J. M. C. BENNETT.

GATES.

No. 193,913. Patented Aug. 7, 1877.

Fig. 1.

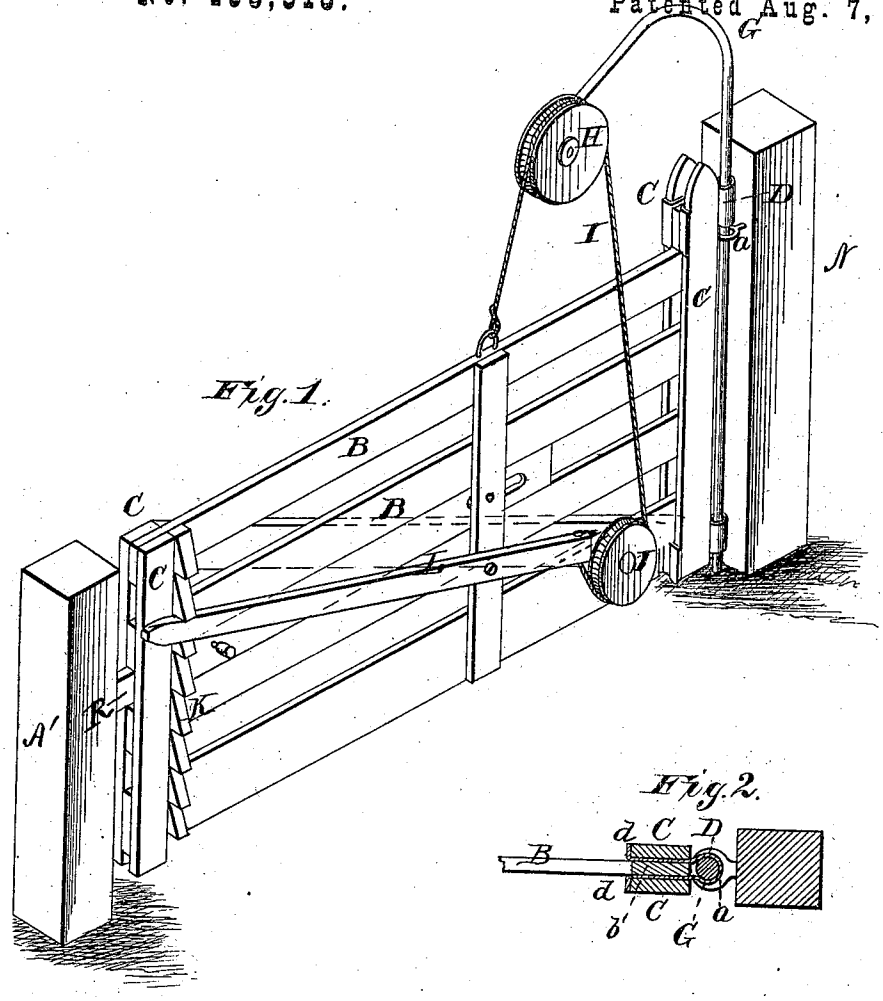



Fig. 2.




WITNESSES

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# UNITED STATES PATENT OFFICE.

JOHN M. C. BENNETT, OF LANSING, MICHIGAN, ASSIGNOR OF ONE-HALF HIS RIGHT TO WALTER BRADSHAW, OF SAME PLACE.

## IMPROVEMENT IN GATES.

Specification forming part of Letters Patent No. **193,913**, dated August 7, 1877; application filed July 10, 1877.

*To all whom it may concern:*

Be it known that I, JOHN M. C. BENNETT, of Lansing, in the county of Ingham, and in the State of Michigan, have invented certain new and useful Improvements in Gates; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of a gate, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a perspective view of the gate. Fig. 2 is a section through one of the hinges.

A A′ represent the two gate-posts between which the gate is placed. In the post A, a suitable distance from the top, is fastened an eye-screw, *a*, as shown.

The gate is composed of a series of horizontal boards, B, connected at each end by upright boards C C placed on opposite sides of the boards B.

The hinges for this gate are formed simply of pieces of sheet metal D D, each piece being bent in the center, the two parts running parallel, and the ends thereof bent outward, forming flanges *d d*. This hinge is inserted between the ends of the vertical boards C C, as shown, and a wedge, *b*, driven in between the two parts of the metal, whereby it becomes firmly held in place, the doubled projecting center of each plate being then rounded or made in tubular form for the passage of a rod, G. This rod is passed through the top hinge D, then through the eye-screw *a*, and through the lower hinge into the ground, thus hinging the gate.

It will be noticed that there are no screws, bolts, or nuts in the arrangement of these hinges.

The upper end of the rod G is bent over forward, and carries at its end a pulley, H, over which is passed a cord or chain, I. One end of this cord or chain is made fast to the top of the gate, while the other end is passed under a pulley, J, mounted at the bottom near the inner end of the gate. At the front of this latter pulley J the end of the cord or chain I is attached to one end of a lever, L, pivoted to the side of the gate, and the other end of this lever is held in a toothed or ratchet bar, K, at the front end of the gate.

It will readily be seen that by this means the gate can be raised and held at any height desired.

R is the latch of the gate.

In opening and closing the gate, the rod G with the pulley H swings with the gate.

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

1. In a gate, the hinge D, formed of a piece of sheet metal, bent as shown, formed with the flanges *d d*, and fastened by the wedge *b* between the boards C C of the gate, as herein set forth.

2. The combination of the post A with eye-screw *a*, gate B C, hinges D D, and rod G, substantially as herein shown and described.

3. The combination of the gate B C, rod G, with pulley H, cord or chain I, pulley J, lever L, and ratchet-bar K, all substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 15th day of June, 1877.

JOHN M. C. BENNETT.

Witnesses:

G. E. LAURENCE,

GEO. F. GILLAM.