# J. W. Dunne,

## Ceiling for Stages.

No. 113,277. Patented Apr. 4. 1871.

Fig: 1.

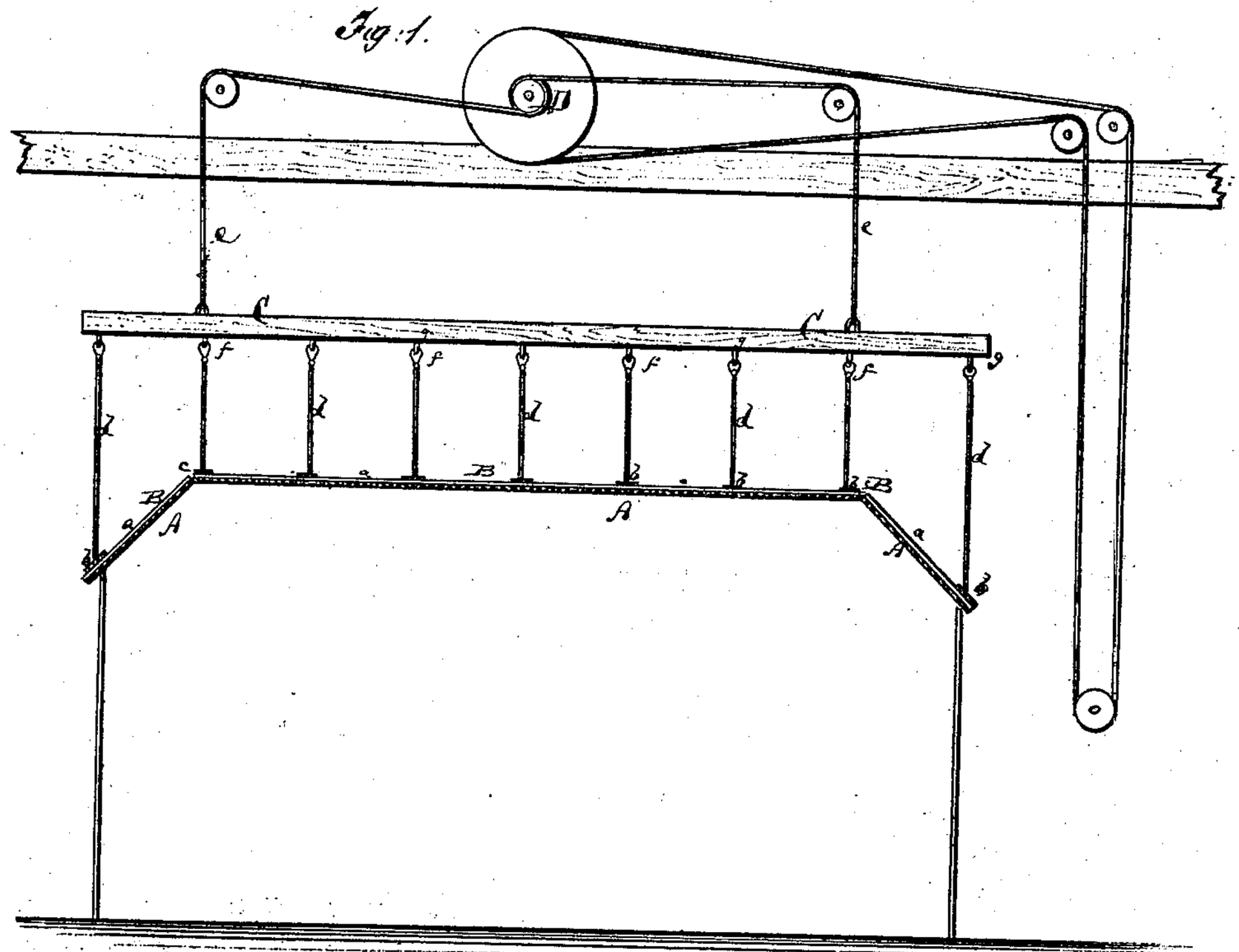


Fig: 2.

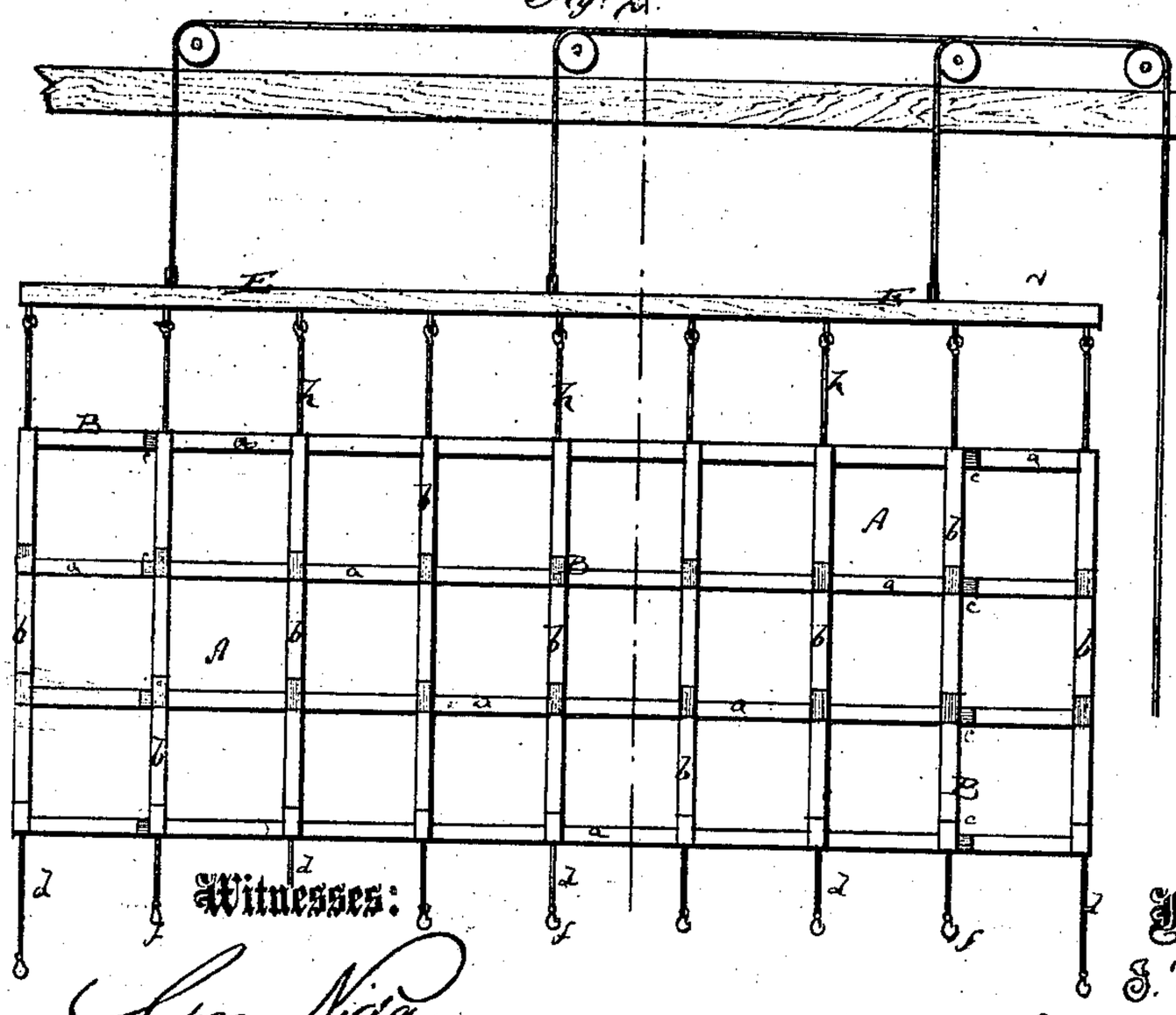


Fig: 3.


Witnesses:

Chas. Nida.

Wm H. L. Smith.

Inventor:

J. W. Dunne

Per Munn & Co

Attorneys.

# United States Patent Office.

JOHN W. DUNNE, OF NEW YORK, N. Y

Letters Patent No. 113,277, dated April 4, 1871.

## IMPROVEMENT IN CEILINGS FOR STAGES.

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, JOHN W. DUNNE, of New York city, in the county and State of New York, have invented a new and useful Improvement in Ceilings for Stages; 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 drawing forming part of this specification.

Figure 1 represents a side view, partly in section, of my improved hipped ceiling for stages.

Figure 2 is a face view of the same, showing it suspended when not in use.

Figure 3 is a transverse section of the same.

Similar letters of reference indicate corresponding parts.

This invention relates to an improvement in ceilings which are to be used on the stages of theaters, opera-houses, &c., to complete and perfect the display of scenery.

Complete ceilings for scenery were heretofore only made flat, and could not be produced in single pieces, arched or hipped.

My invention consists in the construction of jointed ceilings, which are by lines or cords suspended from battens or rigid bars, so that they can, by varying the lengths of said lines, be brought to any desired shape.

The good effect of scenery on stages is, by the introduction of arched, hipped, or otherwise bent ceilings, materially increased, and the complete imitation of every style of architecture made possible.

A in the drawing represents the sheet or canvas, which is painted on its lower surface in imitation of a ceiling.

The canvas is secured to a frame, B, which is composed of narrow cross-pieces or profile strips *a a*, and of longitudinal battens or stretchers *b b*.

The stretchers *b* are jointed at every cross-piece, so that the ceiling will not be strained or torn by tension.

The cross-pieces *a* are rigid, except where the ceiling is to bend; at such places each cross-piece has a joint, as at *c c*.

The ceiling is, by small lines or cords *d d*, suspended from strong bars or battens C C, which hang by ropes *e* from a windlass, D.

The lines *d* are, by snap-hooks *f f*, fastened to small loops *g* on the cross-pieces, so as to be readily detachable.

The lines *d d* are of such varying lengths that, when the ceiling is suspended from the horizontal battens C, it will, on the joints *c c*, be bent to the requisite shape, as in fig. 1.

For arched ceilings the cross-pieces are either jointed throughout or made flexible, to bend of their own weight, and all lines differ in length, becoming larger toward the ends.

For hipped-ceilings, as in fig. 1, the lines *d* are of equal lengths, except at the ends, where they are lengthened, as shown.

By means of the ropes *e* the ceiling can be raised and lowered at will, to be brought to the proper place on the upright scenery.

When the ceiling is to be removed from sight, it is lowered to the stage and detached from the battens C, which can be easily done by the aforesaid snap-hooks.

It is then, by other lines *h h*, suspended at one side from a vertically-adjustable horizontal-bar, E, and hoisted, so as to hang vertically, as in figs. 2 and 3.

When thus hanging it is quite straight, the joints in the cross-pieces allowing it to hang so from the bar E.

The ceiling can now be carried out of the way and hung between the other scenery, and does not occupy more room than any other flat piece of equal extent.

When to be used again, it is lowered to the stage and detached from E, to be refastened to C, and elevated to its position.

Having thus described my invention—

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

1. The jointed-ceiling for stages, suspended from lines *d d*, of varying lengths, to thereby receive the desired shape, as set forth.

2. The bar E, combined with the jointed ceiling, and with the battens C, for the purpose of suspending the ceiling flat between the other scenery, as specified.

3. The frame B, composed of the flexible profile strips *a* and jointed stretchers *b*, substantially as and for the purpose herein shown and described.

JOHN W. DUNNE.

Witnesses:

A. V. BRIESEN,

ALEX. F. ROBERTS.