F. MOORE & G. HASTIE.

APPARATUS FOR HANDLING STAMBOAT STAGES.

No. 81,667. Patented Sept. 1, 1868.

Fig. 1.

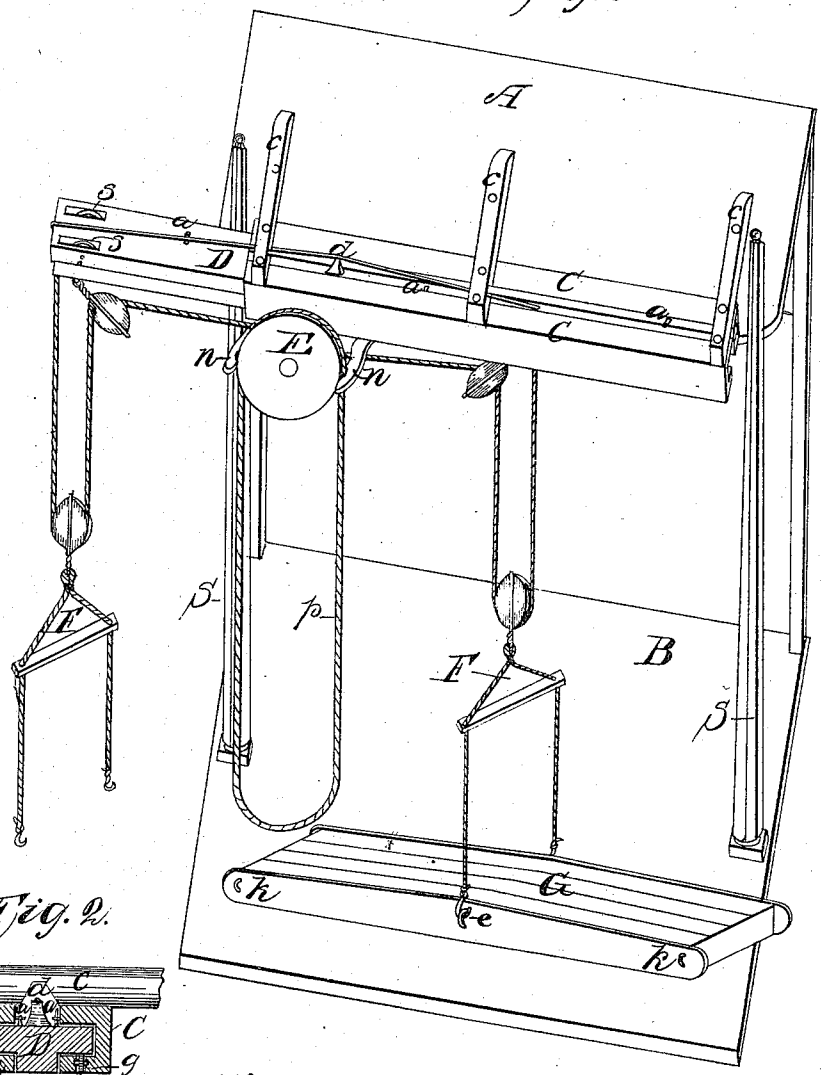
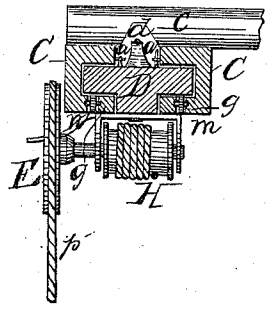


Fig. 2.



Witnesses:

T. J. Jones

O. D. Flora

Inventors:

Ferdinand Moore & Geo. Hastie

per A. H. Bennett & Bro

Attorney

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

United States Patent Office.

FERDINAND MOORE AND GEORGE HASTIE, OF FLORENCE, INDIANA.

Letters Patent No. 81,667, *dated September* 1, 1868.

IMPROVEMENT IN APPARATUS FOR HANDLING STEAMBOAT-STAGES.

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

TO AL WHOM IT MAY CONCERN:

Be it known that we, FERDINAND MOORE and GEORGE HASTIE, of Florence, in the county of Switzerland, and State of Indiana, have invented new and useful Improvements in Apparatus for Handling Steamboat-Stages; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention is an improvement on the "apparatus for handling steamboat-stages" invented by George Hastie, of Florence, Switzerland county, Indiana, and for which an application for patent was filed on the 23d day of March, 1868, and is intended for the same use, but differs materially from the said invention, in the substitution of a rolling carrier-beam for the ordinary crane, to which the tackle and falls are attached.

Figure 1 is a perspective view of the apparatus.

Figure 2 is a sectional view of the beam and guides, and shows the windlass.

Similar letters of reference indicate corresponding parts.

A is the hurricane-deck of the boat, and B the lower deck.

c c c are outriggers, bolted firmly to the hurricane-deck, to the projecting ends of which, on the under side, are rigidly attached the guides C C, said guides running athwart the boat.

These guides are grooved, (see sec. fig. 2,) for the reception of the rolling carrier-beam D, and have rollers, *g g*, four in number, at the ends of the said guides, projecting above the surface of the grooves a sufficient height to give a good rolling bearing to the beam D.

This beam has a T-shaped section, (see fig. 2,) and to it are attached the tackle and falls F F, and also the hoisting-wheel E, with the windlass H, guides *n n*, and hanger *m*. The said beam is trussed by the straining-rod *d*, as shown.

In the guides C C and beam D are the check-pins *a a a a*, which engage with each other in the manner shown, to prevent the beam D from sliding too far out.

s s are rollers in the beam D, which project slightly above the surface of the beam, so as to bear on the interior of the grooves in the guides C C. These rollers are four in number, two at each end of the beam.

G is the stage, shown attached to the larboard fall.

S S are the spars of the boat.

Operation.

When it is desired to launch the stage, it is hooked, as shown, to the proper fall by the staples *e e* in the centre. The falls being attached to the barrel of the windlass H, and the windlass being operated by means of the wheel E and hand-rope *p*, it will be seen that the stage may be hoisted free from the deck by the said rope. A pressure being then exerted to launch the stage causes the carrier-beam to roll in its guides toward that side of the boat until stopped by the check-pins *a a*, &c.; the stage is then lowered. A reverse operation hauls the stage inboard.

When desired, the stage may be hoisted out of the way by hooking both falls to the stage by means of the staples *k k*, &c., and then hoisting on the rope *p*.

We claim as our invention—

The rolling carrier-beam D, provided with the rollers *s s*, fall and tackle F, wheel E, windlass H, hand-rope *p*, journal *m*, pins *a a*, and guides *n n*, or their equivalents, when used in connection with the guides C C, in the manner substantially as described, and for the purposes set forth.

FERDINAND MOORE,
GEORGE HASTIE.

Witnesses:
L. BLEDSOE,
JOHN OREM.