

(No Model.)

F. RAASCH.
BRIDGE GATE.

No. 541,881.

Patented July 2, 1895.

Fig. 1.

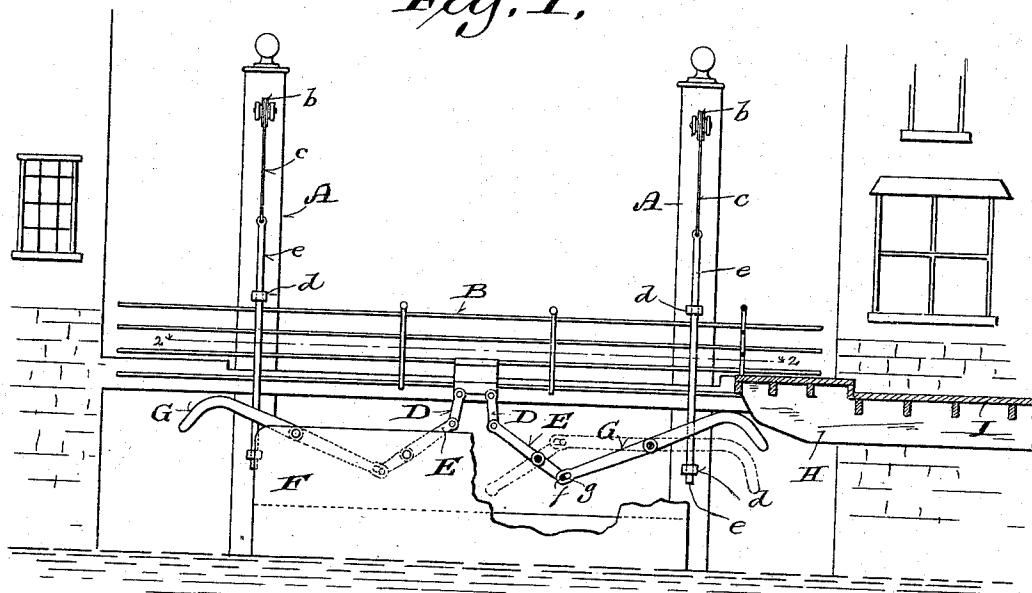


Fig. 2.

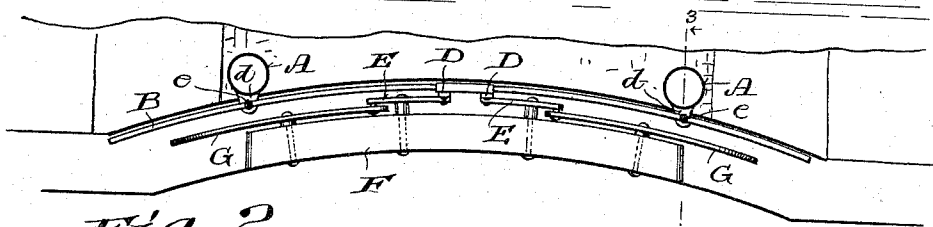
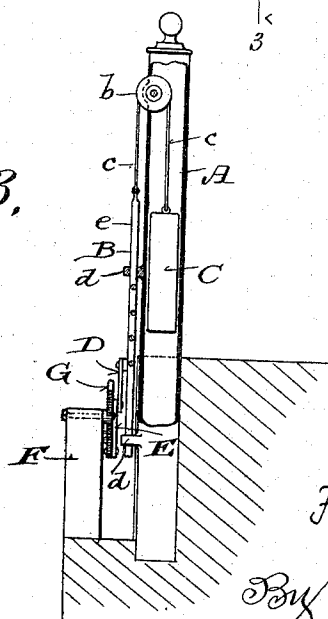


Fig. 3.



Witnesses:
Geo. W. Louny,
N. E. Oliphant

Inventor:
Ferdinand Raasch
By H. G. Underwood
Attorney

UNITED STATES PATENT OFFICE.

FERDINAND RAASCH, OF MILWAUKEE, WISCONSIN.

BRIDGE-GATE.

SPECIFICATION forming part of Letters Patent No. 541,881, dated July 2, 1895.

Application filed April 17, 1895. Serial No. 546,041. (No model.)

To all whom it may concern:

Be it known that I, FERDINAND RAASCH, a citizen of the United States, and a resident of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Bridge-Gates; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention has for its object to automatically bar the approach to a swing-bridge when the latter is open; and it consists in certain peculiarities of construction and combination of parts hereinafter set forth with reference to the accompanying drawings and subsequently claimed.

In the drawings, Figure 1 represents an elevation of a gate and mechanism for automatically raising or lowering the same accordingly as an adjacent swing-bridge is opened or closed, a portion of the bridge being shown in transverse section; Fig. 2, a plan view, partly in horizontal section, on line 2—2 of the preceding figure, and Fig. 3 a view on line 3—3 of the second figure.

Referring by letter to the drawings, A represents hollow posts rising from a bridge-abutment, and mounted in the slotted upper ends of these posts are sheaves *b* for chains or cables *c* that connect a gate B with weights C, the latter being arranged in said posts. The posts are provided with guides *d* for vertical rods *e* constituting parts of the gate, and thus the latter is steadied in its rise and fall parallel to the bridge-abutment.

Depending from the central portion of the gate are links D that connect with other links E, the latter being pivoted intermediate of their extremities to an extension F of the bridge-abutment. By means of the connected links D, E, I connect the gate with levers G that are fulcrumed about midway of their length to said extension of the bridge-abutment, and in order to prevent binding I prefer to have the connections in the form of pins *f* on the links E engaging longitudinal slots *g* in the levers. The outer ends of the levers G are elbowed and arranged to come in the path of a cross-timber H or other depending part at the end of a swing-bridge I the

extremities of this depending part being usually beveled as herein shown.

In practice, when the bridge is swung open, the depending part H will clear the elbow-levers G, and the weights C being free to descend, the gate B is drawn up across the approach to said bridge. When the bridge is swung home the cross-timber will come into contact with the elbowed end of one or the other of the levers G, and the latter being thus tilted on its fulcrum, power is exerted through links E, D, to lower the gate out of the way, each lever and corresponding link E assuming the position shown by dotted lines in the right hand portion of Fig. 1. By having the levers in link-connection with the central portion of the gate, the latter is prevented from canting when the depending part H of the bridge first strikes one of said levers.

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

1. The combination of a swing-bridge, a weight-controlled vertically moving gate, links depending from the center of the gate, other links connected with those aforesaid and pivoted intermediate of their extremities to a suitable support, and elbow-levers joined to the latter links, these levers being fulcrumed about midway of their length to said support in opposition to a depending part of the bridge.

2. The combination of suitable posts provided with sheaves, chains or cables run on the sheaves, weights connected to ends of the chains or cables, a gate hung from the other ends of said chains or cables, elbow-levers fulcrumed intermediate of their ends to a suitable support, a link-connection between the levers and gate central of the latter, and a swing-bridge having parts thereof arranged to actuate said levers.

3. The combination of suitable posts provided with sheaves and guides, chains or cables run on the sheaves, weights connected to ends of the chains or cables, a gate hung from the other ends of said chains or cables and provided with vertical rods engaging the guides on the posts, elbow-levers fulcrumed

intermediate of their ends to a suitable support, a link-connection between the levers and gate central of the latter, and a swing-bridge having parts thereof arranged to actuate said levers.

5 In testimony that I claim the foregoing I have hereunto set my hand, at Milwaukee, in

the county of Milwaukee and State of Wisconsin, in the presence of two witnesses.

F. RAASCH.

Witnesses:

WM. RAASCH,
N. E. OLIPHANT.