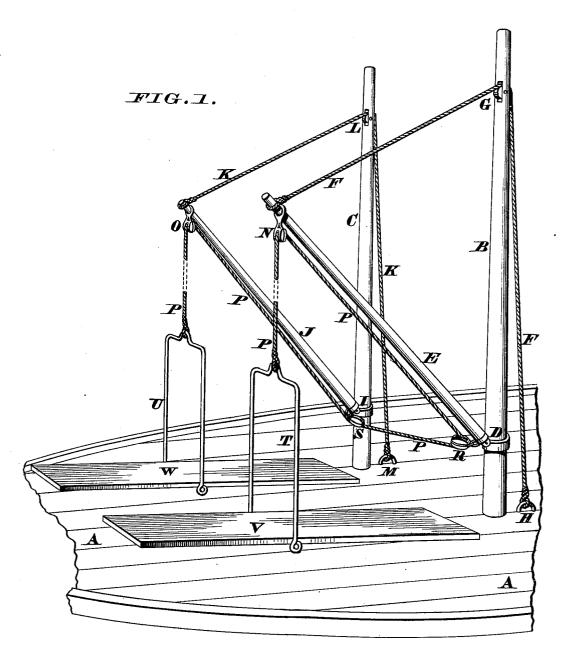
## J. B. MOONEY. Steamboat Staging.

No. 233,160.

Patented Oct. 12, 1880.



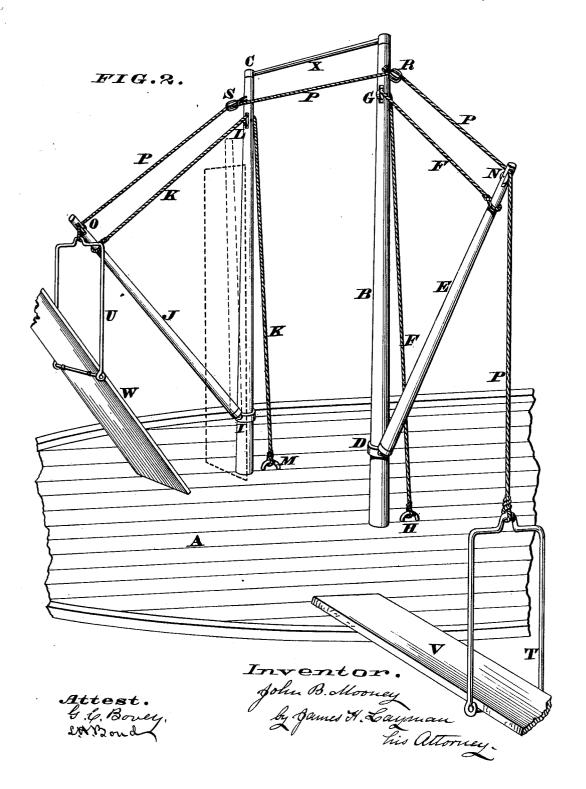
Attest. C. Bover,

John B. Mooney
by James H. Layman
his attorney.

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## UNITED STATES PATENT OFFICE.

JOHN B. MOONEY, OF CINCINNATI, OHIO, ASSIGNOR TO JAMES L. HAVEN, OF SAME PLACE.

## STEAMBOAT-STAGING.

SPECIFICATION forming part of Letters Patent No. 233,160, dated October 12, 1880. Application filed July 1, 1878.

To all whom it may concern:

Be it known that I, John B. Mooney, of Cincinnati, Hamilton county, Ohio, have invented certain new and useful Improvements 5 in Steamboat-Stagings, of which the following

is a specification.

The object of my invention is to render the heavy stagings or platforms of steamboats and all other water-craft capable of being handled 10 with the utmost facility, and this result is accomplished in the following manner: I construct two stagings of practically the same weight and attach them to the depending ends of a rope or chain, or other flexible con-15 nection, and then combine this rope with a system of sheaves and a pair of laterally-swinging booms, so as to cause one of said stagings to counterbalance the other one. By this arrangement either the larboard or starboard 20 staging can be launched ashore or drawn back upon the deck of the vessel by a few men, as hereinafter more fully explained.

In the annexed drawings, Figure 1 is a perspective view of a vessel provided with my 25 improvements, the stagings being shown in position on deck and a portion of the suspensionrope being broken away. Fig. 2 is a perspective view of a modification of the invention. one of the stagings being shown launched

30 ashore.

A represents a portion of the deck of a steamboat or other water-craft, and B C are two stout masts projecting vertically therefrom. Mast B has applied to it, by a suitable coup-35 ling, D, the boom E, which is supported at any desired inclination by a guy, F, the latter being rove through a sheave, G, near the top of said mast, and then secured at H to a staple or other attachment. Mast C is pro-40 vided with a precisely similar arrangement of coupling, I, boom J, guy K, sheave L, and staple or other attachment, M. Booms E J are provided, respectively, near their free ends, with sheaves N and O, to receive a rope or 45 chain or other flexible support, P, capable of sustaining the heavy stagings. This rope is rove through two other sheaves, R and S, which are preferably secured near the feet of their respective booms E and J, or said rope

between the booms or masts. Or the sheaves R S may be situated near the top of the masts, as seen in Fig. 2, in which event said masts should be united with a tie, X. Attached to the depending ends of this rope are two stir- 55 rups, T U, that support, respectively, the stagings V and W; but, if preferred, rope or chain slings may be substituted for these stirrups, the upper portions of said slings being dis-tended with bars or stretchers, so as to afford 60 ample clearance for passengers and the crew. These stagings, which may be of any approved size and shape, are practically of the same weight, and the stirrups T U are attached to them in such a manner as to cause the after 65 ends of said stagings to rest upon the deck A; or said stagings may be swung around so as to present their heavy ends toward the bow of vessel A.

My counterbalanced stagings are operated 70 in the following manner: The stagings V W, when in their normal positions, as seen in Fig. 1, are about in line with their respective masts B'C, and in advance of the same, the after or heavier ends of said stagings resting upon the 75 deck A. If, now, it should be desired to launch ashore the staging V, the following movements are necessary: The boom E is first swung around to the larboard and carries the staging V with it, the after or heavy end of the 80 latter resting upon the deck. The starboard staging W is then lifted by hand or by pulling on its rope P; or on another rope attached to the stirrup U, which latter rope should pass through a separate sheave, so as 85 to cause a corresponding descent of staging V, and thereby land the outer end of the same on the wharf or bank, as seen in Fig. 2. To draw in this larboard staging V it is only necessary to depress the starboard staging W 90 to its original position, so as to elevate the outer end of the one V; or this result can be accomplished by pulling up the rope P, to which said staging V is attached, and then the other staging, W, will descend accordingly. Boom E is 95 now swung around to its original position, thereby disposing both of the stagings in front of and in line with their respective masts B and C. The other staging, W, is launched ashore and 50 may be passed through a single sheave located I drawn in upon the deck by reversing the above- 100

described operations. If it should be desired to elevate both of said stagings clear of the deck, it can be accomplished by pulling the guys FK so as to turn the booms EJ up against 5 the masts B C, when the stagings V W will at once assume the position indicated by dotted lines in Fig. 2. It will thus be seen that by properly setting said booms the stagings can be carried at any desired angle between a hori-10 zontal position on the deck and a vertical, or nearly vertical, position against the masts. It should be observed, however, that the arrangement of sheaves R S (shown in Fig. 1) will allow the stagings to be brought nearer 15 to a vertical position than will the elevated location of said sheaves, as seen in Fig. 2. For the more ready shifting of these booms and their heavy stagings it is necessary to employ a threefold purchase, instead of the single guys 20 F and K, which purchase or tackle may be applied to the booms and masts in any convenient way.

'As the principal feature of my invention consists in counterbalancing two steamboatstagings by suspending them from a rope or other flexible support, and then passing said rope through a system of sheaves or their equivalents, in order that the elevation of one staging may cause the descent of the other one, or vice versa, I reserve the right of modifying the details of construction to adapt the apparatus to any special use or peculiar location.

In some cases the masts and booms may be omitted, and the sheaves NO and RS, or their sequivalents, such as rings and staples, &c., may be applied to the guards or decks or other parts of the boat or structure. Furthermore, by adapting the sheaves N and O to traverse elevated and curved tracks secured to one of

the upper decks of the vessel, and locating the 40 sheaves R and S at the respective centers of said curved tracks or races, precisely the same movements of the stagings V and W can be effected as though the masts B C and booms E J were employed.

In constructing my apparatus it is preferred to locate the sheaves R and S as near the center of motion of their respective booms E and J as can conveniently be done, in order that the stagings V and W may neither be elevated 50 nor depressed by the action of rope P as said booms swing to the right and left.

I claim as my invention-

1. The counterbalanced steamboat-stagings V W, suspended, respectively, from stirrups 55 or slings T U, said stirrups being attached to the opposite ends of a rope or chain, P, which rope depends from two laterally-swinging booms E J, or their described equivalents, and is rove through a system of sheaves in order 60 that the elevation of one staging may cause a corresponding descent of the other, or vice versa, as and for the purpose herein explained.

2. The combination of swinging booms E J, sheaves N O R S, flexible support P, and coun-65 terbalanced stagings V W, substantially as

herein described and set forth.

3. The combination of masts B C, swinging booms E J, guys or tackles F K, sheaves G L N O R S, flexible support P, and counterbal-70 anced stagings V W, as herein described and set forth.

In testimony of which invention I hereunto set my hand.

JOHN BRUCE MOONEY.

Witnesses:

JAMES H. LAYMAN,

RANKIN D. JONES.