

No. 81,125,

PATENTED AUG. 18, 1868.

E. J. ALLEN.
SCOW.

Fig:1.

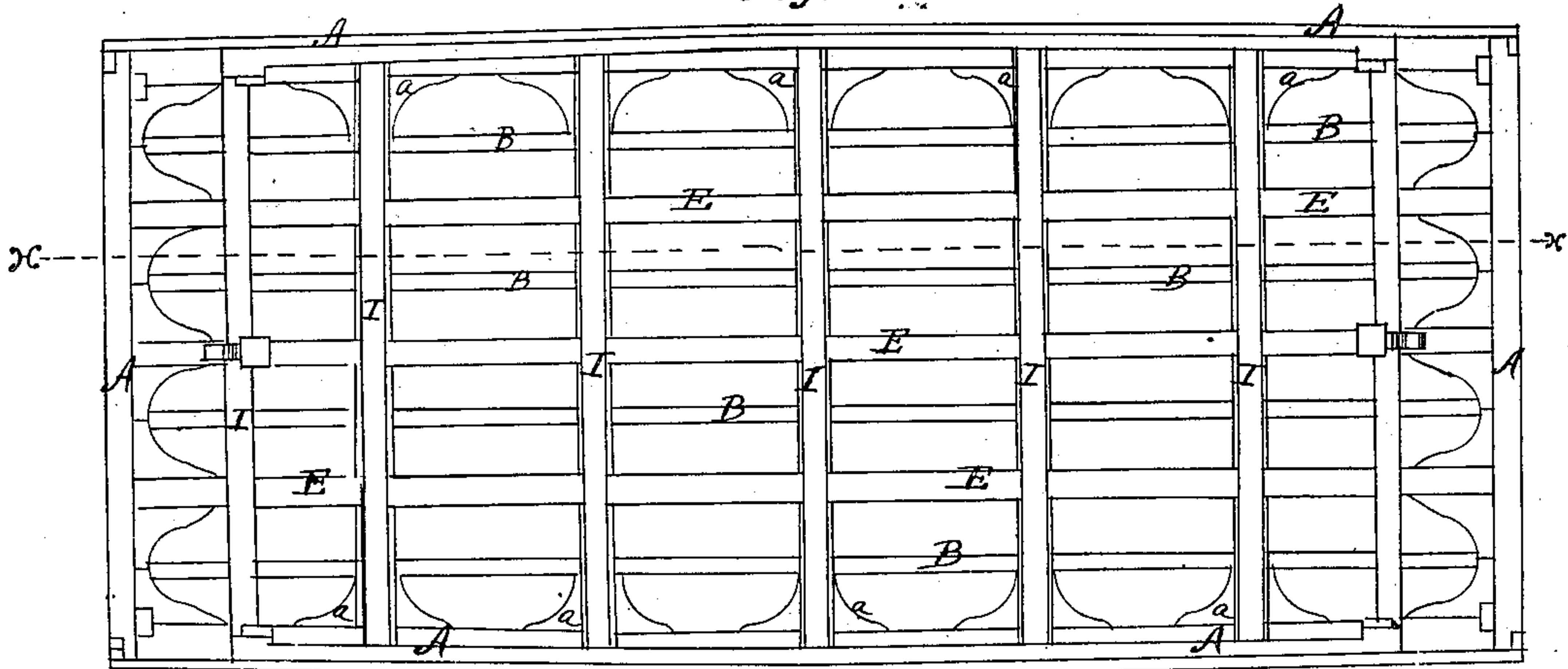


Fig: 2.

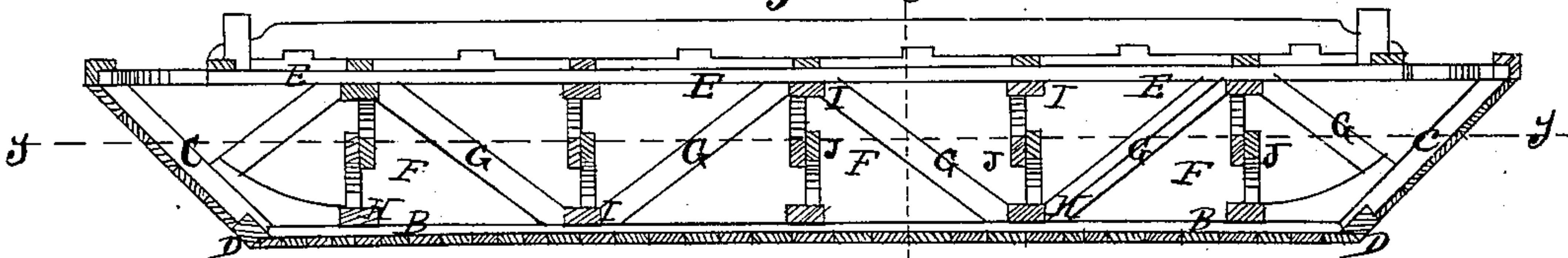
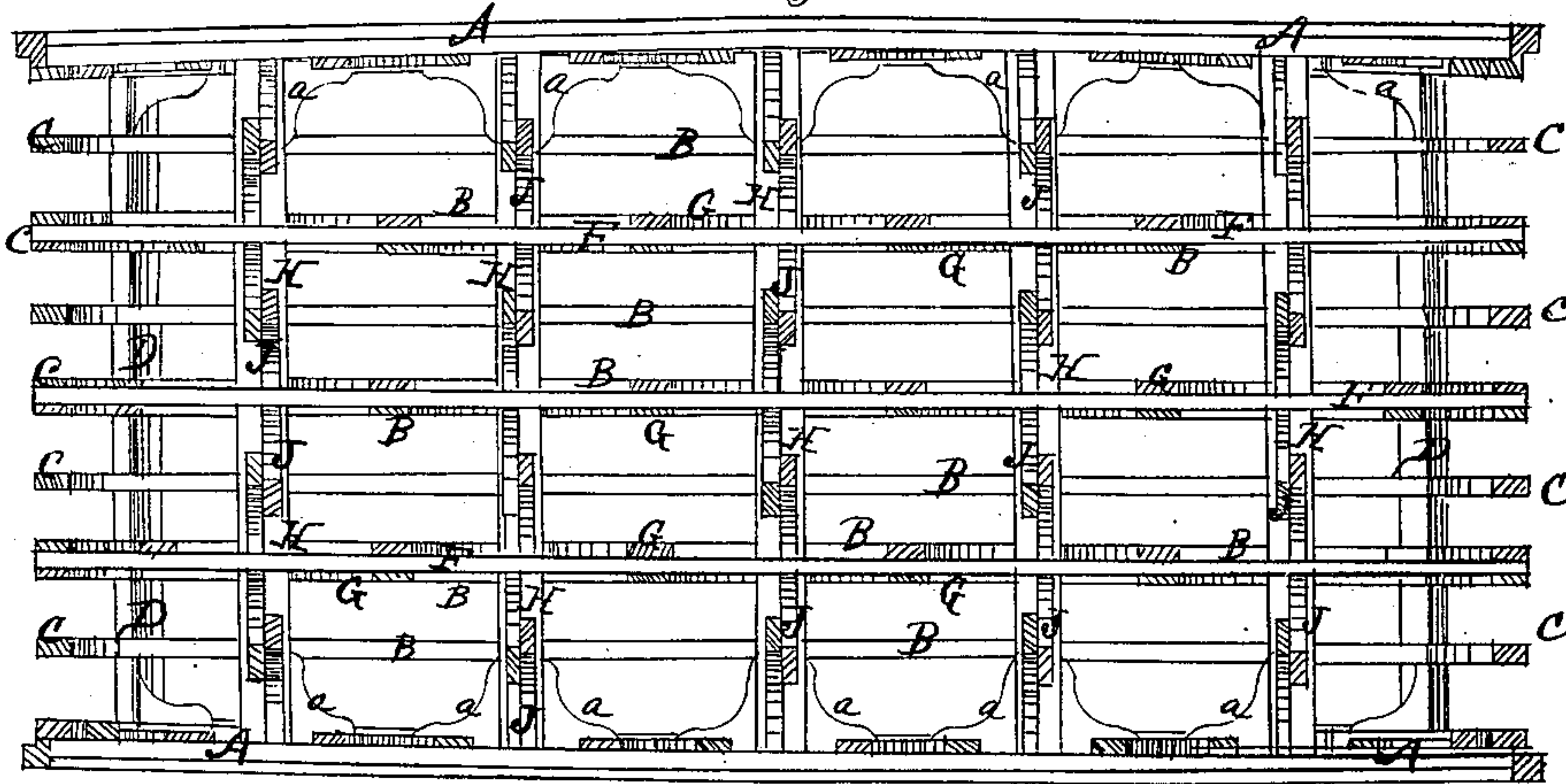
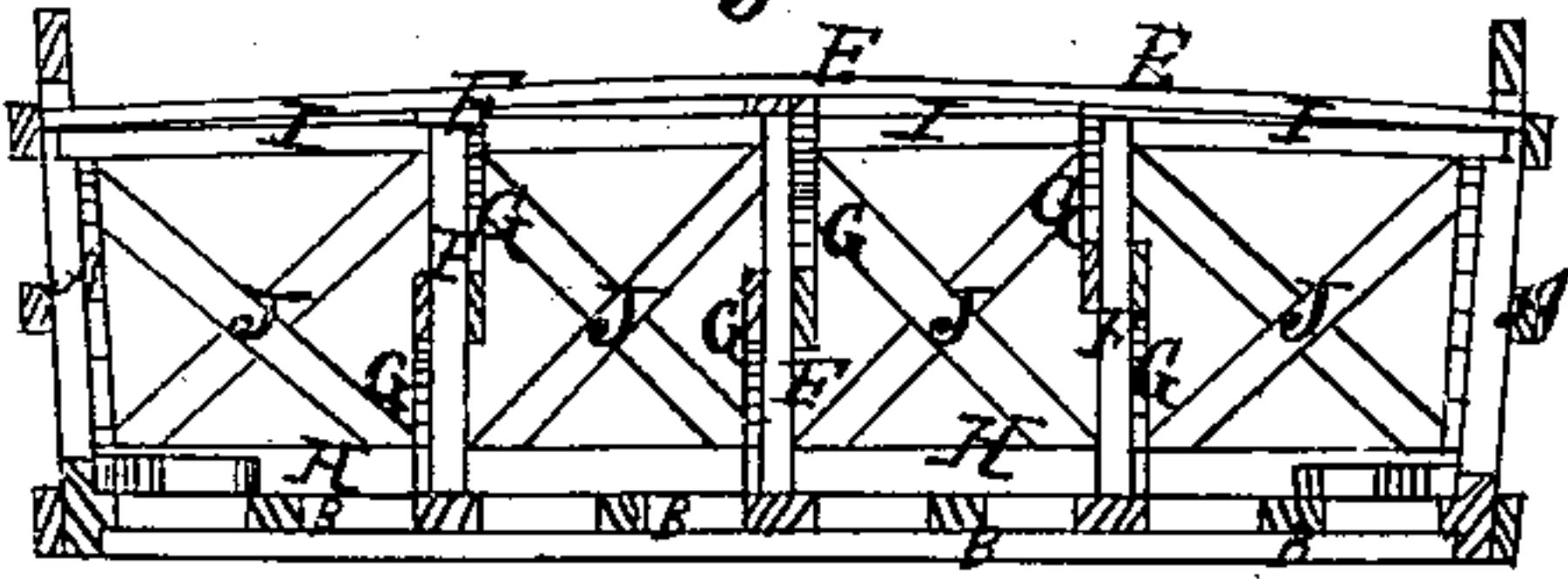
Fig. 3. α 

Fig: 4



Witnesses
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ENOCH J. ALLEN, OF RONDOUT, NEW YORK.

Letters Patent No. 81,125, dated August 18, 1868.

IMPROVEMENT IN SCOWS.

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, ENOCH J. ALLEN, of Rondout, in the county of Ulster, and State of New York, have invented a new and useful Improvement in the Construction of Scows; 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.

Figure 1 represents a plan or top view of my improved scow.

Figure 2 is a vertical longitudinal section of the same, taken on the plane of the line $x x$, fig. 1.

Figure 3 is a horizontal section of the same, taken on the plane of the line $y y$, fig. 2.

Figure 4 is a vertical transverse section of the same, taken on the plane of the line $z z$, fig. 2.

Similar letters of reference indicate corresponding parts.

This invention relates to a new manner of constructing scows, with an object of strengthening the same, and consists—

First, in strengthening the fore-and-aft partitions by means of trestle-work.

Second, in arranging cross-keelsons above and at right angles to the fore-and-aft keelsons; and in the use of cross-beams on head of fore-and-aft keelsons, and parallel to the cross-keelsons. The fore-and-aft partitions are not only made substantial by means of the trestle-work, but still more so by the cross-keelsons and beams.

The invention consists, third, in the employment and use of trestle-work or bracing, by which the cross-keelsons and beams are not only connected, but by which the fore-and-aft divisions are connected and held apart.

The invention consists, fourth, in a new manner of constructing the lower grub, so that by it the fore-and-aft keelsons and the counter-timbers are fairly connected, and a good abutment made for the bottom and end plank.

By all these improvements, the scow is made so strong and substantial that it will be capable of supporting heavier loads, and that it will remain useful for a longer period than any ordinary scow now made.

A, in the drawing, represents the outer case or shell of a scow. B B are the fore-and-aft keelsons arranged in the same. Their ends, as well as the lower ends of the counter-timbers C C, are let into the end grubs D D, which are grooved or mortised for their reception, and which project beyond the faces of the counter-timber and of the keelsons B, in such a manner that the bottom and end planks may abut against them, as is clearly indicated in fig. 2.

By thus arranging the end grubs, the said timber as well as the planks is firmly held in position.

E E are the fore-and-aft beams, which, in conjunction with the keelsons B, serve to support the fore-and-aft plank partitions F F, as usual.

The keelsons B and the beams E are made so wide that they project beyond both sides of the plank partitions, as is clearly shown in figs. 3 and 4, to allow the arrangement on both sides of the partitions of trestle-work G, by which the beams and keelsons are braced, and the partitions supported and strengthened.

H H are cross-keelsons, arranged above or framed together with the keelsons B.

I I are cross-beams, framed together with the beams E, and above and parallel with the keelsons H.

Between the cross-beams and keelsons are arranged braces J J, as shown more particularly in fig. 4. These braces keep the partitions F apart, and strengthen the whole framework of the scow.

The cross-beams and keelsons are secured to the outer frame by means of knee-pieces $a a$, or otherwise.

I am aware that fore-and-aft divisions were already used on scows, but without trestle-work G. They were simply made of plank, and did not materially strengthen the whole structure.

Fore-and-aft keelsons have been used, but no cross-keelsons or beams have ever been employed in the manner and for the purpose shown; neither were the transverse braces J ever employed.

I claim as new, and desire to secure by Letters Patent—

The combination of the cross-keelsons and beams H I, transverse trestles J, and longitudinal trestles G; arranged, as described, in a scow, whereby the cross-keelsons support the transverse trestles, and the latter support the longitudinal trestles, as herein shown and described.

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