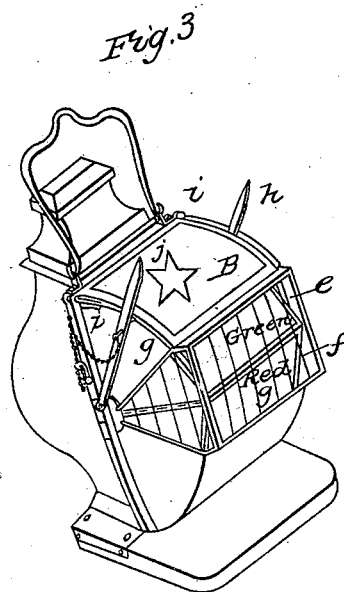
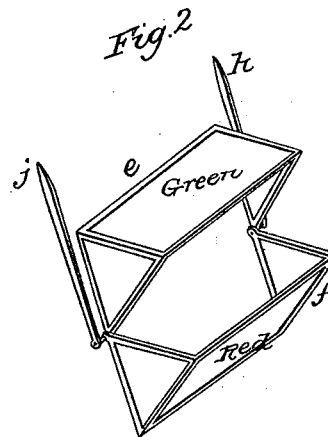
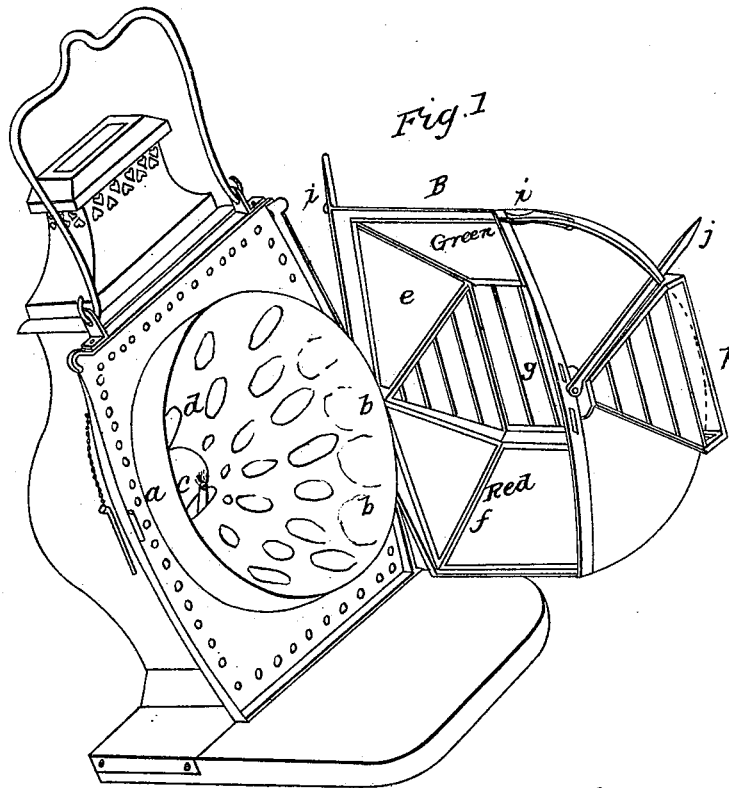


H. SANGSTER.
Signal Lantern.

No. 6,959.

Patented Dec. 18, 1849.



UNITED STATES PATENT OFFICE.

HUGH SANGSTER, OF BUFFALO, NEW YORK.

SIGNAL-LANTERN.

Specification of Letters Patent No. 6,959, dated December 18, 1849.

To all whom it may concern:

Be it known that I, HUGH SANGSTER, of Buffalo, county of Erie, and State of New York, have invented certain new and useful

5 Improvements in Signal Lights and Lanterns, of which the following is a full and exact description, reference being had to the annexed drawings of the same, making part of this specification, in which—

10 Figure 1 is a perspective view of the lantern open, and about $\frac{2}{3}$ of the size used, showing the reflector colored and white lights. Fig. 2 is a perspective view of the two colored lights as hinged together, and connected with the handle. Fig. 3 is a perspective view of the lantern, closed and showing the two colored lights.

The same letters indicate the same parts in all the figures.

20 In the accompanying drawings Fig. 1 represents the lantern open, (the drawing is about $\frac{2}{3}$ of the size used.) The reflector *a*, as seen, is placed in main body of the lantern, the casing of the lantern can be made

25 of any kind of metal that will answer the purpose. The reflector is made with funneled concave, or other shaped, and made from one piece of metal or it can be cast, and turned out smooth upon the inside. The

30 indentation or concavities *b*, *b*, *b*, can be hammered in or otherwise made in the reflector, in such a manner, that the space between the indentation is left flush and smooth.

35 *C*, is the neck of the lamp which is inserted through a hole made in the bottom of the reflector for that purpose. *d*, is another hole cut through the top of the reflector directly over the lamp wick, to allow the

40 smoke to escape into the chimney and to cause a draft in the same direction.

e, represents the green light; *f*, the red light; *g*, the middle or white light.

45 *h*, is the handle which is connected with the green light, at the point of bearing and by it, the said light is raised or lowered and is held up by the spring *i*, *j*, is a corresponding handle connected with the red light, and by it the said light can be raised or lowered

50 as desired.

The two colored and white lights are placed in the door *B*, of the lantern, said door is made of the same material as the body, and is represented as being open—the

55 sides of said door describe a half circle, the front (which is the width) corresponding.

Said door is divided into thirds, the middle third, is cut out, leaving said third open on the two ends and front of the lantern, in this space is placed the white or clear light, or glass and the said glass is placed a little, or enough in advance of the circle described by the side of said door, so that said light which is of course stationary may not be in the range of the circle described by the inside colored lights, as seen by the dotted lines *p*, Fig. 1. The colored lights swing from the center of the above described $\frac{1}{2}$ circle, and such light is connected with its handle by the pin, or center on which they turn or move; said lights are placed on the inside of the door as described, and each of said colored lights when at rest, as shown in Fig. 1 occupy $\frac{1}{3}$ of the described half circle at the top, and at the bottom, leaving the remaining $\frac{1}{3}$ in the middle for the white light, and when either of said colored lights, are raised or lowered by the outside handles they will or occupy or fill the middle $\frac{1}{3}$ or white light, thereby presenting a light colored or otherwise as desired.

The glasses are flat, and are cut from plate glass of the color desired (and are therefore easily made). The front glasses are cut oblong, the width being $\frac{1}{3}$ of the $\frac{1}{2}$ circle, above described, the length corresponding with the width of the inside of the said door, the side lights are cut correspondingly, occupying the $\frac{1}{3}$ of the described $\frac{1}{2}$ circle in the sides, and are therefore in the form of a triangle, the white lights on the side are placed stationary in the sides of the door, the triangle colored side lights are positioned one to each end of the oblong colored front lights as described in Fig. 2 and connected with the handles as shown, by the remaining point. The lights are protected by wires placed in front of the stationary white glass or light.

Its operation is as follows. The light being lit, and the lantern closed as represented in Fig. 3 and when hung or placed in the position desired on a vessel or sailing craft, it is capable of giving the different signals, which are required by sailing crafts on the lakes, rivers, &c. When sailing before the wind, the signal is a while or clear light, in which case neither of the colored lights are required, but are in the position shown in Fig. 1, the white or middle light only being seen. When sailing on the starboard tack a red light is required, which

is immediately given by raising the handle *j*, which is connected with the said light, and it is held up by the spring *i*, as before described. When sailing on the larboard tack,
5 a green light is the signal, which is given by lowering the red light, and letting the green light down by its handle, *h*, and occupies the space that the red light did previous. When a signal of distress is re-
10 quired, a red and green light is presented which is given at one and the same time, by raising the red light half way, and inserting the pin *g*. Fig. 3 against which the handle
15 *j* rests the green light is then lowered and rests upon the red light, as represented in

Fig. 3, in this way the different signals are given, showing them in front and on both sides of the lantern. The lights can be varied to give any signals which may be adopted, or agreed upon.

What I claim as my invention and desire to secure by Letters Patent is—

Subdividing the front of the lantern into three divisions or sectors and arranging and operating the colored glasses inclosed therein
25 in the manner herein described.

HUGH SANGSTER.

Witnesses:

SELAH BEMANCE,
FRANCIS S. PENN.