Portable Roller Fairleads Used with *Titanic's* Boat Winches

By Bob Read, D.M.D.

Introduction

The four boat winches on Titanic's boat deck were used for retrieval of her boats after they had been launched. Usually this was carried out on only one or two boats during a boat drill. In a disaster like *Titanic* experienced, they would never be used. If the emergency boats had to be deployed for a man overboard, the boat winches would be used to retrieve them. There were only indirect routes from the boat falls to the warping drums of the boat winches. Therefore, roller fairleads had to be employed to direct the hauling end of the falls to the warping drums of the boat winches. This article will describe the roller fairleads used with particular emphasis on the portable roller fairleads which are not usually seen.

The Roller Fairleads

The hauling end of the boat falls is directed by several roller fairleads to the warping drums of the boat winches.

 The davit roller fairlead – Some would call the roller fairlead which is part of the davit a "pulley". Since it is not used for any mechanical advantage, but serves only to redirect the hauling end of the boat falls, I will refer to it and all other such devices as "roller fairleads". This roller fairlead can be seen in Figure 1.

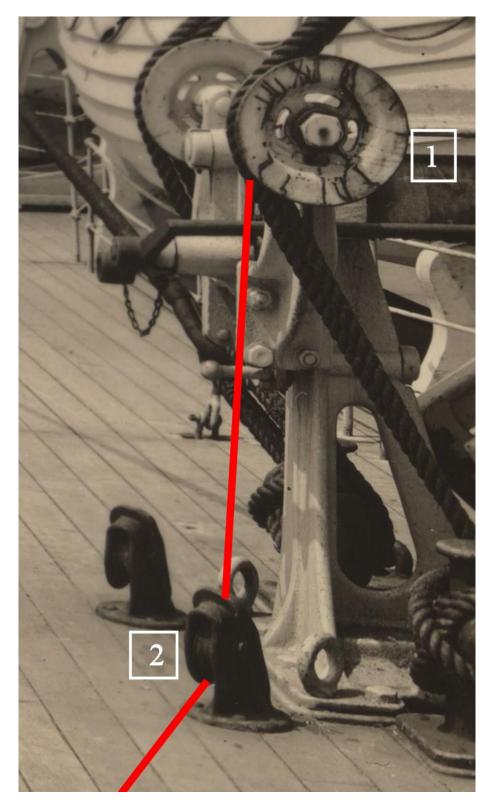
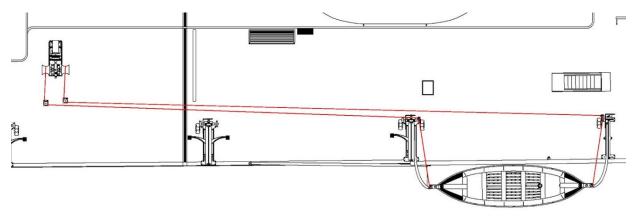


Figure 1 Davit roller fairlead and deck fairlead

The hauling end of the fall emerges from the upper fall block and is directed to the next roller fairlead on deck.

- 2. The second roller fairlead is positioned on deck directly below the davit roller fairlead. This fixed fairlead seen in Figure 1 is positioned to direct the hauling end of the boat falls to the portable boat winch fairlead.
- 3. The portable roller fairleads, of which there are two per boat winch, are positioned outboard of the boat winch, perpendicular to the axis through the warping drums. This can be seen in Figure 2.





Run of hauling ends of boat falls from fall blocks to boat winch

The portable roller fairlead which receives the hauling end of the boat falls which is most distant is positioned further outboard so that the two hauling ends of the forward and aft boat falls do not foul each other. It should be noted that only one boat can be recovered at a time. The portable deck fairleads direct the hauling end of the boat falls at nearly a right angle and upward to a designated warping drum of the boat winch where hauling can commence.

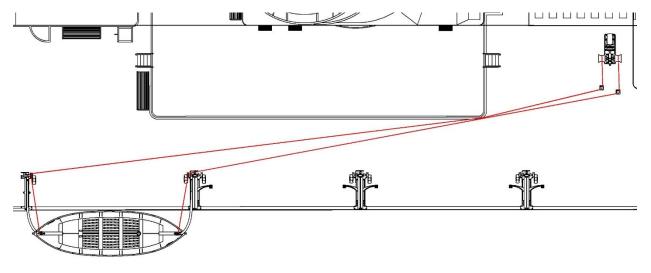
4. There are two additional roller fairleads that have a limited special purpose. In Figure 3 we can see the port roller fairlead for the hauling end of the boat falls located on the forward, port corner of the raised roof over *Titanic's* first-class smokeroom. These roller fairleads were only for the hauling end of the fall of the aft end of boats #15 and #16. They kept the rope from fouling the corner of the deckhouse.





Fixed roller fairlead on corner of *Titanic's* raised roof over the first-class smokeroom

Figure 4 shows the roller fairlead redirecting the run of the hauling end of the aftmost fall of boat #15.





Roller fairlead in use on corner of raised roof of first-class smokeroom

The Portable Roller Fairleads

These fairleads were absolutely necessary to redirect the hauling ends of the falls at nearly a right angle and upward to the warping drums of the boat winches. Figure 5 shows a similar roller fairlead outboard of a boat winch on another White Star Line ship.

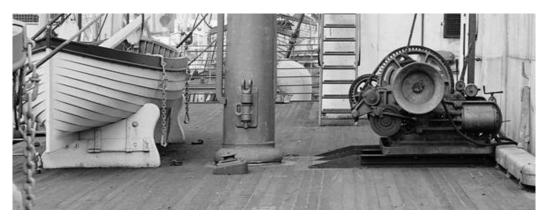


Figure 5

Boat winch fairlead

Figures 6 and 7 show similar boat winch fairleads on *Olympic* in 1913.

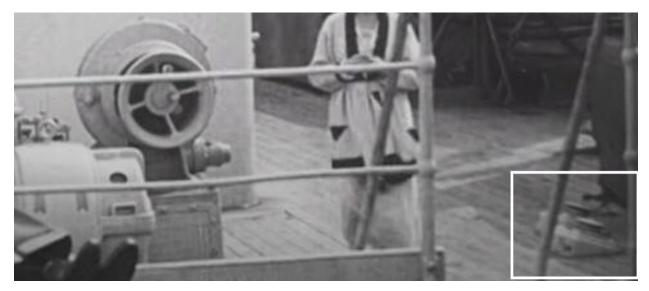


Figure 6

Boat winch fairleads aboard Olympic in 1913

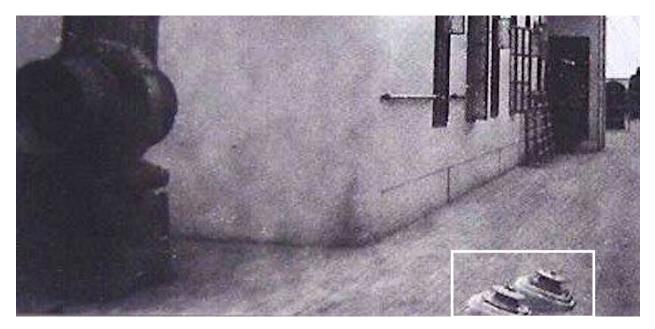
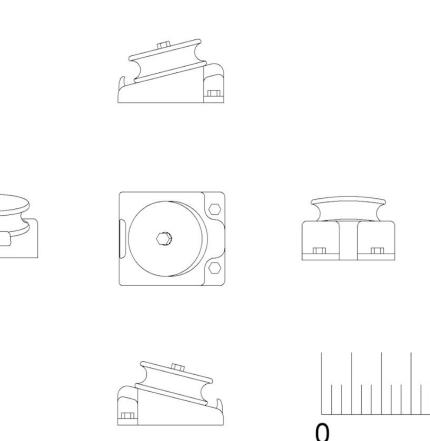


Figure 7

Boat winch fairleads aboard Olympic in 1913

The difference in these previous examples of boat winch fairleads and *Titanic's* is that they were fixed on deck while *Titanic's* were portable. Figure 8 shows a multi-view scale drawing of what Titanic's boat winch roller fairleads probably looked like. Like the Olympic model, it has two inboard bolts to secure it to the deck. The deck would have had threaded sockets for the retaining bolts of the portable fairlead. When not in use, a bronze cap was most likely screwed into the socket so that the cap was flush with the wood deck surface. It would also prevent water from entering the threaded socket. One might wonder why these wouldn't have been fixed on deck on early Olympic and Titanic. During this early period, there was abundant promenade space on the boat deck. These roller fairleads would have presented a trip hazard. On post-refit Olympic the amount of promenade space was very restricted because of the addition of so many extra lifeboats and collapsibles. That left the raised roofs of the first-class lounge and the first-class smokeroom as the primary promenade areas on the boat deck. The boat deck was likely closed to passengers at sunset. The portable roller fairleads for the boat winches on Titanic would only have been installed as needed. For all intents and purposes, these portable fairleads would be irrelevant to the modeler unless he was modeling the retrieval of a lifeboat.



F

Figure 8

Scale in Feet

Multi-view drawing of the proposed configuration of *Titanic's* boat winch roller fairleads

Summary

This article has demonstrated the use of boat winch roller fairleads on several ships and has proposed the configuration of those on Titanic. The configuration has been adapted from the boat winch roller fairleads found on Olympic in 1913.