F I G. 5

F I G. 6

F I G. 7

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This invention relates to a gangway and more particularly to a gangway adapted to be employed with ships or the like.

A primary object of this invention is the provision of an improved gangway adapted permanently to be secured to the side of the ship which may be adjusted to inward and outward positions to permit selectively inner and upper landings, and which may be actuated by means of turn buckles or the like, thus obviating the necessity of the use of boat falls or boat davits in the raising and the lowering of the gangway.

Still another object of this invention resides in the provision of such a gangway having intermediate steps which are readily removable to provide a selective intermediate landing to the vessel.

Still other objects reside in the provision of a safety means whereby passengers may ascend to the upper deck of the vessel without the possibility of injury in the ascension.

Still further objects in the combinations of elements, features of construction, and arrangements of parts, all as will be more fully shown in the accompanying drawings and described in the accompanying specification.

Having reference now to the accompanying drawings, other objects will in part be pointed out and in part be shown.

In the drawings:

Fig. 1 is a perspective view disclosing the gangway or gangplank of the instant invention in extended position.

Fig. 2 is a similar view disclosing the gangplank in retracted position.

Fig. 3 is a rear elevational view of the construction of Figs. 1 and 2 showing the steps in the gangway retracted position.

Fig. 4 is a sectional view taken substantially along the line 4—4 of Fig. 3 that is viewed in the direction indicated by the arrows.

Fig. 5 is a sectional view taken substantially along the line 5—5 of Fig. 1 as viewed in the direction indicated by the arrows.

Fig. 6 is a top plan view of the construction disclosed in Figs. 1 and 2.

Fig. 7 is a sectional view taken along the line 7—7 of Fig. 5 as viewed in the direction indicated by the arrows.

Fig. 8 is a top plan view of a construction detail; and Fig. 9 is a side elevational view of the struct disclosed in Fig. 8.

Similar reference characters refer to similar parts throughout the several views of the drawings.

Having reference now to the drawings in detail there is generally indicated at 10 a gangway comprised of side rails 11 each carrying uprights 12 which in turn carry guide wires or ropes 13 forming railways. Between side rails 11 extend a plurality of removable steps 14, each having an enlarged rear edge 15 formed with a longitudinal channel 16 (see Figs. 3, 4 and 7) the enlarged edge being adapted to seat in grooves 17 cut in the inner edge of side rails 11. Transverse rods 18 extend through suitable bores in the outer sides of side rails 11 and are held in place, seated in channels 16, by means of nuts 20.

Gangway 10 has slidably mounted thereon a bracket or hanger 21 of generally U-shape extending across the rear and sides of the gangway 10 and connected across the front thereof by a rotatably mounted bar or rod 22 from which extend arcuate fingers 23 biased downwardly to engage beneath a selected step 14 and against the top edge of the hanger 21, by means of coil springs 24 surrounding rod 22.

At the opposite ends of rod 22 are positioned bolts 25 which carry L-shaped hanger members 26 which are slidably mounted on the legs 29 of a generally U-shaped support member 30, the hangers 26 being retracted against inward movement on legs 29 by means of slidably adjustable collars 31.

The inner ends of legs 29 are fixed to a rotatable shaft 32 journaled in brackets 33 mounted on the deck 34 of the vessel. Rod or shaft 32 carries at one end an arm 35 on which is movably mounted the eye of a bolt 36 which is connected at its other end, by means of a turnbuckle 37, to a second eye bolt 38, the other end of which is connected to an arm 39 extending from the top of a tubular member 40 pivotally mounted on deck 34 rearwardly of the adjacent bracket 33. A second turnbuckle 41 connects eye bolts 42 and 43, one of which has its eye fixed to the deck as at 44, and the other of which has its eye connected to a second arm 45 which has an upper eye engaging arm 39.

It will now be seen that tightening of turnbuckle 37 will swing the gangway through arm 35, shaft 32 and member 30 from the extended position of Fig. 1 to the retracted position shown in dotted lines in Fig. 2, and that tightening of turnbuckle 41 will tilt tubular member 40 to the inclined full line position of Fig. 2, for full retraction.

As the turnbuckles 37 and 41 are tightened, the shaft 32 is rotated through the movement of arm 35 and post 40 and the member 30 is thus swung from the horizontal position of Fig. 1 to the vertical position of Fig. 2. During this movement, the gangway is simultaneously manually moved upwardly, while subsequently the successive steps 14 ratchet over the spring fingers 23 and the parts assume the final position as shown in Fig. 2. A securing turnbuckle and bolt assembly 49 (see Fig. 2) may be connected between the lower end of gangway 10 and deck 34 to secure gangway 10 in full inboard position.

When it is desired to enter the ship on a lower deck, a selected number of steps 14 are removed, and an extensible platform 50 swingably mounted as at 51 on the side of the ship may be extended to the top step to be used. Platform 50 comprises two plates 52 and 53, the latter being provided with reverted edges 54 so that the former is contained within the edges 54 and plate 53 is thus extensible and retractable relative to plate 52. A series of threaded apertures 55 are provided along the sides of both plates 52 and 53, and when engaged by the threaded ends of uprights 56 serve to hold plates 53 and 52 in a desired position of adjustment (see Figs. 8 and 9). Upright 56 also serves to support a guard rail 57. Gangway 10 is preferably provided at its lower end with a foot plate 58.

From the foregoing it will now be seen that there is herein provided an improved gangway for ships or the like which accomplishes all of the objects of this invention and others including many advantages of great practical importance and commercial utility.

As many embodiments may be made of this inventive concept and as many embodiments may be made in the modification hereinafter shown and described, it is to be understood that all matter herein is to be interpreted merely as illustrative and not in a limiting sense.
As many embodiments may be made of this inventive concept, and as many modifications may be made in the embodiment heretofore shown and described, it is to be understood that all matter herein is to be interpreted merely as illustrative and not in a limiting sense.

What is claimed is:

1. A gangway for ships or the like comprised of an extensible stairway permanently secured to the side of the vessel, means for extending said gangway to angular position relative to the side of the vessel, and means for retracting said stairway to flush relation relative thereto, said last mentioned means including a rotatable shaft secured to the deck of the vessel and turnbuckle means for rotating said shaft whereby to extend or retract said gangway.

2. A gangway for ships or the like comprised of an extensible stairway permanently secured to the side of the vessel, means for extending said gangway to angular position relative to the side of the vessel, and means for retracting said stairway to flush relation relative thereto, said last mentioned means including a rotatable shaft secured to the deck of the vessel and turnbuckle means for rotating said shaft whereby to extend or retract said gangway, said gangway having selectively removable and replaceable steps to permit intermediate or top deck entry to said vessel.

3. A gangway for ships or the like comprised of an extensible stairway permanently secured to the side of the vessel, means for extending said gangway to angular position relative to the side of the vessel, and means for retracting said stairway to flush relation relative thereto, said last mentioned means including a rotatable shaft secured to the deck of the vessel and turnbuckle means for rotating said shaft whereby to extend or retract said gangway, said gangway having selectively removable and replaceable steps to permit intermediate or top deck entry to said vessel, said gangway being provided with side rails.

4. A gangway for ships or the like comprised of an extensible stairway permanently secured to the side of the vessel, means for extending said gangway to angular position relative to the side of the vessel, and means for retracting said stairway to flush relation relative thereto, said last mentioned means including a rotatable shaft secured to the deck of the vessel and turnbuckle means for rotating said shaft whereby to extend or retract said gangway, said turnbuckle means including a pair of threaded shafts, one operatively connected to said gangway and the other to said vessel and a turnbuckle connecting said threaded shafts.

5. A gangway for ships or the like comprised of an extensible stairway permanently secured to the side of the vessel, means for extending said gangway to angular position relative to the side of the vessel, and means for retracting said stairway to flush relation relative thereto, said last mentioned means including a rotatable shaft secured to the deck of the vessel and turnbuckle means for rotating said shaft whereby to extend or retract said gangway, said turnbuckle means including a pair of threaded shafts, one operatively connected to said gangway and the other to said vessel, a turnbuckle connecting said threaded shafts, and a slidable connection between said vessel and said gangplank movable by rotation of said turnbuckles.

References Cited in the file of this patent

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