

(No Model.)

G. W. GREEN.
BRIDGE GATE.

No. 505,707.

Patented Sept. 26, 1893.

Fig. 1.

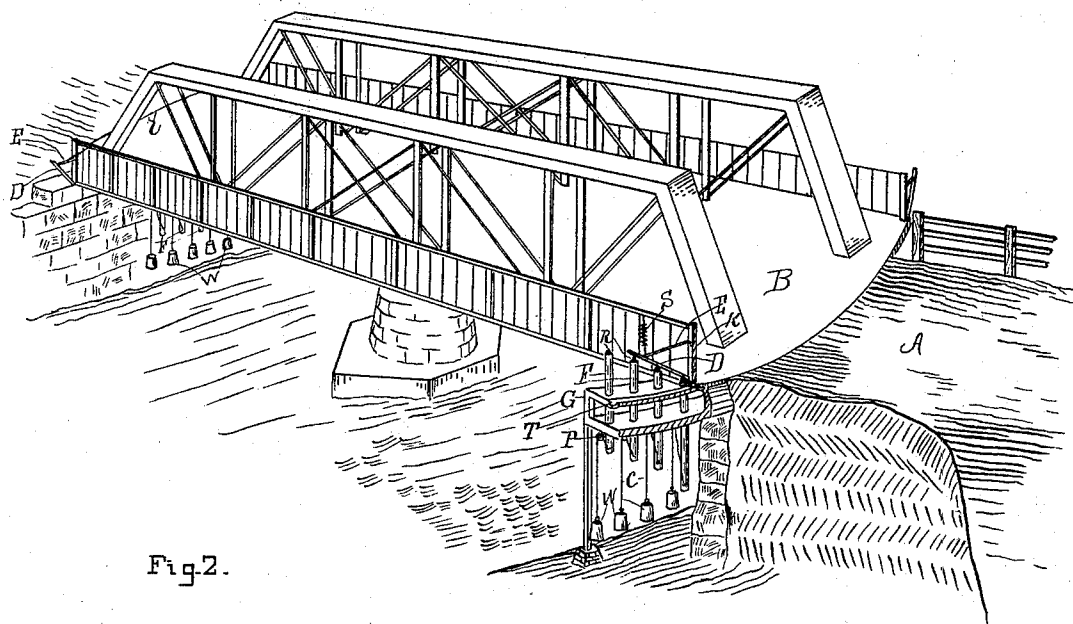


Fig. 2.

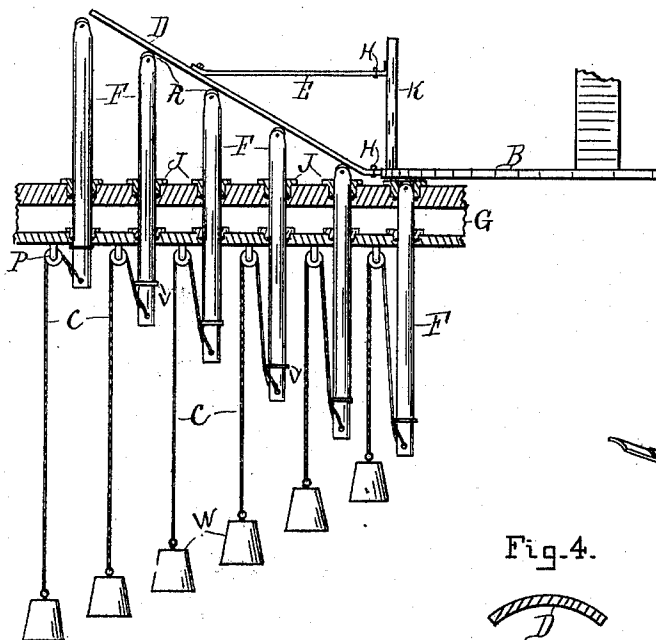


Fig. 3.

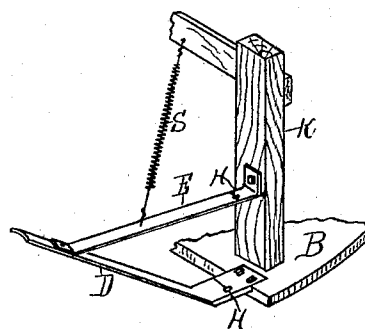


Fig. 4.



Witnesses:

Ray Hutchins.
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UNITED STATES PATENT OFFICE.

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BRIDGE-GATE.

SPECIFICATION forming part of Letters Patent No. 505,707, dated September 26, 1893.

Application filed June 19, 1893. Serial No. 478,087. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. GREEN, a citizen of the United States of America, residing at Joliet, in the county of Will and State of Illinois, have invented certain new and useful Improvements in Bridge-Gates, of which the following is a specification, reference being had therein to the accompanying drawings and the letters of reference thereon, forming a part of this specification, in which—

Figure 1 is a perspective view of a swing bridge and of a portion of a roadway approach showing the bridge gate comprising a series of vertically reciprocating posts adapted to be operated by the bridge. Fig. 2 is a detail view showing a series of weighted vertically reciprocating ports comprising the bridge gate, and showing a portion of the bridge, and an arm thereto attached for operating said posts. Fig. 3 is a detail perspective view showing a portion of the bridge, and an arm thereto attached for operating said posts, and Fig. 4 is a cross section of said arm.

This invention relates to certain improvements in bridge gates, which improvements are fully set forth and explained in the following specification and claims.

Referring to the drawings B represents an ordinary swing bridge.

D represents a laterally extending inclined arm pivotally attached to the side of the bridge at or near its end, and having a brace E to support its outer end. Said arm and brace are hinged to the bridge as shown at H for the purpose of permitting said arm to turn in case it is brought in contact with a passing vessel, and S is a coil spring for returning said arm to its first position after being so turned.

F are a series of posts arranged in proper boxes J in a frame G secured to the roadway approach A. Each of the posts F has a chain or cord C attached to its lower end, and passing over pulleys P attached to the under side of frame G, and each such cord or chain has a weight W attached to its lower end. These weights W are of sufficient weight to overcome that of the post to which it attaches, for the purpose of holding the

posts elevated to their highest position and until arrested by a collar V on the post under frame G, so that said posts all stand in a row across the roadway before being engaged by the bridge so as to form a barrier and close the roadway to travel when the bridge is open. When the bridge turns to the approach the arm D is located so as to ride upon the upper ends of said posts F and depress them successively so that the bridge may cover them and hold them down out of the way of travel. When the bridge moves away from the approach and passes off of the said posts, the weights W will return them to their first position so as to stand in a row across the roadway and form a gate or barrier to travel. It is intended to provide each approach with a series of such posts, so that each roadway will be closed to travel when the bridge is open. It is intended to have the arm D and its brace E hinged to the bridge as shown at H, so that it may turn if it should come in contact with a passing vessel and not be broken off, and be returned by means of a coil spring S or other similar means. The upper ends of the posts F are each provided with friction rollers R for reducing their friction with the arms D, and the said arm is intended to be concave in form on its under side for the purpose of causing it to maintain its contact with said posts, better than if it were flat.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is as follows, to wit:

1. A bridge gate comprising the combination of a series of counter-balanced vertically reciprocating contiguous posts arranged in the bridge approach across the roadway, and adapted to be successively depressed by the bridge when turned to be open to travel, and successively elevated to their first position by means of counterbalancing weights when released by the bridge to close the approach to travel substantially as and for the purpose set forth.

2. The combination of the frame G arranged in the bridge approach, the series of contiguous posts F arranged in boxes J in said frame, and having friction rollers R in

their upper ends, cords or chains C secured to the lower ends of said posts and passing over pulleys P, weights W attached to the lower ends of said cords or chains for holding said posts elevated, and inclined arms D
5 attached to the swing bridge B, and adapted to successively engage and depress said posts

substantially as and for the purpose set forth.

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Witnesses:

THOS. H. HUTCHINS,
RAY HUTCHINS.