

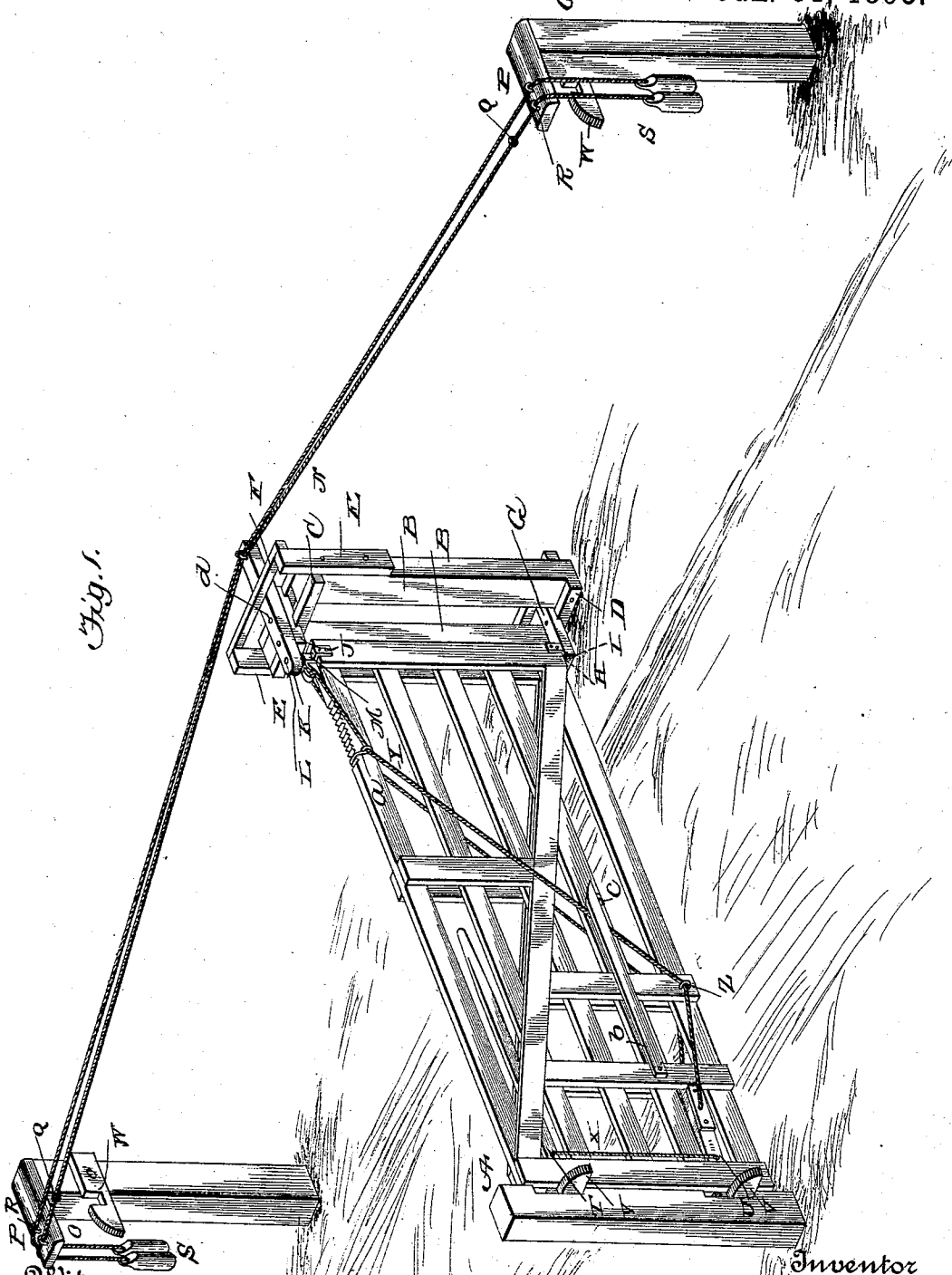
(No Model.)

2 Sheets—Sheet 1.

A. BOYD.
GATE.

No. 490,737.

Patented Jan. 31, 1893.



Witnesses

John D. Smith
A. T. Bishop

Inventor

Alexander Boyd
by *Chas. F. Connelly* Secy.
his Attorney

(No Model.)

2 Sheets—Sheet 2.

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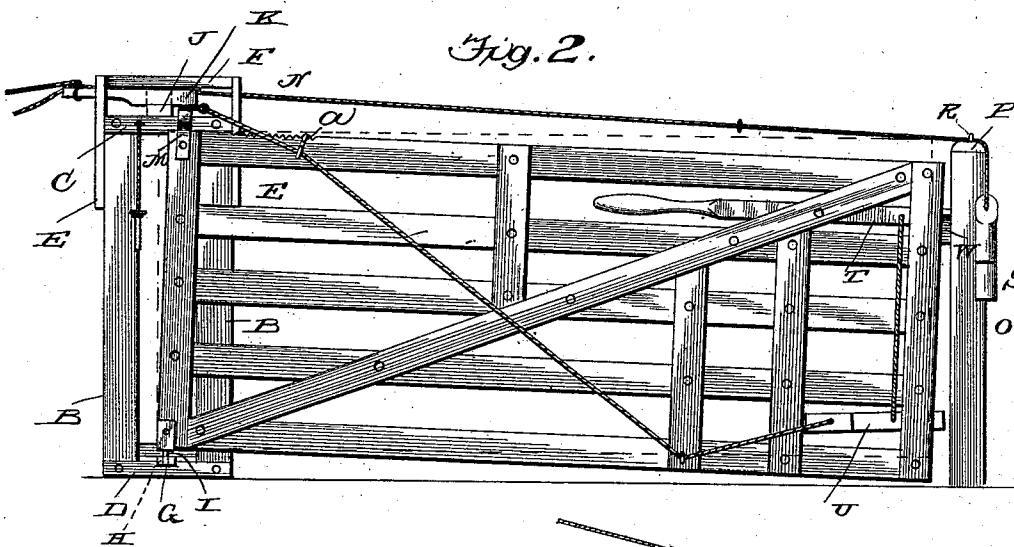


Fig. 3.

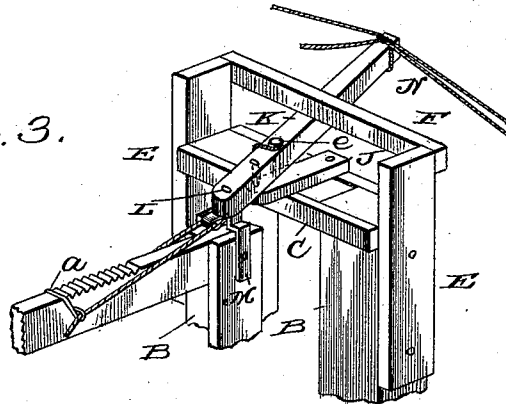
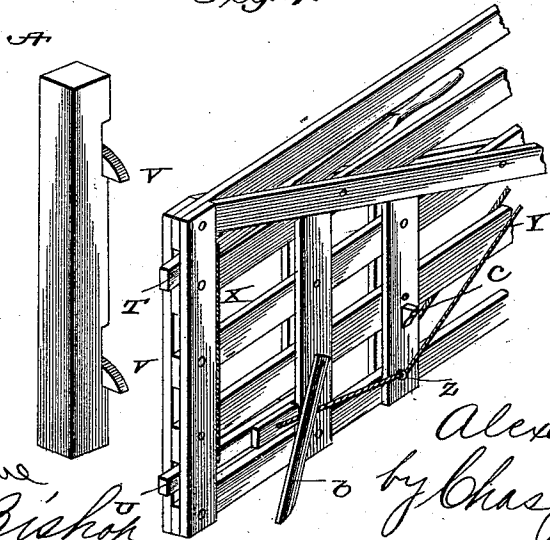


Fig. 4



Witnesses

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UNITED STATES PATENT OFFICE.

ALEXANDER BOYD, OF WHITEWRIGHT, TEXAS.

GATE.

SPECIFICATION forming part of Letters Patent No. 490,737, dated January 31, 1893.

Application filed June 15, 1892. Serial No. 436,848. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER BOYD, a citizen of the United States, residing at White-wright, in the county of Grayson and State of Texas, 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 automatic gates and it consists in certain novel features which will be hereinafter described and claimed.

In the annexed drawings, which fully illustrate my invention, Figure 1 is a perspective view of the gate in its closed position, Fig. 2 is an elevation of the same showing the gate partly open and Figs. 3 and 4 are detail views.

In carrying out my invention, I erect the latch-post A at one side of the road and on the opposite side of the road, directly opposite the latch-post, I erect the posts B, B, which are connected at their upper ends by the cross bars C and at their lower ends by the cross bars D as clearly shown. Vertical arms E are secured to the upper ends of the post B and a keeper F is secured to the said vertical arms. A bracket G is secured to the cross bars D and is provided at its outer end, in its upper side, with a socket H which is engaged by pivot I depending from the inner lower corner of the gate. A similar bracket, J, is secured on the cross bars C and a lever K is pivoted on the said bracket J at the inner end thereof, as shown. This lever K projects beyond the ends of the bracket and its front end receives a pivot L projecting upward from a stirrup or bracket M projecting from the upper inner corner of the gate. The outer end of the said lever has secured thereto the operating cords or ropes N which extend along the side of the road to the posts O, erected a short distance from the posts B, and extend over the brackets or supporting arms P secured to the upper ends of the said posts. The front cord or rope is provided with a stop Q adapted to impinge against the rope guides R for a purpose hereinafter mentioned. The ends of the ropes are provided with weighted handles S which keep them taut at all times.

The gate proper is supported by the pivots

I and L and it is provided at its free end with the latches T, U, which are adapted to engage the catches V on the latch-post and the catches W on the posts O. The latches are connected near their front ends by a cord X and are pivoted to the gate at any suitable point so that they will be caused to operate simultaneously. The upper latch furthermore, is extended inward somewhat so as to provide a handle by which it may be operated by a pedestrian.

In order to overcome the sagging of the gate, I provide the cable Y which has its ends secured to the lower latch in advance of the pivot thereon and then passes downward and under the pins Z on the sides of the gate and thence upward to the stirrup M at the upper corner of the gate. An adjustable guide *a* is provided on the upper rail of the gate near the pivot of the same and receives and supports the cord or cable Y. It will be readily understood that by moving this gate or guide forward or backward the tension of the said cord will be increased or diminished and the tendency of the gate to sag is consequently overcome. When the tension of the cord is increased so that the lower outer end of the gate will be raised, the latches will at the same time be drawn downward so as to remain in the path of the catches and consequently positively engage the same.

The gate is provided on one side with a prop *b* which is normally held in a support *c* on the side of the gate and may be turned downward so as to enter the ground and thereby hold the gate partially open when so desired.

The lever K is provided in rear of its pivot with a vertical opening *d* which is adapted to receive a pin or bolt *e*. The said pin or bolt will impinge against the side of the bracket J and thereby hold the lever out of the line of the gate.

It is thought that the operation of my improved gate will be readily understood. A person approaching the gate on horseback or in a vehicle will pull downward on the inner or back rope and thereby draw upon the lever K so as to swing the same to one side. The inner end of the said lever will thus be moved to one side of the line of the gate and the pivoted end of the gate consequently tilted

so that the front end of the same will be slightly raised and the latches disengaged from the catches V. The weight of the gate will then cause it to swing to one side and thus automatically open as will be readily understood. After passing through the gateway the operator draws downward on the front cord and thereby returns the lever to its normal position and consequently causes the gate to close. The stops on the front cord will prevent the same from being drawn downward so far that the lever will be swung backward sufficiently to swing the gate entirely open again.

15 It may sometimes be found inconvenient to operate my gate by means of the cords or ropes. Under such circumstances, the gate is set up as described without the ropes and the pin *e* is inserted through the opening *d* of the lever so as to bear against the side of the bracket J, as shown most clearly in Fig. 3. When thus arranged, the gate is always opened by hand and pushed toward that side of the bracket against which the pin bears.

25 When opened, it will be tilted so much as to close automatically. Should a larger clear

space be afterward provided, the pin can be quickly released and the operating ropes applied so that the gate may be opened from either side.

It will be seen that my gate is composed of very few parts and its advantages are thought to be obvious.

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

The combination with the gate and the latches mounted thereon and connected together, of a stirrup at the upper rear corner of the gate, forming a part of the hinge, a longitudinally adjustable guide on the upper portion of the gate near said stirrup, a fixed guide at the bottom of the gate, and a cable secured to the stirrup, passing through the adjustable and fixed guides and secured to the lower latch in advance of its pivot.

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

ALEXANDER BOYD.

Witnesses:

W. S. RUSSELL,
W. A. WORDEN.