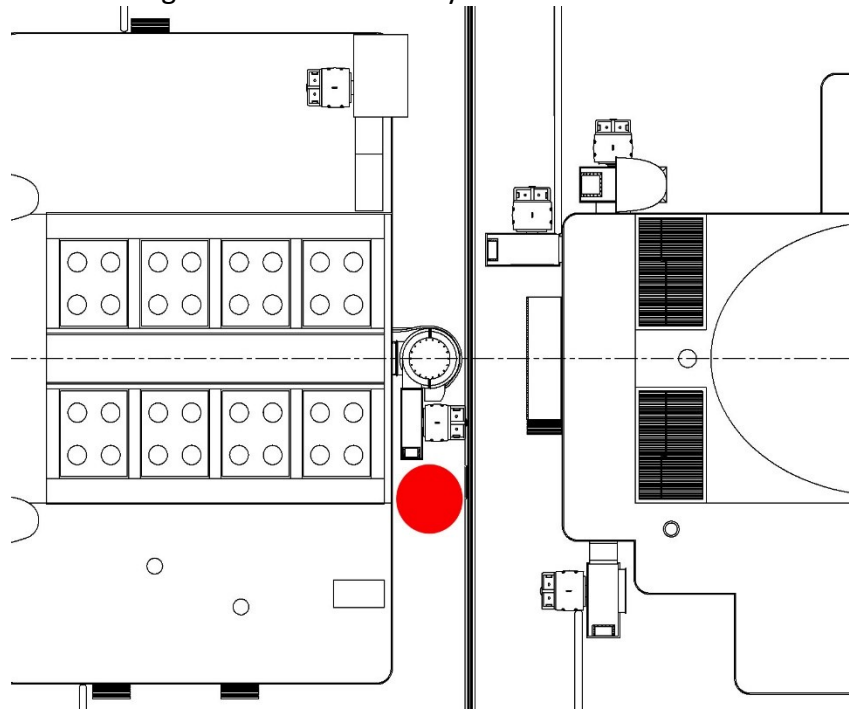


A Re-Examination of One of *Titanic's* Ventilators

By Bob Read, D.M.D.

Introduction

This article will examine the configuration of one of *Titanic's* electric fan ventilators. The particular ventilator which will be discussed is found on the forward starboard aspect of the tank room. This ventilator location is seen in Figure 1 and is indicated by a red circle.



Location of subject *Titanic* ventilator (in red)

This ventilator has been the subject of much discussion by *Titanic* researchers. With this article, *Titanic* researchers will likely be in basic agreement about the configuration of this ventilator. The purpose of this article will be to determine as closely as possible the dimensions of this ventilator with the emphasis being on the vertical dimensions.

One of a kind?

There has been much confusion on my part because other researchers contended that this ventilator was identical (except for being mirrored horizontally) to the ventilator on the port side roof of the tank room. My incorrect assumption that the ventilator on the port tank room roof was a 35-inch ventilator led me to question the initial identification of this ventilator by other researchers. When I finally did painstaking photometric analysis of the vent on the roof of the tank room, I was able to readily determine that this was a smaller ventilator than the standard 35-inch ventilators. The tank room roof railings were used as a reference since the top rail is 42 inches above the surface of the roof. Proportional equations were used to solve for the heights of various vertical landmarks on the ventilator and its intake duct. Figure 2 shows the results of these measurements.

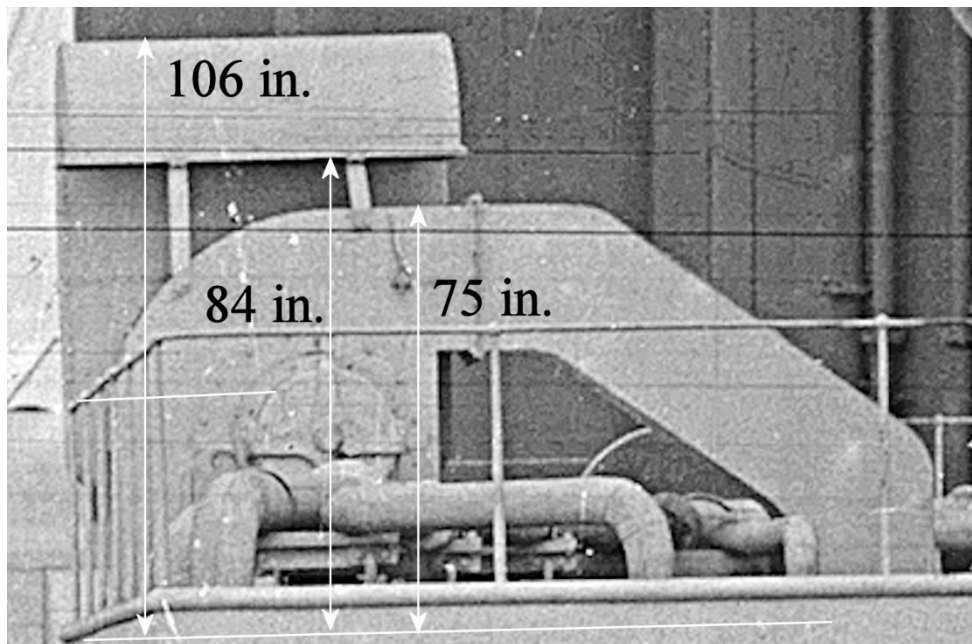


Figure 2

Measurements of various landmarks of the ventilator on the port roof of *Titanic's* tank room

The results of these measurements made it clear that the tank room roof ventilator was not a 35 in. ventilator. The problem was that this particular type of delivery ventilator had never been seen in this form on *Olympic*. The next smaller delivery ventilator on *Olympic* was a 30-inch model. The problem is that this 30-inch delivery model was a measurably smaller ventilator than the one seen on *Titanic's* tank room roof. Not only are the vertical dimensions of the tank room roof model greater than the *Olympic* 30-inch delivery model, the width of the *Olympic* ventilator indicates that the tank room roof ventilator was based on some ventilator other than *Olympic's* 30-inch delivery ventilator.

There is another possibility that may be the answer. The width of the fan of the 30-inch suction fans used on *Olympic* and *Titanic* is a much closer match to that of the tank room ventilator. Figure 3 shows a comparison of the sizes of a 30-inch delivery ventilator and a 30-inch suction ventilator seen on *Olympic*.

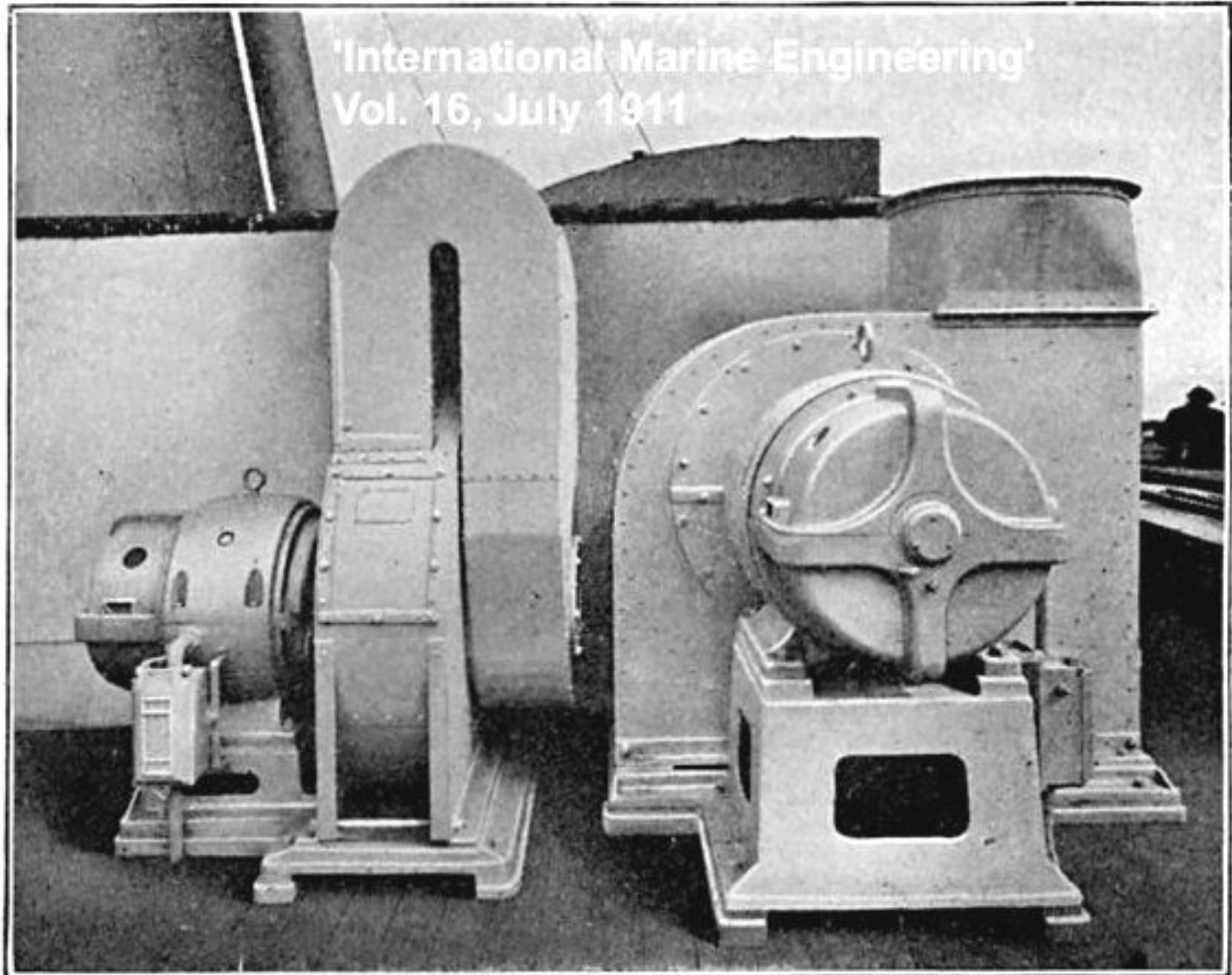


Figure 3

30-inch delivery ventilator (left) and 30-inch suction ventilator (right) as seen on *Olympic*

Therefore, it is my speculation that the tank room roof ventilator is based on the 30-inch sirocco suction electric fan ventilator.

Is Ventilator in Question the Same as the Tank Room Roof Ventilator?

Knowing the basic vertical dimensions of the tank room roof ventilator, we can now compare it to photos to see if it is a good match to the ventilator seen on the forward starboard bulkhead of the tank room. Figure 4 shows this comparison.

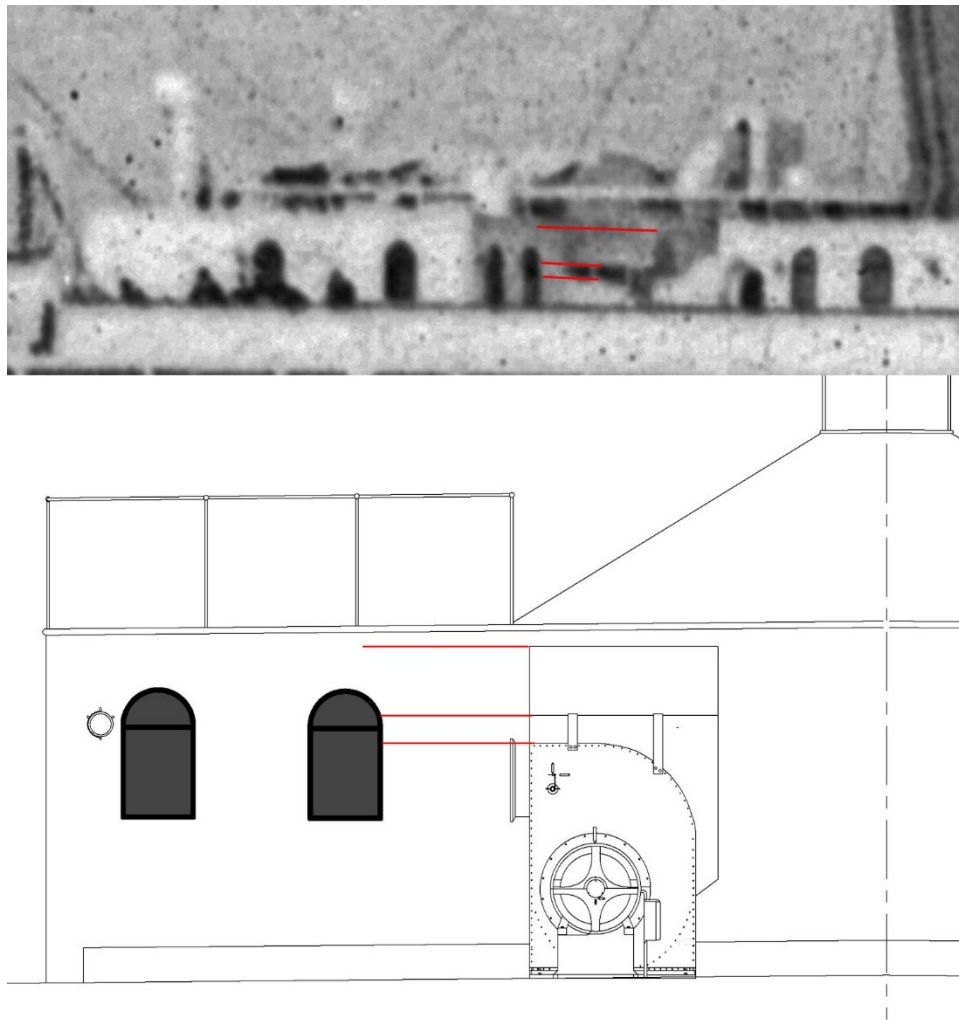


Figure 4

Comparison of tank room roof ventilator to that seen in *Titanic* photo

Because of the vertical distortion of this photo and the lack of definition, it is not possible to make measurements with a high degree of certainty. Nevertheless, the comparison of where the ventilator's vertical landmarks meet the tank room windows shows that this tank room roof ventilator is a good candidate for the type seen in the photo. Additionally, it is a much closer match than any other possible alternative.

Supporting Evidence

During *Olympic's* 1913 refit, a 30-inch ventilator was added to the port side of her forward tank room bulkhead. It has been suggested that *Titanic's* tank room roof ventilator and this 30-inch ventilator added during *Olympic's* refit were essentially the same and served the same function.

If we look at Figure 5, we can see how ducting from *Titanic's* tank room roof ventilator could duplicate the function of *Olympic's* refit ventilator.

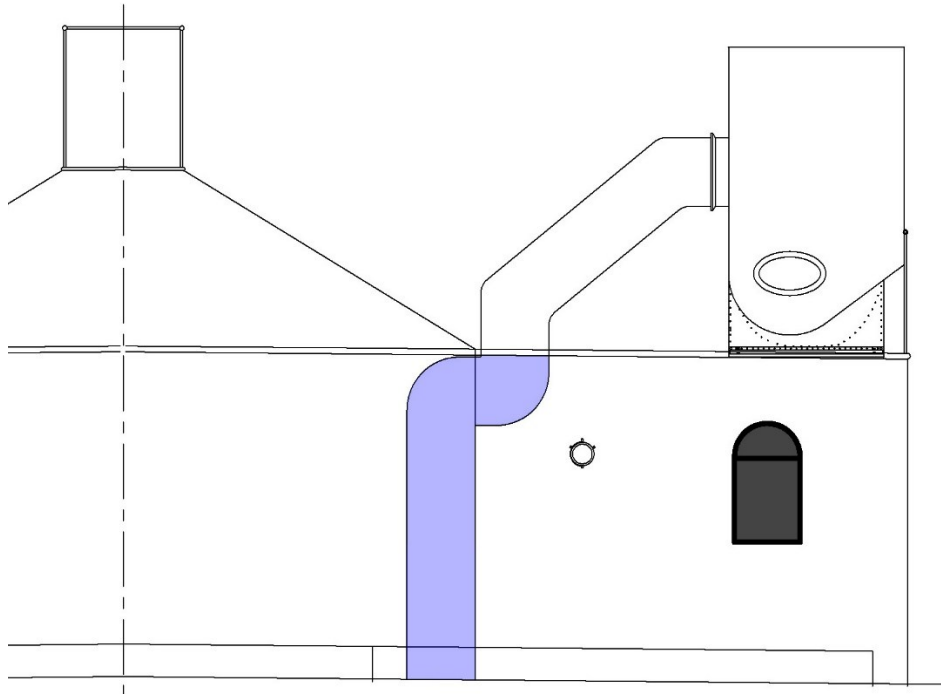


Figure 5

Probable ducting of *Titanic's* tank room roof ventilator showing how it's function and configuration could duplicate *Olympic's* 1913 refit 30-inch delivery ventilator

This would provide more circumstantial evidence that the tank room roof ventilator was indeed a 30-inch model. Figure 6 shows a 5-view drawing of what I believe is the ventilator found on the forward starboard aspect of *Titanic's* tank room.

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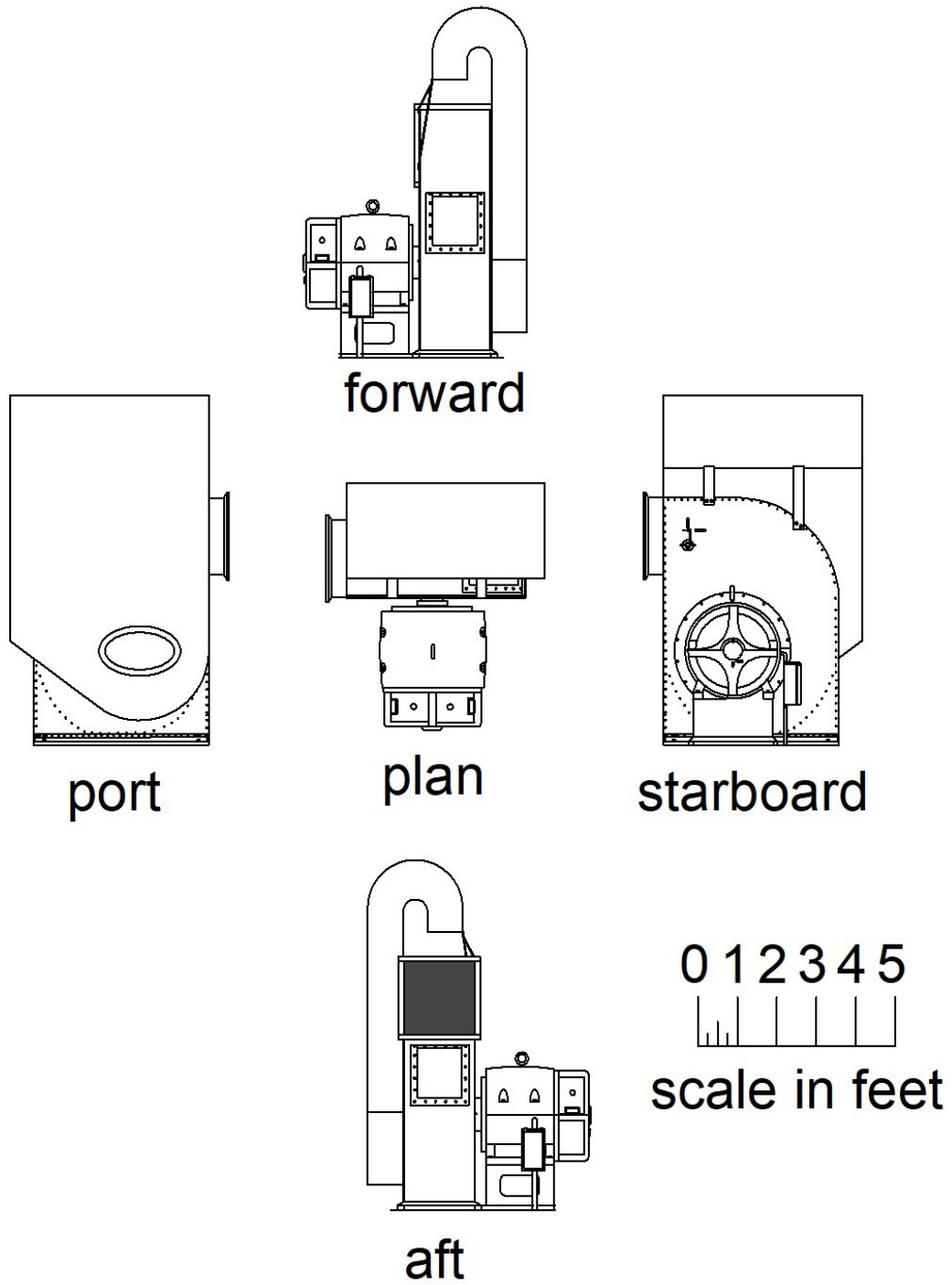


Figure 6

5-View drawing of ventilator on forward starboard side of *Titanic's* tank room

Figure 7 shows the ventilator in place on the forward bulkhead of *Titanic's* tank room.

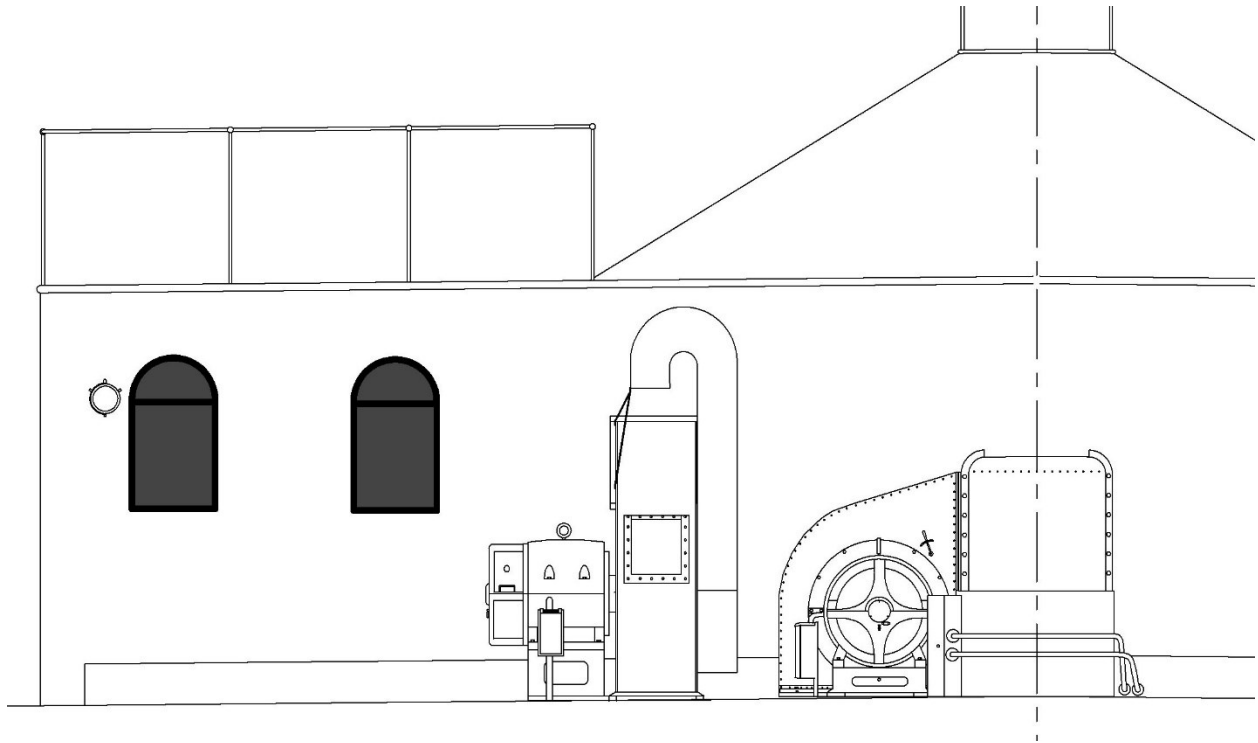


Figure 7

Ventilator in place on the forward starboard side of *Titanic's* tank room

Summary

This article has examined the possible alternatives for identification of the *Titanic* ventilator found on the forward starboard aspect of her tank room. Evidence relating this unknown ventilator to the ventilator found on *Titanic's* port tank room roof was evaluated and compared to photos of the unknown ventilator. It appears that the ventilator on *Titanic's* port tank room roof is the same type (mirrored horizontally) as the unknown ventilator. Circumstantial evidence was also evaluated and supports the identification of the unknown ventilator as a 30-inch sirocco electric fan ventilator with a swan neck intake duct.