

STANDARDIZED ACCOMMODATION LADDER SYSTEM.

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1,329,924.



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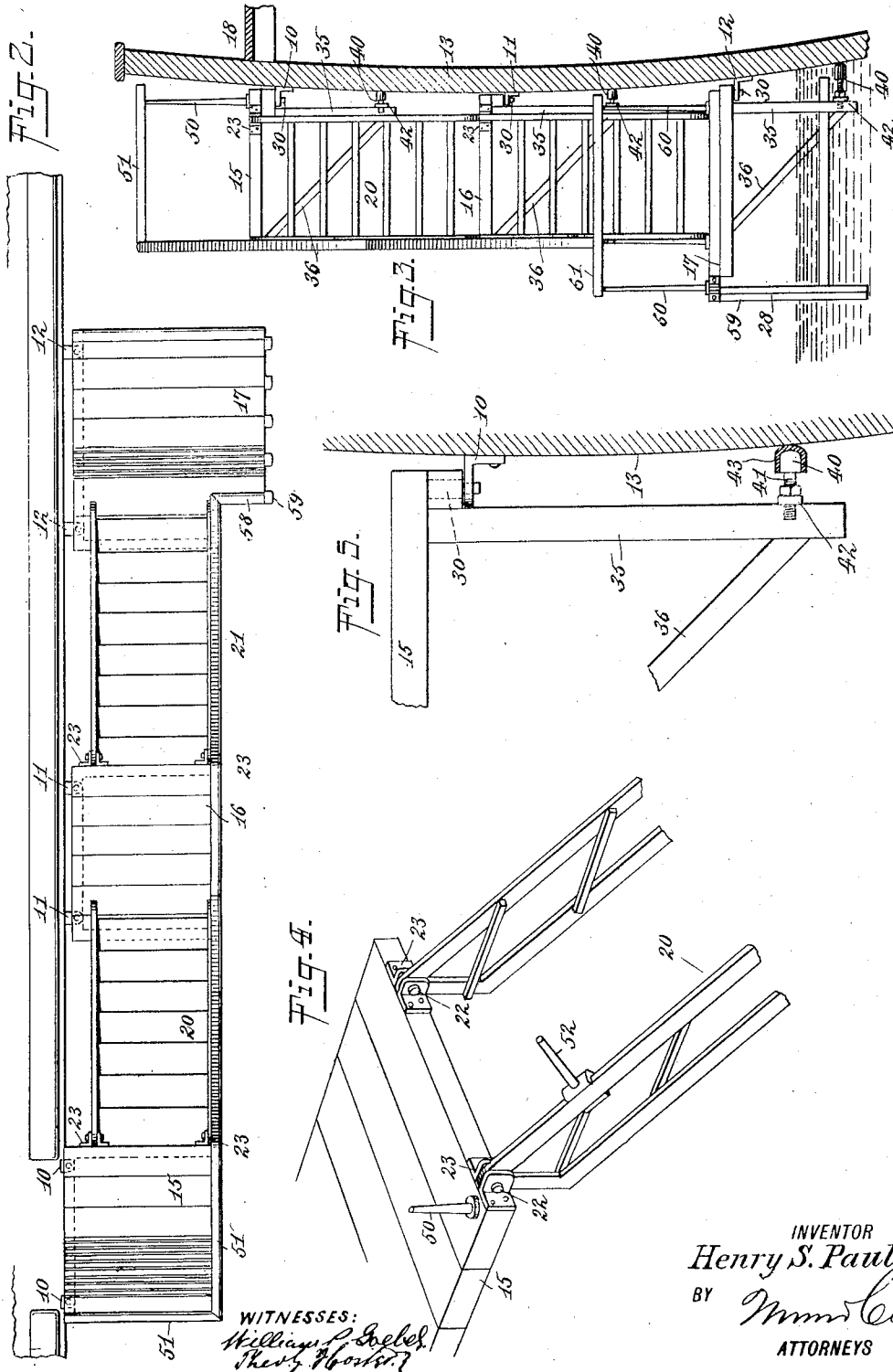
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STANDARDIZED ACCOMMODATION-LADDER SYSTEM.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, HENRY S. PAUL, a citizen of the United States, and a resident of Portsmouth, in the county of Rockingham and State of New Hampshire, have invented a new and Improved Standardized Accommodation-Ladder System, of which the following is a full, clear, and exact description.

The invention relates to marine vessels, and its object is to provide a new and improved standardized accommodation ladder system arranged to permit adjustment according to the fore and aft sheer of the vessel. Another object is to permit of conveniently and quickly placing the ladder in position for use on the side of the vessel or removing it therefrom whenever it is desired to do so. Another object is to make the accommodation ladder in sections to fit vessels of different freeboard.

With these and other objects in view the invention consists of certain novel features of construction as hereinafter shown and described and then specifically pointed out in the claim.

A practical embodiment of the invention is represented in the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a side elevation of the accommodation ladder as applied to a marine vessel;

Fig. 2 is a plan view of the same;

Fig. 3 is a front elevation of the same with the marine vessel shown in cross section;

Fig. 4 is a perspective view of the upper or deck platform and a portion of the upper end of the uppermost ladder; and

Fig. 5 is an enlarged front elevation of a portion of one of the platforms in position on the side of the vessel and with part shown in section.

In the general construction of the accommodation ladder system use is made of sets of brackets 10, 11 and 12 bolted or otherwise secured to the side of the marine vessel 13 on which the accommodation ladder is to be used. The brackets 10, 11 and 12 are adapted to support detachable platforms 15, 16 and 17, of which the platform 15 is the uppermost and is approximately on a level with a deck 18 of the vessel, and an opening 19 is formed in the side of the vessel to permit a person to pass from the plat-

form 15 onto the deck 18 or from the latter onto the upper platform 15. The platform 16 is an intermediate platform and the platform 17 is the landing platform and is a short distance above the water to permit persons to step from a boat onto the platform 17 or from the latter into the boat.

The brackets 10, 11 and 12 and the platforms 15, 16 and 17 are arranged one in front and one below the other, and the platforms 15, 16 and 17 are connected with each other by ladders 20 and 21, of which the ladder 20 is provided at its upper end with pivots 22 engaging bearings 23 attached to the front edge of the platform 15, as plainly shown in Figs. 1, 2 and 4. The lower end 24 of the ladder 20 has its stiles rounded off and resting on the rear side of the platform 16. The front of this platform is provided with bearings 25 engaged by pivots 26 held on the upper end of the ladder 21, and the lower rounded off ends 27 of the stiles of this ladder 21 rest on the rear of the landing platform 17. It will be noticed that a person alighting on the platform 17 can readily pass up the ladder 21 onto the platform 16 and from the latter by way of the ladder 20 onto the platform 15 to finally step from the latter onto the deck 18, and a person on leaving the deck can readily pass down the several platforms and ladders to finally reach a boat adjacent the platform 17. The lower platform 17 is provided at the outer side with a fender 28 which extends downward below the water level to permit a boat to readily draw up alongside of the platform 17 for a person to step out of the boat onto the platform 17 or from the latter into the boat.

Each of the platforms 15, 16 and 17 is provided at the inner side with depending pivot pins 30 engaging the corresponding brackets 10, 11 and 12, and each platform is provided with a depending arm 35 having braces 36 connected with the outer side of the corresponding platform with a view to provide a strong platform structure. The lower end of each arm 35 is provided with one or more abutting members adapted to abut against the side of the vessel 13 to hold the corresponding platform approximately in a horizontal position. Each abutting member 40 is preferably in the form of a bolt 41 adjustably secured in a bar 42 connecting the arms 35, and the bolt 41 is provided with a head 43 prefer-

ably having a covering 44 of a soft material to abut against the side of the vessel 13 with a view to prevent marring or scraping of the paint of the vessel side. It will be noticed that by adjusting the bolt 41 in the bar 42 the arm 35 can be readily adjusted to vertical position to hold the platform 15, 16 or 17 in the desired horizontal position.

10 The accommodation ladder is provided at its outer side with a railing made in sections as follows: On the deck platform 15 are secured posts 50 supporting rails 51 at the outer side and the rear end, as plainly illustrated in Figs. 1, 2 and 3. On the outer stile of the ladder 20 are secured posts 52 supporting a rail 53 which joins at the upper end the corresponding end of the rail 51. On the outer portion of the platform 16 are erected posts 54 supporting a rail 55 joined at one end with the lower end of the rail 53. On the outer stile of the lower ladder 21 are secured posts 56 carrying a rail 57 joined at its upper end to the rail 55 and at its lower end to a rail 58 extending transversely and mounted on posts 59. Posts 60 are erected on the front side of the bottom platform 17 and support a transverse rail 61. The rails 53 and 57 are adjustable in length in any well known or preferred manner, and are arranged to be detachably joined to the rails of the platforms in order that the ladders may be employed to connect platforms which are of different distances apart.

From the foregoing it will be seen that by the arrangement described the brackets

10, 11 and 12 form permanent parts of the ship side while the platforms 15, 16 and 17 are removably connected with the said brackets and can be readily placed in position thereon or removed therefrom. It will also be noticed that the ladders 20, 21 can be readily connected or disconnected at their upper ends from the corresponding platforms 15 and 16 but in practice the ladders 20 and 21 are alike in construction and can be interchangeably used on either platform to connect one platform with the one next below, as shown and described.

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

An accommodation ladder system adapted to be used upon marine vessels of varying height of freeboard and having sides of varying longitudinal and vertical curvilinear conformation, said ladder system comprising platforms hung on the sides of the vessel, one in front of and below the other, said platforms having rigid depending bracing arms arranged for adjustable abutment against the sides of the vessel to hold the platforms approximately in a right angle position relative to the sides of vessels of varying curvilinear conformation, and ladders pivotally connected at their upper ends to the said platforms and having their lower ends freely resting on the next platform below, whereby said ladders are arranged to connect platforms which are of varying distances apart.

HENRY S. PAUL.