No. 891,348. PATENTED JUNE 23, 1908.

M. M. LAMB.

FARM GATE.

APPLICATION FILED FEB. 17, 1908.

2 SHEETS—SHEET 1.

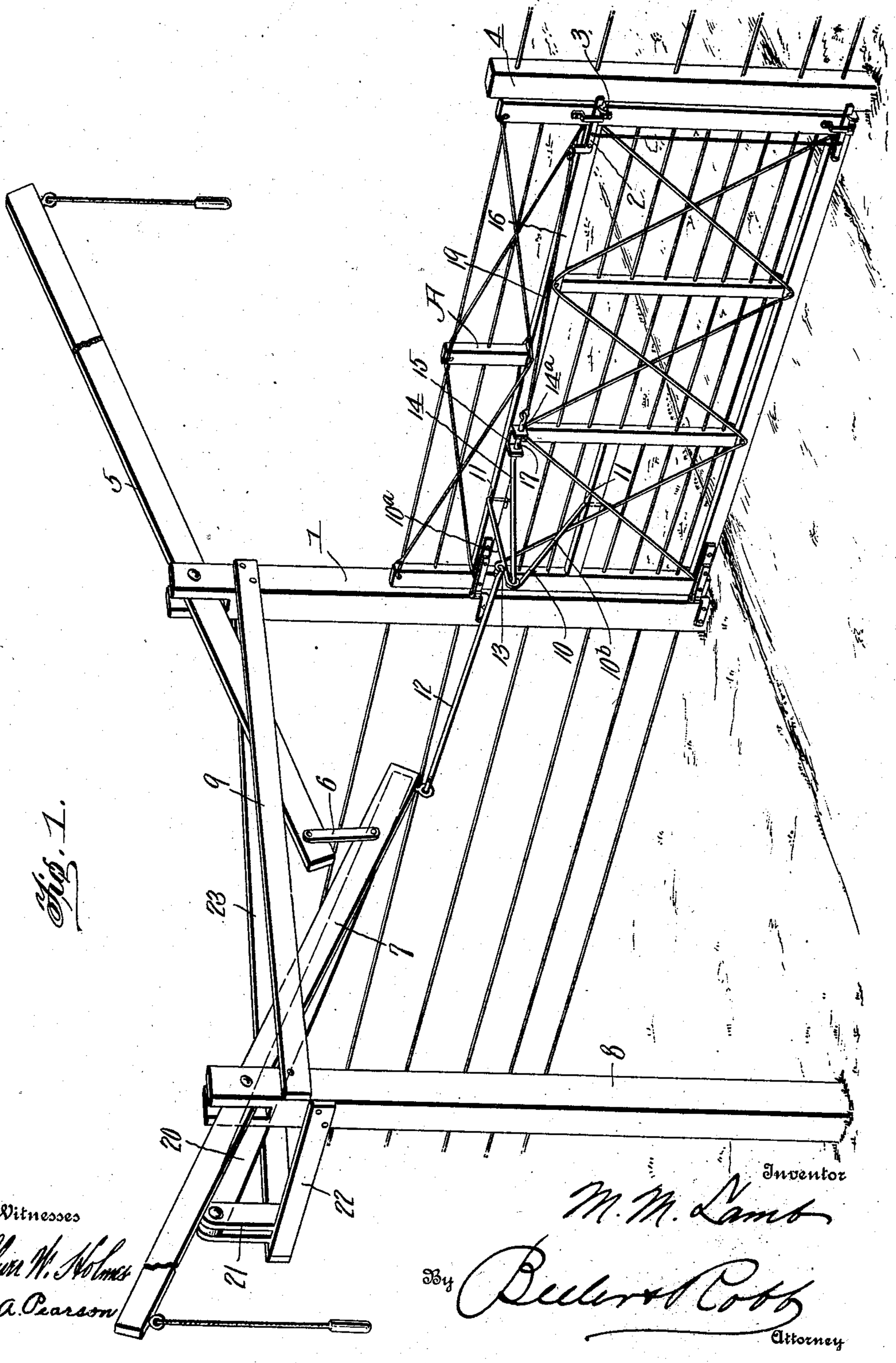

Fig. 1.

Witnesses

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2 SHEETS—SHEET 2.

Fig. 2.

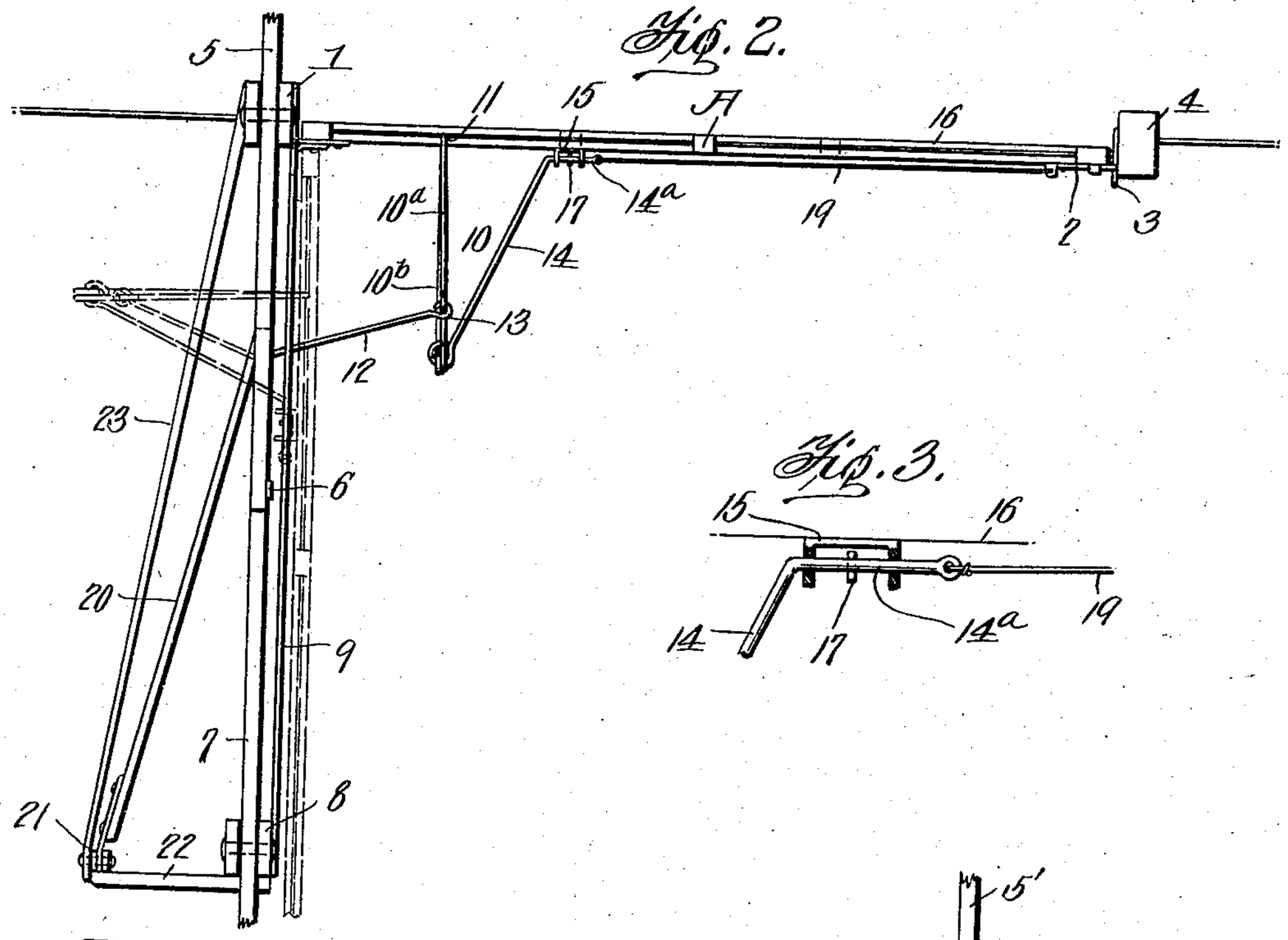

Fig. 3.

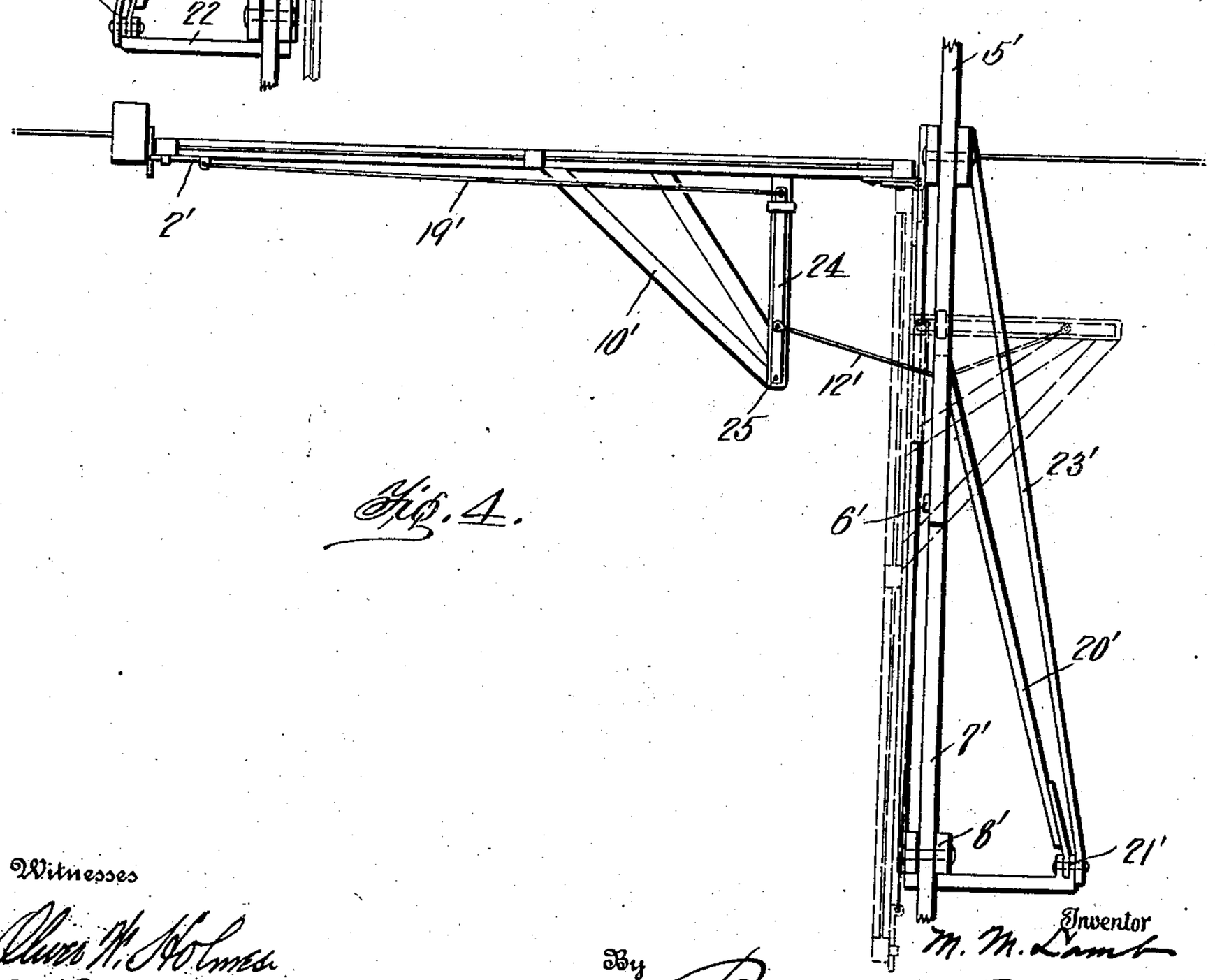

Fig. 4.

Witnesses

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MONROE M. LAMB, OF EAGLEVILLE, TENNESSEE.

FARM-GATE.

No. 891,348. Specification of Letters Patent. Patented June 23, 1908.

Application filed February 17, 1908. Serial No. 416,282.

To all whom it may concern:

Be it known that I, MONROE M. LAMB, a citizen of the United States, residing at Eagleville, in the county of Rutherford and State of Tennessee, have invented certain new and useful Improvements in Farm-Gates, of which the following is a specification.

This invention embodies improvements in farm gates of the horizontally swinging type.

The principal object of the invention is to provide general operating mechanism for opening and closing the gate, which is comparatively simple in structure, but extremely practical and desirable for the purposes of the invention. The gate is hand operated, and the said operating means is peculiarly constructed and arranged, in carrying out the invention, to facilitate the opening and closing movement of the gate, as the latter is operated from either side thereof.

For a full understanding of the invention, including its mode of operation, reference is to be had to the following detail description and to the accompanying drawings, in which:

Figure 1 is a perspective view showing a gate and operating means therefor embodying the preferred form of the invention; Fig. 2 is a top plan view of the gate, dotted lines showing the position of the parts when the gate is open; Fig. 3 is a detail sectional view showing more clearly the connection between the gate and the bracket rod connected with the latch mechanism, and Fig. 4 is a plan view, partially broken away, illustrating a modification of the invention.

Similar reference characters refer to similar parts throughout the description and on the several views of the drawings.

In the drawings the gate is designated A and may be of any general construction admitting of horizontal swinging movement relative to the gate post 1 to which it is pivoted or hinged. A suitable latch device 2 is pivoted to the gate and coöperates with a catch 3 secured to the latch post 4, in order to hold the gate in closed position. Mounted upon the upper end of the gate post 1 is a hand lever 5, pivoted thereto between its ends, one end of said lever 5 being connected by a link 6 with a second hand lever 7, which is pivoted between its ends to a vertical supporting post 8 located at one side of the gate A and some distance therefrom.

If preferred the posts 1 and 8 are connected by a bar or rail 9 substantially secured thereto. The lever 7 is of course arranged at one side of the gate A, while the end of the lever 5, remote from the lever 7, projects some distance from the opposite side of said gate. The lever 5, therefore, is operated by a passerby approaching from one side of the gate while the lever 7 is operated when the gate is approached from the other side thereof, both levers 5 and 7 being operably connected with the gate.

A vertical bracket 10 is mounted on the gate A, said bracket consisting of an upper arm 10^a and a lower arm 10^b, corresponding ends of both of which are pivotally connected with the gate as indicated at 11. An operating rod 12 is pivotally attached at one end to the inner end of the lever 7, the opposite end of the rod being similarly connected with the bracket 10 as shown at 13. Extending from the bracket 10, at the side opposite that from which the rod 12 extends, is a brace rod 14, the outer end of which is pivotally connected with the outer end of the bracket, while the inner end of said rod 14 is formed with an angular extension 14^a slidably mounted on the outwardly projecting ends of a guide plate 15 secured to the upper rail 16 of the gate. The extension 14^a of rod 14 is adapted for slight sliding movement through the guide plate 15, such movement being limited in both directions by a pin 17 connected with the part 14^a of the member 14, and arranged between the ends of plate 15. The outer extremity of the extension 14^a is connected by a light rod or flexible connection 19 with the latch 2 of the gate and a pull exerted upon the brace rod 14 will move the extension 14^a longitudinally of the gate, a slight distance, but sufficiently to tilt the latch 2 and disengage the same from the catch 3. The mounting of the levers 5 and 7 is somewhat peculiar.

It will be apparent that it is desirable in an arrangement of levers such as shown, to effectively reinforce said levers against side stress or strain caused by the connections between the same and the gate, when the levers are operated to open the latter. With this in view the lever 7 is braced by means of a brace 20 one end of which is secured in a substantial manner to the inner or lower end of the lever 7, while the other end of the brace 20 is pivotally connected at 21 to the outer end of the arm 22 which projects laterally from the upper end portion of the supporting post 8. A diagonal brace 23 connects the post with the

outer end of the arm 22. The brace 20 is so arranged that it is freely movable with the lever 7, the pivoted axes of the brace and lever being in horizontal alinement. The weight of the brace 20 furthermore coöperates to cause the inner ends of the levers 5 and 7 to normally incline downward, as shown in Fig. 1, in which position the gate is closed, and in like manner, when the gate is open, the relative positions of the levers 5 and 7 are the same as when the gate is in its closed position referred to above.

The construction and arrangement of the parts of the invention having been described above the advantages of the mechanism will be apparent. In order to operate the gate, it will be understood that pull cords or any similar devices may be connected with the remote ends of the levers 5 and 7, for the convenience of the passerby.

A modification of the invention is illustrated in Fig. 4 of the drawings and in this construction substantially the same parts are employed as shown in the preferred form of the invention except the devices for actuating the latch. In the modification a rigid bracket 10′ is secured to the gate and upon the said bracket is supported a lever 24 pivoted at its outer end at 25 to the bracket and having its inner end movable in a guide loop 26. The inner extremity of the lever 24 is connected by the connection 19′ with the latch 2′. A pull rod 12′ is connected at its outer end with the lever 7′ and the latter is actuated in an obvious manner to impart pivotal movement to the lever 24 and operate the latch 2′. The lever 5′ and parts 8′, 20′, 21′, and 23′ shown in Fig. 4 are equivalent to similar parts shown in the preferred embodiment of the invention.

Having thus described the invention, what is claimed as new, is:

1. In combination, a gate, latch mechanism therefor, a bracket pivoted to said gate at its inner end, operating means connected with said bracket at the outer end thereof, a brace rod connected with the outer end of the bracket, a guide plate applied to the gate and having the inner end of the brace rod slidably mounted thereon, means for limiting the sliding movement of said end of the brace rod, and means connecting the inner end of the brace rod with the latch mechanism.

2. In combination, a gate, latch mechanism therefor, a bracket pivoted at its inner end to the gate, operating levers connected with the outer end of the bracket for imparting pivotal movement thereto, a guide plate secured to the gate and having outwardly projecting ends, a brace rod connected at one end with the outer portion of the bracket and having its inner end formed with an extension mounted for slidable movement on the ends of the guide plate, a pin connected with the extension of the brace rod at a point between the ends of the guide plate and limiting the sliding movement of the extension of the brace rod, and a connection between the brace rod extension and the latch mechanism.

3. In combination, a gate, operating mechanism for opening and closing the gate comprising supporting posts, operating levers pivoted to said posts, a connection between said levers, and means connecting the levers with the gate for operation of the latter, an arm extending laterally from one of the supporting posts, a brace having pivotal connection with said arm and arranged on the side of the post opposite that upon which the gate is arranged, the pivotal axis of the said brace being in alinement with the pivotal axis of the adjacent operating lever, and the other end of said brace being firmly connected with said adjacent operating levers at the end of the latter which is connected with the gate.

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

MONROE M. LAMB.

Witnesses:
J. S. TAYLOR,
G. T. WILSON.