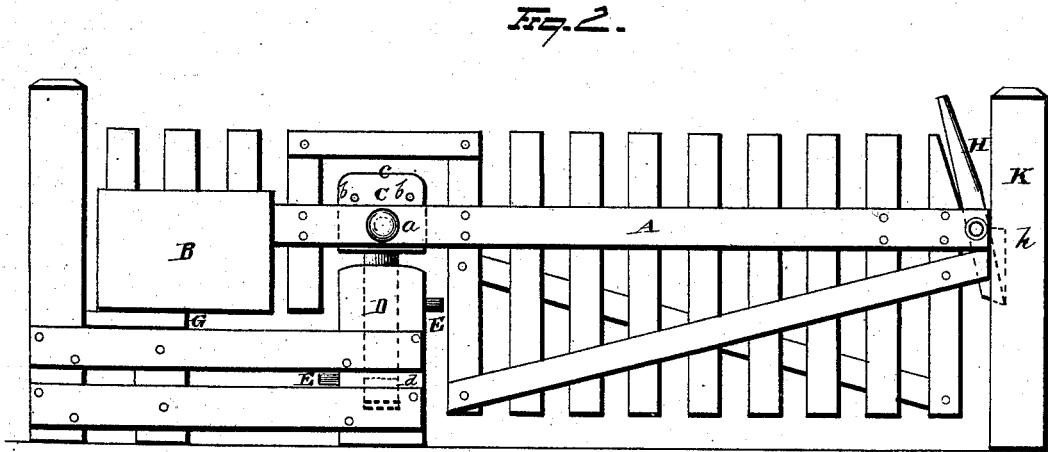
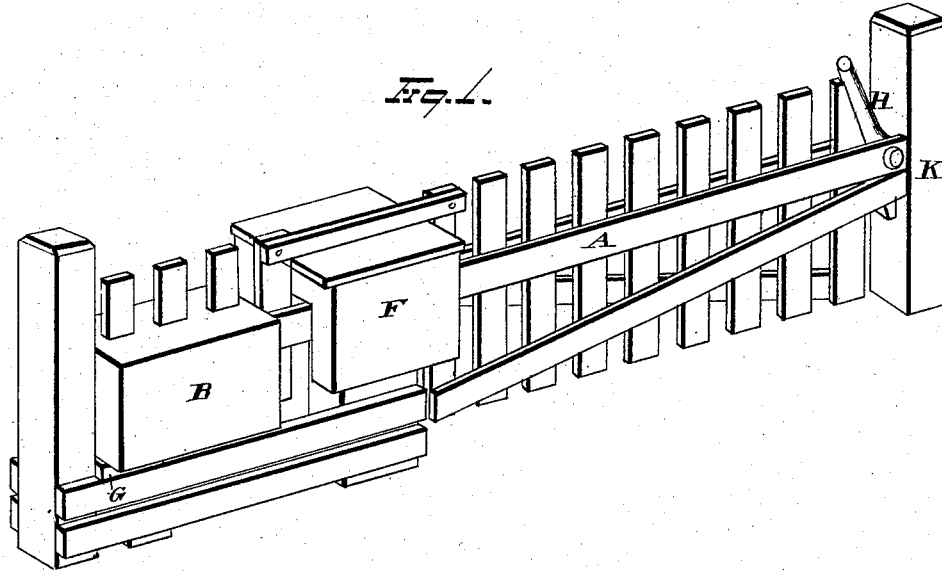


W. B. ALLEN.  
Gate.

No. 207,149.

Patented Aug. 20, 1878.



WITNESSES

*Edw. J. Nottingham*  
*A. M. Bright*

INVENTOR

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# UNITED STATES PATENT OFFICE.

WILLIAM B. ALLEN, OF ORLEANS, NEW YORK.

## IMPROVEMENT IN GATES.

Specification forming part of Letters Patent No. 207,149, dated August 20, 1878; application filed April 23, 1878.

*To all whom it may concern:*

Be it known that I, WILLIAM B. ALLEN, of Orleans, in the county of Ontario and State of New York, 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to improvements in that class of carriage-way gates which are provided with a counterpoised or weighted beam pivoted to a supporting-post, and upon which the gate swings.

The invention consists in the construction as follows: The counterpoised beam is pivoted to an upright, which latter is fitted within a tubular supporting-post and adapted to have rotation therein in a vertical plane and about its longitudinal axis. The lower extremity of the upright and its end bearing-seat in the tubular post are each provided with a metallic plate, which are adapted to prevent wear, as the said upright has bearing in the post during its axial rotation. The upper extremity of the upright is formed with a transverse head or cross-bar, provided with one or more pins, which limit the vertically-tilting movement of the counterpoised beam as the latter swings thereon. A box-like cover fits over these several connecting parts, and protects them from the weather and from becoming injured or rendered inoperative by reason of clogging matter gathering about the same, the cover being secured to the gate so as to be firm thereon. The lost motion or wear caused by the rotation of the upright in its tubular supporting-post is taken up by means of two adjusting-pins, which pass partially through said post and have end bearing against the upright. The counterpoise end of the beam is adapted to be vertically supported by means of a horizontal platform formed in connection with the fence, and so arranged as to cause the counterpoise to rest thereon.

The construction of the several parts is such that when the gate is closed the weight of the same is borne in part, respectively, by

the upright to which the beam is pivoted, the counterpoise, and the gate-latch. The latch is pivoted to the gate so as to have a vertical longitudinal movement instead of a horizontal one, and is provided with a lower end which is beveled inwardly and upwardly. The gate-post is made with a mortise, which has an in-cut beveled bottom, the counterpart of the bevel on the gate-latch, and the latter is locked by engagement with said mortise.

Referring to the drawings, Figure 1 is a view in perspective; Fig. 2, a view in side elevation, showing certain of the parts in section or broken away.

The beam A of the gate is provided with the counterpoise B, and is pivoted by a horizontal pivot, *a*, to the upright C, which latter is adapted to have longitudinal axial rotation within the tubular supporting-post D. The head or cross-bar *c*, formed on the upper extremity of the upright, is provided with the two transverse pins *b*, one respectively on either side of the vertical plane in which the pivotal connection of said beam and upright is located. These pins serve to define the vertically-tilting movement of the gate, and, if desired, one of them may be omitted and the gate be operated quite as well. The lower end of the upright and the bearing-seat thereof within the tubular post are respectively provided with metallic plates *d*, which latter serve to prevent wear of the parts as the upright moves in axial rotation, while, in order to take up all lost motion or wear occasioned by the friction of the longitudinal body of the upright within the tubular post, the two adjusting-pins E are provided. These pins pass partially through the supporting-post D from opposite sides thereof, and have end-bearing against the upright C. By adjusting these pins the said upright is maintained in vertical operative position, and the gate is supported in a secure manner. I prefer to have these adjusting-pins located out of horizontal line with each other, so that one may be placed some distance above the horizontal plane of the other, as indicated in the drawings.

The connections of the beam, upright, and tubular post are protected from the weather and from any clogging or injury thereto by

means of the box-like cover F, which fits over the same, and is secured to the gate in any suitable manner.

The platform G, built in connection with the fence at the rear end of the gate, is adapted to provide vertical bearing for the counterpoise B, and the construction of the several parts of the gate is such that when the latter is closed the weight thereof will be borne in part by the counterpoise as it rests tightly upon its bearing-platform, in part by the pivotal connection of counterpoised beam and upright, and in part by the latch H, as the latter engages with the gate-post K. The latch is pivoted to the gate so as to have vertical longitudinal movement, and also to have end bearing within the mortise *k*. The bottom of this mortise is made downwardly and inwardly in cut, in counterpart to the beveled end *h* of the latch. The gate is thus locked by the engagement of said latch with the post-mortise.

The construction of the gate otherwise than as above specified may be of any desired character; but, preferably, I make the same with diagonal cross-braces and pickets, as shown in the drawings, the pickets being embraced between the two longitudinal sections of the counterpoised beam.

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

1. The combination, with the upright having rotating movement in the tubular sup-

porting-post, of the counterpoised beam and the horizontal pivot which connects the two together, substantially as set forth.

2. The combination, with the upright to which the counterpoised beam is pivoted and the tubular post in which the upright has axial rotation, of the adjusting pin or pins, which have end bearing against said upright, and are adapted to take up all lost wear thereof as the same rotates in the tubular post, substantially as set forth.

3. The combination, with the upright, which has rotation within the tubular supporting-post, and is formed with the enlarged head, having one or more studs or pins adapted to limit the vertically-inclined movement of the gate when swung open, of the counterpoised beam and the horizontal pivot which connects the same with said rotating upright, substantially as set forth.

4. In a counterpoised gate, the latch H, pivoted thereto so as to have vertical end bearing in the mortise *h* of the gate-post, said mortise having its bottom formed with an in-cut bevel, which engages with a counterpart bevel on the lower end of said latch, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 18th day of April, 1878.

WILLIAM B. ALLEN. [L. S.]

Witnesses:

STEPHEN P. SEYMOUR,  
ROBT. M. SMITH.