

No. 824,195.

PATENTED JUNE 26, 1906.

N. A. McPHAIL.
GATE LATCH.

APPLICATION FILED OCT. 18, 1904.

Fig. 1.

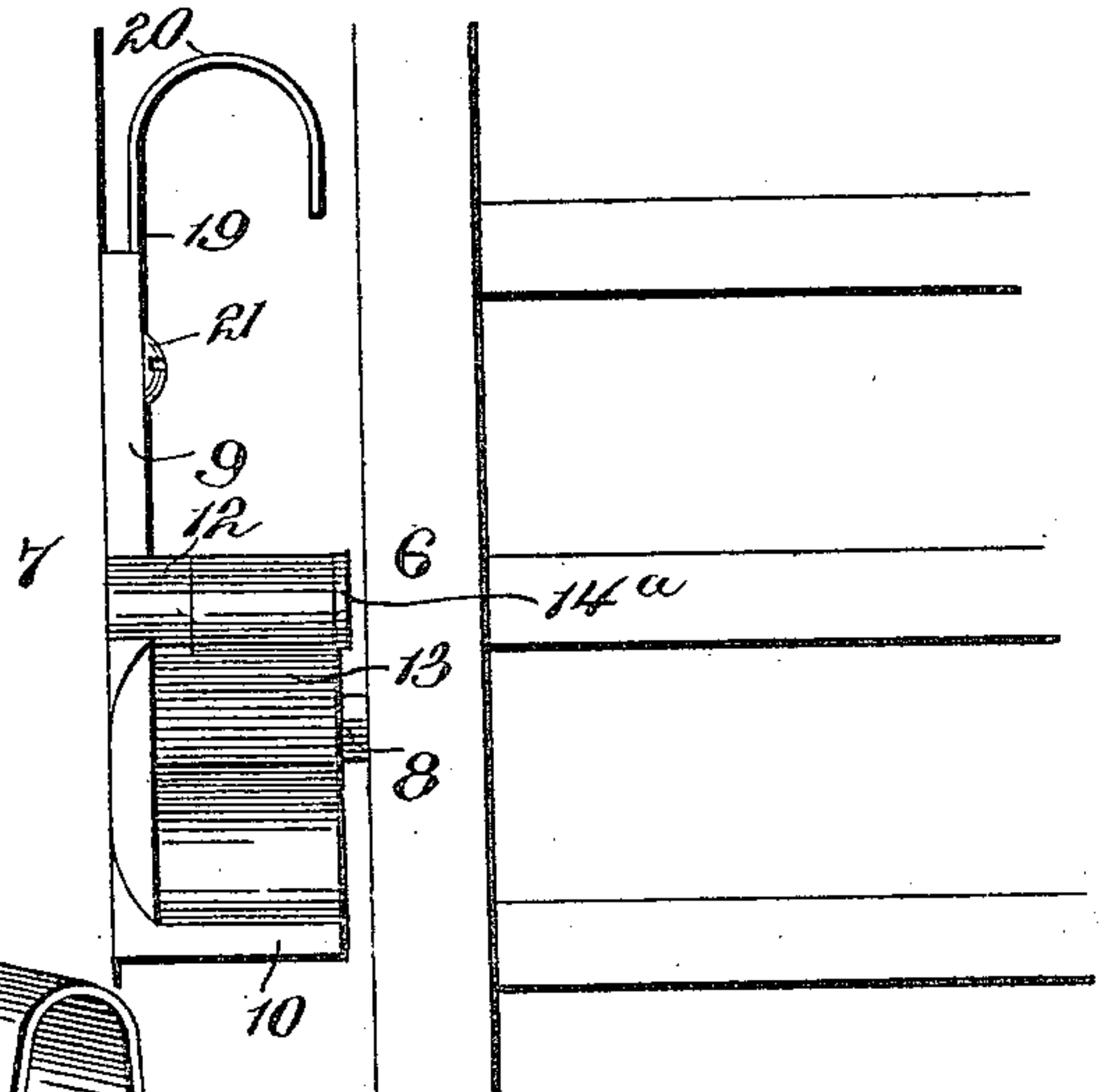


Fig. 2.

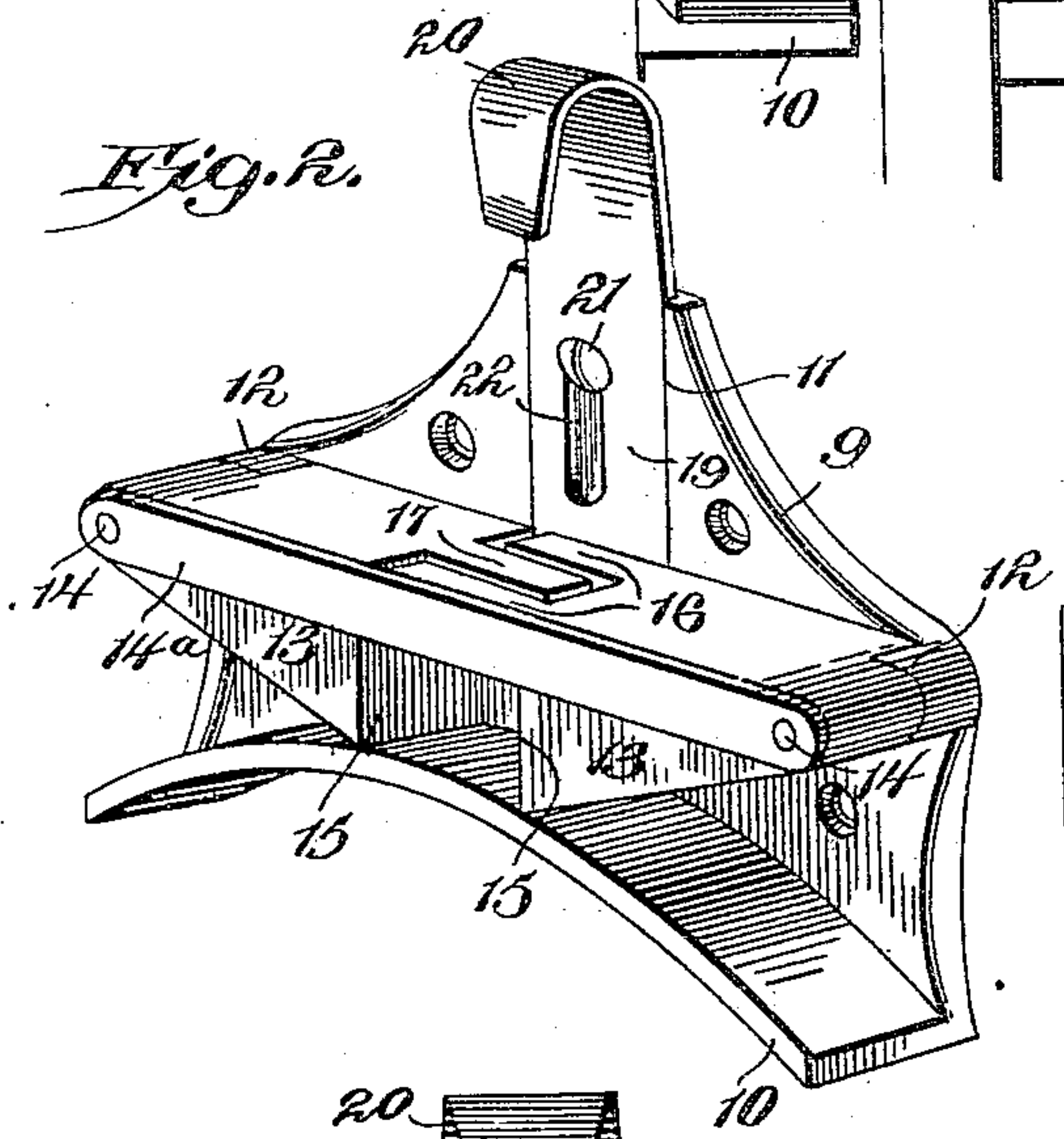


Fig. 4.

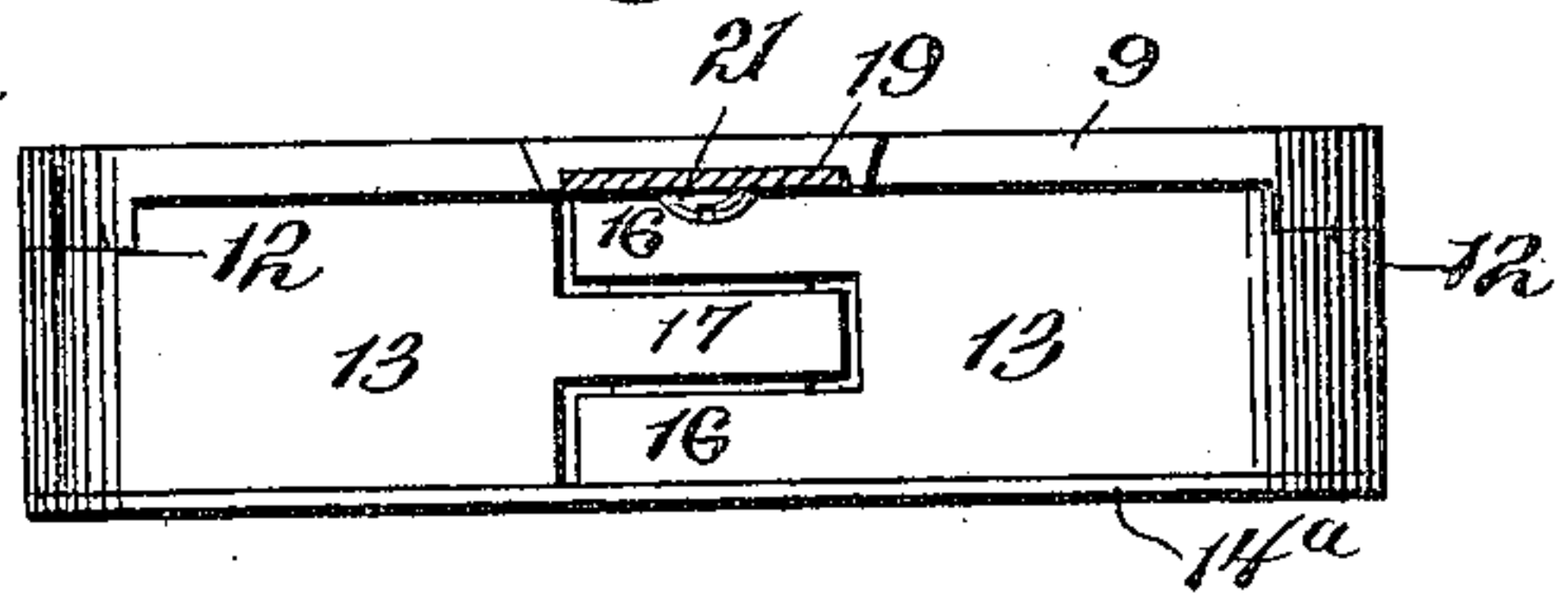


Fig. 3.

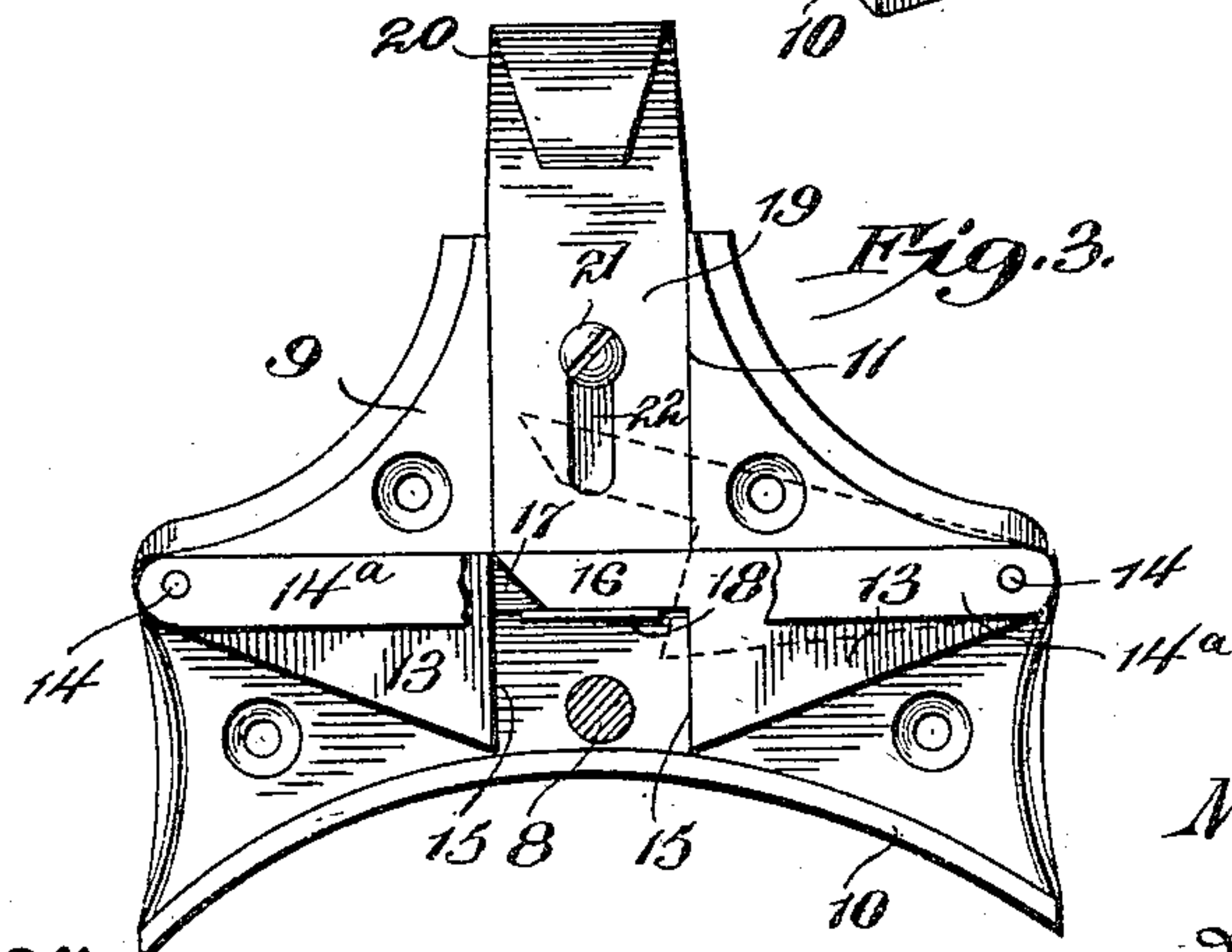
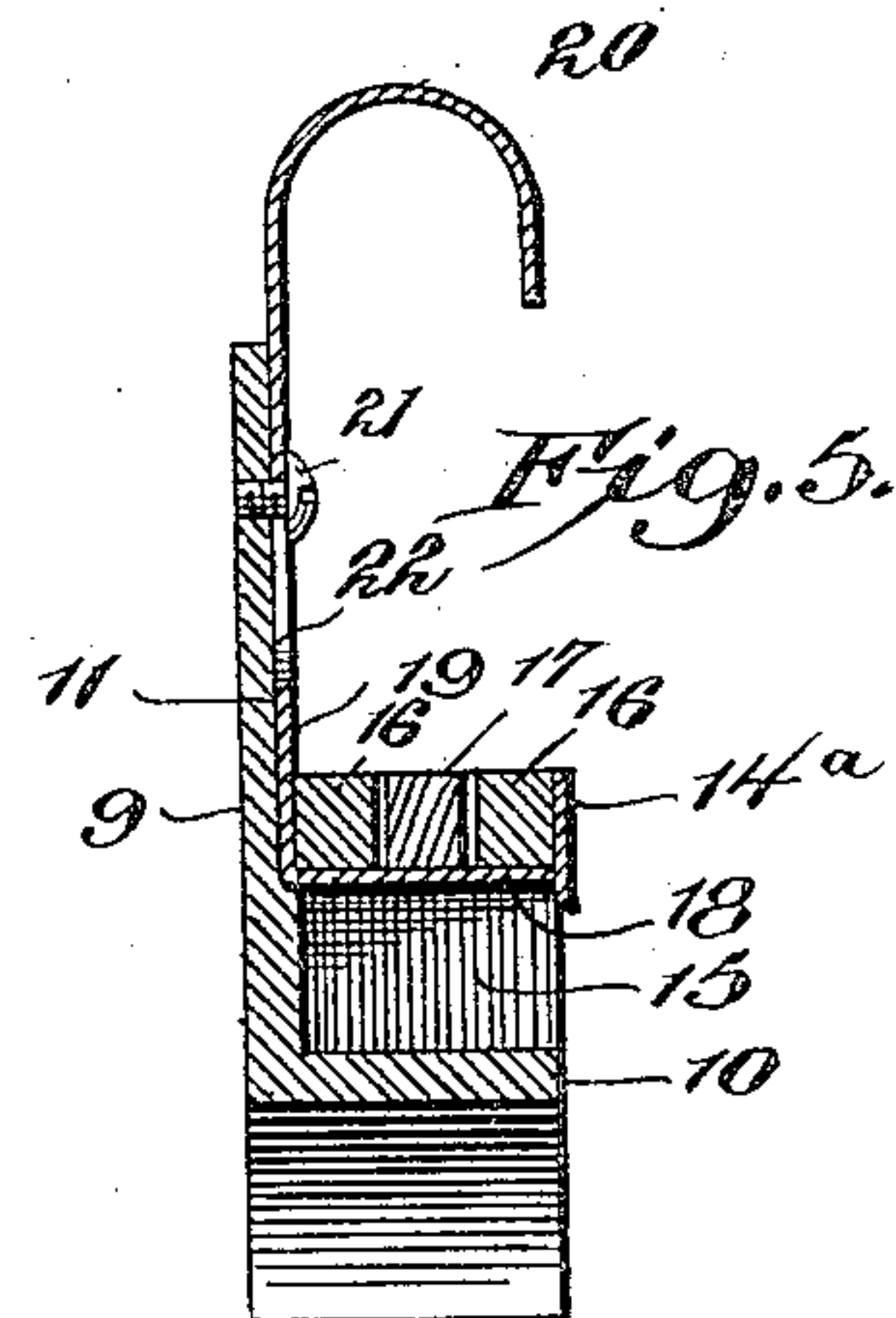


Fig. 5.



Witnesses
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UNITED STATES PATENT OFFICE.

NEAL A. McPHAIL, OF CASS CITY, MICHIGAN, ASSIGNOR TO ORRIN K. JANES, OF CASS CITY, MICHIGAN.

GATE-LATCH.

No. 824,195.

Specification of Letters Patent.

Patented June 26, 1906.

Application filed October 18, 1904. Serial No. 228,986.

To all whom it may concern:

Be it known that I, NEAL A. McPHAIL, a citizen of the United States, residing at Cass City, in the county of Tuscola and State of Michigan, have invented a new and useful Gate-Latch, of which the following is a specification.

This invention relates to latches for swinging gates; and the object is to provide a novel and simple article of manufacture that will permit the swinging of a gate in either direction, will lock the same when swung to closed position from either side of the gateway, is easily operable, strong, and durable, and may be manufactured at small cost.

The preferred embodiment of the invention is illustrated in the accompanying drawings, wherein—

Figure 1 is a side elevation of portions of a gate and gate-post, showing the improved latch. Fig. 2 is a perspective view of the latch. Fig. 3 is a front elevation of the same. Fig. 4 is a top plan view, the finger-hook being broken away. Fig. 5 is a vertical transverse sectional view.

Similar reference-numerals designate corresponding parts in all the figures of the drawings.

In the structure illustrated the portion of the gate shown is designated by the reference-numeral 6, and the gate-post by 7. The former carries a rigid pin 8, which projects toward the gate-post and is adapted to be engaged and held by the improved latch. This latch consists of a body-plate 9, secured to the inner side of the post 7 transversely of the gate and having a lower curved guide-flange 10 and an upwardly-extending slot or recess 11, disposed above the central portion of the flange. Outwardly-extending bosses or lugs 12 are located at the opposite side margins of the body-plate above the ends of the flange.

Tapering dogs 13 have their outer and smaller ends connected to the body by means of pivot-pins 14, which pins are embedded in the bosses 12, the outer ends of said dogs being recessed to receive the bosses and the projecting ends of the pins being connected by a brace-plate 14^a. The thicker ends of the dogs are spaced apart and their end walls are disposed in substantially vertical planes, forming shoulders 15, that rest upon the flange 10. The inner end of one of the dogs is provided with spaced longitudinally-dis-

posed fingers 16, and the other dog is provided at its inner end with a central longitudinally-disposed finger 17, that lies between the fingers 16. Beneath these overlapping fingers is arranged the outwardly-projecting lower end 18 of an actuating device comprising a plate 19, vertically slidable in the slot or recess 11 and having its upper end overhanging, as shown at 20, and forming a finger-hook. The actuating device is held in place in its guideway or slot and the movement thereof is limited by a headed retaining device 21, secured to the body and located in a slot 22, formed in the plate 19.

It will be apparent that when the gate is swung from open to closed position in either direction the pin 8, carried thereby, will enter the throat formed between the flange and the adjacent dog and lifting the latter will enter the space between the shoulders 15 and below the fingers 16 and 17. The gate will thus be secured in closed position, and all strains against the dog, due to the rapid closing of the gate or otherwise, will be against the lugs or bosses 12, thus relieving the pivot-pins 14 of the same. Said pivot-pins are at the same time strengthened by their comparatively long bearings in said bosses. To release the gate, it is only necessary to draw the actuating device upwardly by means of the finger-hook 20, whereupon the end 18, engaging beneath the fingers 16 and 17, will raise the dogs simultaneously to permit the escape of the pin 8. Thus it will be apparent that the various objects set forth in the preliminary portion of the specification are obtained, and, furthermore, the device can be readily applied by an unskilled person.

From the foregoing it is thought that the construction, operation, and many advantages of the herein-described invention will be apparent to those skilled in the art without further description, and it will be understood that various changes in the size, shape, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A gate-latch comprising a body having a guideway, locking-dogs pivoted at their outer ends, said dogs having spaced depend-

ing shoulders that rest upon the guideway and being furthermore provided with longitudinally-disposed overlapping fingers at their inner ends that permit the movement of
5 either dog independently of the other, and an actuating device movably mounted on the body and including a projecting portion disposed transversely of the guideway and fingers and coacting with the latter for raising
10 both dogs.

2. A gate-latch comprising a body having an outstanding guide-flange and an upright recess in its outer side, dogs pivoted at their outer ends to the outer sides of the body
15 above the flange, said dogs having depending

shoulders spaced apart and resting upon the flange, being furthermore provided with overlapping fingers at their inner ends, and an actuating device comprising a plate slidably mounted in the recess, said plate having an
20 outstanding projection at its lower end that is located beneath the fingers, and an overhanging finger-hook at its upper end.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in
25 the presence of two witnesses.

NEAL A. McPHAIL.

Witnesses:

ORRIN K. JANES,
JOHN C. LAING.