

(No Model.)

W. H. SWOGGER.
GATE.

No. 447,122.

Patented Feb. 24, 1891.

Fig. I.

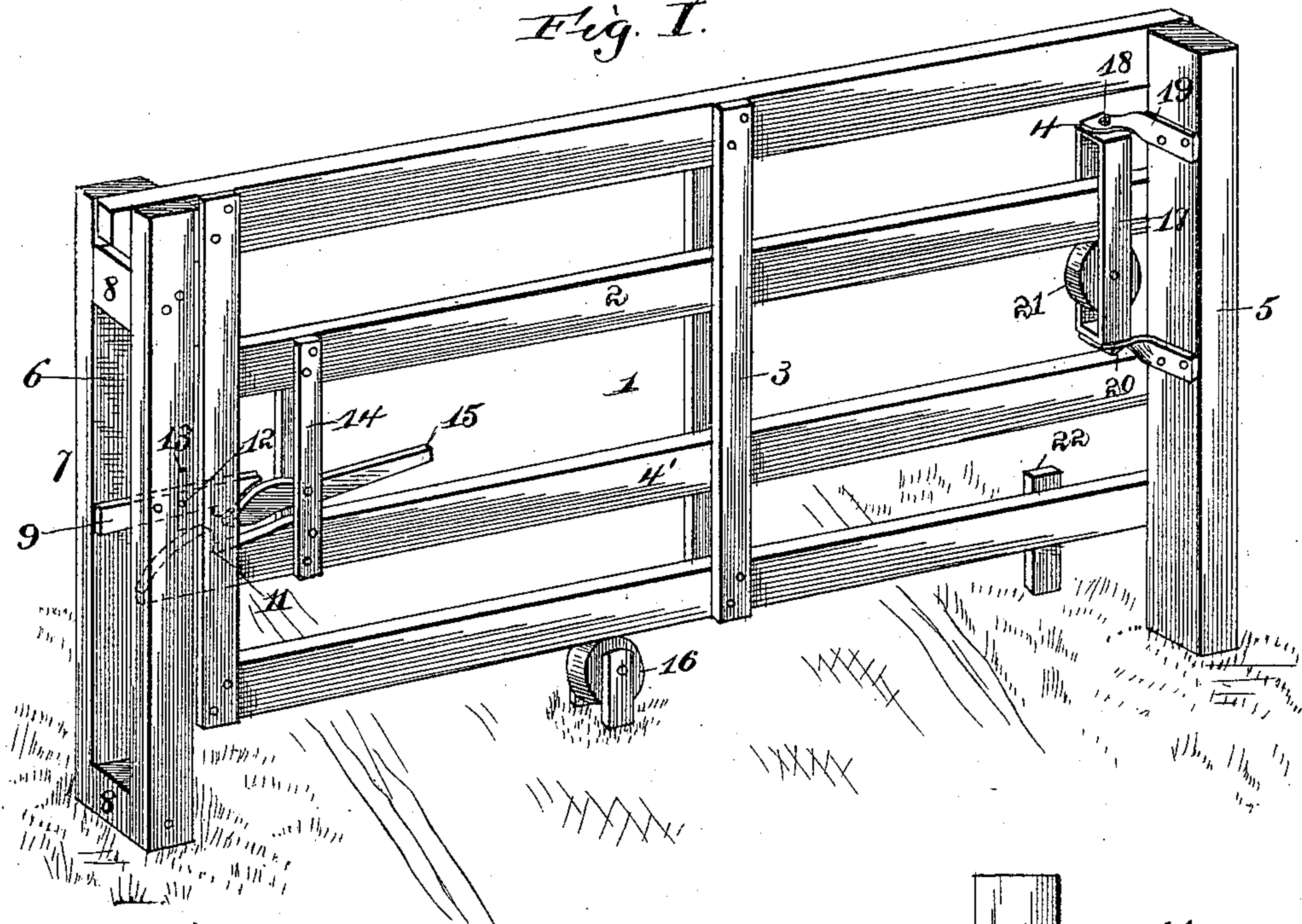


Fig. II.

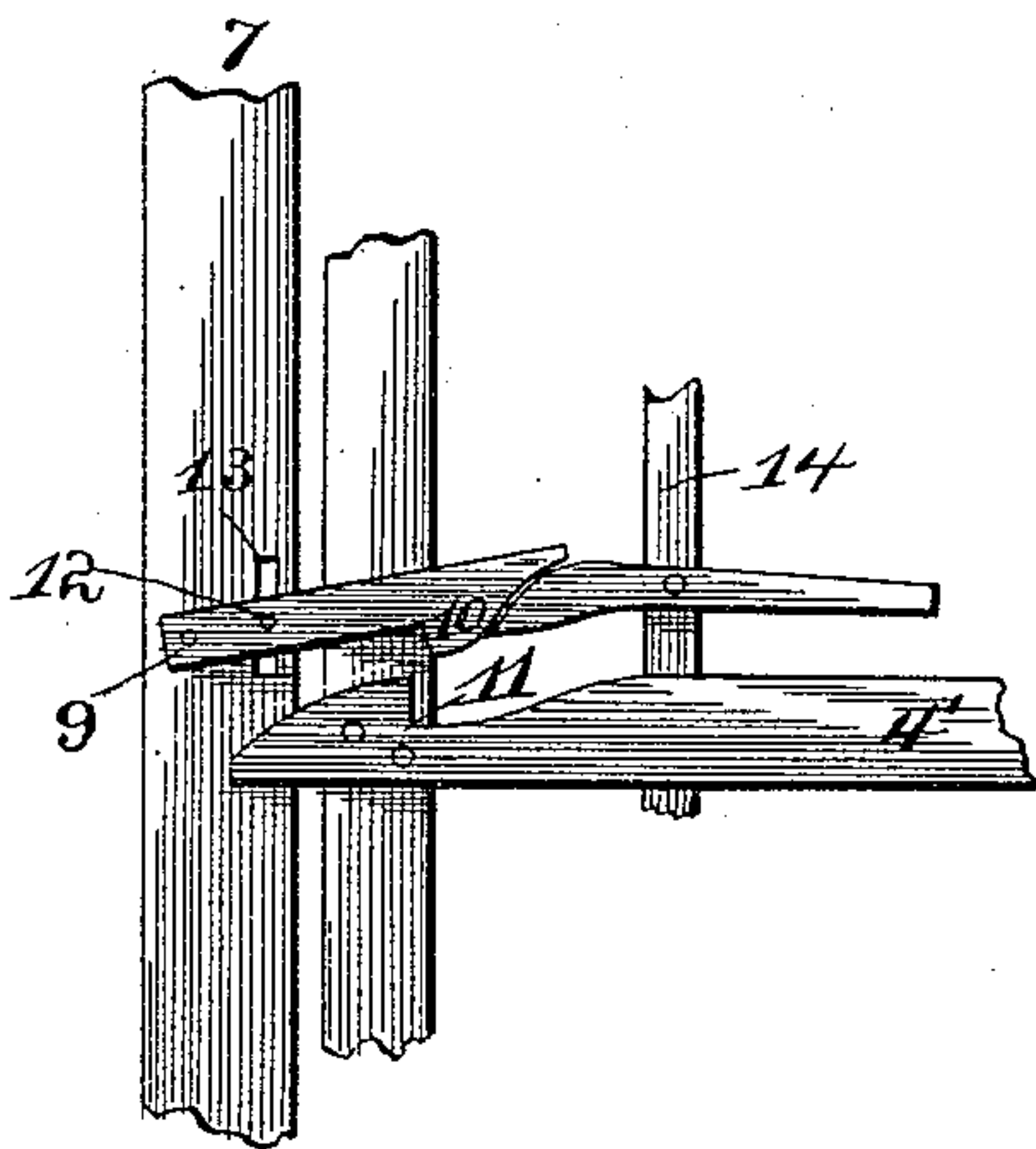
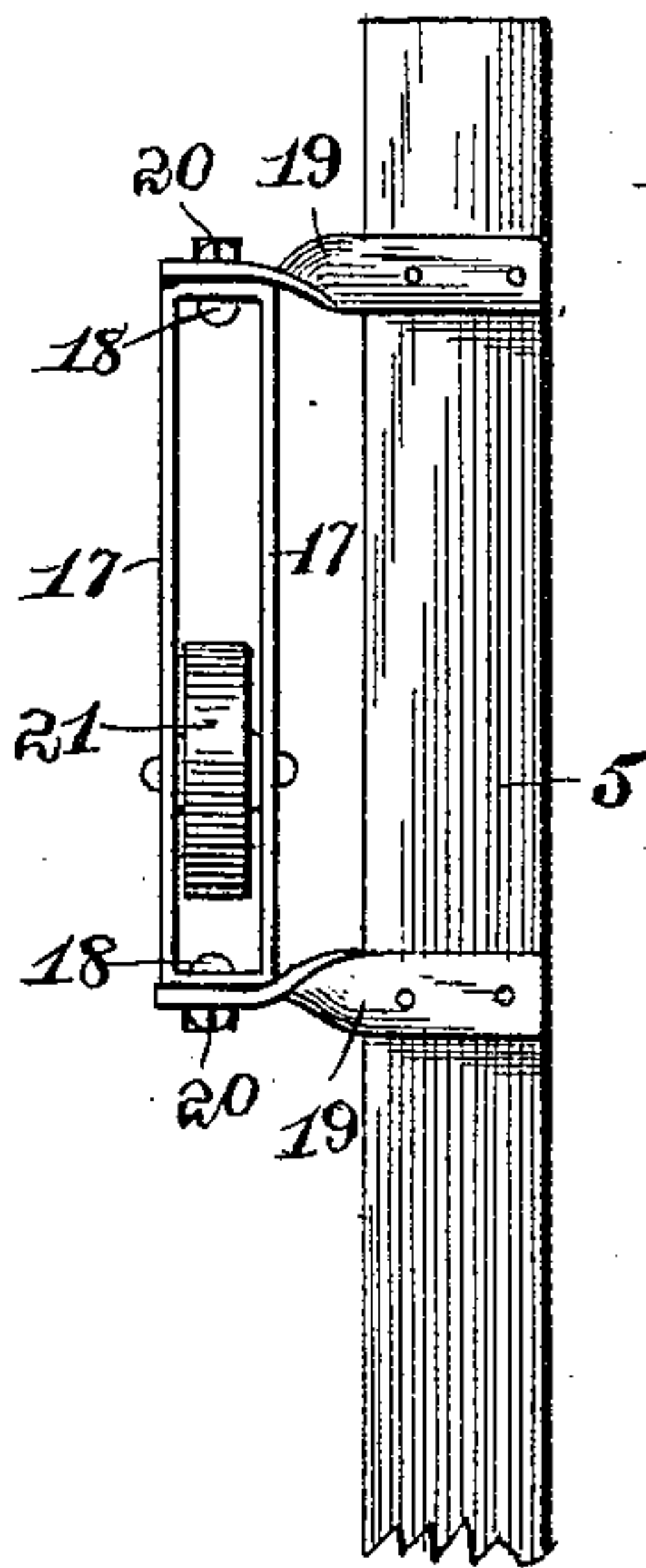


Fig. III.



Witnesses:

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GATE.

SPECIFICATION forming part of Letters Patent No. 447,122, dated February 24, 1891.

Application filed October 28, 1890. Serial No. 369,607. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. SWOGGER, a citizen of the United States, residing at New Wilmington, in the county of Lawrence and State of Pennsylvania, have invented certain new and useful Improvements in Gates; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in gates; and it has for its object to provide an automatic locking device for securely locking the gate when closed; and a further object of my invention is to provide a gate which can be used equally as well in winter as in other seasons of the year; and a still further object is to provide a gate which can be so adjusted as to permit of the passage of small animals, as sheep, &c., and at the same time to exclude larger animals.

With these and other ends in view my invention consists in the peculiar construction and arrangement of parts, as will be herein- after fully described and claimed.

In order that others may understand my invention, I have illustrated the same in the accompanying drawings, in which—

Figure I is a perspective view of my improvements. Fig. II is a detail view of the locking devices, and Fig. III is a detail view of the swiveled hanger.

Like numerals of reference denote corresponding parts in all the figures of the drawings, referring to which—

1 designates a gate constructed in accordance with my invention and consisting of the longitudinal bars 2, secured together at suitable intervals by the stiles 3. At one end the gate 1 is connected by means of a swiveled hanger 4, the construction of which will be hereinafter described, to the upright hinge-post 5. The upper and lower longitudinal bars of the gate 1 are extended somewhat beyond the end of the gate at one end, and said extended portions when the gate is closed fit within a vertical slot 6, formed in a latch-post 7. This post 7 may either be made solid, with the exception of a vertical recess or slot in one of its faces, or it may, as shown in the drawings, be composed of two upright parallel standards situated a slight distance apart

and connected at points intermediate of their length by blocks 8, thus providing a slot which extends through from one face of the post to the opposite side thereof. Within the recess or slot 6 in the post 7 is pivoted a vertically-movable latch 9. This latch is provided near its inner end with a depending projection 10, which is adapted to fit within a notch 11 in the upper edge of an extended bar 4' of the gate.

12 designates a guide-pin, which passes through the latch 9 in rear of the pivotal connection thereof with the latch-post, and the outer ends of which fit in short vertical slots 13, formed in the standards of the post 7, in order that the inner end of the latch may not when the gate is open fall below the plane of the bar 4' of the gate 1, and also to guide the latch in its vertical movements. The inner end of the latch is curved, as shown in Fig. I, and the end of the extended bar 4' is curved or rounded, so that as the gate is closed the rounded end of the bar 4' will raise the latch slightly to allow the bar to pass thereunder until the notch 11 is reached, when the latch will fall by gravity and hold the gate from backward movement until the projection 10 is raised clear of the notch 11.

Near the forward end of the gate and on either side thereof are placed two parallel brace-strips 14, and between these strips on a suitable bar is fulcrumed an operating-lever 15, the forward end of which when the gate is closed lies between the bar 4' and the curved inner end of the latch 9 and in contact with such parts. The other end of the lever 15 extends rearwardly a short distance, and is adapted to be grasped and depressed to raise the projection 10 out of engagement with the notch 11 and permit the gate to be drawn rearwardly to open the same.

To facilitate the rearward movement of the gate, I provide at a point intermediate of the posts thereof a roller 16, journaled in suitable bearings, and on which the lower bar of the gate rides.

The swiveled hanger 4, by which the gate is connected to the hinge-post 5, is composed of two vertical bars 17, which extend parallel for some distance and at both ends are bent inwardly toward each other, the bent ends of one bar lapping the bent portion of the other

bar. Through these overlapping ends of the bars 17 are passed short vertical pivot-bolts 18, which also pass through the inner end of brackets 19, secured at one end to one of the sides or faces of the post 5, and these bolts 18 are kept in position and the different pieces held together by nuts 20. Between the side bars 17 is journaled a small roller 21, which is in contact with the lower edge of one of the bars of the gate.

On the opposite side of the gate from the hinge-post 5 and slightly in advance thereof I provide a short upright post 22, between which and the post 5 the gate is turned after being drawn back far enough.

The horizontal brackets for supporting the swiveled hanger are given a quarter-turn in order to provide a proper bearing for said hanger, and said brackets are thrown or arranged out of line with the hinge-post to enable the gate to be swung around at right angles to its normal position without interference from the hinge-post.

The operation of my invention is simple and may be briefly stated as follows: In order to open the gate the inner end of the lever 15 is depressed and the projection 10 on the latch 9 lifted clear of the notch 11. The gate is then moved rearwardly until the end of the extended bar 4' is clear of the slot in the post 7, when it can be swung around alongside the hinge-post 5 and at right angles to its normal position. The bolts 18 serve as pivots on which the hanger and gate carried thereby are turned. When the gate is closed, the latch is, as before stated, raised slightly by the curved end of the bar 4', and when the notch 11 comes under the projection 10 on the latch the latter descends by gravity and

fits within said notch, and the gate cannot be opened without depressing the lever 15, as is obvious.

If in winter it should be desirable to elevate the gate to clear the snow, it is only necessary to depress the heel of the gate and swing the forward end around.

When it is desired to arrange the gate so as to let small animals pass beneath the same and at the same time exclude larger animals, the gate is tilted and the extended bar 4' placed so that its forward end rests on top of the latch 9.

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

The gate having the rigid shouldered latch-bar extended beyond its free end, the vertically-slotted latch-post provided with the short aligned slots in the opposing faces of the slotted portion thereof, the latch pivoted in rear of the aligned slots in the latch-post and having a curved hook-shaped end extending toward the latch-bar and arranged to engage when in line with said latch-bar the shoulder on said bar, the guide-pins fixed to the latch and extending laterally therefrom into the aligned slots of the latch-post, and the lifting-lever pivoted to the gate and arranged to engage the curved heel of the latch as said latch engages with the latch-bar, as herein shown and described.

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

WILLIAM H. SWOGGER.

Witnesses:

A. W. MADGE,
R. G. MADGE.