

C. C. CLAUSSEN.
Bridge-Gate.

No. 227,613.

Patented May 18, 1880.

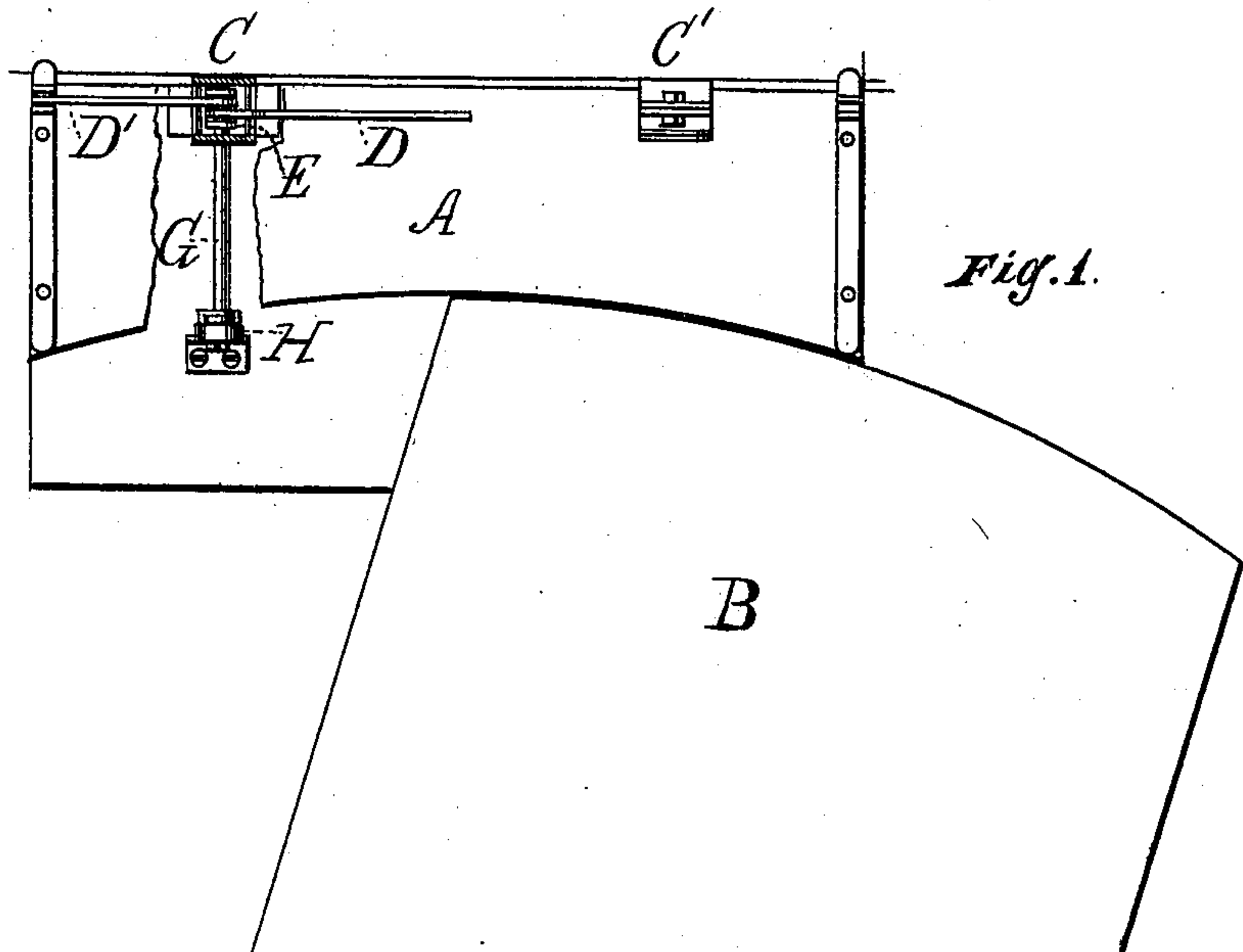


Fig. 1.

Fig. 2.

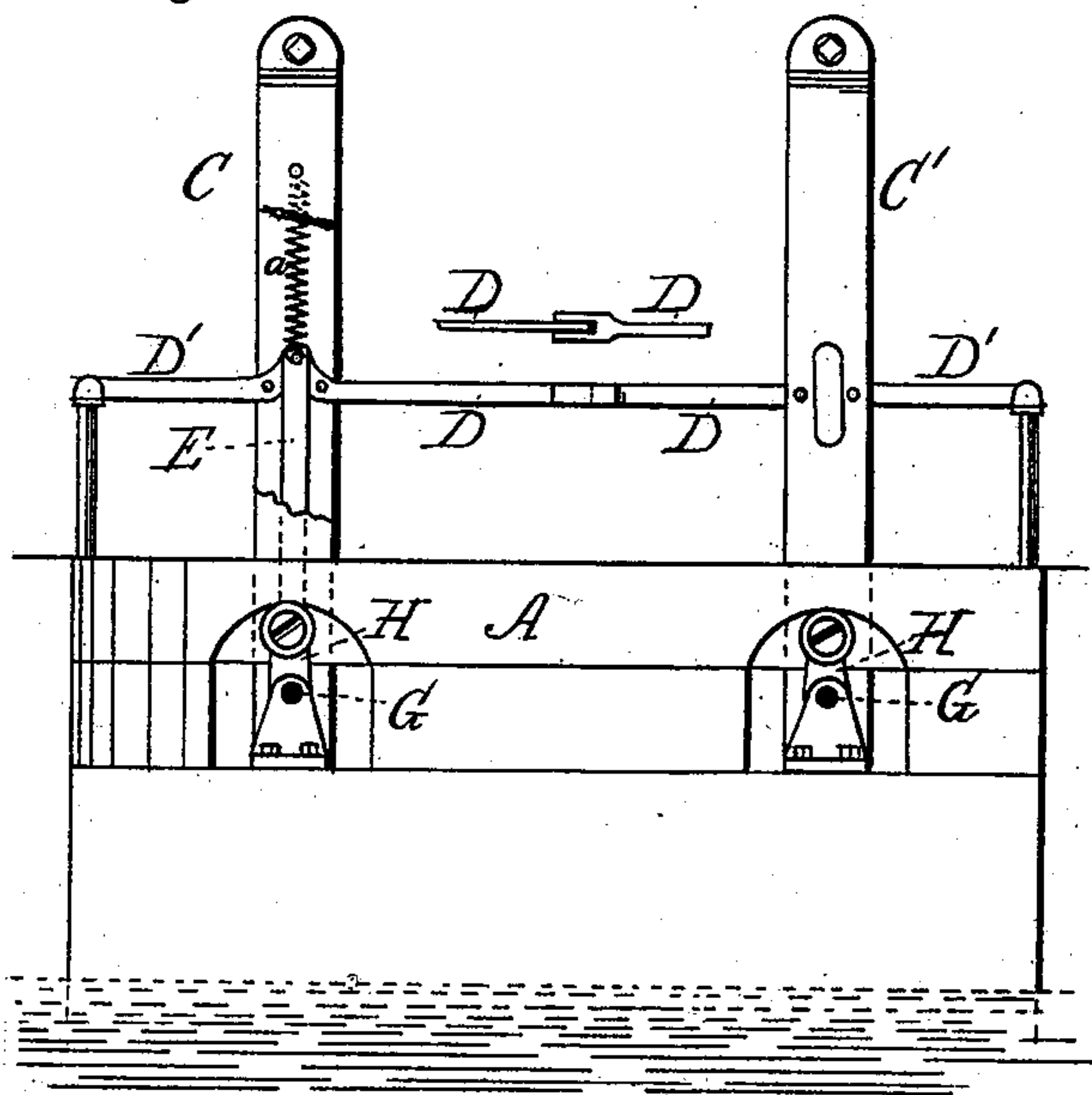
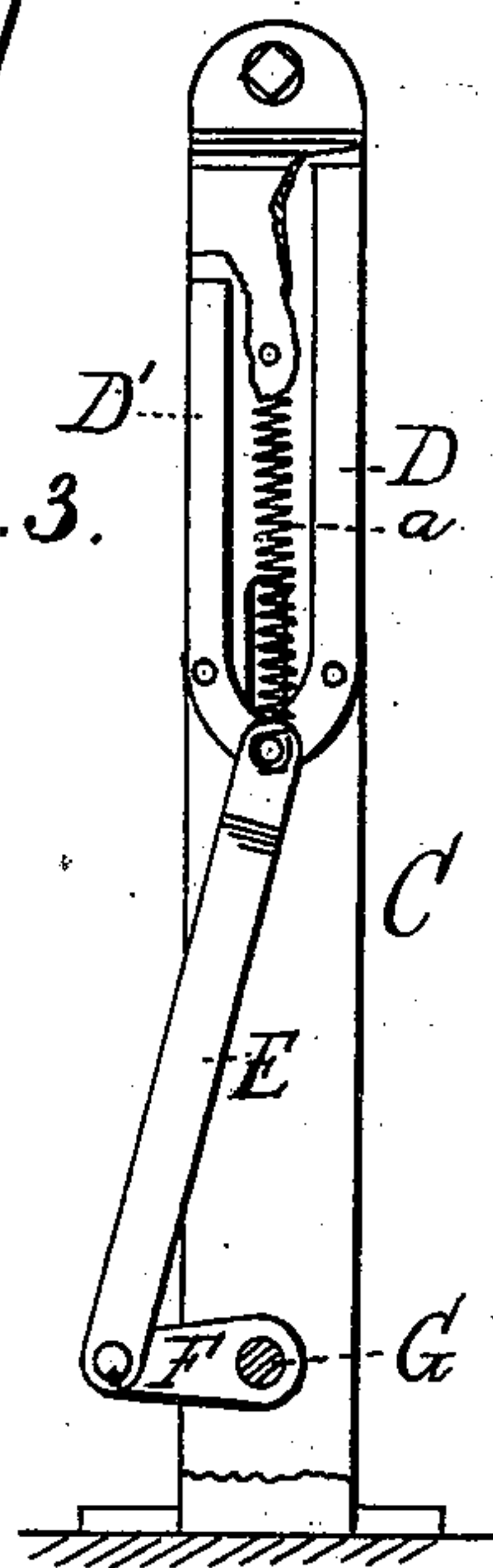


Fig. 3.



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CLAUS C. CLAUSSEN, OF CHICAGO, ILLINOIS.

BRIDGE-GATE.

SPECIFICATION forming part of Letters Patent No. 227,613, dated May 18, 1880.

Application filed February 3, 1880.

To all whom it may concern:

Be it known that I, CLAUS C. CLAUSSEN, of Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Bridge-Gates, of which the following is a specification.

The object I have in view is to produce a gate for swinging bridges, to be opened and closed by the swinging of the draw-span in either direction, which will be simpler, cheaper, and stronger than those heretofore designed, will not require any special construction of the ends of the draw-span, can be set at any desired distance back from the edge of the abutments, and will not obstruct travel when open; and my invention therein consists in the several combinations of the operative parts, as fully hereinafter explained, and pointed out in the claims.

In the accompanying drawings, forming a part hereof, Figure 1 is a top view of my gate partly closed, mounted in position on the abutment of a draw-bridge, with the top of one of the posts removed and the abutment broken away to show one crank-shaft; Fig. 2, an elevation of the face of the abutment and the closed gate, with one of the gate-posts broken away to show the connection of the bars; and Fig. 3, a separate view of one set of bars in the position they assume when the gate is open, the post being broken away to show the bars and the crank-connection.

Like letters denote corresponding parts in all three figures of the drawings.

A is one of the abutments, and B the swinging draw-span, of a draw-bridge. Upon the abutment, at any desired distance from the face of the same, are placed two frame-posts, C C', one on each side of the roadway, in each of which are pivoted, on bolts or short shafts, two bars, D D'. The inner ends of the bars of each post, between the pivoting-bolts, are both connected with a vertical rod, E, which is pivoted at its lower end to a crank, F, on the end of a horizontal shaft, G. Each shaft G extends through the abutment to the face of the same, where it is provided with another crank, H, projecting in the same direction as the crank F.

When either set of bars is in a horizontal position, projecting outwardly from their post,

both of the cranks on the shaft connected to those bars will stand vertically; but when the crank H is struck on either side and depressed by the end of the draw-span it will raise the bars connected with it and withdraw them within the post.

The cranks H are preferably provided with anti-friction rollers in their outer ends. The long bars D close the roadway, and are preferably curved toward the street, for the purpose of bracing each other should any pressure be brought against them when closed.

One of the long bars may be forked at its end to embrace the end of the other bar, for giving additional strength.

The short bars D' drop across the footways, and when in a horizontal position may rest in saddles on the top rail of the fence on each side of the approach to the draw-span.

It will be seen that the swinging of the draw-span in either direction away from the abutment will allow the cranks to rise in succession and the two sets of bars to drop in succession, so that one footway will be open as long as it would be safe to step upon the moving draw-span, and in closing the draw-span in either direction first one set of bars would be raised and then the other.

If it were desired to construct this gate so that both sets of bars would be operated at the same time, (when the draw-span commences to move and just as it stops,) a single crank, H, could be arranged centrally on the face of the abutment, to be worked by a beveled block on the center of the draw-span at each end, and could be connected by shaft and rods with the cranks F.

The bars D D' are intended to drop by their own weight; but it might be found desirable to connect a spiral spring, a, (or a weight,) to the short arms of each set of bars, to assure their movement when the draw-span opens.

What I claim as my invention is—

1. In a gate for draw-bridges, and in combination with the swinging draw-span, the posts C C' at the sides of the roadway, the two sets of vertically-swinging bars D D', pivoted in such posts, the cranks F in the lower ends of such posts, the pitman-rods E, connecting the cranks F with the inner ends of the bars D D', and a crank or cranks on the

face of the abutment, depressed by the draw-span and connected with the cranks F, substantially as described and shown.

2. In a gate for draw-bridges, and in combination with the swinging draw-span, the two posts at the sides of the roadway, the two sets of bars pivoted in said posts, and the two crank-shafts connected with the inner

ends of the bars, such crank-shafts being operated in succession by the movement of the draw-span, substantially as described and shown. 10

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