(No Model.) 2 Sheets—Sheet 1.

J. P. GARTON.

GANGWAY FOR SHIPS.

No. 259,846. Patented June 20, 1882.

Fig. 1.

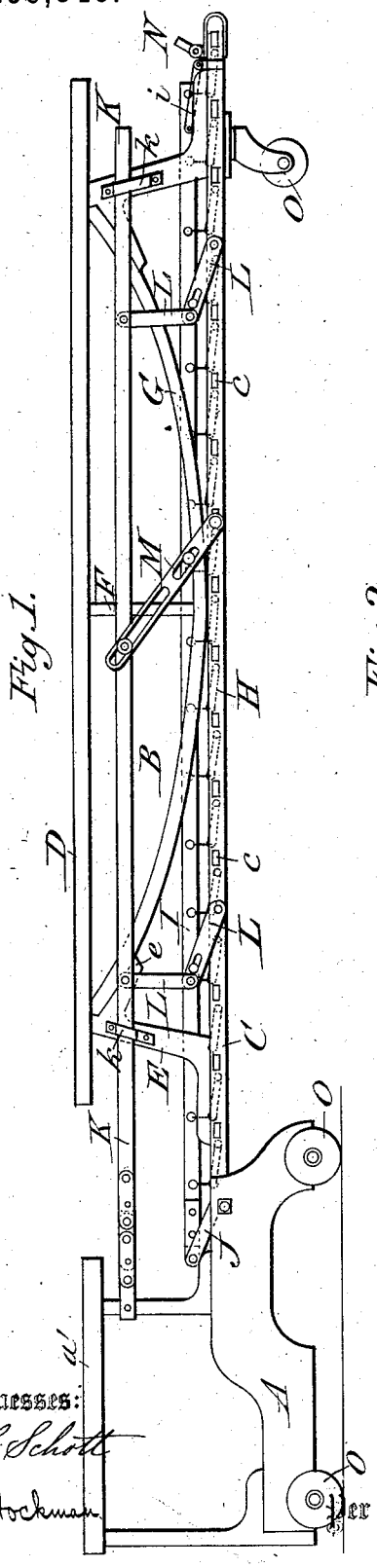
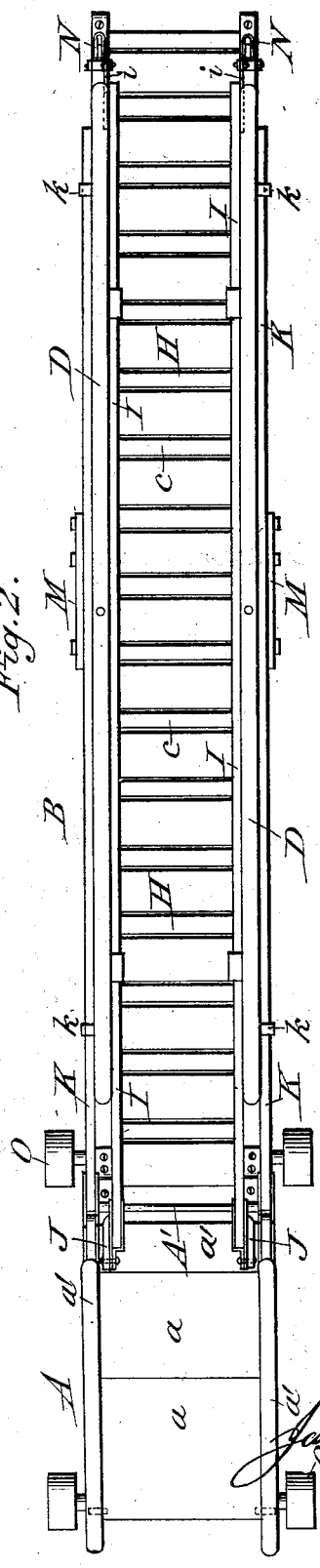


Fig. 2.



Witnesses:
F. H. Schott
J. A. Stockman

Inventor
James P. Garton
by Watson & Co
Attorneys.

(No Model.) 2 Sheets—Sheet 2.

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Fig. 3.

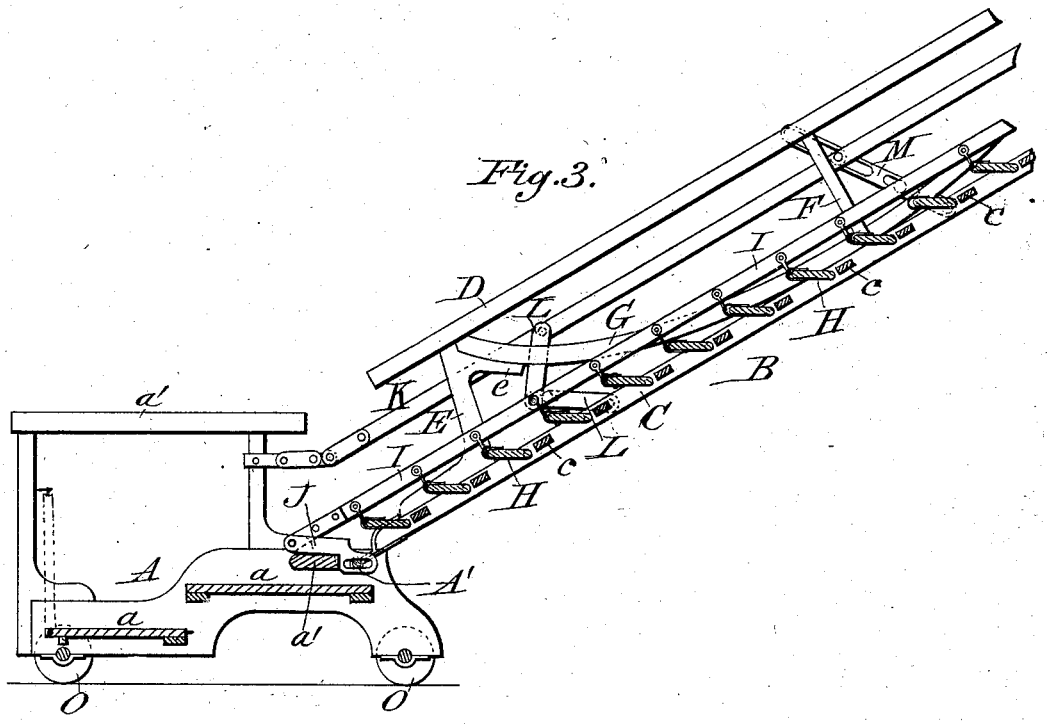
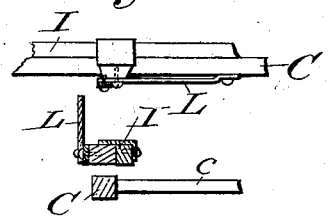


Fig. 4.



Witnesses:
F. H. Schott
J. A. Stockman.

Inventor
James P. Garton
Per C. H. Watson & C. Attorneys.

UNITED STATES PATENT OFFICE.

JAMES P. GARTON, OF JERSEY CITY, NEW JERSEY.

GANGWAY FOR SHIPS.

SPECIFICATION forming part of Letters Patent No. 259,846, dated June 20, 1882.

Application filed March 25, 1882. (No model.)

To all whom it may concern:

Be it known that I, JAMES P. GARTON, a citizen of the United States, residing at Jersey City, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Gangways; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in gang ways for use on ships of all descriptions; and it consists in the construction and arrangement of the different parts, as will be hereinafter more fully described and claimed.

In the accompanying drawings, which fully illustrate my invention, Figure 1 is a side elevation of my improved gang way or plank. Fig. 2 is a plan view of the same. Fig. 3 is a central longitudinal section, showing the bridge in a raised or inclined position, and Fig. 4 shows details of the manner of attaching the elbow-levers to the frame of the bridge and the bars.

Like letters indicate like parts in the several views.

The letter A represents the carriage, which is provided with steps *a a* and hand-rails *a' a'*, supported by suitable standards. The lower step, *a*, is pivoted at one end to the truck A in such a manner that its opposite end can be raised, as shown by dotted lines in Fig. 3, and secured to the forward standards of the hand-rails *a'*, and thus serve as a gate to prevent persons from attempting to cross the gangway until said gangway is properly secured.

B is the bridge, having sides C C connected by cross-bars *c c* and hand-rails D D, suitably mounted upon and supported by standards E E. The hand-rails D D are further supported and braced by vertical rods F F and semicircular braces or sweeps G G, the ends of which rest upon knees *e e*, formed upon the standards E E. One end of the bridge B is pivoted to the cross-bar A' of the truck A.

Suitably pivoted to the sides C C are boards or steps H H, which correspond with the spaces formed by the sides C C and cross-bars *c c* of the bridge B. The ends of the boards H H are suitably connected to the under sides of rods or levers I I, the ends of which are pivoted to levers J J. The forward ends of the levers I I are connected to the sides C C by means of pivoted bars *i i*. The forward ends of the levers J J, which are slotted and pivoted to the cross-bar A', are depressed so as to form shoulders which will bear against the front part of the forward step, *a*, of the truck A when pushed back the required distance, and thus a leverage or purchase is obtained, by means of which, when the shoulders of the levers J J abut against the step *a'*, the levers I I will be caused to move in a forward direction when the bridge is being raised, thus throwing the steps H H into proper position.

Hinged to the forward standards of the carriage A are levers K K, whose movement is guided by the ears *k k* on the standards E E.

To the sides of the frame of the bridge B are attached elbow-levers L L, which connect the levers I I and K K with said frame. The levers I K may be further connected to the frame of the bridge B by slotted rods M M. The levers K L and rods M assist in throwing the steps H H into proper position.

Attached to the forward ends of the bridge B are staples N N, through which ropes may be passed to secure the said bridge to the dock or vessel, as the case may be.

Rollers O O are suitably attached to the under sides of the truck or carriage and the bridge, by means of which my device is made portable.

The operation of my device is as follows: When the deck of the vessel and the top of the dock or wharf are on, or nearly on, a line, the device can be wheeled into the desired position, and the forward end of the bridge be placed upon the dock, and as the carriage and the bridge will be on a line the boards or steps will be horizontal and form a level gangway from the vessel to the dock; but when the deck of the vessel is lower than the dock it will be necessary to raise or incline the bridge until its free end shall rest against the top of the dock, and it can then be secured in the desired position by means of ropes attached to staples. When the bridge is thus raised the boards or steps will be thrown upward and out-

ward by the system of levers, and form a flight of stairs, as shown in Fig. 3, up or down which persons can easily and safely ascend and descend. Should the deck of the vessel be higher than the floor of the dock it will be obvious that the above operation will be reversed by placing the truck of the machine upon the dock and elevating and securing the end of the bridge to the deck of the vessel.

It will be seen that my device is applicable as a cargo-truck as well as a gangway.

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

1. In a portable gangway, the combination of the truck A, having pivoted step *a*, with the adjustable bridge B, having pivoted steps H and the levers I J, substantially as shown and described.

2. In a portable gangway, the combination of the truck A with the adjustable bridge B, having sides C C, hand-rails D D, and pivoted steps H H, connected to levers I I, and the levers J J, substantially as shown and described.

3. In a portable gangway, the combination, with the truck A, having steps *a a*, hand-rails *a' a'*, and cross-bar A', of the adjustable bridge B, composed of the sides C C, cross-bars *c c*, hand-rails D D, supported by standards E E, having knees *e e*, and having pivoted steps H H and curved braces G G, the levers I J K L, and the slotted bars, M M, all constructed and arranged substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES P. GARTON.

Witnesses:
HARRY A. GARTON,
JOHN D. SCHOONMAKER.