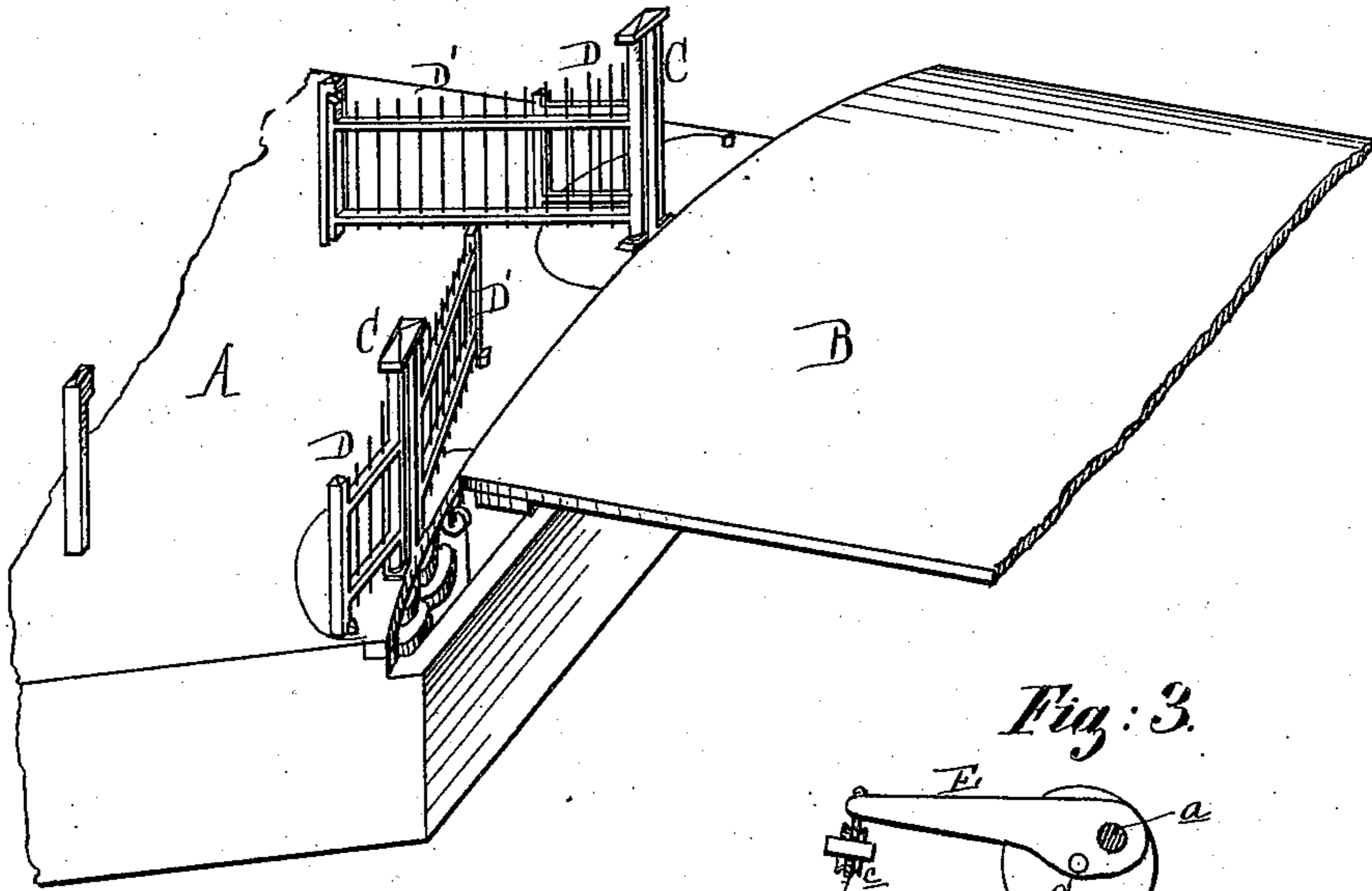


J. SCHWENNESEN.  
DRAW-BRIDGE GATE.

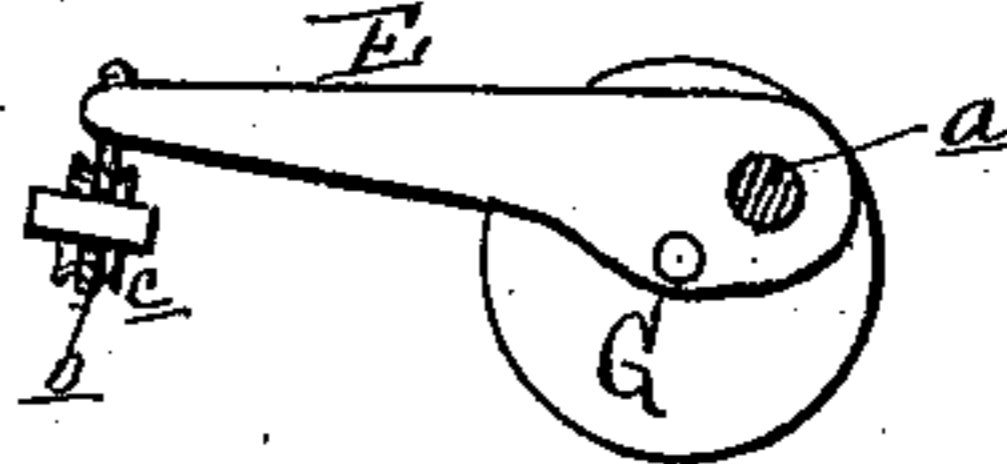
No. 174,307.

Patented Feb. 29, 1876.

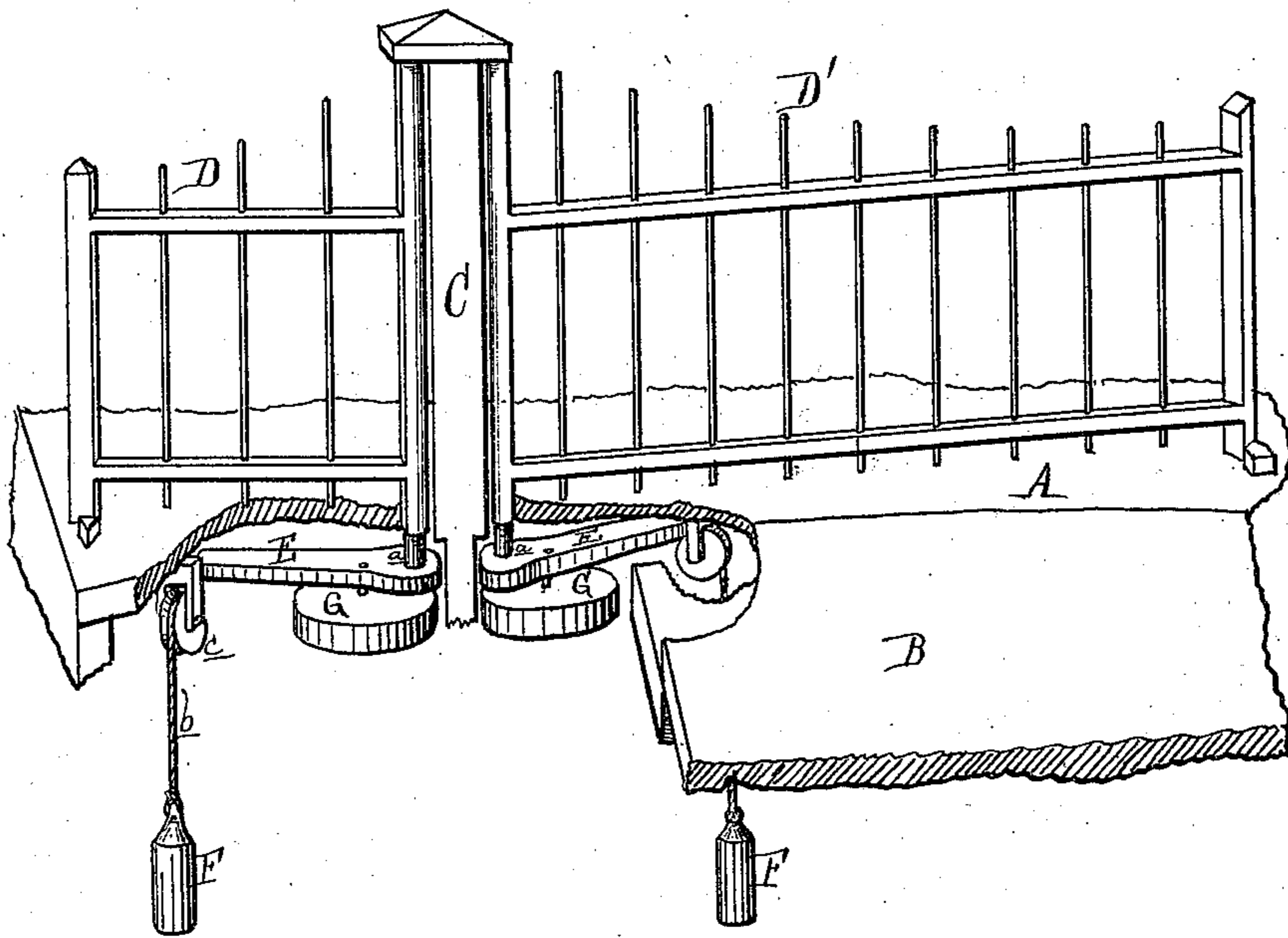
*Fig: 1.*



*Fig: 3.*



*Fig: 2.*



*Attest.*  
Edward Barthel  
H. F. Everts.

*Inventor*  
J. Schwennesen  
per atty  
Wm S. Sprague

# UNITED STATES PATENT OFFICE

JACOB SCHWENNESEN, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF  
HIS RIGHT TO JOHANN SUHR, OF SAME PLACE.

## IMPROVEMENT IN DRAW-BRIDGE GATES.

Specification forming part of Letters Patent No. **174,307**, dated February 29, 1876; application filed  
January 25, 1876.

*To all whom it may concern:*

Be it known that I, JACOB SCHWENNESEN, of Chicago, in the county of Cook and State of Illinois, have invented an Improvement in Bridge-Gates, of which the following is a specification:

The nature of this invention relates to an improvement in that class of gates which are placed on the approaches to a swinging bridge, to automatically close or open as the draw-span is swung away from or to the approaches, in order to prevent accidents which so frequently occur where an open draw is left unprotected. The invention consists in one or more gates at each side of the roadway, arranged to close automatically, when the draw is open, by a simple combination of a weight and cord, acting upon the gate through an arm below the floor of the approach, and an eccentrically-pivoted roller on the arm, acted upon by the end of the draw-span to open the gate, as more fully hereinafter set forth.

Figure 1 is a perspective view, showing the gates at one side of the roadway closed and at the other side open. Fig. 2 is an enlarged perspective view of a pair of gates closed, with portions of the approach and the draw-span broken away to show the operating parts. Fig. 3 is a plan of an arm and its roller.

In the drawing, A represents an approach to a bridge, of which B represents a part of

the draw-span. C is a gate-post erected at the head of the approach, at each side of the roadway, and at each side thereof is hung a gate, D or D', the former to close the footway, and the latter to close one-half of the roadway. The pivot *a* of the gate is in each case stepped below the floor of the approach, where it has keyed on it an arm, E, to the end of which is suspended a weight, F, by a cord, *b*, running over a pulley, *c*, to close the gate against a stop, *d*, when free to do so.

Eccentrically pivoted to and under each arm is a roller, G, which, when the gate is closed, projects into the path of the draw-span. When the latter is swung in front of the approach a stringer, *e*, under its end, coming into contact with the rollers, successively pushes them and their arms back under the approach, and thus causes the gates to be swung open.

What I claim as my invention is—

The combination of the arms E, cords *b*, weights F, and rollers G with gates D D', erected at the approach of a draw-bridge, and adapted to open and close the same by the action of the draw-span, substantially as described.

JACOB SCHWENNESEN.

Witnesses:

WM. H. LOTZ,  
WM. HOFFMANN.