

(No Model.)

3 Sheets—Sheet 1.

E. E. VANCE.
STAGE EFFECT.

No. 534,532.

Patented Feb. 19, 1895

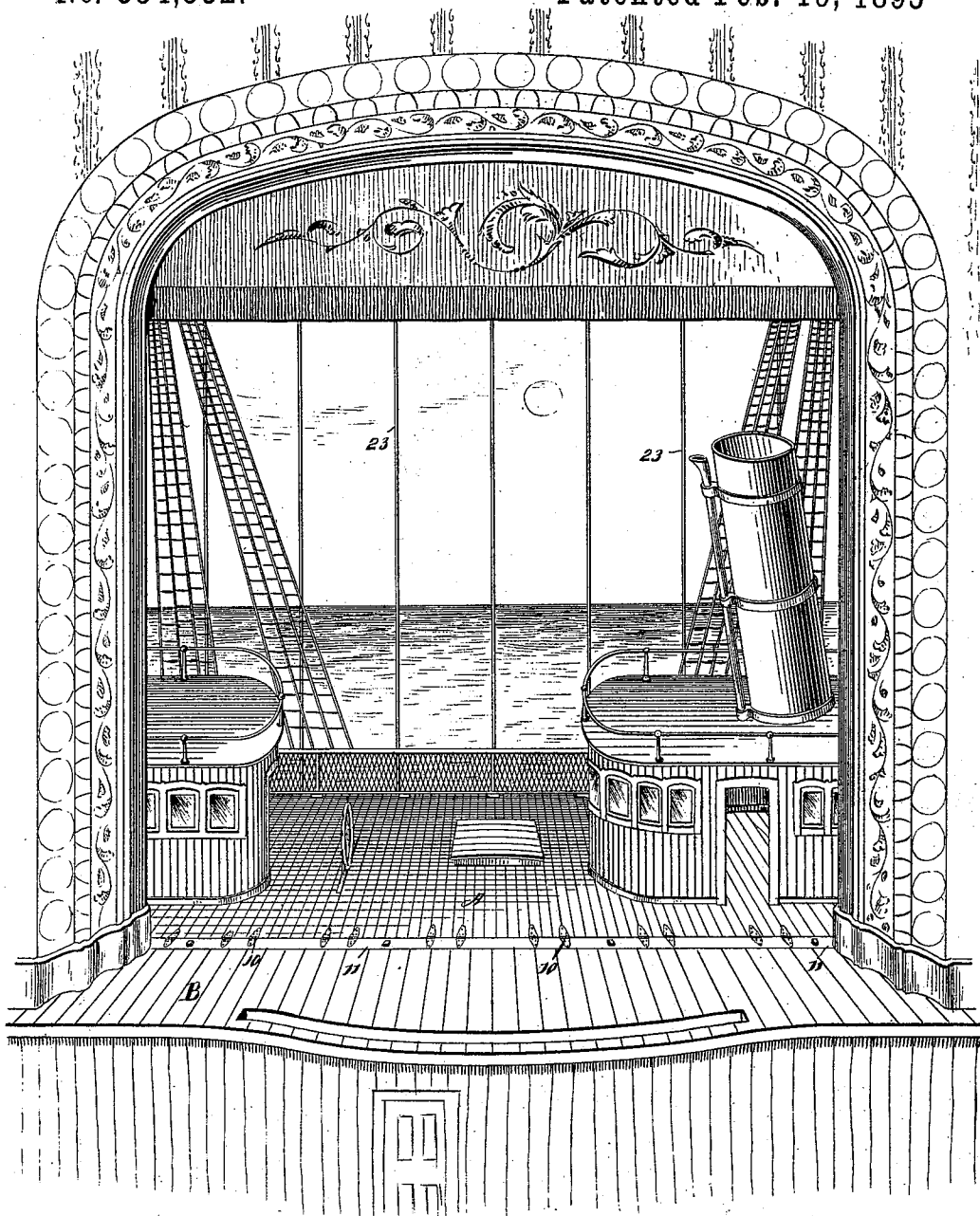


Fig. 1.

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E. E. Vance

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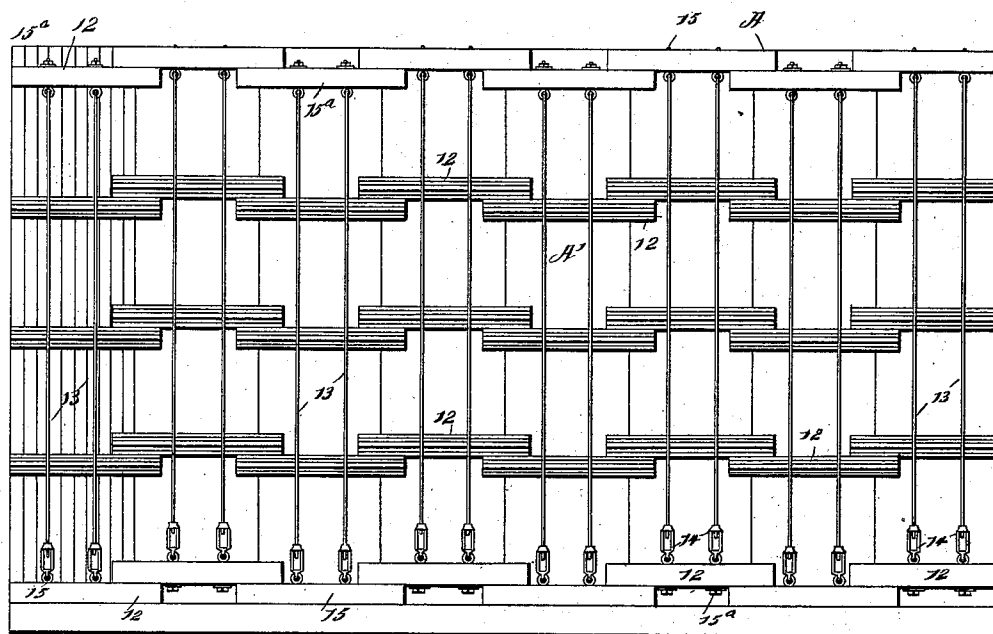
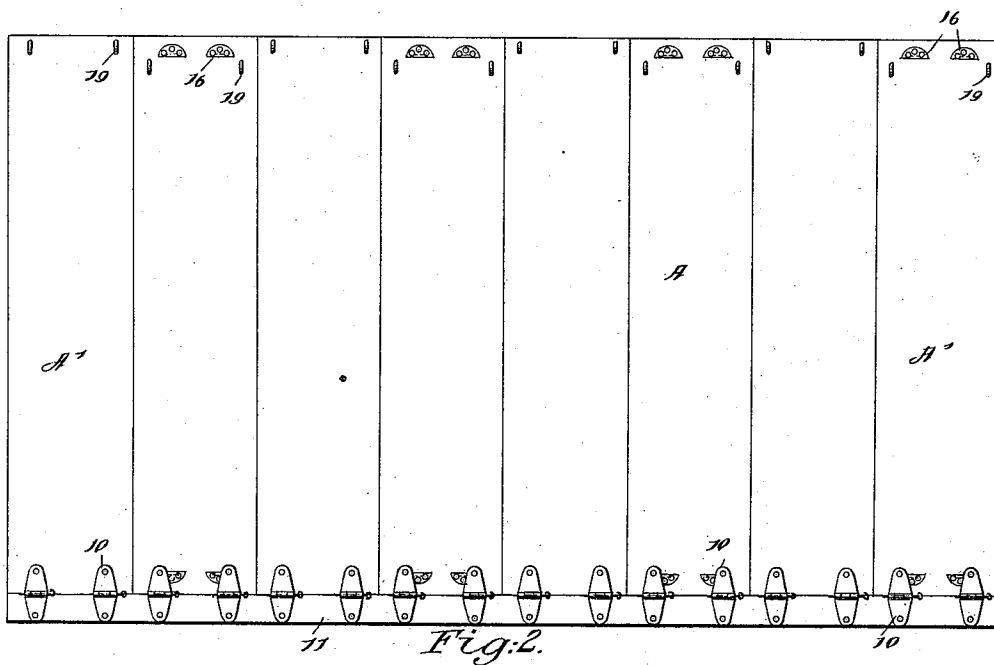
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3 Sheets—Sheet 3.

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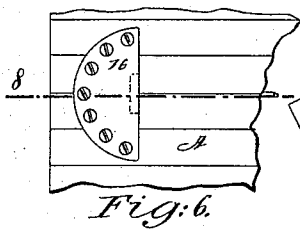


Fig. 6.

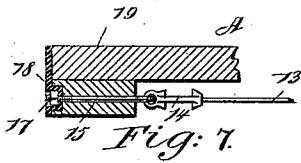


Fig. 7.

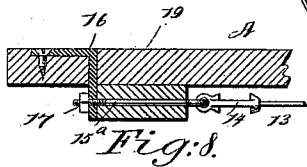


Fig. 8.

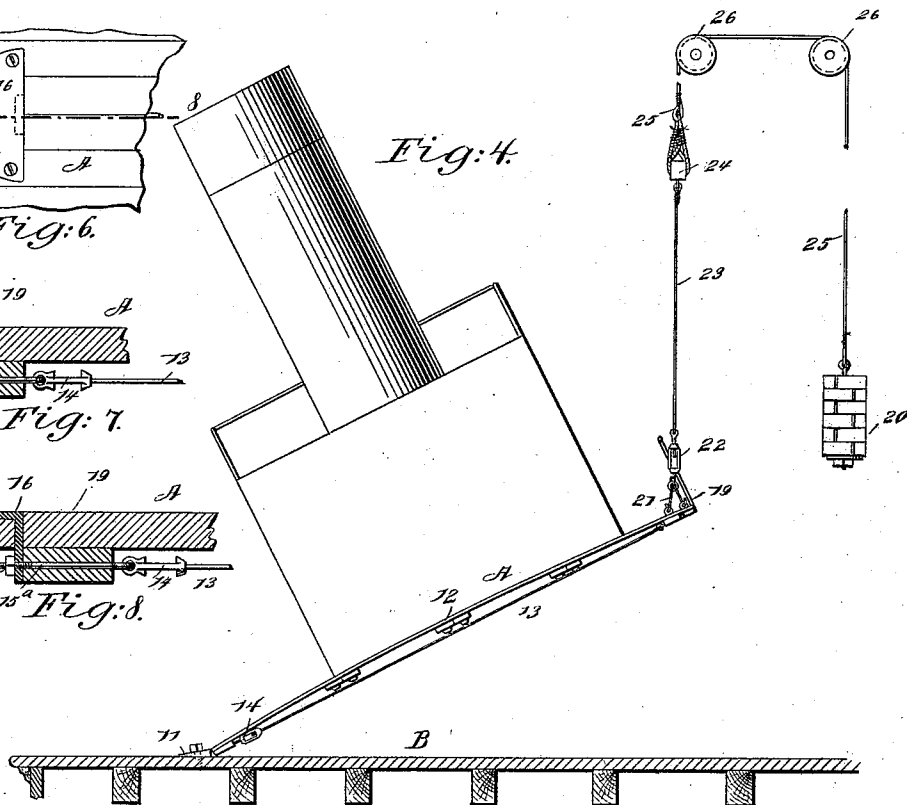


Fig. 4.

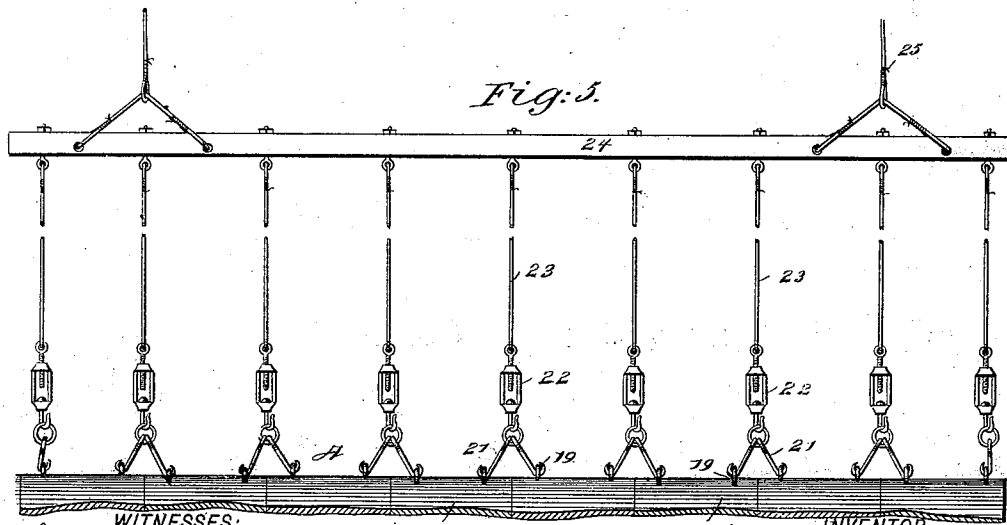


Fig. 5.

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UNITED STATES PATENT OFFICE.

ELMER E. VANCE, OF NEW YORK, N. Y.

STAGE EFFECT.

SPECIFICATION forming part of Letters Patent No. 534,532, dated February 19, 1895.

Application filed August 18, 1894. Serial No. 520,713. (No model.)

To all whom it may concern:

Be it known that I, ELMER E. VANCE, of New York city, in the county and State of New York, have invented a new and Improved Stage Effect, of which the following is a full, clear, and exact description.

My invention relates to an improvement in stage effects, and it has for its object especially to represent a steamship or other vessel at sea on a theatrical stage, and to so produce the effect that the rocking swaying movement of a vessel on a rough sea will be imitated to perfection, and to provide a means whereby a false stage will be made to lie over the regular theatric stage the width of the proscenium opening and of a predetermined depth, the false stage being hinged at its forward edge to the main stage and the rear portion of the false stage being mechanically controlled in a manner to raise and lower the said free portion and impart thereto more or less of a lateral movement also, the prime feature of the invention being to so connect the false stage with the main stage that the line of sight of the audience will remain unobstructed, thereby producing a complete illusion.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures and letters of reference indicate corresponding parts in all the views.

Figure 1 is a view of the stage from the front, illustrating a steamship scene mounted thereon in the improved manner. Fig. 2 is a plan view of the false stage. Fig. 3 is a bottom plan view of the said stage. Fig. 4 is a section through the main stage and the false stage attached thereto, illustrating the manner in which the rear portion of the false stage is elevated. Fig. 5 is a partial front elevation of the false stage, illustrating a portion of the actuating mechanism thereof. Fig. 6 is a detail view of a portion of the false stage viewed from the top. Fig. 7 is a transverse section of a part of the rear portion of the false stage,

and Fig. 8 is a section taken substantially on the line 8—8 of Fig. 6.

In carrying out the invention a false stage A is provided, said stage being constructed preferably of a series of sections A', in order that the stage may be readily dismantled or disconnected and packed in a minimum of space for transportation. The stage A is of a width equal to and preferably slightly greater than that of the proscenium opening of the stage; and the said false stage at its forward end is connected by hinges 10, or their equivalents, to the front portion of the main stage B, within the proscenium line, as shown in Fig. 1; and where the false stage is attached to the main stage the false stage is beveled so that it will meet the main stage with a substantially feather edge, thus preventing the line of sight of the audience from being obstructed, and rendering the scene mounted upon the false stage an exceedingly realistic one in its effect.

Preferably the false stage A is hinged directly to a connecting bar, board or plate 11, and the said bar, board or plate is beveled upon its upper surface in a downwardly and forwardly direction, and is bolted or otherwise securely fastened to the main stage, as shown in both Figs. 1 and 4.

The false stage is adapted to contain not only the scene, but it is likewise adapted to support the performers taking part in the play. Therefore this stage must be rendered exceedingly strong, and at the same time it is desirable that it should be made as light as possible consistent with strength. To that end each section A' of the stage is usually constructed of a series of boards secured together by battens 12, extending transversely of a section, any desired number of battens being used. The battens extend beyond both side edges of the intermediate sections, and beyond the inner side edges of the end sections, as illustrated in Fig. 2; and the said battens are so arranged that when the sections are placed together to form the complete false stage, they will interlock, breaking joints, as is clearly shown in Fig. 2. Therefore, the forward end batten of one section will be at

its extreme forward end and the opposite end batten removed a predetermined distance from the rear one, while the next section will have its rear batten at the rear edge and its forward batten removed a predetermined distance from its forward edge.

Since exceedingly light material is employed in the construction of this false stage, and as the stage is very large when complete, in order that it shall sustain the necessary weight the sections are proportionately bowed in a longitudinal direction in a manner to arch their upper surfaces, as illustrated in Fig. 4. The said bowing or arching of the sections may be accomplished in many ways, but preferably as illustrated in the drawings, in which longitudinal tie rods 13 are located beneath the sections, connected at one of their ends with turn buckles 14; and the said turn buckles are attached to eye-bolts 15, passed through the battens and secured in any approved manner, and the opposite ends of the rods are connected by similar bolts 15^a.

When the bolts are passed through battens removed from the end portion of a section, as shown in Fig. 8, the batten and likewise the section proper are strengthened by means of an angle plate or bracket 16, appearing upon the upper face of the section, to which it is screwed or equivalently secured, and the vertical member of the bracket or plate is carried downward to an engagement with the batten, and through this plate the bolt 15^a is passed, being provided with a suitable nut 17. When, however, the bolt 15, for example is passed through a batten located at the end of a section, as shown in Fig. 7, the nut 17 of the said bolt is located in a sleeve 18, countersunk in the outer edge of the batten in order that there shall be no projections from the forward or rear edges of the stage.

It is evident that by manipulating the turn buckles 14, the tie rods 13 may be placed under such tension as will give the required arch to the stage and thereby add materially to the strength of the structure.

At the rear portion of each section a series of eye-bolts 19 is located at suitable intervals apart, and the eye-bolts 19 are preferably placed immediately over the rear end battens of the sections in order that they may have as strong a hold as possible on the stage.

The stage is supported at its rear end by means of counterbalance weights 20, or any equivalent thereof, the weights 20 being of such heft that they will counterbalance not only the stage itself when placed at a desired inclination, but likewise the scenery of the stage and the people taking part in the play. By thus counterbalancing the stage at its rear or free end, the stage may be carried to any desired inclination through the medium of attendants stationed at the back and hidden from view; and the false stage may likewise

be vertically reciprocated or rocked, giving the appearance, from the front, of the vessel rolling in direction of the audience, and the entire scene may be made to appear as rolling in direction of the audience over beyond the front of the stage; and to add to the realistic effect of the movement of the ship a forward and aft movement or pitch may be imparted thereto by rocking the stage in a lateral direction, that is, by imparting to the rear a shaking movement, which will be carried throughout the length of the stage owing to the sectional construction of the same.

The false stage work from its point of connection with the main stage, and as it appears a portion of the main stage and the front is entirely unobstructed, the line of sight of the audience remains likewise unobstructed, and therefore the realistic effect is greatly heightened.

The manner in which the false stage is illustrated as supported at its rear or front portion, is by attaching to the eye-bolts 19 on the sections of the stage grapples 21, or their equivalents, the said grapples being arranged in pairs and connected to eye-bolts of two adjacent sections of the stage, and to turn buckles 22, the said turn buckles being connected with rods 23 in their turn attached to a lift beam or cross head 24 located well up in the flies and out of the sight of the audience.

The turn buckles 22 may be located at any desired point between the false stage and the cross head or lift beam 24, or they may be entirely omitted, it being understood that each and every part of the lifting mechanism is detachable in order that it may be conveniently packed.

The lift beam or cross head 24 is connected with cables 25, and the said cables are passed over sheaves or pulleys 26, located at a predetermined point in the flies, and each cable is made to terminate in a weight 20, the combined weights being sufficient to counterbalance the stage when in working condition.

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

1. The combination, with a main theatrical stage, of a sectional false stage having hinged connection with the main stage at its forward edge, the rear portion of the false stage being connected with an elevating and counterbalancing device, as and for the purpose set forth.

2. In a stage effect, the combination, with the main stage, of a false stage having pivotal or hinged connection therewith, the false stage being constructed in detachable sections, the said sections having interlocking connection, and means, substantially as shown and described, for controlling the free end of the false stage, as and for the purpose set forth.

3. In a stage effect, a false stage constructed in sections, means for connecting the sections, and tension devices whereby the sections of the stage are arched, substantially as shown and described.

tached to the weights and passed over rolling supports, and grapples carried by the cables, adapted for detachable connection with the false stage at its free end, as and for the purpose specified.

ELMER E. VANCE.

Witnesses:

J. FRED. ACKER,
C. SEDGWICK.

4. In a stage effect, the combination, with a main stage, and a false stage having hinged connection with the main stage at its forward portion, of counterbalance weights, cables at-