

No. 682,305.

Patented Sept. 10, 1901.

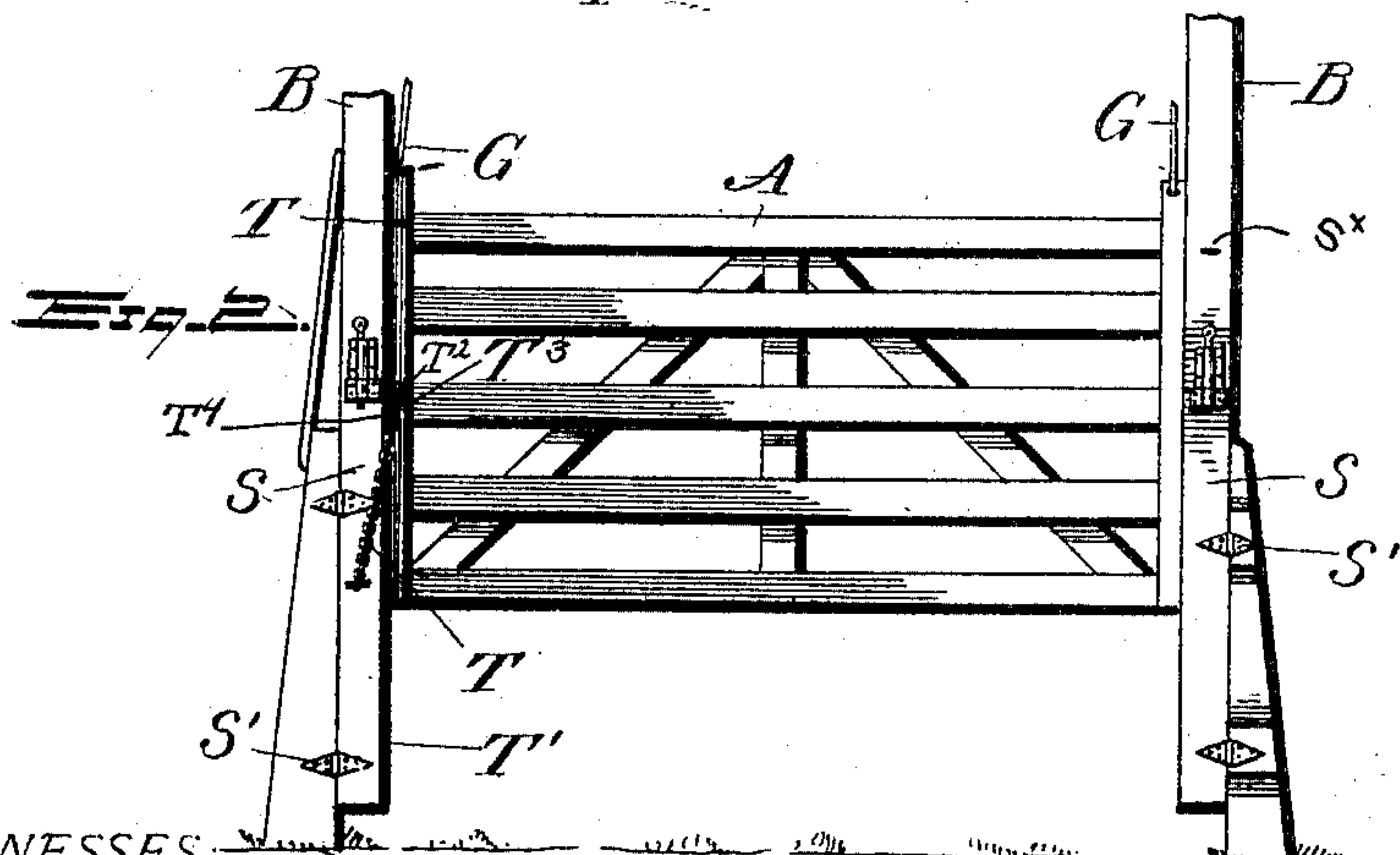
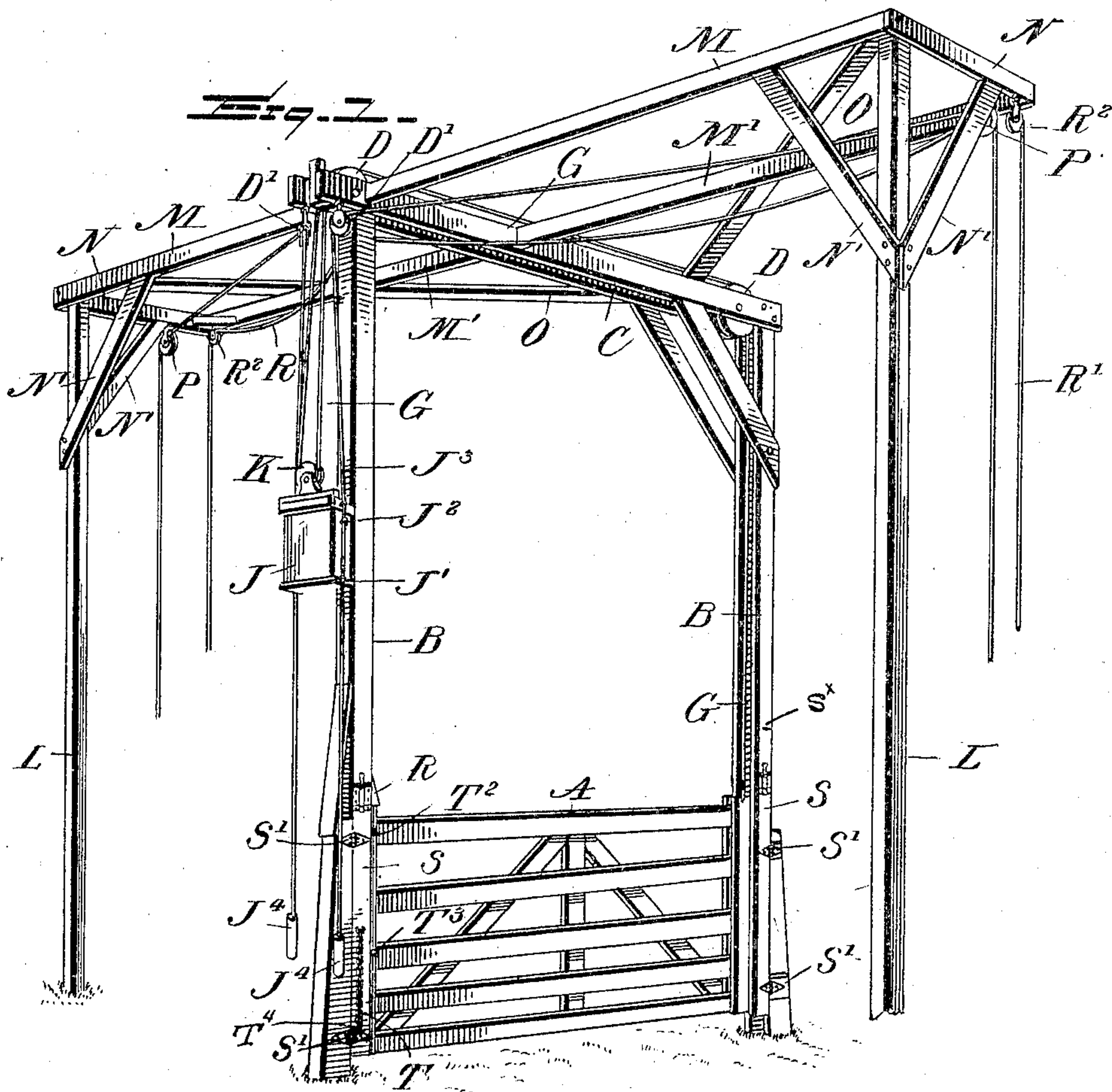
W. S. WITTEN.

GATE.

(Application filed Dec. 26, 1900.)

(No Model.)

2 Sheets—Sheet 1.



WITNESSES:

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A. L. Hough

INVENTOR

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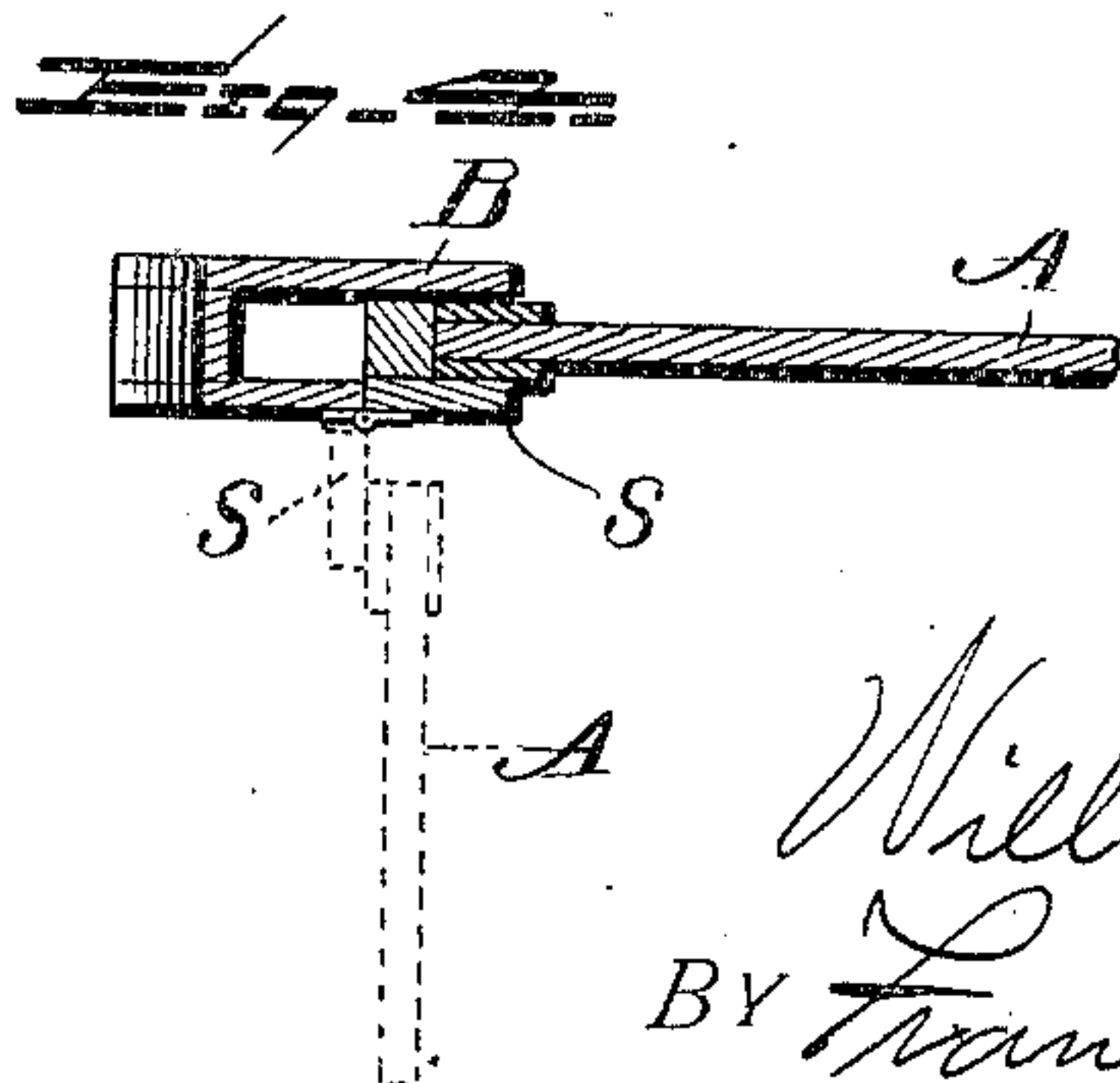
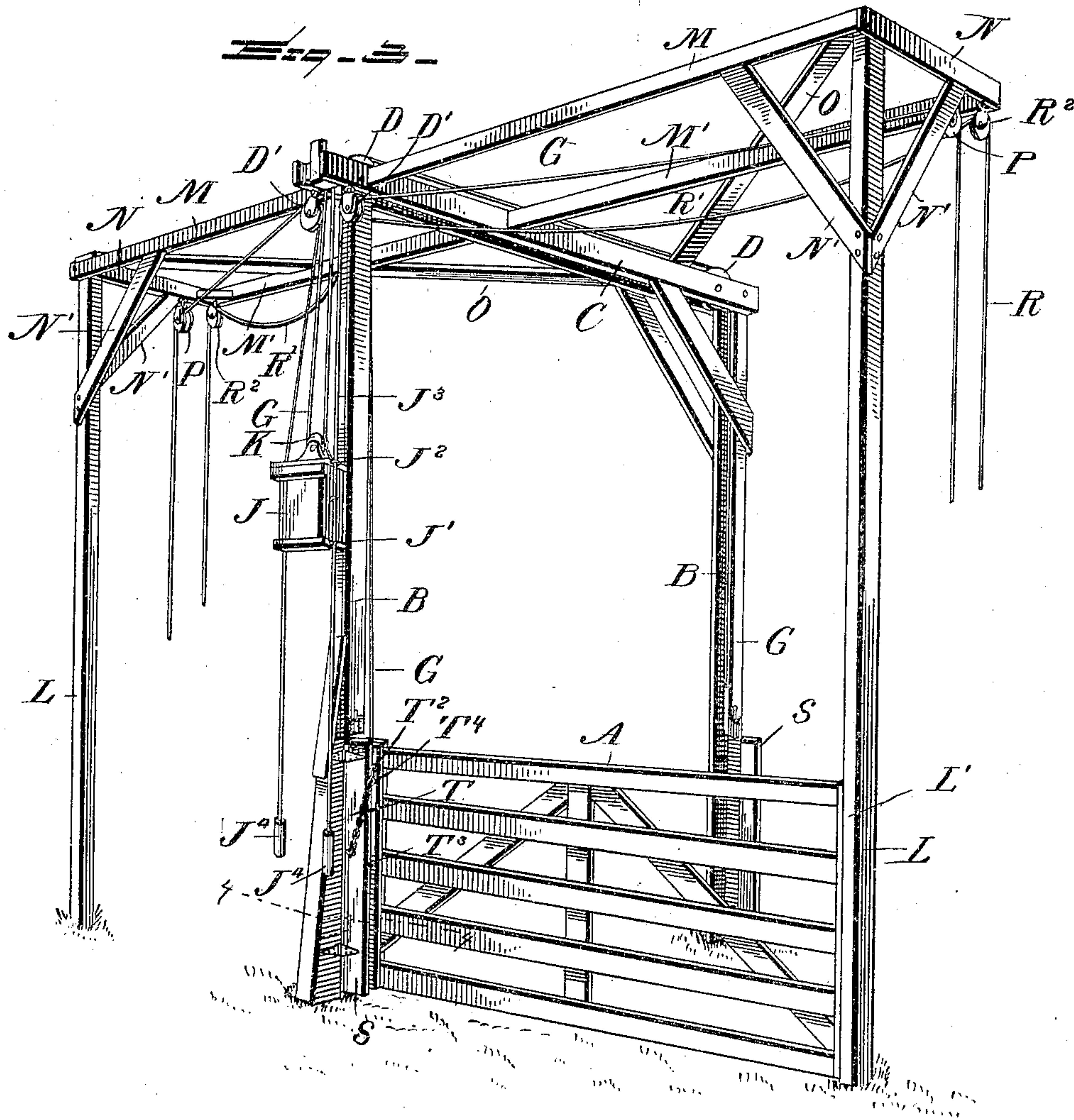
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WITNESSES:
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UNITED STATES PATENT OFFICE.

WILLIAM STANLEY WITTEN, OF CHICAGO, ILLINOIS.

GATE.

SPECIFICATION forming part of Letters Patent No. 682,305, dated September 10, 1901.

Application filed December 26, 1900. Serial No. 41,102. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM STANLEY WITTEN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Gates; and I do declare the following to be a full, clear, and exact description of the invention, such as it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in gates, and especially to an improvement upon the construction of gate forming the subject-matter of my application Serial No. 38,916; and it consists in the provision of means whereby the gate, besides being of the nature of a drop-gate, may be adapted to swing as a hinged gate.

To these ends and to such others as the invention may relate the same consists, further, in the novel construction, combination, and adaptation of parts, as will be hereinafter more fully described, and then specifically defined in the appended claims.

My invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form part of this application, and in which drawings similar letters of reference indicate like parts throughout the several views, in which—

Figure 1 is a perspective view of my improved gate, showing the framework in which the same is mounted, the lower portion of one of the posts being broken away. Fig. 2 is a side elevation of the gate with the superstructure cut away, showing the gate held up a slight distance from the ground. Fig. 3 is a perspective view showing the gate swung about at right angles to the position shown in Fig. 1, and Fig. 4 is a sectional view on line 4 4 of Fig. 3.

Reference now being had to the details of the drawings by letter, A designates the gate, which is of the usual construction (shown in my application hereinbefore referred to) and is adapted to work vertically between the posts or beams B, which support at their upper ends the cross-beams C. To the end cross-

pieces of the gate are secured the ends of a cord G, which cord passes over pulleys D, mounted between the beams C.

K is a pulley, the yoke of which is secured to the weight J, and said pulley K is supported by the rope G, which passes over the pulleys D, as described, said weight being provided to normally hold the gate open. Passing through an aperture J' in the cross-piece at the lower end of said weight, also guided through an eye J² in the side of the weight, is a rope J³, which passes loosely through said aperture and eye and over a pulley D', which is mounted adjacent to the projecting ends of the beams C, and to the lower end of the cord J³ is secured a weight J⁴. Vertical posts L are mounted at suitable locations, preferably the length of the gate from one set of posts B and substantially in line with said set of posts, and to the upper ends of the posts L is secured beam M, the center of which is supported by the beams C. Mounted also upon the upper ends of the posts T are the short beams N, which latter, also the beam M, are suitably braced by the brace-pieces N', as shown in the drawings. Secured to the outer ends of the beams N is a second beam M', which is parallel with the beam M and has its center supported by the beams C, as shown in the drawings. In order to strengthen the framework, diagonally-disposed beams O are passed from the upper ends of the vertical posts T over the tops of the beams M' and C.

From the foregoing it will be observed that the framework will be suitably braced from various directions and will withstand pressure incident to a heavy wind or other source. Cord J³, which is an operating-cord, passes through a pulley P, which is suspended from one of the beams N. There are two of these cords, which are similarly mounted and pass over pulleys at the ends of the rectangular frame made up of the horizontally-disposed beams, as shown.

One of the vertical posts B is cut so as to form a hinged portion S and is hinged at S' to the side or stationary part of the boxing in which the gate is guided as it works vertically. This portion of the post is hinged for the purpose of allowing one end of the gate to swing from the boxing, while the op-

posite end of the gate is secured to and swings with a hinged door S after the other door has been thrown open. In order to hold the gate closed, I provide a latch consisting of an angle-plate R, similar to that shown in my Patent No. 663,378, pivoted to the boxing made up of the posts B, and secured to said latch is a cord R', which passes over suitable pulleys R² in the framework, and the end of said cord extends to any suitable location where it may be grasped for the purpose of disengaging the latch from the upper edge of the gate and may be caught in an eye S^x to hold the weights from falling and to allow the weight to raise the gate to the position desired. In order to hold the hinged portion of the post S closed, a catch of any suitable construction may be employed, but which does not form part of the present application. The ends of the cord G, which raise the gate, are provided with hooks which engage eyes on the gate, so that the ends of said cord or one end may be easily detached from the gate when it is desired to allow the latter to swing as a hinged gate. Secured to one of the posts B at any suitable location is a chain T, having a snap-hook T⁴, mounted on the end thereof, and on one of the strips of the gate, preferably the cross-pieces at the end, is an eye T², which when it is desired to allow the gate to swing is engaged by the snap-hook T⁴, which serves to hold the gate down, while the free end of the gate which has been disconnected from one end of the cord G is allowed to swing after the hinged door S is thrown open. On the vertical posts L are hooks L', which are adapted to engage with and hold the gate open when swung in one direction or the other. Held in an aperture in the gate is a pin T³, which may be utilized, if desired, for the purpose of holding the gate at different heights to adjust the same for allowing stock of different sizes to pass underneath the gate. This pin in adjusting the gate may be passed through apertures in the end cross-pieces of said gate.

In operation when it is desired to allow the gate to be raised the operator pulls on

one of the cords R, which are connected to the latch, and the latter being raised out of the path of the gate the weight will cause the gate to rise to its highest position. In closing the gate the operator pulls down on the cord J³, and when the weighted end J⁴ comes in contact with the cross-piece on the bottom of the weight the latter may be raised, along with the smaller weight, and the gate will fall by gravity to its closed position. In adjusting the gate to swing as a hinged gate one end of the cord G is detached from the hook at the end of the gate, the door S swung open, the snap-hook carried by the chain on the gate-post is hooked into an eye on the gate to hold the hinged end down, and the free end of the gate may be swung and held to the post L by means of the hook L', mounted on said post.

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

1. In a combination dropping and swinging gate, the combination with the framework, the gate and weighted means for raising said gate, of means for allowing one end of the gate to swing free from the framework, and mechanism for holding the opposite end of the gate from rising while the free end of the gate is swung laterally.

2. In combination with the vertical posts, the dropping gate mounted between said posts, a weight and detachable connections between said weight and the gate, a swinging door at one end of the gate to allow the gate to swing free from the post, a chain and hook carried thereby, said chain being secured to the gate-post, an eye on the gate designed to be engaged by said hook to hold one end of the gate down, while its opposite end swings, and means for holding the gate open, as shown and described.

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

WILLIAM STANLEY WITTEN.

Witnesses:

THOS. J. FITZGERALD,
A. S. RUBLES.