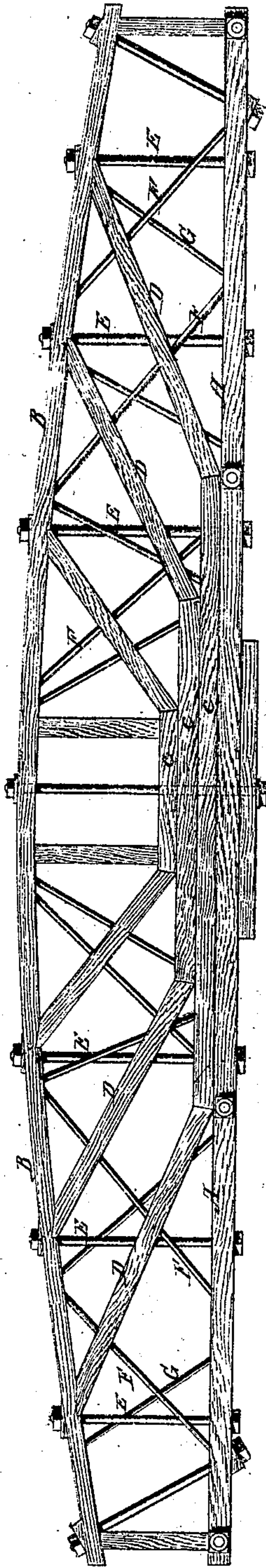


H. W. Cass,

Truss Bridge.

No. 97044.

Patented Nov. 23. 1859.



Witnesses:

Susanne Dietrich
W. F. Clark

Inventor:

H. W. Cass.
PER *Mumford*
Attorneys.

United States Patent Office.

H. W. CASS, OF LODI, WISCONSIN.

Letters Patent No. 97,044, dated November 23, 1869.

IMPROVED DRAWBRIDGE.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, H. W. CASS, of Lodi, in the county of Columbia, and State of Wisconsin, have invented a new and useful Improvement in Bridges; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

The object of this invention is to provide an improved construction of drawbridges, calculated to be stronger and more durable, with the same weight of material, than any now in use.

The invention consists in a certain construction and arrangement of parts, as hereinafter more fully specified.

The drawing represents a side elevation of a section or span arranged according to my improvement.

A represents the lower chord, and B, the upper one. C represents the counter-chords, placed upon the top of the lower chords, at the centre, and one above

the other, the lower one being the longest, and the others shortened in regular gradations.

D represents braces, fitted to the ends of these counter-chords, and to the under side of the upper chord, at the points where the vertical suspending-rods E pass through the said upper chords, so that the said upper ends of the braces are firmly confined thereat.

In connection with this arrangement of braces, I provide, also, the diagonal bracing-rods F G, inclined in opposite directions, and clamping the upper and lower chords together.

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

A drawbridge, provided with the chords A B, counter-chords C, braces D, and rods E F G, all constructed and arranged with reference to each other, in the manner specified.

Witnesses:

H. M. AYER,
J. H. RAY.

H. W. CASS.