XR 715,013

No. 715,013. Patented Dec. 2, 1902.

G. BRUSH & A. H. THAYER.

PROCESS OF TREATING THE OUTSIDES OF SHIPS, &c., FOR MAKING THEM LESS VISIBLE.

(Application filed Apr. 17, 1902.)

(No Model.)

Fig. 1.

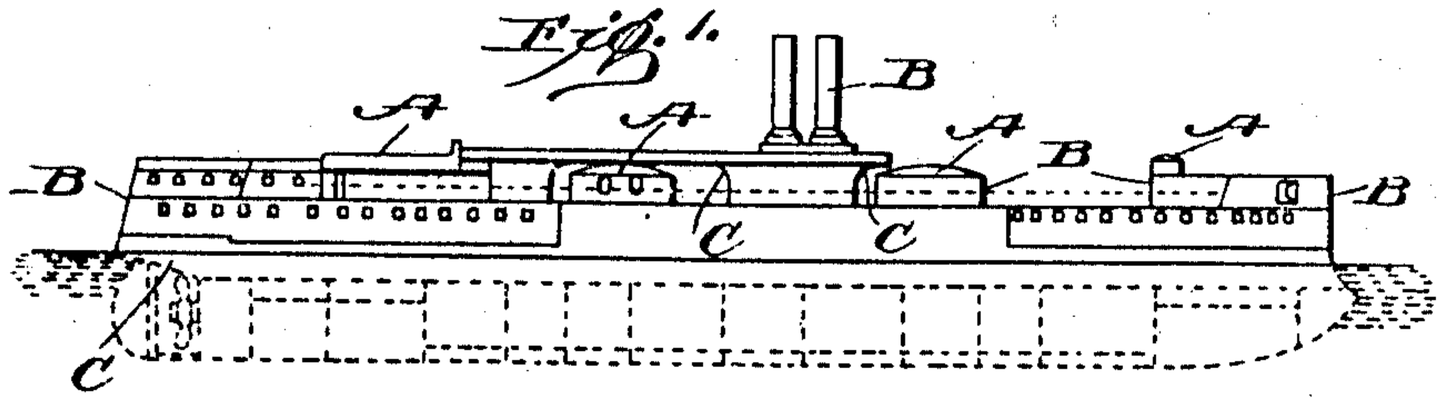


Fig. 2.

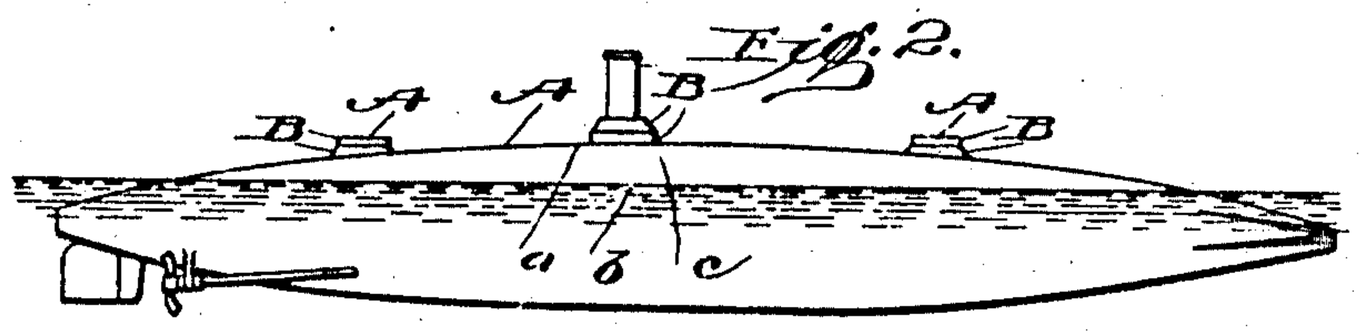


Fig. 3.

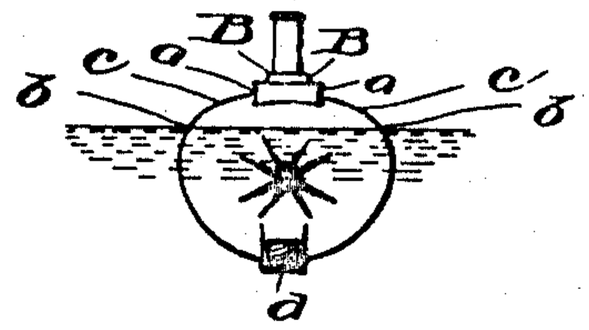


Fig. 4.

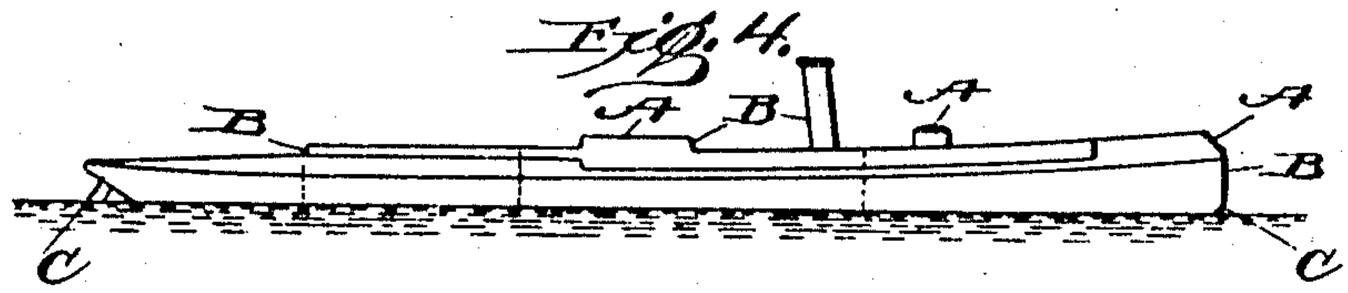
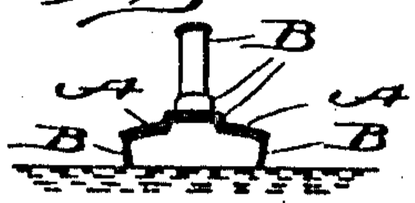


Fig. 5.



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UNITED STATES PATENT OFFICE.

GEROME BRUSH AND ABBOTT HANDERSON THAYER, OF DUBLIN, NEW HAMPSHIRE.

PROCESS OF TREATING THE OUTSIDES OF SHIPS, &c., FOR MAKING THEM LESS VISIBLE.

SPECIFICATION forming part of Letters Patent No. 715,013, dated December 2, 1902.

Application filed April 17, 1902. Serial No. 103,301. (No specimens.)

To all whom it may concern:

Be it known that we, GEROME BRUSH and ABBOTT HANDERSON THAYER, residing at Dublin, in the county of Cheshire and State of New Hampshire, have invented a new and useful Process of Treating the Outsides of Objects, Especially Ships, to Make them Less Visible, of which the following is a specification.

The reason any object is easily seen, no matter what color it is painted, is because when near enough to be distinguished its various surfaces reflect, respectively, different amounts of light, the upward-facing surfaces—such as the deck, tops of turrets, &c., of a ship—being the lightest, the vertical surfaces less light, the surfaces facing downward less, and the deep recesses still less. When far away, so that its various surfaces blend into one, a ship may be visible owing to the contrast of the whole object with the surrounding sky and water. A white ship may be seen against so bright a sky as to look almost like a black one. Therefore it makes little difference what color a ship is painted if it be with only one color, as either the whole ship will silhouette against the sky beyond or its different parts will present a strong contrast of light and shade among themselves.

Our invention consists in so painting the ship or other object as to prevent the existence of contrasts of light and shade.

Referring to the annexed drawings, which form part of this specification, Figure 1 shows a side view of a man-of-war, to which our invention may be applied. Fig. 2 shows a side view of a torpedo-boat; Fig. 3, an end view of the torpedo-boat shown in Fig. 2; and Figs. 4 and 5, a side and a sectional view, respectively, of another form of boat to which our invention may be applied.

Referring to the drawings by letters, A represents that portion of the ship's structure facing upward and which according to our invention is painted a dark color, such as blue or green.

B represents the vertical or nearly vertical surfaces, to which we give a lighter color than to the surfaces facing upward.

C represents those surfaces of the structure which face downward and to which we give a still brighter or white color. When the structure is of the form shown by that part of Fig. 3 from *a* to *b*—that is, a curved structure, which has no vertical or nearly-vertical surfaces—we find that we obtain the best result by giving to the surface, beginning at *a*, a dark color and making the colors gradually blend from such dark color to a light color, the surface being lightest when it reaches the point *b*—that is, the surface beginning at *a* will be dark, the intermediate point (marked *c*) being less dark, and at *b* the color being still lighter—while in cases like that of a submarine torpedo-boat the graduation continues down to white at *d*.

A ship or other object treated by our method tends when out on the open sea to appear transparent and to cause the observer to seem to look through it, as if it were not there.

What we claim as our invention, and wish to secure by Letters Patent, is—

1. The method of making an object less visible, which consists in giving to that part of the surface of the object which would reflect the most light a comparatively dark color and to that part which would reflect the least light a comparatively light color, so as to prevent the existence of contrasts of light and shade.

2. The method of making an object less visible, which consists in giving to the upper surface of the object a dark color and to the lower part or surface of the object a light color and gradually making the colors blend from dark at the upper part to light at the lower part of the object, as and for the purposes set forth.

3. The method of making objects less visible, which consists in giving to the upper surfaces of such objects a dark color and gradually making the colors blend from dark at the upper part to light at the lower part of the object, and in pitching this gradation of color so that the resultant monochrome shall be as near as possible to the average background against which the ship or other object thus painted shall be seen.

In testimony of which we have hereunto set our hands and seals in the presence of two attesting witnesses.

GEROME BRUSH. [L. S.]
ABBOTT HANDERSON THAYER. [L. S.]

Witnesses:
JOHN A. GLEASON,
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