Feb. 18, 1936. C. J. WARD 2,031,241

SHIP CHART CABINET AND DISPLAY CASE

Filed March 5, 1934

Fig. 1

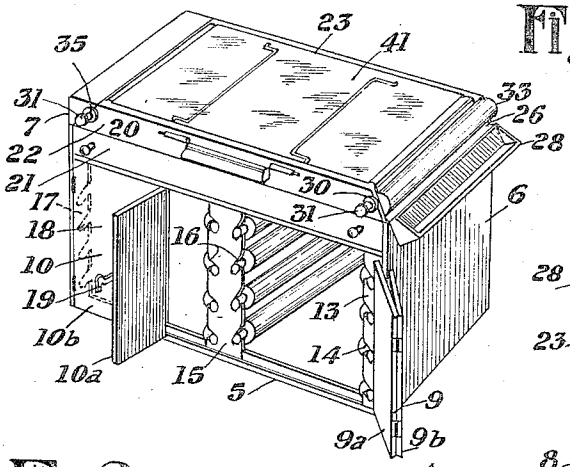


Fig. 4

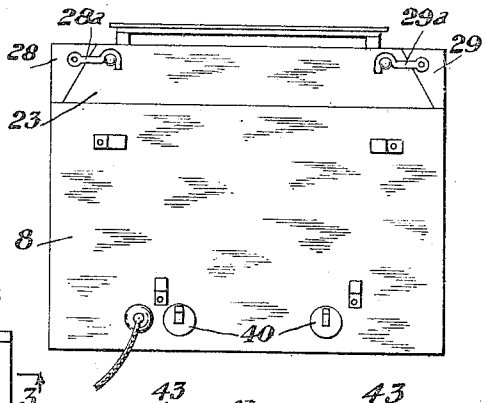
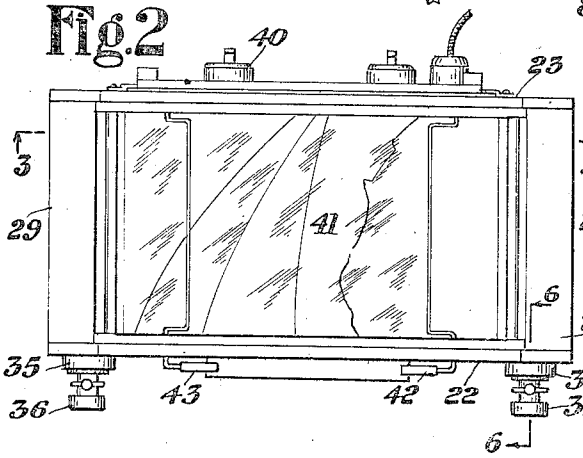


Fig. 2



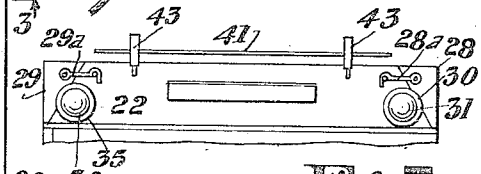
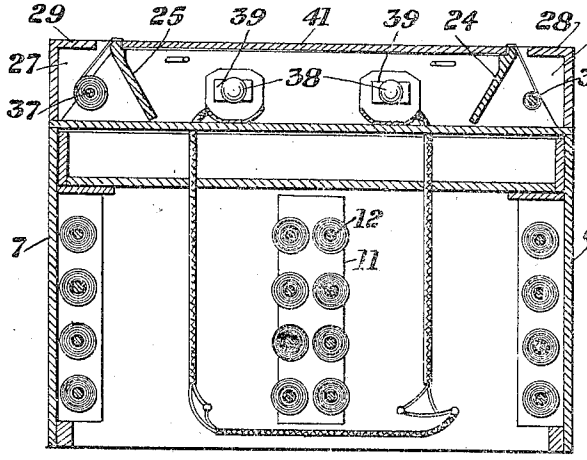
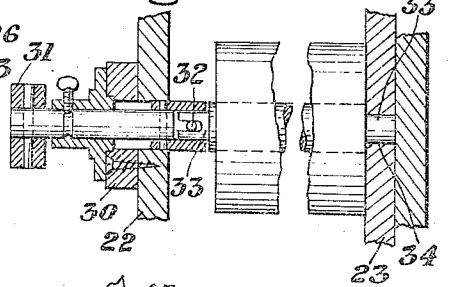


Fig. 5

Fig. 6





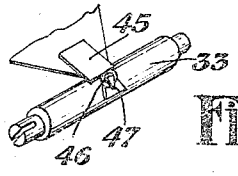


Fig. 7

Fig. 3

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SHIP CHART CABINET AND DISPLAY CASE

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Application March 5, 1934, Serial No. 714,026

4 Claims. (Cl. 40—86)

This invention relates to improvements in chart holding and display cabinets for ships, and one of its objects is to provide a display case in which a ship chart may be drawn over an illuminated glass panel, with the light projected from below, so that there is diffusion of the light rays, and the chart is not subjected to a folding or mutilating use, and all fine detail markings and signal or danger positions can be accurately determined, with the least waste of valuable time, and without danger of fold lines or other irregular marks being confused, in a period of critical interest, with informative markings of the chart.

Another object of the invention is the provision of a chart cabinet with roll holding pockets located at the ends thereof, swinging covers for these pockets, a lamp box located between the pockets, a glass panel arranged over the lamp box, means for guiding the chart from one roll to the other, and means for lifting the glass panel quickly to permit of quick replacement of any of the lamp bulbs arranged in the lamp house, whereby an efficient construction is obtained, which will promote intelligent reading of ship charts, with a minimum of error and loss of time.

Another object of the invention is the provision of a chart supply holding cabinet, located below the lamp house, which will hold for ready indexing and quick removal all of the charts of a ship.

With the above and other objects in view the invention consists in certain new and useful constructions, combinations, and arrangements of parts, clearly described in the following specification, and fully illustrated in the accompanying drawing, in which:—

Fig. 1 is a front elevation, showing one of the doors opened, to disclose the interior; and showing one of the roll pocket doors in open position.

Fig. 2 is a plan view.

Fig. 3 is a horizontal sectional view, taken on line 3—3 of Fig. 1, looking in the direction of the arrows.

Fig. 4 is a detail sectional view, taken on line 4—4 of Fig. 1, looking in the direction of the arrows, showing the roll holding reel construction.

Fig. 5 is a detail end view.

Fig. 6 is a detail view, broken away, shown partly in section, of one of the rollers.

Fig. 7 is a detail view in perspective of a reel shaft.

Referring to the accompanying drawing illustrating the practical construction of the invention 5 designates the base of the cabinet, 6 and 7 the end walls thereof, and 8 the rear wall. The front wall is the form of the right door 9, consisting of the hinged sections 9a and 9b, and the left door 10, consisting of the hinged sections 10a and 10b. These doors are shown hinged at their outer ends to the end walls 6 and 7, so as to open outwardly.

The rear wall 8 is equipped with vertical members 11, which are formed with reel holding sockets 12. Adjacent to the end wall 6 a vertical rack 13 is arranged, which is formed with angular or inclined slots 14 to receive the ends of the reel shafts which carry the ship charts. A double rack 15 is located midway of the two end walls, and provided with inclined slots 16, while another rack 17 is located near the end wall 7 and is provided with inclined slots 18. The slots of the various racks are arranged in registration with the sockets of the members 11, so that the supply of ship charts may be supported horizontally on the opposed members, for easy withdrawal through the open forward side of the cabinet. The doors close against the outer ends of the chart rolls, thereby locking them in the supports, and the doors can be locked by means of the latch or locking member 19.

The lamp box 20 is built upon the upper part of the cabinet, and a drawer 21 is provided below this lamp box. The lamp box includes the forward side wall 22 and the rear side wall 23. Between these side walls the partitions 24 and 25 are arranged, near the opposite ends thereof. These partitions are inclined downwardly and inwardly, and form the inner end walls of the roll pockets 26 and 27, arranged at the ends of the lamp box. A cover 28, shown to be of triangular shape, is hinged to the cabinet to close the pocket 26, and a similar cover 29 is hinged to the opposite end of the cabinet to close the pocket 27. Latches 28a and 29a are provided for holding the covers in closed position.

The front side wall 22 of the lamp box or housing, is equipped near the right end with the roll shaft bearing 30, in which the handle 31 is fitted. This handle is slidably mounted in the bearing, so that it can be withdrawn outwardly, and is provided with a key 32 on its inner end, to engage the slotted end of the roll shaft 33. The opposite side wall 23 is provided with a socket 34 to receive the rear end of the roll shaft located in the pocket 26. A similar bearing 35 is located at the opposite end of the wall 22, in line with the roll pocket 27, and is equipped with a similar handle 36. The rear wall 23 is also provided with a similar bearing to receive the rear end of the roll shaft 37.

The lamp box is equipped with one or more electrical lamps **38** supported by the sockets **39** in the space bounded by the side walls and the end partitions. The circuit through these lamps is closed by means of a switch **40**, arranged in any suitable position. A clear or frosted glass panel **41** is positioned over these lamps, being supported by the side walls **22** and **23**, and the end partitions, in recesses formed therein, so that the glass will be flush with the upper surface of the cabinet, or below it. In order to quickly lift the glass out of its nested position, the swinging crank bars **42** and **43** are arranged in the lamp box, being pivoted transversely to the side walls **22** and **23**, and provided with handles on their forward ends.

The ship chart is preferably arranged on a strip of rollable transparent cloth, similar to tracing cloth, and is provided on each end with a tapered attaching terminal **45**, which is equipped with a connecting ring **46**, adapted to cooperate with a holding hook **47** carried by the roll shaft **33**.

The loaded roll shaft is placed in one of the end pockets, and the end portion of the chart strip or web is stretched across the glass panel, and then connected to the unloaded roll shaft, which is located in the opposite pocket. The chart roll may be then moved across the illuminated glass panel, and all detail markings of the chart may be clearly observed and studied without confusion. This will preserve the ship chart against mutilation, due to constant folding and unfolding, and the surface will always remain uniform and readable without mistaking irregular marks or abrasions as informative markings.

I claim as new:—

1. A ship chart holding cabinet having a lamp box at the top thereof, roll receiving pockets located at the ends of the lamp box, bearings in each pocket in which the shaft of a chart holding roll may be mounted for turning, and covers hinged to the cabinet to close the pockets, said covers being of triangular construction so as to remain in closed position by their weight.

2. A ship chart holding cabinet having a lamp box at the top thereof, said cabinet being constructed with roll receiving pockets located at the ends of the cabinet, bearings in the end walls of each pocket, a triangular cover hinged to the cabinet to close each pocket, a glass panel removably located over the lamp house, and a lever mounted across the lamp box for lifting the panel from its normal position, to permit quick access to the interior of the lamp box.

3. A ship chart holding cabinet having a lamp box at the top thereof, said cabinet being constructed with a lamp box having inclined partitions near the ends thereof forming roll holding pockets at the ends of the lamp box, means for mounting roll shafts in said pockets, and a triangular door for each pocket having its narrow end hinged to the cabinet so that it will close the pocket and remain in closed position by the action of its own weight against the cabinet.

4. A ship chart cabinet consisting of a stand having means therein for holding a supply of rolled ship charts and a display cabinet on the stand, said cabinet having an opened top inclined and members arranged in said cabinet and providing supports, a glass panel removably mounted on said supports, illuminating means located under said panel, said cabinet being provided with a compartment located outwardly of each support, a ship chart arranged in a roll of one of said compartments and adapted to be stretched over the glass panel and means in the other compartment to receive the end of the chart whereby the chart may be moved across the panel and wound from one compartment to the other compartment and only a portion of the chart over the panel will be illuminated.

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