

No. 609,774.

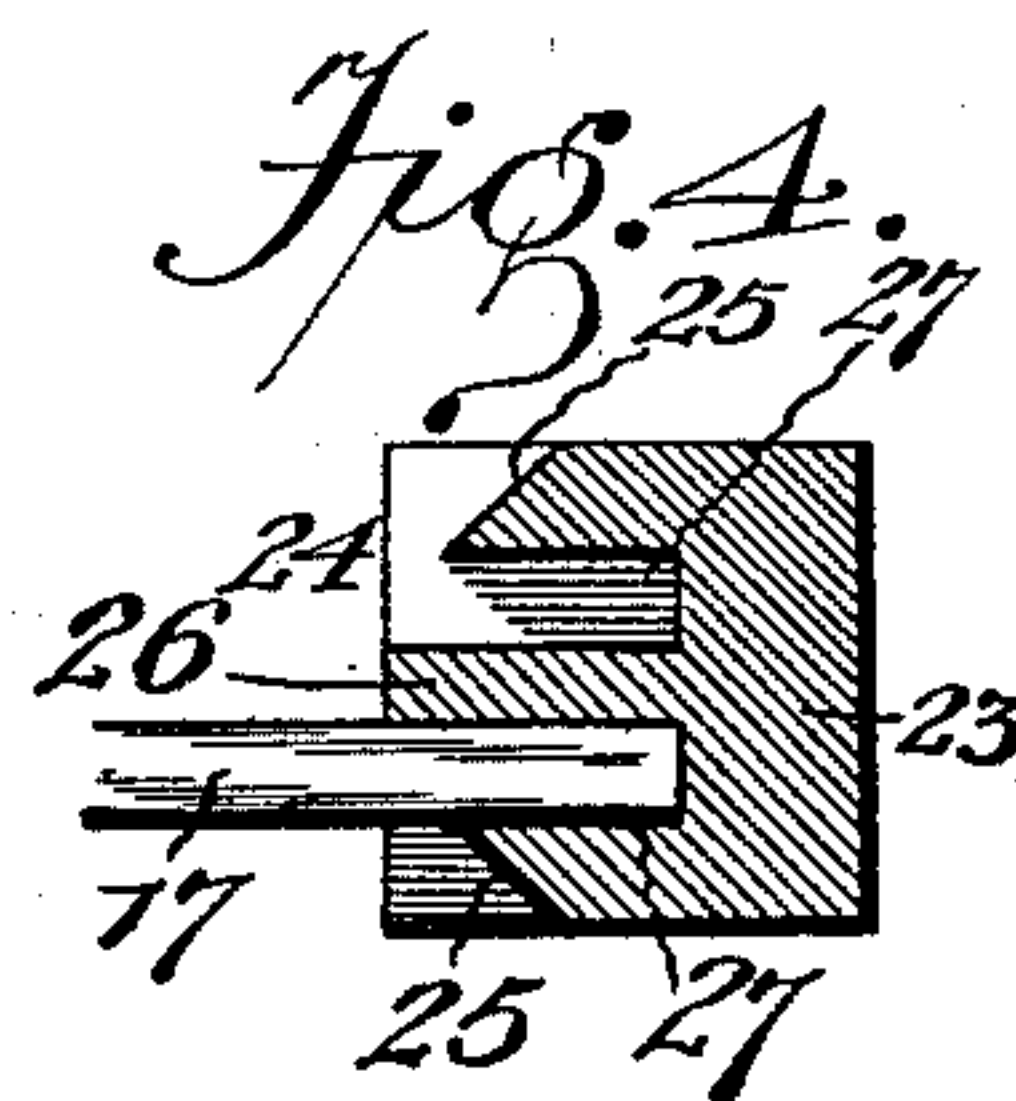
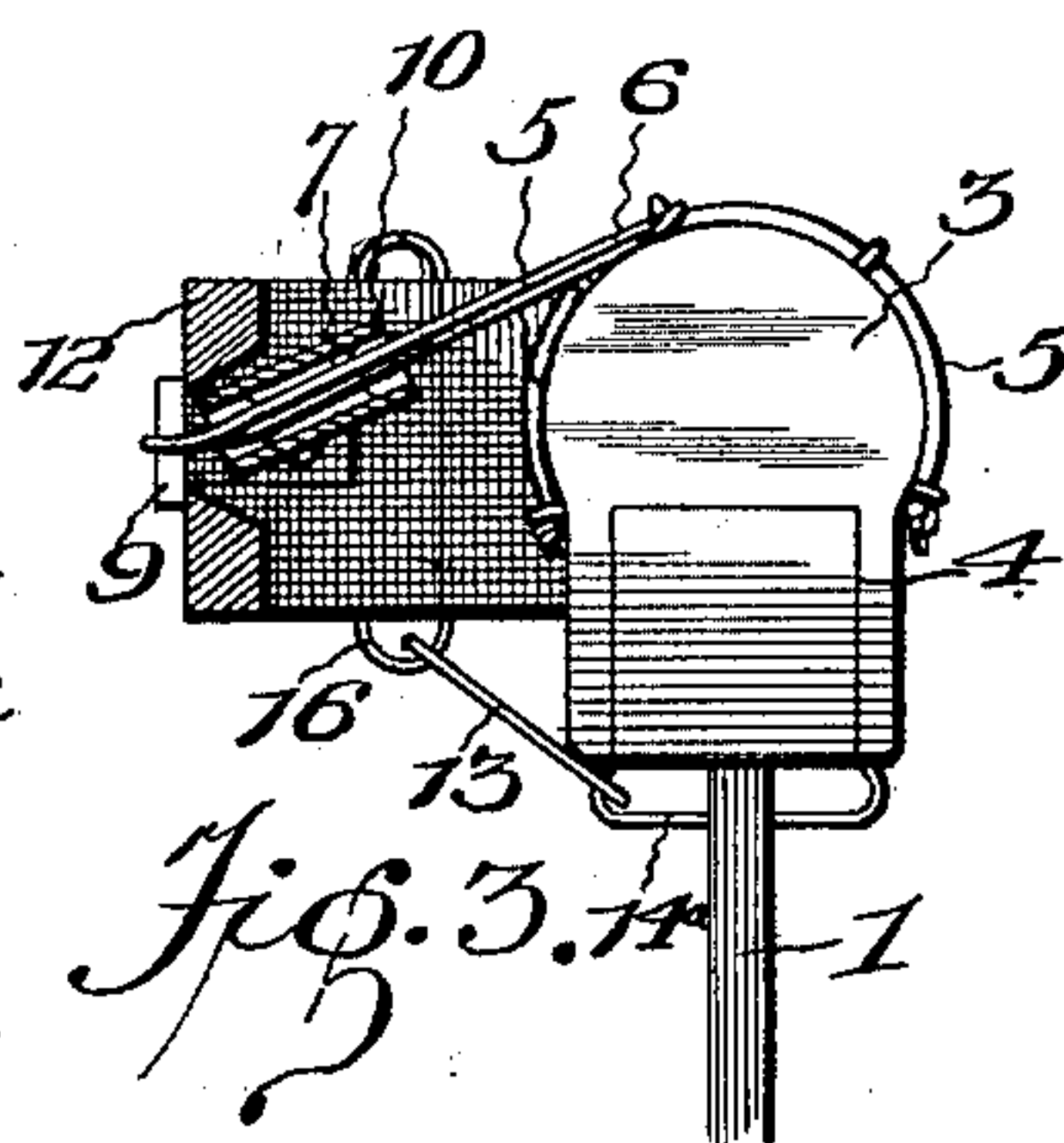
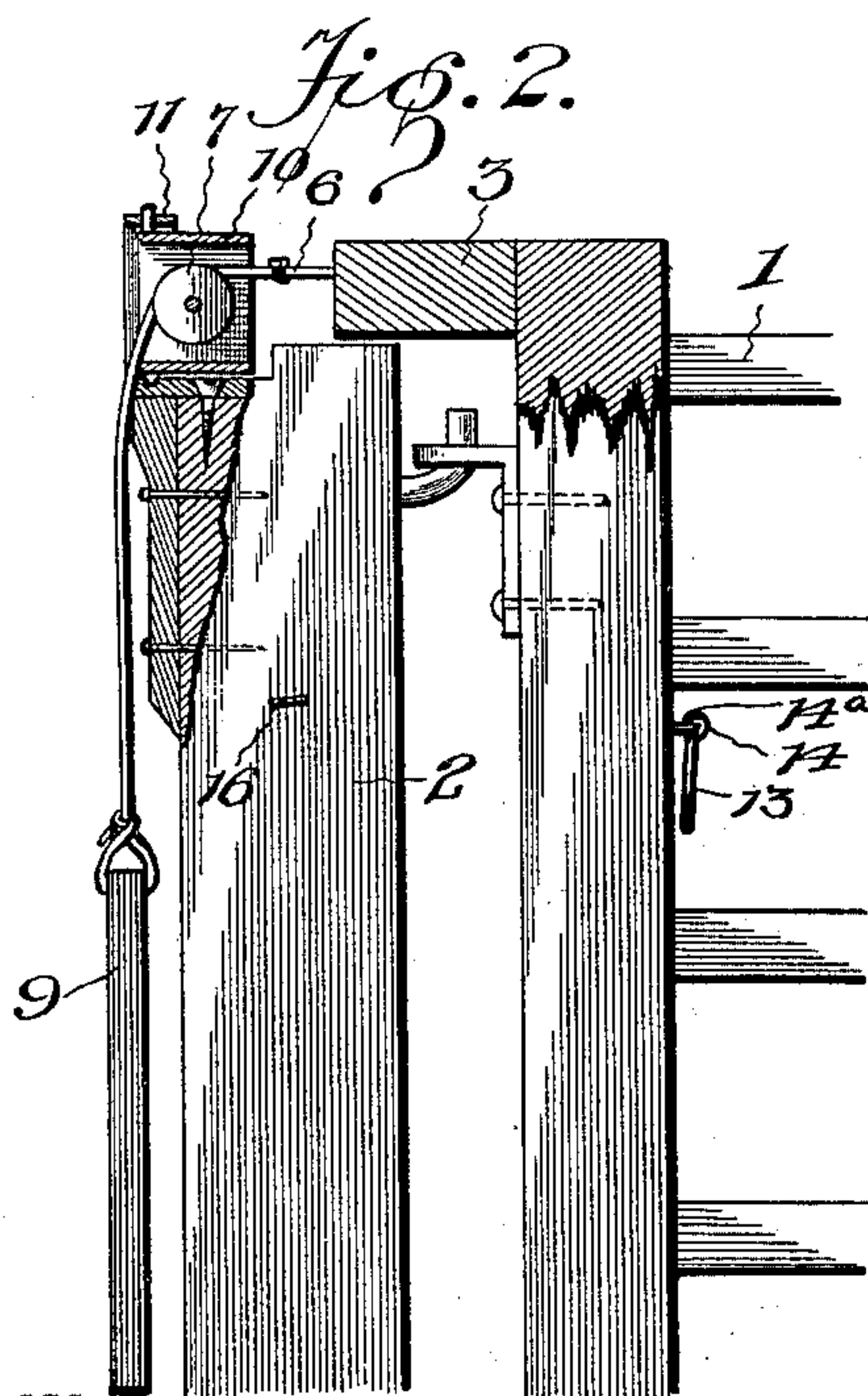
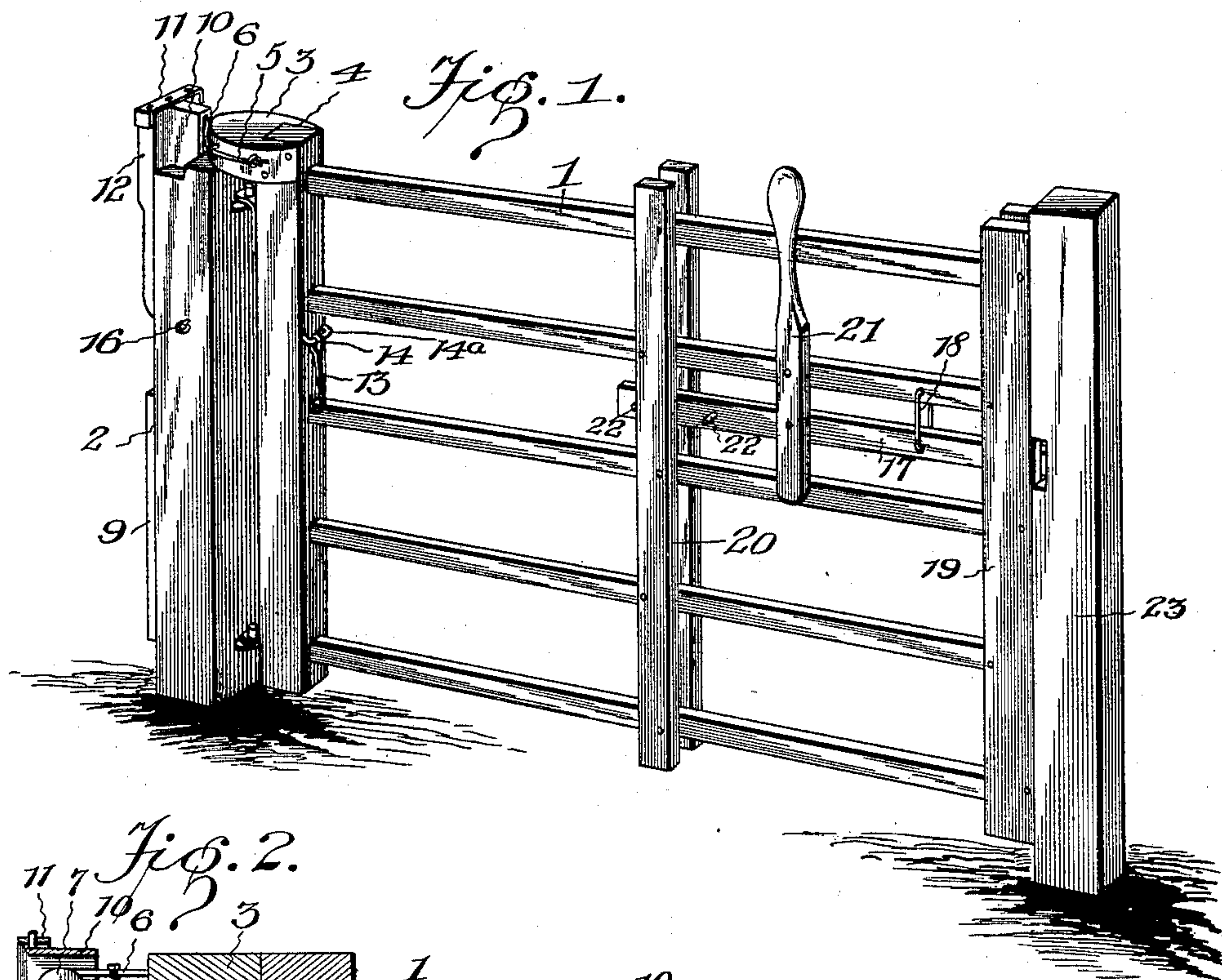
Patented Aug. 30, 1898.

A. C. BURNER.

GATE.

(Application filed Dec. 31, 1897.)

(No Model.)



Inventor

Witnesses

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By *his* Attorneys,

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UNITED STATES PATENT OFFICE.

ALLEN C. BURNER, OF GREEN BANK, WEST VIRGINIA.

GATE.

SPECIFICATION forming part of Letters Patent No. 609,774, dated August 30, 1898.

Application filed December 31, 1897. Serial No. 664,990. (No model.)

To all whom it may concern:

Be it known that I, ALLEN C. BURNER, a citizen of the United States, residing at Green Bank, in the county of Pocahontas and State of West Virginia, have invented a new and useful Gate, of which the following is a specification.

The invention relates to improvements in gates.

The object of the present invention is to improve the construction of swinging gates and to provide a simple, inexpensive, and efficient device for automatically closing the gate after the same has been opened.

Another object of the invention is to enable the gate to be maintained in its open position when desired and to provide for gates opening in either direction a single hook for securing them to either side of the hinge-posts.

The invention consists in the construction and novel combination and arrangement of parts, as hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a swinging gate constructed in accordance with this invention. Fig. 2 is a vertical sectional view of the rear portion of the gate. Fig. 3 is a horizontal sectional view of the same, the gate being open. Fig. 4 is a detail sectional view illustrating the construction of the keeper of the latch-post.

Like numerals of reference designate corresponding parts in the several figures of the drawings.

1 designates a swinging gate hinged to a post 2 and provided at its top with a rearwardly-projecting segmental extension 3, consisting, preferably, of a block provided with a recess 4 to receive the upper end of the rear end bar of the gate to which it is secured. To the curved edge of the segmental block or extension 3 are secured branches 5 of a flexible connection 6, which extends over a pulley 7 of the gate and is provided at its lower end with a weight 9, adapted to close the gate after the same is opened. The pulley 7, which is vertical, is mounted upon the top of the hinge-post within a pivoted casing 10, provided at its top and bottom with pivots or journals and adapted to swing in

either direction to conform to the lateral movement of the upper portion of the flexible connection.

The gate is adapted to open in either direction, and when it swings to one side the segmental extension is carried in the opposite direction, causing the horizontal portion of the flexible connection to move laterally, as illustrated in Fig. 3 of the accompanying drawings. The flexible connection may be constructed of any suitable material, and its branches are secured to the extension at opposite sides of the center thereof by any suitable means.

The lower pivot or journal of the casing of the pulley is mounted in a suitable bearing on the top of the post, and the upper pivot or journal fits in a bearing-perforation of a cross-piece 11, which is supported by a bifurcated block or cleat 12. The bifurcated block or cleat extends above the top of the hinge-post, forming an arm thereof, and the opening or space formed by the bifurcation is beveled adjacent to the pulley-casing to permit the same to turn freely to the necessary extent.

When the gate is open and released, the weight, which is attached to the lower end of the flexible connection, operates to close it. It is secured in its open position by a hook 13, provided with an eye 14, arranged on a horizontal loop or guide 14^a, mounted on the front face of the rear end bar of the gate and adapted to permit the hook to slide to either side thereof to bring the same in position for engaging eyes 16 at the sides of the hinge-post.

The gate is locked in its closed position by a horizontal latch-bar 17, suspended from one of the horizontal rails of the gate by a swinging link 18 and guided between the front end bars 19 and intermediate bars 20. The latch-bar, which is connected with an operating-lever 21, is provided near its rear end with stops 22, located at opposite sides of one of the intermediate bars 20 and adapted to limit the longitudinal movement of the latch-bar. The link and the stops are arranged so that the latch-bar in moving inward swings upward, whereby the weight of the latch-bar operates to hold it in engagement with the latch-post 23.

The latch-post is provided with a double

keeper 24, consisting of opposite recesses having beveled side faces 25, a central wall 26, and sockets 27, located at opposite sides of the wall between the same and the beveled faces and adapted to receive the outer end of the latch-bar. The latch-bar, which is adapted to engage either socket, is automatic in its operation and interlocks with the latch-post when the gate is opened at either side. The central wall extends outward beyond the beveled faces and forms a stop to prevent the gate in closing from swinging past the latch-post.

The invention has the following advantages: The gate, which is simple and comparatively inexpensive in construction, is adapted to open in either direction, and it is capable of closing automatically. The vertical pulley is adapted to swing laterally to conform to the movement of the flexible connection, and the weight serves to counterbalance the gate, relieve the hinges of strain, and prevent the gate from sagging. The hook at the inner or rear end of the gate is adapted to be shifted to either side thereof, so that only one hook is necessary to fasten the gate to either side of the hinge-post.

Changes in the form, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

What I claim is—

1. The combination with a hinge-post, of a swinging gate mounted thereon and arranged to open in either direction, a flexible connection attached to the rear end of the gate and provided with a weight adapted to close the gate when the same is released, and a vertical pulley receiving the flexible connection and pivotally mounted on the hinge-post, said pulley being arranged to swing laterally to follow the movement of the flexible connection, substantially as described.

2. The combination with a post, of a swinging gate hinged to the same and arranged to

open in either direction, a segmental extension mounted on the gate at the rear end thereof, a flexible connection provided at its lower end with a weight and having diverging branches at its upper end secured to the segmental extension of the gate, and a vertical pulley pivotally mounted on the post or support and arranged to swing laterally of the gate, substantially as and for the purpose described.

3. The combination with a post or support, of a swinging gate hinged to the same and adapted to open in either direction, a block mounted on the gate at the top thereof and forming a segmental extension, an arm projecting upward from the post and provided with a slot or opening, a vertical pulley-casing provided at its top and bottom with journals and mounted in suitable bearings at the opening or slot of said arm, a pulley mounted in the pulley-casing, and a flexible connection provided with a weight passing over the pulley and having branches at its upper end connected with the segmental extension at opposite sides of the center thereof, substantially as described.

4. The combination of a hinge-post, a swinging gate mounted thereon and adapted to open in either direction, eyes mounted on the hinge-post at opposite sides thereof, a horizontal loop or guide mounted on the gate at the back thereof, and a hook provided with an eye linked into the loop or guide and adapted to be shifted from one side of the gate to the other to enable the hook to engage either of the eyes of the hinge-post, substantially as described.

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

ALLEN C. BURNER.

Witnesses:

J. R. WARWICK,
J. W. RILEY.