# The Opening Windows of Olympic and Titanic's Boat Deck First Class Entrance and Gymnasium

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### Introduction

As originally conceived Olympic did not have windows which opened in her Boat Deck First Class Entrance or Gymnasium. Early experience from Olympic would show the need for better ventilation through these two public rooms. During Titanic's fitting out process these new opening windows were added. During her early career these opening windows were also added on Olympic. The exact date of the refit of these windows on Olympic is not known but they were installed at least by her 1913 refit. This article will show which windows opened on both ships. Different windows opened on both ships so both ships will be explained.

#### The Windows

The windows of the Boat Deck First Class Entrance and Gymnasium are shown in Figure 1. These windows were "Pattern E" teak framed windows. The only difference between the First Class Entrance windows and the Gymnasium windows was that the First Class Entrance windows had clear glass and the Gymnasium had translucent hammered glass. The Gymnasium windows had one other feature unique to them. On the windows which did not open, the center pane in the top row of the rectangular windows opened. For the windows of both the First Class Entrance and the Gymnasium only alternating windows had the lower rectangular section which opened.

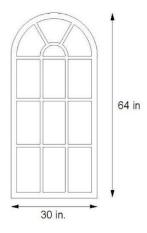


Figure 1

Figure 2 shows Olympic's Gymnasium windows with both the full lower rectangular part of a window open and forward of it the upper center pane of one of the non-opening windows in the open position.

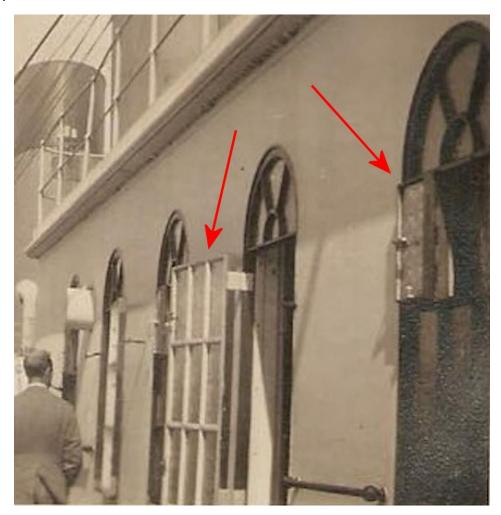


Figure 2

## General rules for opening widows

Olympic and Titanic both had identical "Pattern E" opening windows on their First Class Entrances and Gymnasiums. They did, however, have different patterns of which windows opened and which did not. One aspect of these windows which was not like most other doors and windows was that the opening lower windows did not consistently follow the standard convention of opening forward. Some did while others did not. To determine both the pattern and direction the first rule which was followed was that only alternating windows opened. This is given in the Britannic Specification Book. Figure 3 is an excerpt of this book showing how only the alternating windows opened.

Children's Playroom

1st Cl. Gymnasium

Teak framed windows, Patt. E.
Two windows (P&E) in Entrance to have bot part only to hinge. Windows in the Gymmato be white Flemish glass, the bottom pa of alternate windows being made to hinge. The windows in the Children's Playroom be clear glass, but otherwise the same athe Gymnasium.

Figure 3

The second rule was that the single opening pane in the non-opening windows swung aft to open. The third rule was that in the area between windows into which the opening windows opened did not have a storm rail. Given these rules, we will first look at Titanic to determine its pattern of opening windows.

## Titanic's opening window pattern

The opening window pattern for Olympic was relative easy to determine. The one area that did not have good photo coverage was the starboard side of the first class entrance. The first area which will be examined is the Gymnasium. We had seen from Olympic evidence that the aft facing Gymnasium window opened. It was unclear whether this window opened on Titanic until the Titanic wreck photo shown in Figure 4 was discovered.



Figure 4

Figure 4 shows the opening for the aft facing Gymnasium window on Titanic. We are able to determine that the door opened to starboard because there is a hinge plate remnant on the starboard side of the window.

Next we proceed to the starboard Gymnasium windows as seen in Figure 5.



Figure 5

In this photo, we can only see windows 1-5. We will have to use another photo to supplement this one. To determine which windows opened we have to look at which storm rails are present and which are missing. Then by applying the general rules which were outlined previously, the only pattern where alternating windows could be opened are either windows 1-3-5, or windows 2-4-6. We can see that window 3 has storm rails on both fore and aft sides so that rules out the 1-3-5 window opening pattern. Next we have to test whether the 2-4-6 pattern would fit within the general rules previously outlined. In the 2-4-6 pattern, window 2 could open forward and window 4 could open aft. Since we can't see a storm rail between windows 5 and 6 we could postulate that window 6 could open forward. The only thing which could prevent this is if a bulkhead lamp were located between windows 5 and 6. To confirm the location of another bulkhead lamp, we will have to look at another Titanic photo.

Figure 6 shows that there is a bulkhead lamp aft of window 6 so there is nothing to prevent window 6 from opening forward. So our opening window pattern on the Gymnasium is 2-4-6.

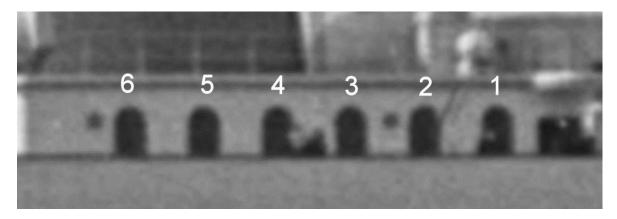


Figure 6

Next we turn our attention to the port side of the First Class entrance shown in Figure 7.



Figure7

With only 5 windows on the port side we have only two possibilities of alternating opening windows. Either pattern 1-3-5 or 2-4 are the only two possibilities. The photo shows that there are storm rails on both fore and aft of window 3 so that rules out pattern 1-3-5. For pattern 2-4

we can see that window 2 could open forward and window 4 could open aft. So the 2-4 pattern is confirmed for the port side of the first class entrance.

The starboard side of the first class entrance presents the greatest problem for determining the pattern of opening windows. Figure 8 shows what is believed to be the best Titanic wreck evidence for the location of storm rails. This area collapsed and only early expedition photos of low quality are available to study.

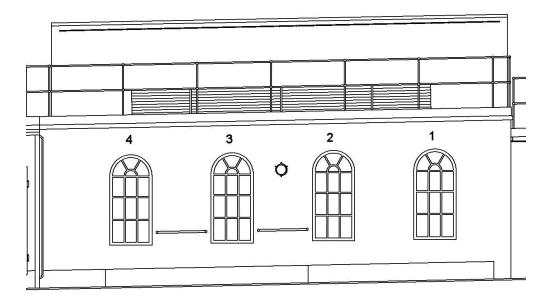
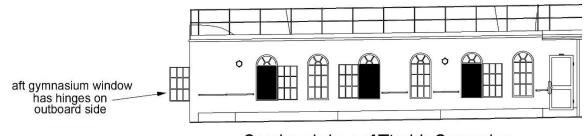


Figure 8

For an alternating opening window pattern here we have the possibility of windows 1-3 or 2-4. The biggest question in the evidence is the location of storm rails forward of window 3. If the analysis shown above is correct then because window 3 is flanked by storm rails on both forward and aft sides, the opening pattern would have to be 2-4.

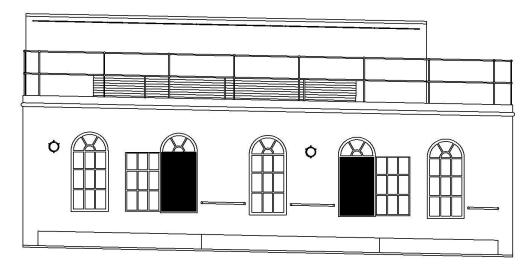
To illustrate the opening patterns of the three locations of opening windows on Titanic the following drawings are offered. Figure 9 shows the opening Gymnasium windows.



Opening windows of Titanic's Gymnasium

Figure9

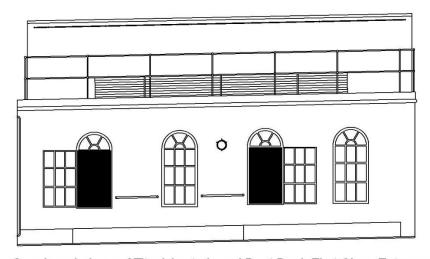
Figure 10 shows the opening windows on the port side of Titanic's Boat Deck First Class Entrance.



Opening windows of the port side of Titanic's Boat Deck First Class Entrance

Figure 10

Figure 11 shows the opening windows of the starboard side of Titanic's Boat Deck First Class Entrance.



Opening windows of Titanic's starboard Boat Deck First Class Entrance

Figure 11

## Olympic's opening window pattern

Because of her longer career, many more photos were taken of Olympic than either of her sisters Titanic or Britannic. Therefore we are able to more easily determine the opening pattern of windows of her Gymnasium and First Class Entrance. The first thing we must

illustrate is the fact that "as built" Olympic had no opening windows in either of these public rooms. Figure 12 shows the Gymnasium windows of Olympic during fitting out.

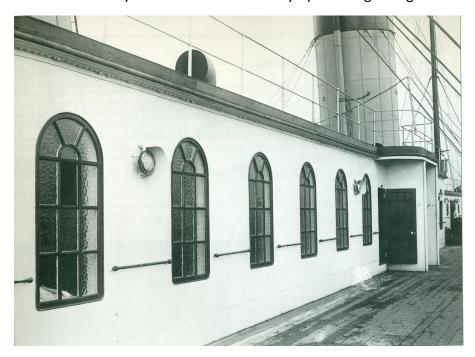


Figure 12

As can be seen in the photo, there are storm rails fitted between all the windows. This indicated that none of the windows could open. The storm rails which were omitted on Titanic for these opening window were once thought to have been omitted during a rush to finish fitting her out. The discovery of the opening windows has shown that the omission of the storm rails to be strategic. Olympic got her opening windows sometime after her maiden voyage. She was brought back to Belfast several times during her first year. The installation could have happened during one of these visits or it might have been done during her 1912/13 refit. The same method which was explained for determining which windows opened on Titanic were used for Olympic. An in depth analysis will not be done for Olympic. The final determination of which windows opened will simply be illustrated.

Figure 13 shows Olympic's opening Gymnasium windows.

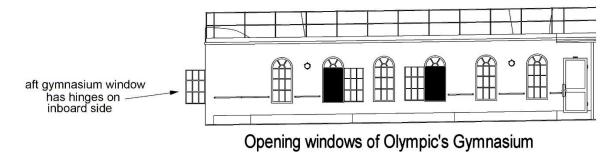
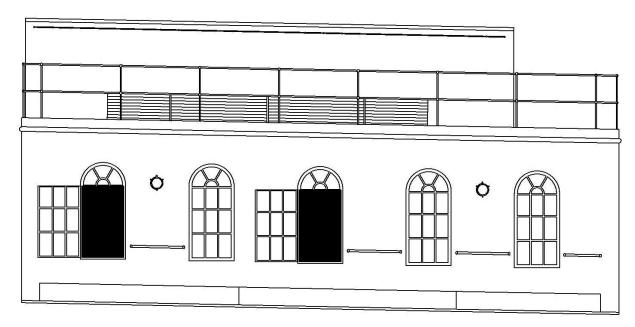


Figure 13

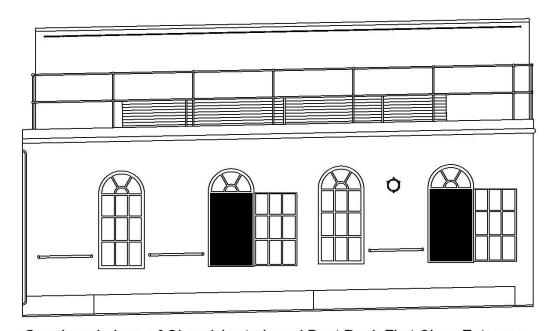
Figure 14 shows Olympic's opening windows of the port Boat Deck First Class Entrance.



Opening windows of Olympic's port Boat Deck First Class Entrance

Figure 14

Figure 15 shows Olympic's opening windows of the starboard Boat Deck First Class Entrance.



Opening windows of Olympic's starboard Boat Deck First Class Entrance

Figure 15

#### Britannic

Britannic's Specification Book shows in Figure 3 that opening windows for the Gymnasium, Children's' Playroom, and First Class Entrance on the Boat Deck were at least planned to have opening windows. The onboard and wreck photos of Britannic are so few that it is impossible to determine whether she had opening windows or what pattern they used. To speculate would not be of much worth.

### Conclusion

Photo evidence from Olympic and Titanic bolstered by documentary evidence from Britannic indicates that Olympic and Titanic had alternating opening windows on their Gymnasiums and Boat Deck First Class Entrances. The pattern of these opening windows was different on Olympic and Titanic. This is probably because Olympic's opening window installation was a retrofit. They probably didn't want to relocate bulkhead lamps on Olympic during the retrofit process. The one area which is somewhat in question is the starboard Boat Deck First Class Entrance of Titanic. Since there were opening windows here on Olympic, it is reasonable to assume that these windows also opened on Titanic. The patterns were likely different because of the differing location of the bulkhead lamps in this location on both ships. There has been no evidence which has surfaced which would contradict the pattern of opening windows on the starboard Boat Deck First Class Entrance of Titanic which is shown in this article.