

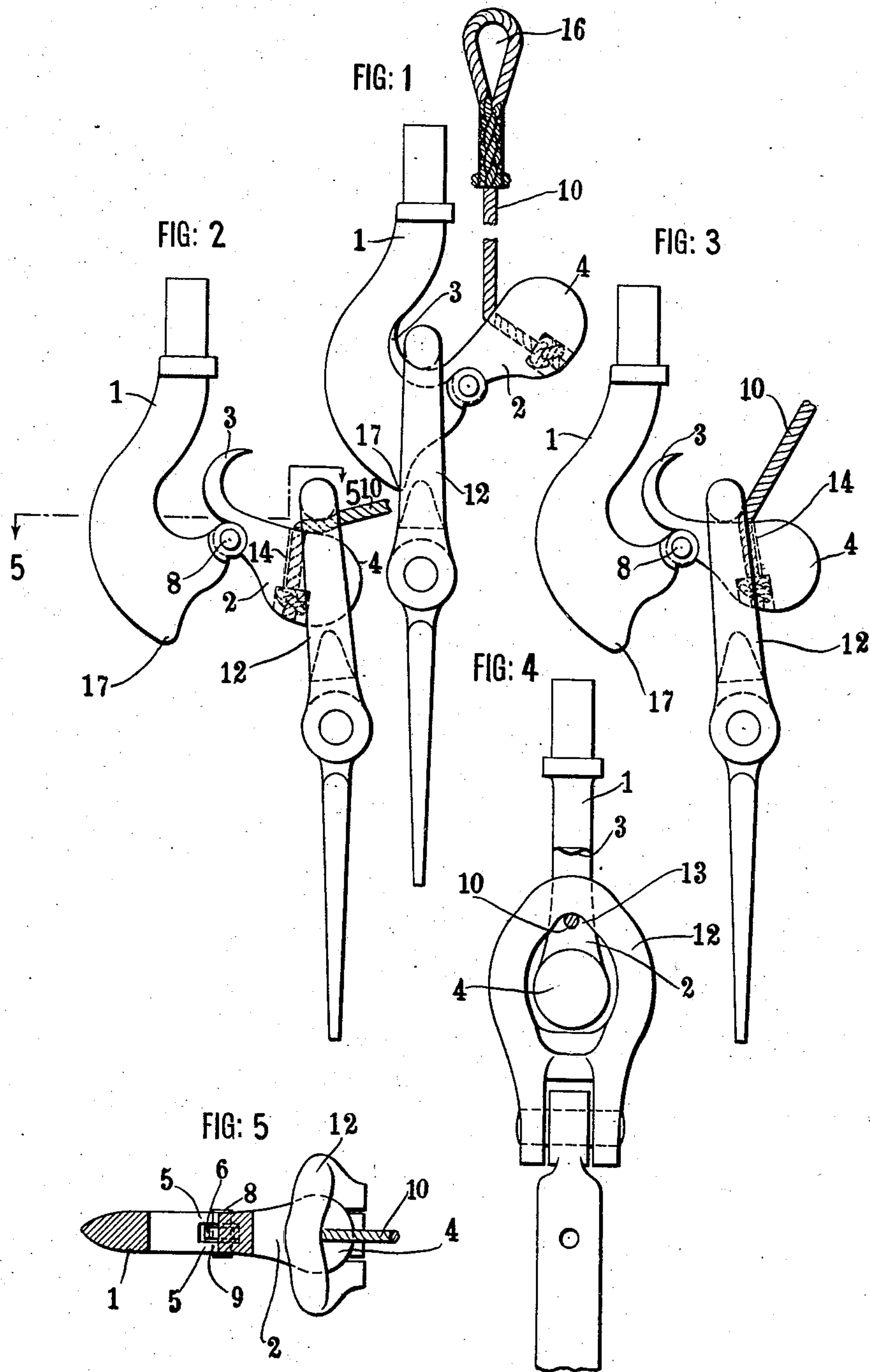
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PATENTED JULY 28, 1908.

J. R. RAYMOND.

DEVICE FOR ATTACHING AND DETACHING BOATS.

APPLICATION FILED AUG. 21, 1907.



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# UNITED STATES PATENT OFFICE.

JAMES RICHARDSON RAYMOND, OF BAYONNE, NEW JERSEY.

## DEVICE FOR ATTACHING AND DETACHING BOATS.

No. 894,345.

Specification of Letters Patent.

Patented July 28, 1908.

Application filed August 21, 1907. Serial No. 389,448.

*To all whom it may concern:*

Be it known that I, JAMES RICHARDSON RAYMOND, a citizen of the United States of America, and a resident of Bayonne, county  
5 of Hudson, State of New Jersey, have invented certain new and useful Improvements in Devices for Attaching and Detaching Boats, of which the following is a specification.

10 This invention relates to improvements in devices for attaching and detaching boats.

The especial purpose of the invention is to provide attaching and detaching hooks of such construction and mode of operation  
15 that the shackles of the boats may be connected with the said hooks by guiding lanyards, without requiring a sailor to take either the shackle or the hook in his hands, and that even in a rolling sea.

20 Much experience with my boat detaching apparatus has shown that it is of the highest importance that whenever it is necessary to "hook on" a life boat or other boat, to the  
25 fall hooks, as when such boat has returned to the ship, for hoisting inboard, this "hooking on" may be accomplished without requiring the sailors to take either the hooks or the shackles in their hands at the time of hooking  
30 on. For the heaving of the boat on a rolling sea is very liable to catch the sailor's hands in the hook, and badly lacerate or even tear off his fingers. But to attain this "hooking on" without use of the sailor's hands, it is necessary that the boat shackles shall be guided  
35 with infallible certainty and celerity into secure engagement with the hooks by the guiding hook lanyards, and without catching on any part of the hooks before they have reached this secure engagement thereon. For it  
40 will not do to fail in, or bungle with, the "hooking on," when your boat is pitching on a rolling sea. The present improvement perfectly attains this result, by extending the bill of the hook out beyond the guiding  
45 lanyard a very substantial distance, so that the enlargement of the bill is beyond the lanyard, and passing the lanyard through the hook in the plane of the oscillation of the hook. With this construction much experience  
50 in all conditions of the sea shows that the hook lanyard guides the shackle fair and clear over said projecting end of the bill, and the shackle slides to place in the bight of the hook, without the possibility of catching, because the lanyard holds the relatively contracted hook socket in the upper part of the

shackle out of contact with the hook, until the shackle has passed over the enlargement of the bill and on to the smaller neck of the hook, where it slides easily home to place;  
60 whereas, if the enlargement of the bill is not thus well out beyond the lanyard, said hook socket of the shackle will catch on the bill, and it will be almost impossible to get the shackle home to place on the hook, while, if  
65 the lanyard passes through the hook transversely to the plane of oscillation of the hook, the shackle will catch on the lanyard or on the bill, one or both. In case of the shackle's catching from either cause it may become  
70 necessary for the sailor to take hold of the shackle and hook with his hands, with great danger of having his fingers torn off. Therefore the present invention has proven to be of great practical importance in connection  
75 with life boat apparatus, and its value has been recently demonstrated in the United States and other navies.

Another purpose of this invention is to provide a device in which the tripping hook  
80 is pivoted directly upon the shank or body without a link, and so that the hook will not stick from corrosion. By pivoting the hook directly upon the shank, I obtain important advantages. In the first place, I obviate the  
85 danger of the hook's being frozen stiff from ice forming in open spaces of the joints which are necessary when links are employed, and in the second place, the shackle is retained more securely upon a hook of given dimensions, when the hook is pivoted directly upon  
90 the shank, than when a link is interposed between the shank and the hook. The sticking of the hook through corrosion at the pivot is obviated by enlarging the hole in the hook  
95 through which the pivot pin passes so as to have a very loose fit on the pin, and by spacing the knuckles of the hinge joint on the shank and the hook so that they have a very easy fit with each other, whereby difficulty  
100 from corrosion at the joint is prevented.

Referring to the drawings: Figure 1 is a side elevation of a hook and a shackle home to place thereon. Fig. 2 is a side elevation of a hook and shackle in the position when the  
105 hook is entering the shackle. Fig. 3 is a side elevation of the same parts, but in the position wherein the shackle has slid down upon the relatively narrow neck of the hook. Fig. 4 is an end view of the same parts, but in the  
110 position of Fig. 2. Fig. 5 is a horizontal section and elevation on the line 5—5 of Fig. 2.



Referring to said drawings, it will be understood there will be two similar hooks, one for each davit, on the ship, and similar shackles at each end of the boat. On the shank 1 of each hook, which will preferably be swiveled in a block of the hoisting ropes in the usual manner, is pivoted a tripping hook 2, which is provided with a curved lip 3, and enlarged weighted bill 4. The knuckles 5—5 on the shank 1 are spaced to receive the knuckle 6 of the hook 2 with easy fit, and the hole 9 in said knuckle 6 is enlarged to have loose fit on the hinge pin 8, this construction preventing difficulty from corrosion at the joint. Said hook 2 is provided with a guiding lanyard 10 which passes through a hole 14 made through said hook in the plane of the oscillation of said hook, and said hole 14 is made through the hook at a substantial distance back from the extremity of the said bill 4 and behind the enlargement thereof, as clearly shown in the drawings. The said lanyard 10 is secured to the hook 2 in any suitable manner, as by knotting its end and drawing the knot into the countersunk enlargement of the said hole 9. The results of placing the lanyard thus back from the extremity of the bill and behind the enlargement thereof are very important. For the shackle 12 is provided with a socket, or relatively contracted portion 13, which locks on the hook 2 when the shackle is home to place, and unless said lanyard 10 is arranged well back from the extremity of the bill 4, such a shackle contacts with the enlarged portion of the bill, and catches so that it is practically impossible to get the shackle over the enlargement. In a heaving sea this is a source of great peril. But I have found that when the lanyard is placed well back from the extremity of the bill 4 and behind the said enlargement, said lanyard serves to support and guide the shackle over the end of the said bill, in such manner that the end of the bill passes freely through the large opening of the shackle, and the hook socket 13 does not contact with the hook until the shackle has passed over the said enlargement and has reached the smaller neck of the hook 2 where it slides freely home to place.

In operation, assuming that a boat is returning to the ship, and that the hooks are tripped by their weighted bills, the sailor catches the lanyard 10 and passes the free end thereof through the shackle 12, the lanyard then extending in an approximately horizontal direction out from the hook, and in the plane of the oscillation thereof. Then by pulling the lanyard taut, he guides the shackle truly and freely over the bill 4 of hook 2, the lanyard assuming an upward inclination as the sailor pulls it. Figs. 2 and 4 illustrate the manner in which the lanyard thus guides the shackle. It will be seen that said lanyard supports the shackle so that

narrow socket part 13 is raised above and kept out of contact with the enlargement of the bill 4, said bill being now in line with and beginning to project freely through the larger central hole of said shackle. The sailor continuing to pull the lanyard finally guides and slides the shackle back on to the smaller neck portion of said hook 2, and about to the position of Fig. 3, and the sailor still pulling on the lanyard raises said hook a little and the shackle slides freely home to place. An eye 16 will usually be spliced in said lanyard 10 into which a heaving line, not shown, may be bent when the boat is returning to the ship on a turbulent sea, and the heaving line thrown to a sailor in the boat, before the boat comes near enough to be in danger of being smashed against the ship's side. The sailor in the boat, in such a case, passes the heaving line through the shackle, and draws first said line and then said lanyard through the shackle without delay, thereby hooking on the boat without danger of collision with the ship.

The shank 1 is preferably provided with the downwardly projecting part 17 which is adapted to contact with the lower part of the shackle 12 and prevent the shackle from jumping back.

Now having described my improvement, I claim as my invention.

1. The combination in a boat attaching and detaching device, of a movable hook having a neck and an enlarged bill, a shackle adapted to engage said neck, and a lanyard adapted to guide said shackle to place on said neck and secured to said hook at a substantial distance back of said enlarged bill, whereby the lanyard in hooking on prevents direct engagement between said bill and shackle and guides said shackle on to the neck of said hook, substantially as described.

2. The combination with a pivoted tripping hook provided with an enlarged integral bill, of a shackle having a relatively larger opening adapted to pass over the said bill and a relatively smaller socket adapted to fit on the bight of said hook, a lanyard adapted to guide said shackle to place on said hook and secured to said hook at a substantial distance back of said enlarged bill whereby the lanyard in hooking on prevents direct engagement of the said socket with said bill and guides said socket on to the neck of said bill, substantially as described.

3. The combination, in boat attaching and detaching devices, of a shank, a pivoted tripping hook thereon having a relatively small neck and a relatively large bill, a shackle having a relatively larger opening adapted to pass over said bill and a relatively smaller opening adapted to a substantially true fit on said neck, and a lanyard secured to said hook at a substantial distance back of said enlarged bill, whereby in hooking on the said lanyard prevents direct engagement between



said bill and said shackle and guides said shackle on to said neck, substantially as described.

4. The combination in a boat attaching and detaching device, of a shank, a hook having a neck and an enlarged bill pivoted directly on said shank without a link, and having a loose-fitted pin and hole connection with said shank, a shackle adapted to engage said neck, and a lanyard adapted to guide said shackle to place on said neck and secured to said hook at a substantial distance back of said enlarged bill, whereby the lanyard in hooking on prevents direct engagement between said bill and shackle and guides said shackle on to the neck of said hook, substantially as described.

5. The combination in boat attaching and detaching devices, of a shank, a hook with enlarged integral bill pivoted directly thereon without a link, and a guiding lanyard secured to said hook at a substantial distance back of said enlarged bill, whereby in hooking on said lanyard prevents direct engagement between

said shackle over said enlarged bill, substantially as described.

6. The combination, in boat attaching and detaching devices, of a shank, a tripping hook pivoted thereon and having a relatively small neck and relatively large bill, a shackle having a relatively larger opening adapted to pass over said bill, and a relatively smaller socket adapted to substantially true fit on said neck, a projection on said shank adapted to prevent the jumping back of the shackle, and a lanyard secured to said hook at a substantial distance back of said enlarged bill, whereby said lanyard prevents direct engagement between said bill and said shackle and guides said shackle on to said neck, substantially as described.

Signed at New York city this 2nd day of August, 1907.

JAMES RICHARDSON RAYMOND.

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