# Paint Color and Application to *Titanic's* Winches: The State of the Evidence

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#### Introduction

This article is being written to reevaluate previous assumptions and evidence regarding the paint color and application to *Titanic's* various types of winches. Previous assumptions have been proven to be wrong regarding other paint applications on *Titanic* so it became necessary to have a fresh look at *Titanic's* winches. This article will describe the different types of winches and our authority for choosing particular colors and where they are applied.

#### **Steam Winches**

Titanic had three steam powered winches manufactured by Harland and Wolff. All three of these winches were located on the forecastle deck. One was positioned directly aft of cargo hatch #1. The other two were positioned directly aft of the foremast. Figure 1 shows the location of all three steam winches.

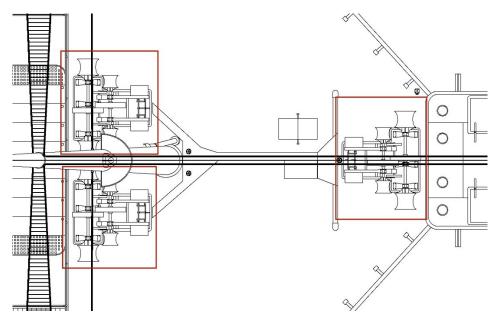
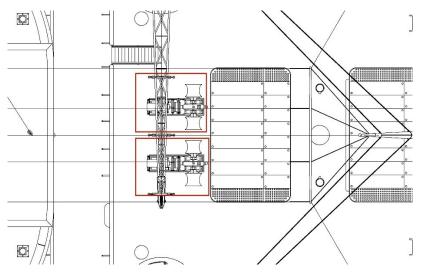


Figure 1

#### Steam winches on Titanic's forecastle deck

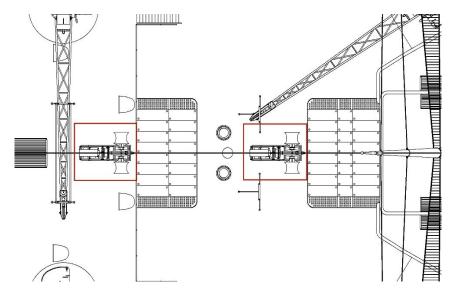
# **Electric Cargo Winches**

*Titanic* carried four 3-ton capacity electric cargo winches which were manufactured by Sunderland Forge. Two were located in the forward well deck aft of cargo hatch #3. One was in the aft well deck directly aft of cargo hatch #5 and one was positioned at the forward end of the poop deck. The 3-ton electric cargo winches are shown in Figures 2 and 3.





#### 3-ton electric cargo winches in the forward well deck





3-ton electric cargo winches in the aft well deck and on the poop deck

### **Boat Winches**

*Titanic* carried four 3/4 -ton electric boat winches made by Sunderland Forge. These winches were for the purpose of retrieving launched boats. They were not used in the launching process. Two were located at the aft end of the officers' quarters (p&s). The other two were located on either side (p&s) of the weather cover over the aft first-class staircase dome. These boat winches are shown in figures 4 and 5.

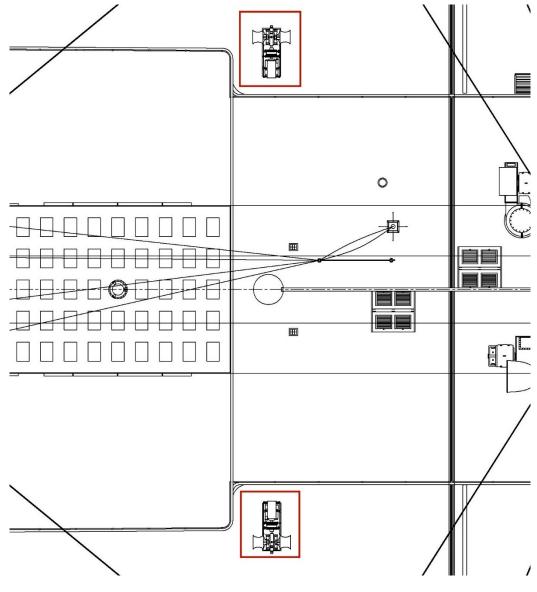


Figure 4

3/4-ton Boat winches on either side of officers' quarters

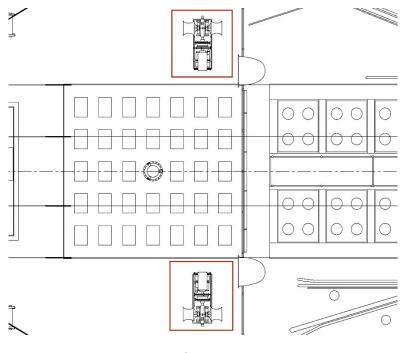


Figure 5

3/4-ton boat winches located on either side of weather

cover over aft first-class staircase dome

## Source for Winch Color

Our primary source for the color of the winches has been the Britannic Specification Book. In Figure 6 we see an excerpt from the book which specifies that the winches for Britannic's civilian colors were to be "green and black".

#### Winches

- - 2 - Green & Black.

Figure 6

Original Britannic Specification Book entry for winch colors

For other paint specifications we have been able to determine fairly specifically where the different colors of paint were to be applied. However, the winch paint specification is confusing. It does not specify where the green and black paint were to be applied to the winches.

Our first piece of evidence which helped us to determine what part of the winches were to be painted green was a photo of one of *Titanic's* <sup>3</sup>/<sub>4</sub>-ton boat winches. Figure 7 shows this photo.

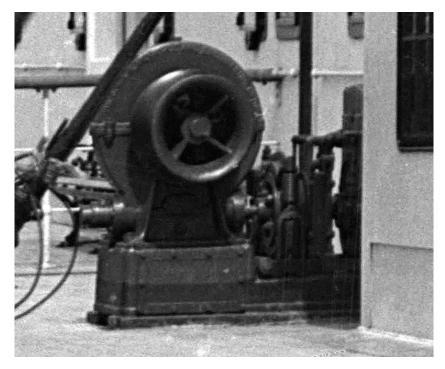


Figure 7

# Photo of one of *Titanic's* ¾-ton boat winches

If the colors are green and black it is clear that the lighter, upper part of the winch would be green and the lower darker part would be black. We also have a photo of one of *Britannic's* boat winches showing the same pattern. This *Britannic* photo is shown in Figure 8.

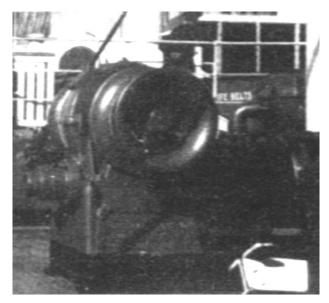


Figure 8

Britannic boat winch

With this evidence the other winches on *Titanic* and early *Olympic* (1912-13) were examined. Unfortunately, no similar paint pattern was found on the other winches.

There are very few photos of *Titanic* or early Olympic which give us a good view of the 3-ton electric cargo winches. In examining many Olympic photos over the span of her career it was not possible to find any kind of paint separation on her cargo winches. The one photo which had the potential of being like *Titanic* was a photo of *Olympic's* 3-ton cargo winch on her poop deck in May 1912. The photo is not ideal but it appears that there is no paint separation line on the lower part of the winch which can be seen in Figure 9.

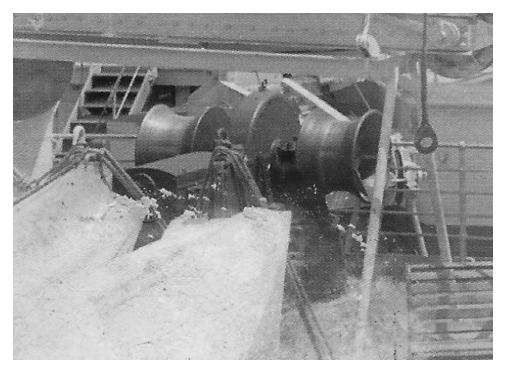


Figure 9

#### 1912 photo of 3-ton cargo winch on Olympic's poop deck

In examining the steam winches, we have another difficulty. In the early blue sensitive black and white film, the shade of the steam winches on the forecastle and the dark gray of the bollards are nearly identical. So, these early photos of the steam winches were examined, but again no paint separation line could be found.

At this point questions were raised about whether the *Britannic* specifications actually applied to *Titanic's* steam winches. Fortunately, a book with photos taken in 1912 in New York was found. The book is entitled "The Longshoremen". Panchromatic or modern black and white still film did not become available until 1906. Even then, the use of blue sensitive film persisted because it was less expensive. The photos in "The Longshoremen" appear to be taken with early panchromatic modern black and white film. We no longer see the distortion of known colors due to the characteristics of the early blue-sensitive film. The reason why this newer,

more expensive film was used in this case was most likely because these photos would be used in a book where a higher quality of photo was desired.

The photo shown in Figure 10 is one take from "The Longshoremen". It was taken some time in 1912 in New York. It is a photo taken aboard the White Star vessel RMS *Celtic.* 

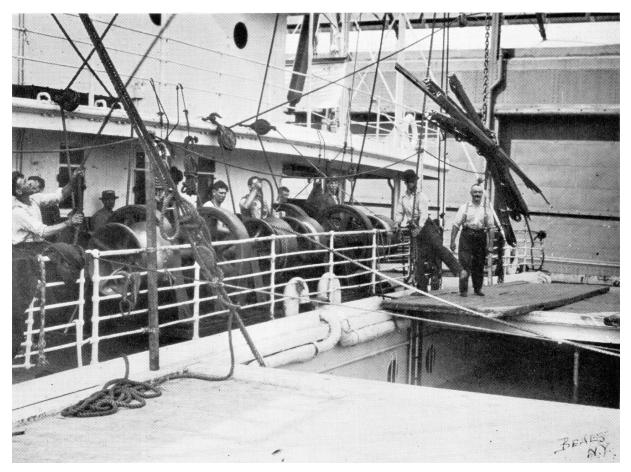


Figure 10

#### 1912 photo taken aboard RMS Celtic in New York City

In the photo you can tell that these steam winches are not black by looking at the black object one deck above on the deck. Additionally, there does not appear to be any paint separation line on the winches. These winches appear to be a uniform color. Since this is a White Star ship in 1912, we can surmise that these steam winches were painted uniformly green.

With all this evidence it was time to reevaluate the *Britannic* specification. It does not correspond with evidence from 1912. So, while these two colors, green and black, were used on some of *Titanic's* winches, all the different types of winches did not have both black and green painted areas.

Given all the previous evidence, the following paint colors and areas of application are supported by the best evidence at this time.

Steam winches – Uniformly green

3-ton electric cargo winches – Uniformly green

<sup>3</sup>/<sub>4</sub>-ton electric boat winches – Green with a black dado.

## **Green Paint Color**

Now that the areas where paint was applied has been examined, we now ask the question, are there any clues as to what the shade of green was? Winch and steam equipment from the late 19<sup>th</sup> and early 20<sup>th</sup> centuries was examined and the Figures 11-13 show these shades of green.



Figure 11

Green paint used on steam equipment in early 20<sup>th</sup> century

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Figure 12

Green paint used on steam equipment in early 20<sup>th</sup> century

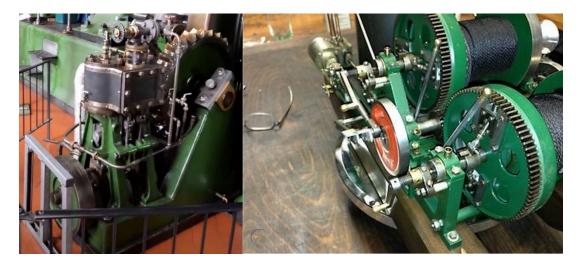


Figure 13

#### Green paint used on steam equipment in early 20<sup>th</sup> century

These representative samples are fairly uniform. This is a lighter brighter green rather than a dark forest type green. Given the evidence from other ships, I believe a representative shade of the green paint used on *Titanic's* winches is shown in Figure 14.

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Figure 14

#### Representative shade of green likely used on *Titanic's* winches

Some may object at this point and say that the green paint used on Titanic's winches must have been much darker. The reason for this is again the blue sensitive black and white film which was used. As a demonstration, I will convert one of the color photo examples above to what would be seen if it were photographed with blue sensitive black and white film shown in Figure 15.

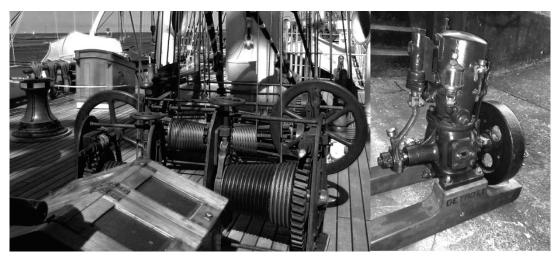


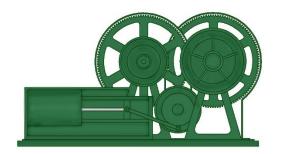
Figure 15

Appearance of winches if photographed by blue sensitive

black and white film

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To demonstrate how the various types of winches on Titanic would appear with this representative shade, they are shown in Figures 16-18.



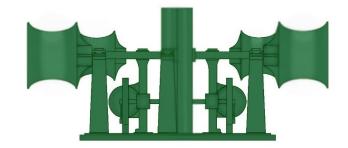
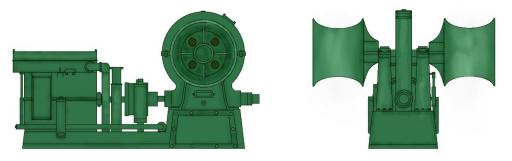


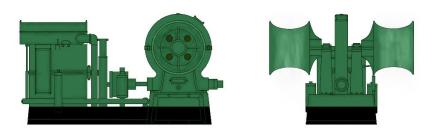
Figure 16

#### Appearance of steam winches aboard Titanic





## Appearance of 3-ton cargo winches aboard Titanic





Appearance of ¾-ton boat winches aboard *Titanic* 

# Conclusion

A new examination of the evidence has caused a reevaluation of how the various winches aboard *Titanic* were painted. The strength of the evidence for different colors aboard *Titanic* varies. The evidence for the paint application on all the winch types on *Titanic* and this specific shade is not as strong as would be desirable. However, at this time I believe it is the best evidence we have. Any other paint scheme would have less evidence supporting it. If and when any contradictory evidence surfaces, it will be announced and this article will be edited to reflect that change.