Titanic's Emergency Boat Fall Recovery System

By Bob Read, D.M.D.

Introduction

For some time, it has been noted that on the outboard aspect of *Titanic's* forward A deck outboard bulwark that there was a block and tackle rig. This rig is shown in Figure 1.

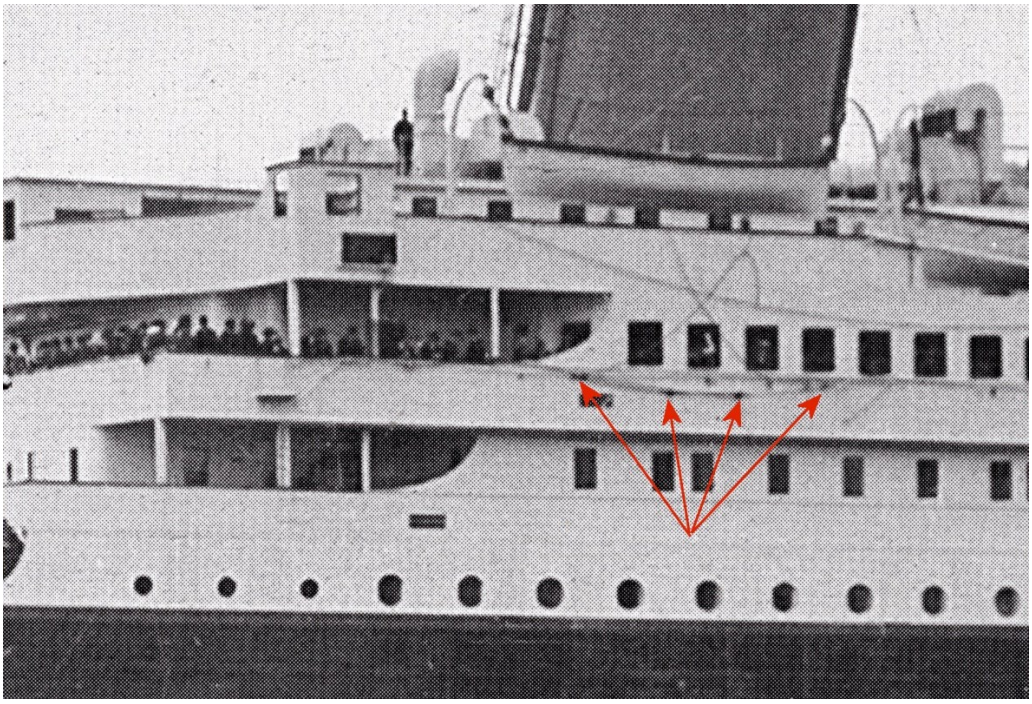

Figure 1

Rigging on *Titanic's* A deck bulwark

Circumstantially, this rigging only appears below the emergency boats on both port and starboard. There are no photos of this rigging in use on either *Titanic* or *Olympic.* Much speculation has been offered to explain the function of this rigging but there have been problems with these alternative proposals to greater and lesser extents. The purpose of this article is solely to offer the theory which I personally believe best fits the facts. No attempt will be made to expound upon alternative theories or to rebut them. I will leave it to their proponents make their best cases which, like this one, will have to stand or fall on their own merits.

Emergency Boat Fall Recovery System

After looking at all the evidence, this is the one explanation for the purpose of this rigging which I believe explains this rigging. To state this theory succinctly, I believe that this rigging was used to recover emergency boat falls which had become fouled following the release of the lower fall blocks from their boat disengaging gear. This rigging would be used to haul the falls up to A deck to be cleared and then lowered back down to await the return of the emergency boat. The problem of fouled falls will be described in the next section.

The Problem of Fouled Emergency Boat Falls

At the time of *Titanic,* there were two very prevalent problems associated with emergency boat falls. These problems had a common origin. The first problem was termed "toppling" or "capsizing" of the lower fall block. When the lower fall block was released from the disengaging gear in the boat, the lower fall block would have a tendency to invert where the lower ring which had been attached to the disengaging gear would rotate vertically. The second problem was called "cabling". This problem also occurred when the lower fall block was released for the disengaging gear of the boat. The falls would begin to twist as if they were forming a larger rope cable.

The source of these problems was the latent energy in the fall ropes introduced by the twisting that occurred during the rope manufacturing process. These problems were worse with new fall ropes and those which were wet. Figure 2 is an explanation of these problems taken from The Nautical Magazine, p. 528, 1912. This citation is one of the best but many more were found.

LOWERING BOATS.

THE great difficulty in recovering and rounding up a davit tackle fall after the first lifeboat has been lowered into the water was a source of worry to all seamen. It was recognised as a forlorn hope or as practically impossible to prevent the lower block from capsizing, and the tackle falls, especially if they were new, from twisting up like a cable-laid rope, immediately the lower block was unhooked when the boat was water-borne.

Figure 2

Excerpt from The Nautical Magazine, 1912

The Solution to Fouled Emergency Boat Falls

Once the falls were "cabled" or the lower blocks were "toppled", they had to be recovered and cleared before hooking back onto the emergency boat. The procedure was to recover the tangled falls and straighten them out on deck. This procedure was explained by Eward Wilding of Harland and Wolff at the British Titanic Inquiry. The pertinent testimony is shown below.

20539. Whether side by side or whether one is stowed under the other, you could have two boats served by the same davit much more certainly and safely if you are certain of recovering your falls?
- You are certain of recovering your falls as it is; it is only a question of time.

20540. But you recover them in a tangled state?
- But you can untangle them. There is nothing impossible in the untangling if you take a quarter of an hour or 20 minutes and disentangle those falls.

20541. (*The Commissioner.*) You must untangle them before you can recover them?
- No, My Lord, the best thing is to pull it up and straighten it out on deck.

20542. (*Mr. Rowlatt.*) We had a little demonstration of that, My Lord?
- Recover it by a hook, or something of that sort, and pull it out on deck.

Note that Wilding is not saying that you can raise the falls by the usual method but rather by recovering them using a method to pull them up in their tangled state, untangling them on deck, then lowering them back down for use by the emergency boat. To expedite the process, I believe that on *Titanic* that they kept dedicated tackle rigged specifically for recovering emergency boat falls which fouled.

The Rigging

The fall recovery rigging looks somewhat complicated in its stowed position. However, I believe it consisted of a pair of two single-sheave blocks with pendants and a hook attached to the end of the pendant to hook onto the lower fall block once it was released. Figure 3 shows these blocks stowed.

Go to next page

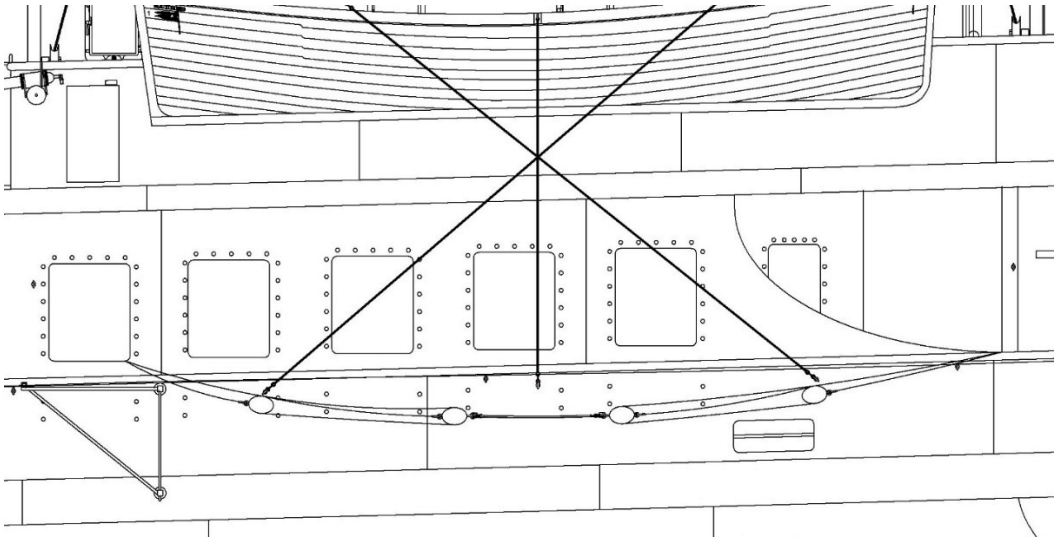

Figure 3

Recovery rigging stowed

In use, I believe the upper recovery block would be hooked to an eye to facilitate the operation of the rigging. Figure 4 shows the recovery rigging in place and in use.

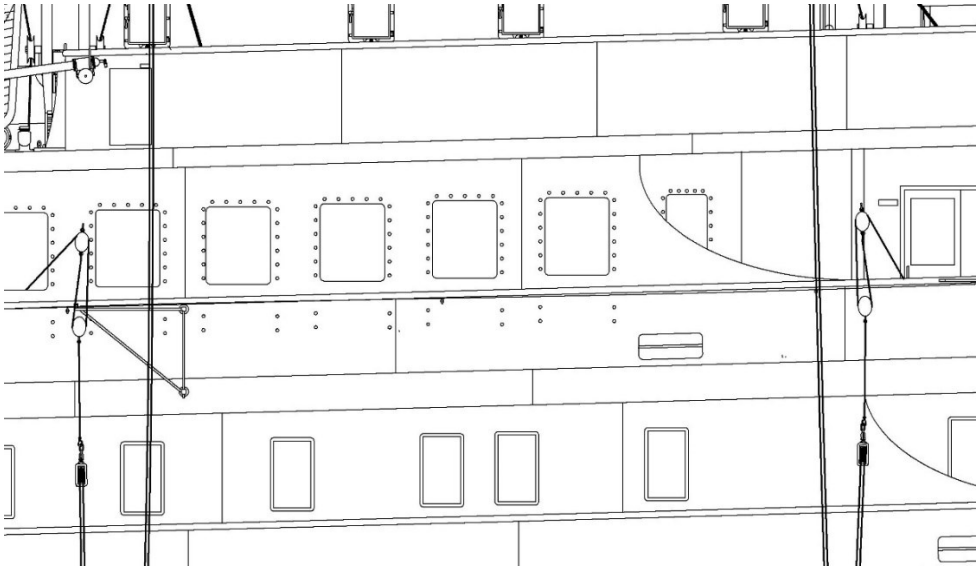

Figure 4

Recovery rigging rigged and in use

The Recovery Procedure

I believe the recovery of any twisted falls would be accomplished by something like the following procedure.

Step 1: Figure 5 shows the starboard emergency boat secured outboard at the ready.

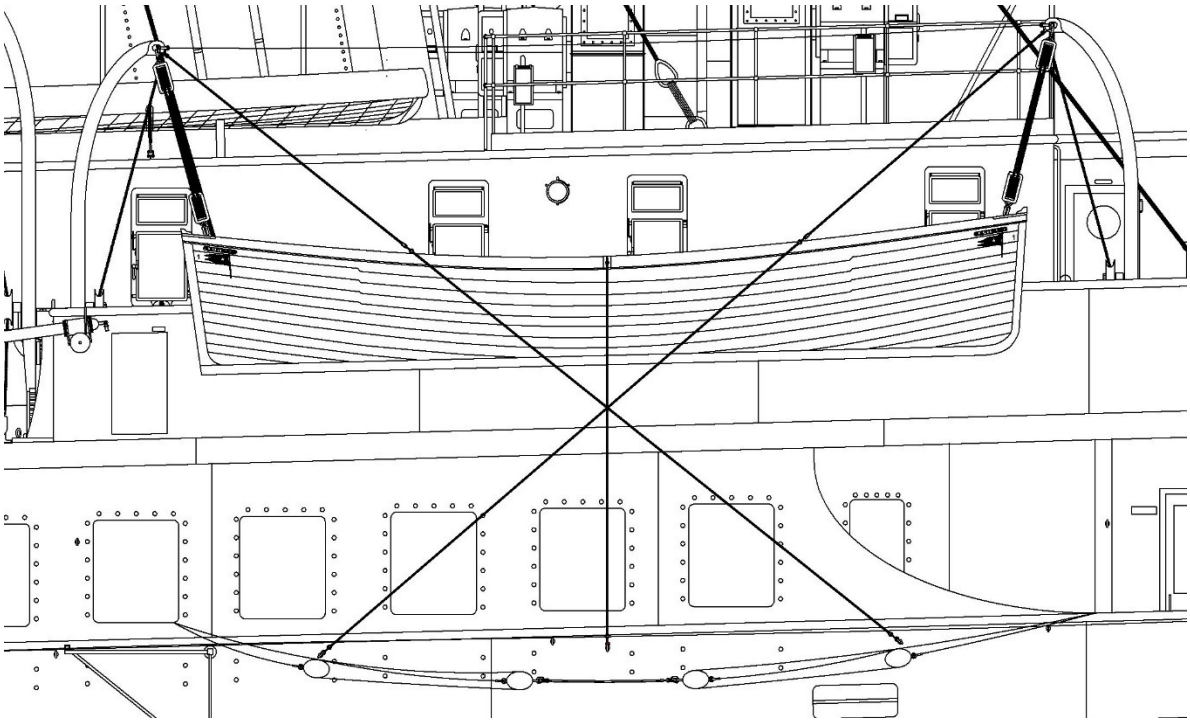

Figure 5

Emergency boat secured and at the ready

Step 2: The boat is manned and is lowered slightly so that the gripes are slack as shown in Figure 6.

Go to next page

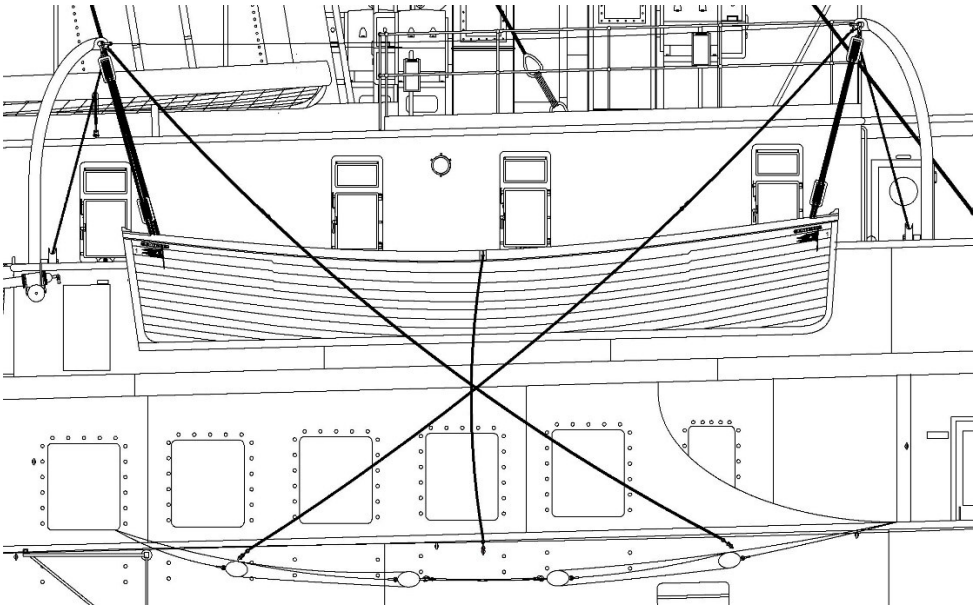

Figure 6

Boat lowered slightly until gripes go slack

Step 3: The gripes are detached and cast off as shown in Figure 7.

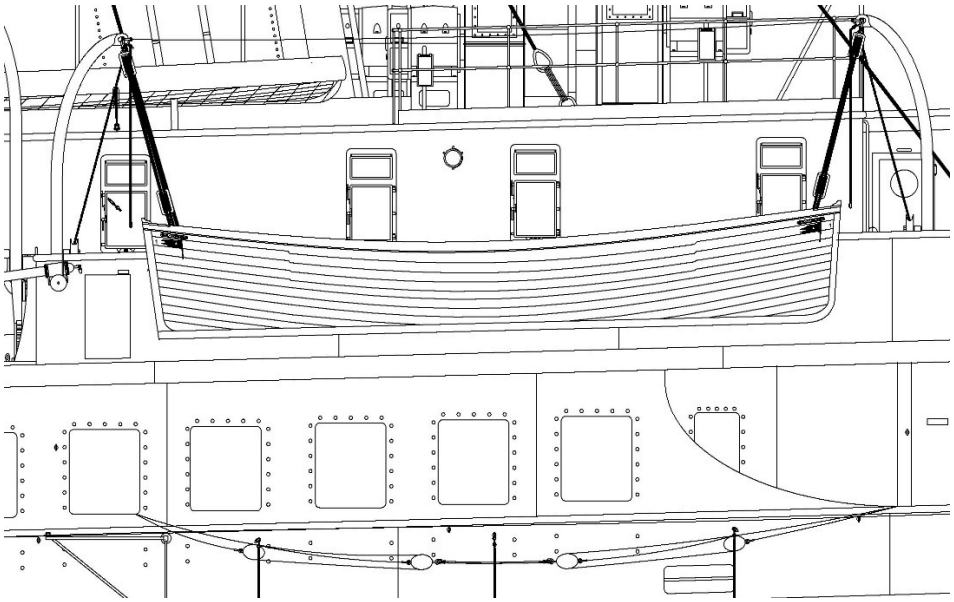

Figure 7

Gripes detached and cast off

Step 4: The boat is lowered down to A deck. The stationary blocks are attached to eyes on the A deck stanchions and promenade screen plating. The pendants of the traveling blocks of the rigging are brought aboard the boat and hitched around thwarts. Figure 8 illustrates this step.

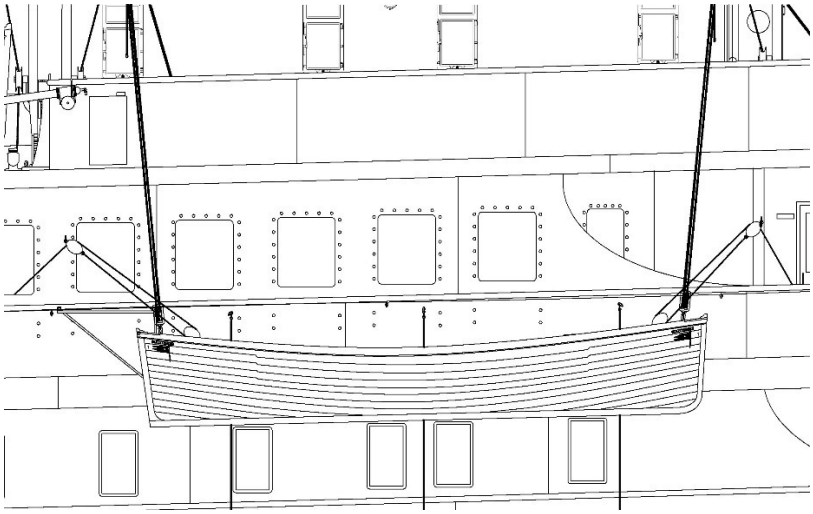

Figure 8

Boat lowered to A deck. Stationary blocks rigged to eyes. Traveling block pendants hitched around boat thwarts.

Step 5: The boat is lowered to the water and the lower fall blocks are released from the boat disengaging gear. If either or both of the falls become twisted, the boat crew attaches recovery rigging to the block. If recovery rigging is not necessary, it is cast off before the boat departs.

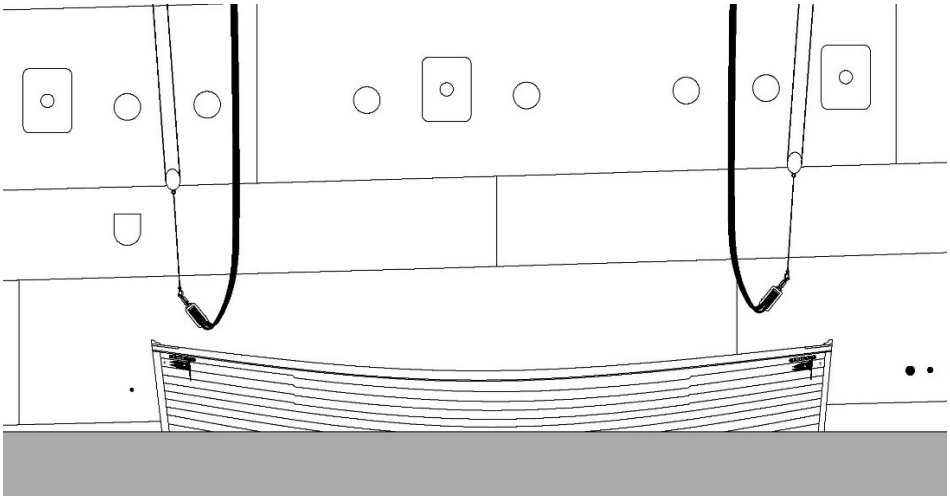

Figure 9

Boat lowered to water. Falls disengaged. If falls are twisted, they are attached to recovery rigging.

Step 6: The emergency boat departs. Any twisted falls are recovered to A deck where they are cleared then lowered for use when the emergency boat returns.

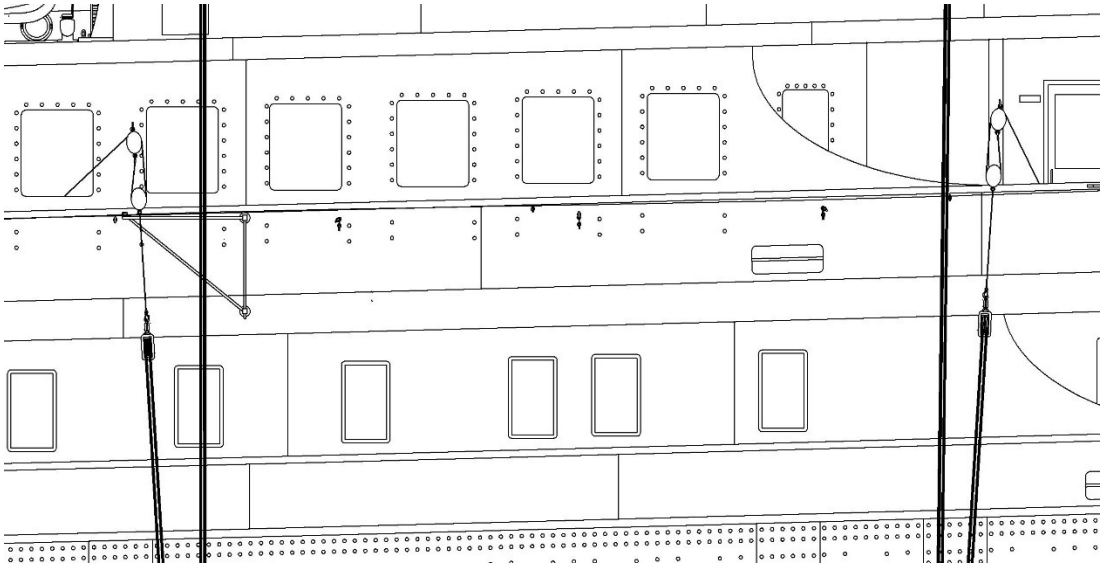

Figure 10

Twisted falls recovered to A deck by recovery rigging. Falls cleared and lowered for use by returning emergency boat.

Conclusion

The purpose of this article has been to propose an explanation for the rigging we see in Figure 1. The proposed function of the rigging is to act as a recovery mechanism for emergency boat falls which had fouled because of twisting. Step-by-step proposed procedures have been given for how the recovery tackle would be operated.