By Bob Read D.M.D.

Introduction

While researching some other matters pertaining to *Titanic's* bridge, I began examining the folddown tables found there. I realized that I did not know much about their structure or operation. I decided to do a little more in-depth research to see if I could answer those questions. These are fairly unremarkable structures but having found answers to my questions about them I decided to write a relatively short article explaining their structure and operation.

Structure

There aren't too many good photos of the fold-down tables on *Titanic's* bridge and those which are clearer show the tables folded down which obscures their construction details and operation. Fortunately, I found information about this type of table in *Practical Shipbuilding: A Treatise On the Structural Design and Building of Modern Steel Vessels: the Work of Construction, from the Making of the Raw Material to the Equipped Vessel, Including Subsequent Up-Keep and Repairs, Volume I &II. By A. Campbell Holmes.*

The relevant information is shown in Figure 1.

Go to next page

Table.—Figs. 178 to 182 show a folding table such as is fitted inside a shelter. This form of table is also used in many other parts of a ship. Fig. 178 shows the end elevation and Fig. 179 the front elevation. The table is made of teak and fitted with a small fore-edge all round. The leaf is clamped at the ends. and is hinged to a $2\frac{1}{2}$ in. by I in. piece which is screwed to the framework inside. It is supported when in use by a *gallows* bracket, framed up, as shown in Fig. 181. This bracket is arranged to revolve by cutting two dowels on the vertical piece, to fit into holes, one in the piece to which the table is hinged, and one in a small bracket screwed to the inside sheeting. The general sizes are shown on the drawing, and the illustrations should make the construction quite clear.





Information about fold-down tables from "Practical Shipbuilding"

It appears that this type of fold-down table had other applications throughout ships other than just on the bridge. It is fortunate that the design for this type of table was relatively standard at the time because it makes determining the structure of *Titanic's* fold-down table easier. The

drawing in "Practical Shipbuilding" shows a table that would be considerably smaller than *Titanic's* bridge tables. The best information from the drawing is the description and drawing of how the table top, or leaf, was supported.

Construction

The main structural elements of the fold-down tables on the bridge are shown in Figure 2.





Main structural elements of fold-down table

- 1. Mounting frames: These wooden frames are attached to the inner tongue-and-groove planking of the bridge deckhouse. They are positioned over underlying structural frames to provide a strong structural element to which the table is mounted.
- 2. Headboard: This "L" shaped structure provides a structure to which brass hinges are attached. The other part of the hinge is attached to the table leaf to allow it to be rotated from its working horizontal position to its vertical stowed position.
- 3. Table leaf: This is the working surface of the fold-down table. It is attached to the headboard by brass hinges. It is the only hinged element on of the entire table assembly. It has raised fore-edges on its ends and front sides to prevent writing instruments from rolling off the table. It has two positions. It is either raised to its horizontal working position or lowered to its vertical stowed position. The table leaf is

made up of several boards arranged on the long axis of the leaf. The boards are strengthened from below by boards on either end called "clamps". The writing surface of the table leaf was 42 inches off the deck. The estimated dimensions of *Titanic's* table leaf were 44 inches x 22 inches.

4. "Gallows" brackets: These brackets have two dowels in their upper and lower ends. The upper dowel fits into a hole in the underside of the headboard piece. The lower dowel fits into a hole in a square wooden rod attached to the mounting frame. These brackets are stowed against the bridge bulkhead when rotated inward. When the table leaf is raised to its working position, the brackets can be rotated outward to support the table leaf from underneath. Their outward rotation is stopped by a wooden piece applied to the fore and aft ends of the leaf. This wooden piece is called a "clamp".

Operation

The operational use of the fold-down tables will be described here.

- 1. From its stowed position the table leaf is first raised to its horizontal position.
- 2. The two gallows brackets are rotated outward until they are stopped by the "clamp" boards on the ends of the table leaf.
- 3. To lower and stow the table leaf it is raised slightly to take pressure off the gallows brackets. The gallows brackets are rotated inward until they are against the bridge bulkhead.
- 4. The table leaf is lowered to its vertical resting position.

The operation of the table will be shown in Figure 3.

Go to next page





Plan view Table leaf raised Brackets rotated outward



Forward elevation view Table leaf lowered Brackets rotated inward



End elevation view Table leaf lowered Brackets rotated inward



Forward elevation view Table leaf raised Brackets rotated outward



End elevation view Table leaf raised Brackets rotated outward





Various view showing operation of fold-down table

Figure 4 shows the starboard fold-down table on *Olympic* lowered, stowed position.





Starboard fold-down table on Olympic lowered, stowed position

Materials and Finish

Practical Shipbuilding indicates that these tables were made from teak. In close-up photos of the tables, it doesn't appear that the tables are unfinished. They have more of a glossy painted finish which is likely "japanned". This term "japanned" means "covered with a hard black varnish." Figure 5 shows a close-up of the surface of this table.





Close-up photo of table

Use

These tables were for any purpose like spreading out a chart, looking at a book, or writing on paper. They were likely only used in daylight hours. After sunset, the lights on the bridge interior would not be turned on because they would interfere with the night vision of the officer of the watch.

Summary

This short article was written to examine the structure of the fold down tables on the navigating bridge. They are fairly unremarkable structures but they had fairly standardized construction. I thought that it might be beneficial for some purpose in the future to document these tables.