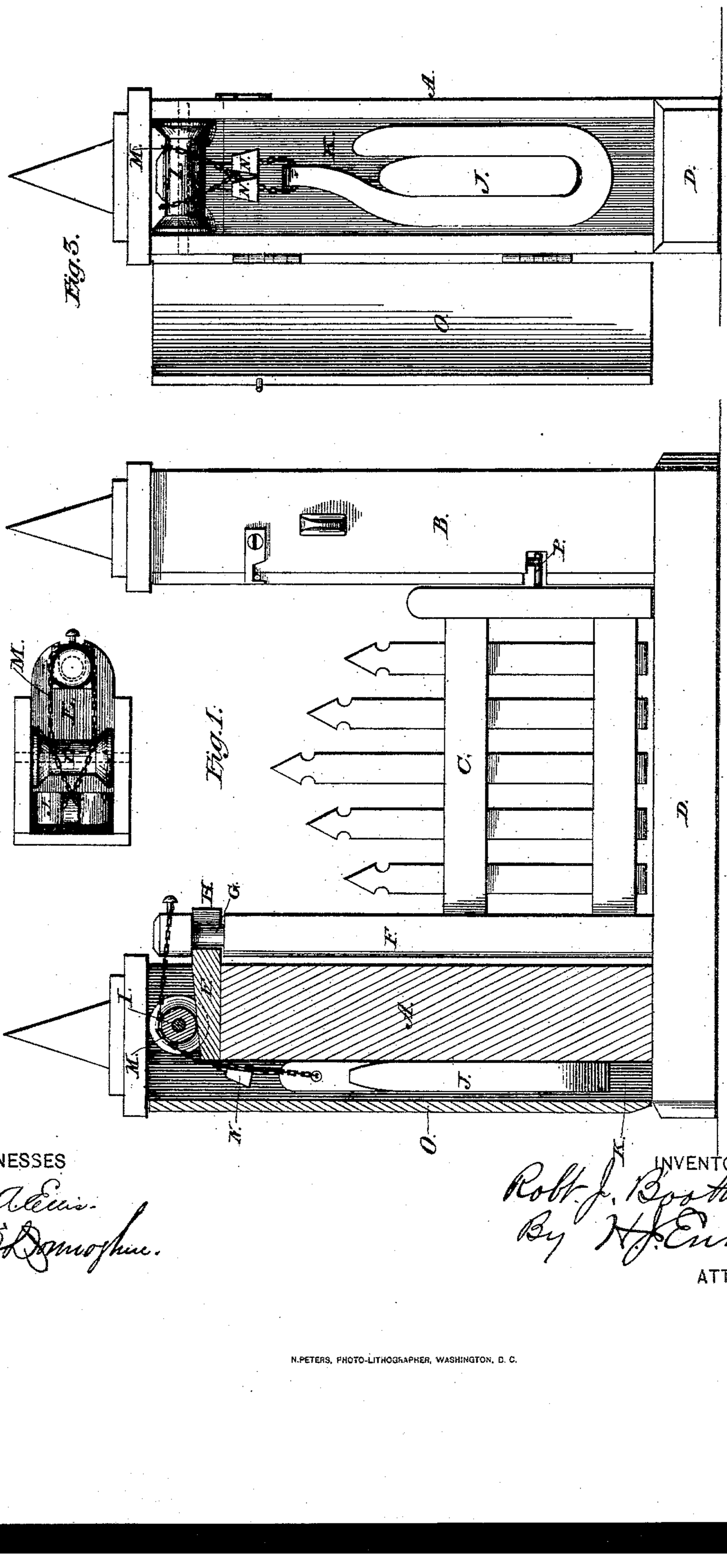
R. J. BOOTH.

Gate.

No. 210,660. Patented Dec. 10, 1878.




WITNESSES

John A. Ellis.

John O. Donoghue.

INVENTOR

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# UNITED STATES PATENT OFFICE.

ROBERT J. BOOTH, OF DES ARC, ARKANSAS, ASSIGNOR OF ONE-THIRD HIS RIGHT TO WASHINGTON C. PEARCE, OF SAME PLACE.

## IMPROVEMENT IN GATES.

Specification forming part of Letters Patent No. **210,660,** dated December 10, 1878; application filed August 26, 1878.

*To all whom it may concern:*

Be it known that I, ROBERT J. BOOTH, of Des Arc, in the county of Prairie and State of Arkansas, have invented certain new and useful Improvements in Self-Closing Gates; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 is a transverse vertical section through the gate-posts, showing the operating mechanism. Fig. 2 is a sectional plan of the rear gate-post, the cap being removed to show the operating mechanism; and Fig. 3 is an elevation of the rear side of the rear gate-post, showing the door open or the cover removed.

This invention has relation to gates; and consists in the improvements in the construction of the same, hereinafter fully described and particularly pointed out in the claim.

In the accompanying drawing similar letters of reference indicate corresponding parts in the several figures.

A represents the rear post; B, the front post, and C the gate itself. The gate-posts A B are connected at their lower ends by the sill D; or an arm similar to the arm E may be employed to furnish the lower bearing or hinge for the gate C. The heel-post F of the gate is made of a length nearly equal to the rear post, A, and has a neck, G, which fits the collar H in the arm E. In the top of the post A is a sheave, I, over which is a chain, M, pinned to the upper end of the heel-post F, and encircling the same, passes, is crossed, and has a weight, J, secured to it within a chamber, K, to operate the gate.

In operating the gate, one side of the chain M will be taut and the other side will sag, unless some provision is made to counteract the sagging of the inoperative side of the chain M. I accomplish this by securing to each side of the chain within the chamber K a small weight, N, as shown, which descends and keeps the inoperative side of the chain taut when the other side is used to open and close the gate. This gate is opened by hand, and is closed automatically by the weight J. A door, O, is provided to cover the chamber K; but the cover for said chamber may be secured by screws or nailed, as it is not ordinarily necessary to repair the portions of the mechanism in the chamber K. The front post, B, is provided with a keeper described and shown in another application filed by me; and a latch, P, engages with the keeper in said front post, B.

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

In a gate, the combination of the gate-post A, provided with the chamber K, with the gate C, having the heel-post F, provided with neck G, secured in bearings, and the chain M pinned to the top of said heel-post F, and encircling the same, and provided with the weights J and N N, constructed and operating substantially as and for the purposes set forth.

In testimony that I claim the foregoing as my own I hereby affix my signature in presence of two witnesses.

ROBT. J. BOOTH.

Witnesses:
A. D. REDDITT,
GEO. J. RUEBELL.