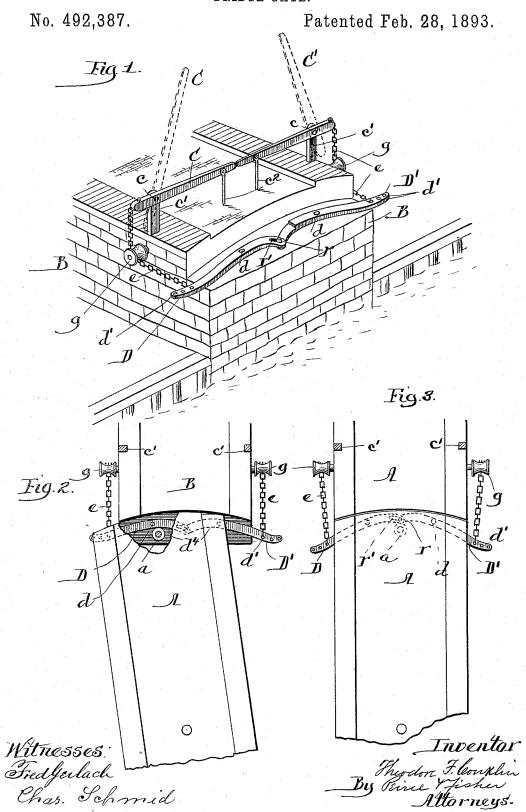
T. F. CONKLIN. BRIDGE GATE.



## UNITED STATES PATENT OFFICE.

THEODORE F. CONKLIN, OF CHICAGO, ILLINOIS, ASSIGNOR TO NATHAN S. LEPPERR, OF SAME PLACE.

## BRIDGE-GATE.

SPECIFICATION forming part of Letters Patent No. 492,387, dated February 28, 1893.

Application filed August 29, 1892. Serial No. 444, 345. (No model.)

To all whom it may concern:

Be it known that I, THEODORE F. CONKLIN, of Chicago, in the county of Cook and State of Illinois, have invented certain new and 5 useful Improvements in Mechanism for Operating Bridge-Gates, of which I do declare the following to be a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My present invention has for its object to provide improved mechanism for operating bridge gates and my invention consists in the novel features of construction hereinafter described and illustrated in the accompanying drawings and particularly defined in the claim at the end of this specification.

In the accompanying drawings my improved mechanism is shown as applied for operating

20 the gates of a swinging bridge.

Figure 1 is a perspective view showing the abutment of a swinging bridge, having my improved mechanism applied thereto. Fig. 2 is a detail plan view, showing the bridge partly turned. Fig. 3 is a similar view to Fig. 2, but showing the bridge in closed position.

A designates a swinging bridge and B designates one of its abutments, it being understood that both of the abutments or approaches of the bridge may be provided with the same

gate mechanism.

In the accompanying drawings I have shown my improved mechanism as employed for operating a gate consisting of two guard bars 35 C and C' that are pivotally mounted as at c upon the upright posts c' at each side of the abutment. The free ends of these guard bars are preferably furnished with the usual stop rods c² which serve to limit the downward 40 movement of the bars.

Adjacent to the edge of the abutment B are mounted the operating levers D and D', these levers being pivoted as at d; and the outer ends of the levers D and D' are connected preferably by chains e to the outer ends of the pivoted guard bars C and C'. Preferably the chains e will pass around the idler rolls g. The outer ends of the levers D and D' may be furnished with a series of holes d' to into which the hooks of the chains e may be

engaged according as a variation in the force of the levers is desired. By preference the inner ends of the levers D and D' are bent, as shown, so as to form the double inclined edge  $d^4$  with which will contact a suitable projection (preferably a friction roll a) upon the under side of the swinging bridge A adjacent to its end, and by preference also the inner ends of the levers D and D' will be suitably connected together, as per example by a pin 60 r fixed to one of the levers and projecting through a slot r' in the opposite lever.

From the foregoing description it will be seen that when the gate is in closed position the friction roll a will occupy a position op- 65 posite the inner ends of the levers D and D' and will consequently hold the pivoted guard bars C and C' in elevated position, as shown in Fig. 1 of the drawings, and it will be observed that when in such position the guard 70 bars C and C' will be in readiness to fall by gravity as soon as the swinging bridge is so far turned as to cause the friction roll a to pass off from the inclined ends of the levers D and D'. When the swinging bridge is thus 75 turned in either direction the guard bars C and C' will fall by gravity to the closed position shown in Fig. 1 of the drawings and will remain in such position until the swinging bridge is again closed and the friction roll a 80 has forced inward the inclined ends of the operating levers D and D'.

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

Patent, is as follows:

The combination with the pivoted guard bars C and C' of the pivoted and horizontally movable levers D and D', the inner ends of said levers being connected together and extending outwardly in position to be operated 90 by the swinging bridge, and forming a double incline, and connections uniting the outer ends of said levers to the ends of the pivoted guard bars C and C', substantially as described.

THEODORE F. CONKLIN.

Witnesses:
GEO. P. FISHER, Jr.,
FRED GERLACH.