

(No Model.)

W. C. NEWMAN.

BRIDGE GUARD.

No. 370,403.

Patented Sept. 27, 1887.

Fig. 1.

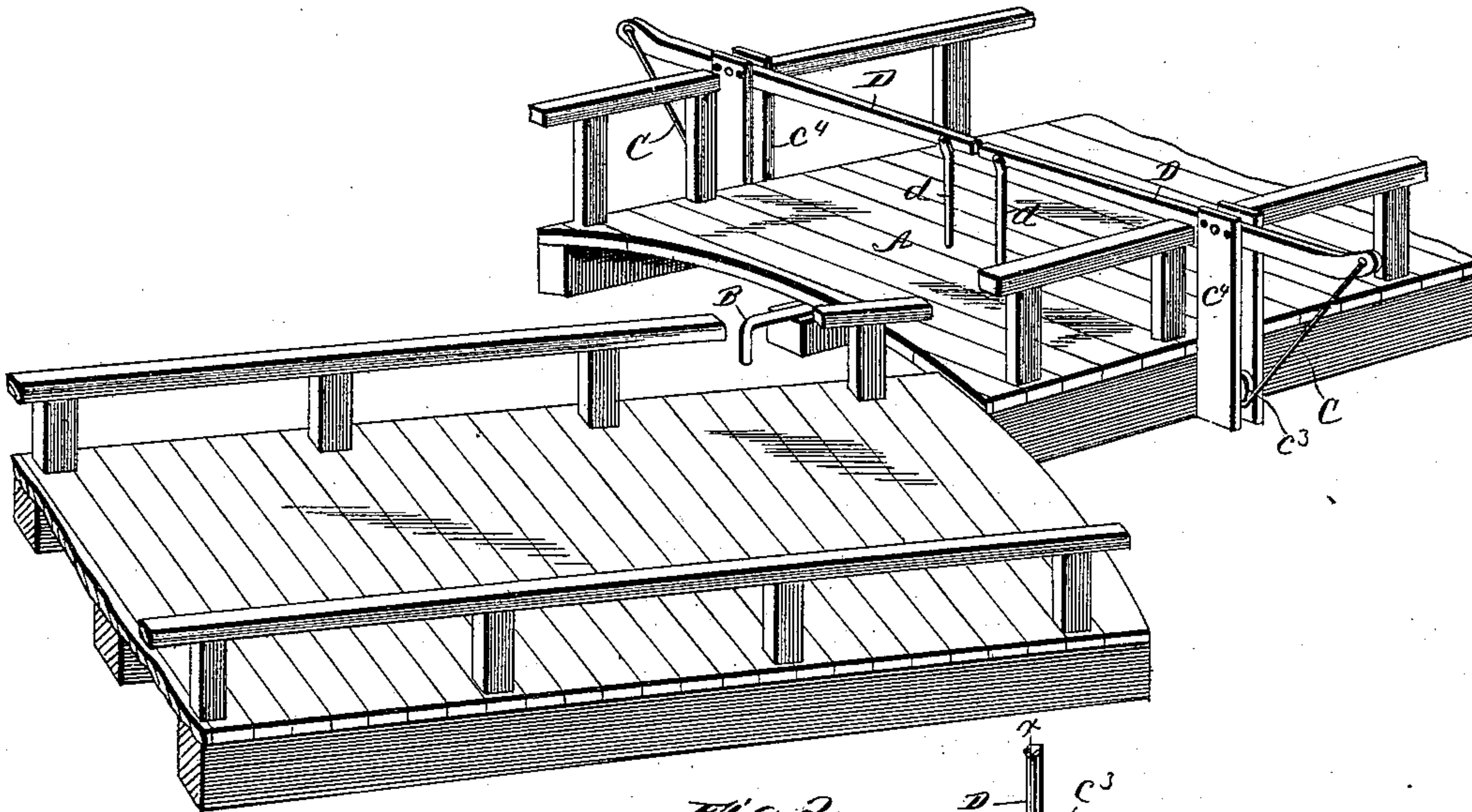


Fig. 2.

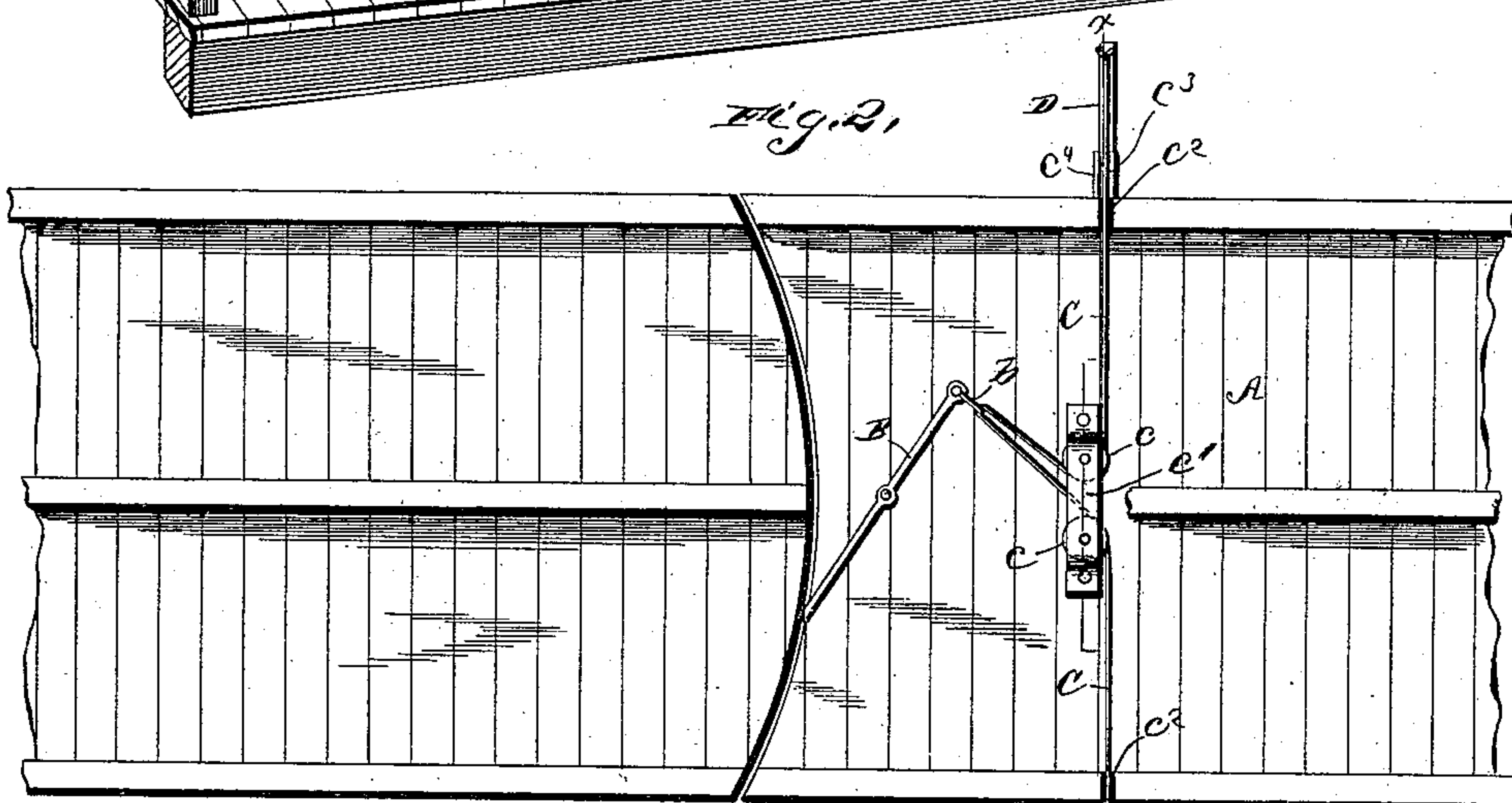
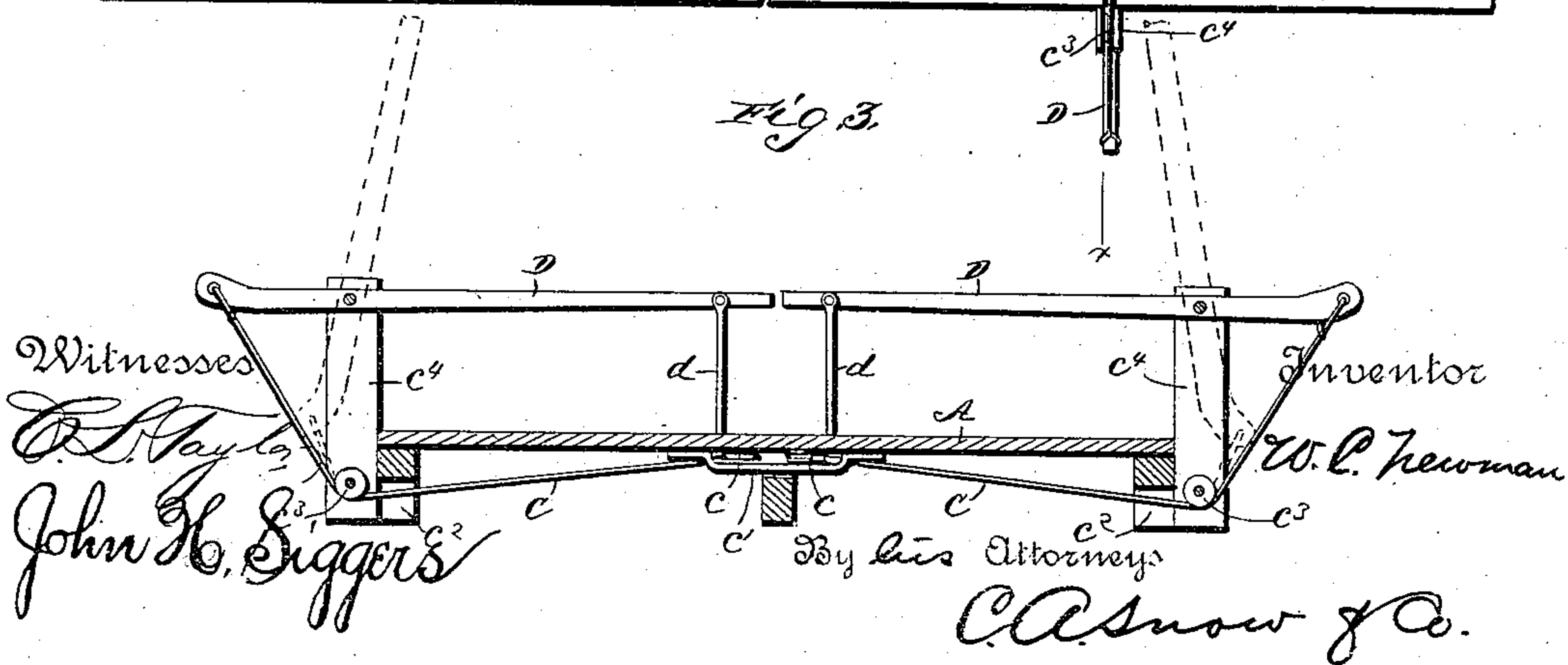


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM C. NEWMAN, OF CHARLEVOIX, MICHIGAN.

BRIDGE-GUARD.

SPECIFICATION forming part of Letters Patent No. 370,403, dated September 27, 1887.

Application filed June 4, 1887. Serial No. 240,289. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM C. NEWMAN, a citizen of the United States, residing at Charlevoix, in the county of Charlevoix and State of Michigan, have invented a new and useful Improvement in Bridge-Guards, of which the following is a specification.

My invention relates to an improvement in bridge-guards; and it consists in the construction and arrangement of the parts of the same, which will be more fully hereinafter described, and pointed out in the claims.

My present invention is an improvement upon Patent No. 348,410 granted to me August 31, 1886.

The object of my present invention is to provide a more simple form of guard having a more positive operation, being adapted to raise the two portions of a gate when the bridge-draw is closed and to cause said gate to drop when the draw is opened. I attain this object by the device illustrated in the accompanying drawings, wherein like letters of reference indicate similar parts in the several views, and in which—

Figure 1 is a perspective view of a portion of a bridge with my improvements shown in connection therewith. Fig. 2 is a bottom plan view of a bridge platform or flooring. Fig. 3 is a transverse vertical sectional view on the line xx of Fig. 2.

A indicates the flooring of the bridge, to the under side of which is a centrally-pivoted lever, B, which, when the draw is closed, is pressed back under the flooring A, as shown in Fig. 2, and when the draw is opened it turns out over the end of the platform A, as seen in Fig. 1. The inner end of this lever B is provided with a link or eye, b , to which two chains or ropes, C C, are secured, which pass right and left through sheaves or pulleys c , mounted in connection with the under side of the flooring A by means of a strap, c' , and thence pass out through the sides of the bridge through openings c^2 into metal projections, forming

bearings for sheaves or pulleys c^3 , and under said pulleys, and are thence connected to the ends of gravity gate-bars D, which are mounted in the projections c^4 , which extend above the bridge-surface a suitable distance to have the desired function. The pivots, which form the means of uniting the said gate-bars D, in connection with the projections, pass through the said gate-bars at such a point that one end thereof will overbalance the other end, and when the lever B is released by the opening of the draw the said gate-bars D will drop by gravity and automatically close the bridge-opening. The gate-bars D have suitable stops, d , pivotally mounted in connection therewith, which, when the gate-bars are in a lowered position, will rest upon the top flooring of the bridge. By this means it will be seen that I obtain an automatically-operated bridge gate or guard adapted to be used in connection with draw-bridges, which are used for the purpose well understood in the art.

The novelty and utility of my improved device being obviously apparent, it is unnecessary to further enlarge upon the same herein.

Having thus described my invention, I claim—

1. The combination of the centrally-pivoted lever B, the ropes or cables C C, and the levers or bars D, substantially as described.

2. The combination of the centrally-pivoted lever B, the ropes C C, connected to the inner end thereof, passing through sheaves c and through openings in the side of the bridge, and the gate-bars D, mounted in the projections c^4 some distance above the top flooring of the bridge, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

WILLIAM C. NEWMAN.

Witnesses:

E. H. GREEN,
GEORGE W. MILLER.