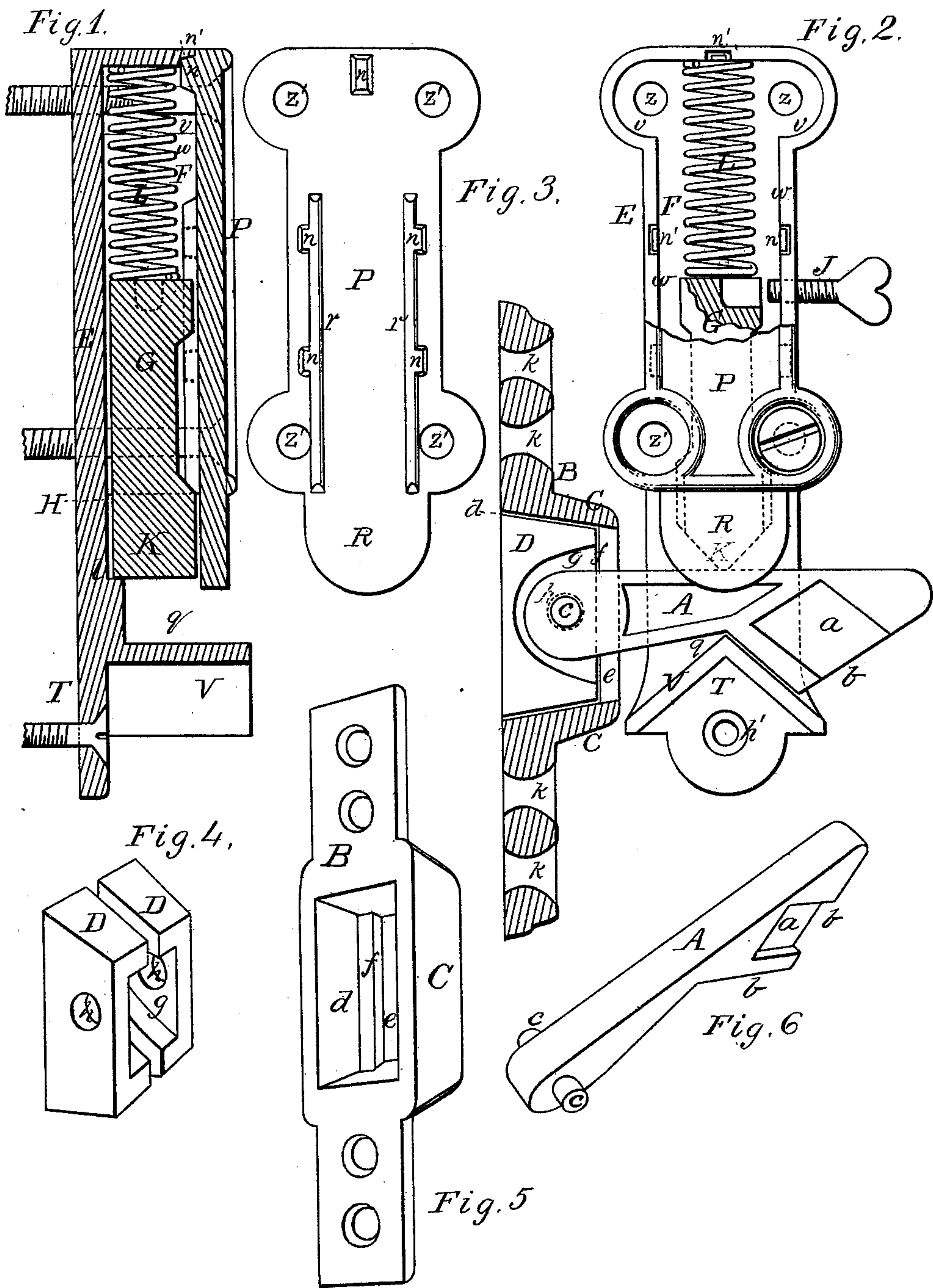


J. NEILL.
GATE LATCH.

No. 190,976.

Patented May 22, 1877.



WITNESSES
Villette Anderson
F. J. Claxi

INVENTOR
John Neill,
by *E. W. Anderson,*
ATTORNEY

UNITED STATES PATENT OFFICE.

JOHN NEILL, OF ST. JOSEPH, MISSOURI.

IMPROVEMENT IN GATE-LATCHES.

Specification forming part of Letters Patent No. 190,976, dated May 22, 1877; application filed October 21, 1876.

To all whom it may concern:

Be it known, that I, JOHN NEILL, of St. Joseph, in the county of Buchanan and State of Missouri, have invented a new and valuable Improvement in Gate-Latches; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a vertical section of the catch-plate. Fig. 2 is a face view of the same with face-plate partially removed, and sectional view of the latch-plate. Fig. 3 is an inside view of the face-plate. Figs. 4, 5, and 6 are details.

This invention has relation to means for fastening gates; and it consists in the combination, with a recessed catch-plate having an angular foot-flange and a ribbed face-plate, of a slide and spring. It also consists in certain other details of construction, whereby very desirable results are obtained, as hereinafter shown and described.

In the accompanying drawings, the letter A designates the latch or tongue. Its forward end *a* is made broad, and provided with an angular border, *b*. At its rear end the latch is provided with journals *c*. B indicates the attachment-plate, whereby the latch is secured to the gate. This plate is provided with a central rectangular enlargement, C, which is recessed from the rear, as shown at *d*. The front wall of this enlargement is slotted vertically at *e* for the passage of the latch, ledges or shoulders *f* being left on each side of the slot. D D represent journal-seat blocks, each of which is laterally recessed toward the front on the inside, as shown at *g*, and provided with a journal-seat aperture, *h*. When these blocks are brought together on each side of the latch, the apertures *h* receive the journals of the latch and form seats therefor. These blocks are designed to be introduced with the tongue or latch into the recess *d*, and to fill the latter neatly. The plate B is provided with screw-holes *k*, for the passage of the screws, whereby it is attached to the gate. The blocks D D are held in the recess *d*, between the material of the gate and the ledges

f of the attachment-plate. E represents the catch-plate, which is designed to be secured to the gate-post. Its upper end is longitudinally recessed, as shown at F, for the reception of the pressure-slide G, the marginal wall *w* of the recess being curved outward at the corners thereof, as shown at *u*, to provide inside spaces for the shanks of the fastening-screws, which are designed to pass through the holes *z*. The pressure-slide G extends downward through the opening H at the lower end of the recess F, and terminates in a transversely-angular end, K, which, in its lowest position, abuts against the shoulder *l* of the plate. Above the slide is arranged the spring L, which serves to press the former downward with a certain amount of elastic force. Over the recess F is fitted a face-plate, P, which is provided at its corners with screw-holes *z'*, opposite the holes *z* of said recess, so that the same screws which serve to fasten the attachment to the gate-post will hold the face-plate to its position. On the inside face of this plate are arranged ribs *r*, which extend longitudinally, and form a slideway for the pressure-slide G. Side and end lugs *n*, on the inside face of said plate, serve to engage with marginal notches *n'* of the wall of the recess F, and prevent all lateral and longitudinal movement of the face-plate when duly fitted in position. At its lower end the face-plate is extended, as shown at R, to form an exterior guard for the latch and slide in their relative movements.

T represents the lower end or foot of the attachment-plate E, which is usually provided with a screw-hole, *h'*. Above this is arranged, opposite the transverse angular end of the pressure-slide G, a transverse A-shaped flange, V, which extends outward from the plate underneath, and at a short distance from the angular end of said slide. Between the latter and the A-shaped flange a transverse passage or throat, *q*, is formed, having on each side a wide opening, which gradually decreases toward the central line, as shown. When the gate is closed the tongue or latch A is designed to pass between the angular slide and the flange V until the enlarged portion or head *a* is entirely through and engages with the bevel of said flange, which lies on the oppo-

site side from the gate. In this position the spring presses the slide down upon the back of the latch, and holds the latter to its engagement with the catch-flange V.

In order to lock the gate, a set-screw, J, is provided in the wall of the recess F, to engage with the slide G when in its lowest position.

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

1. The combination, with the recessed catch-plate E, having the A-shaped foot-flange and the ribbed face-plate P, of the slide G and spring L, substantially as specified.

2. The latch-plate B, having the central recess *d*, in combination with the latch A and the journal-seat blocks, adapted to be inserted in said recess, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOHN NEILL.

Witnesses :

CHAS. ETSCHMANN,
GEORGE FANNING.