

T. H. DODGE.  
Signal Light.

No. 8,822.

Patented March 23, 1852.

Fig. 1.

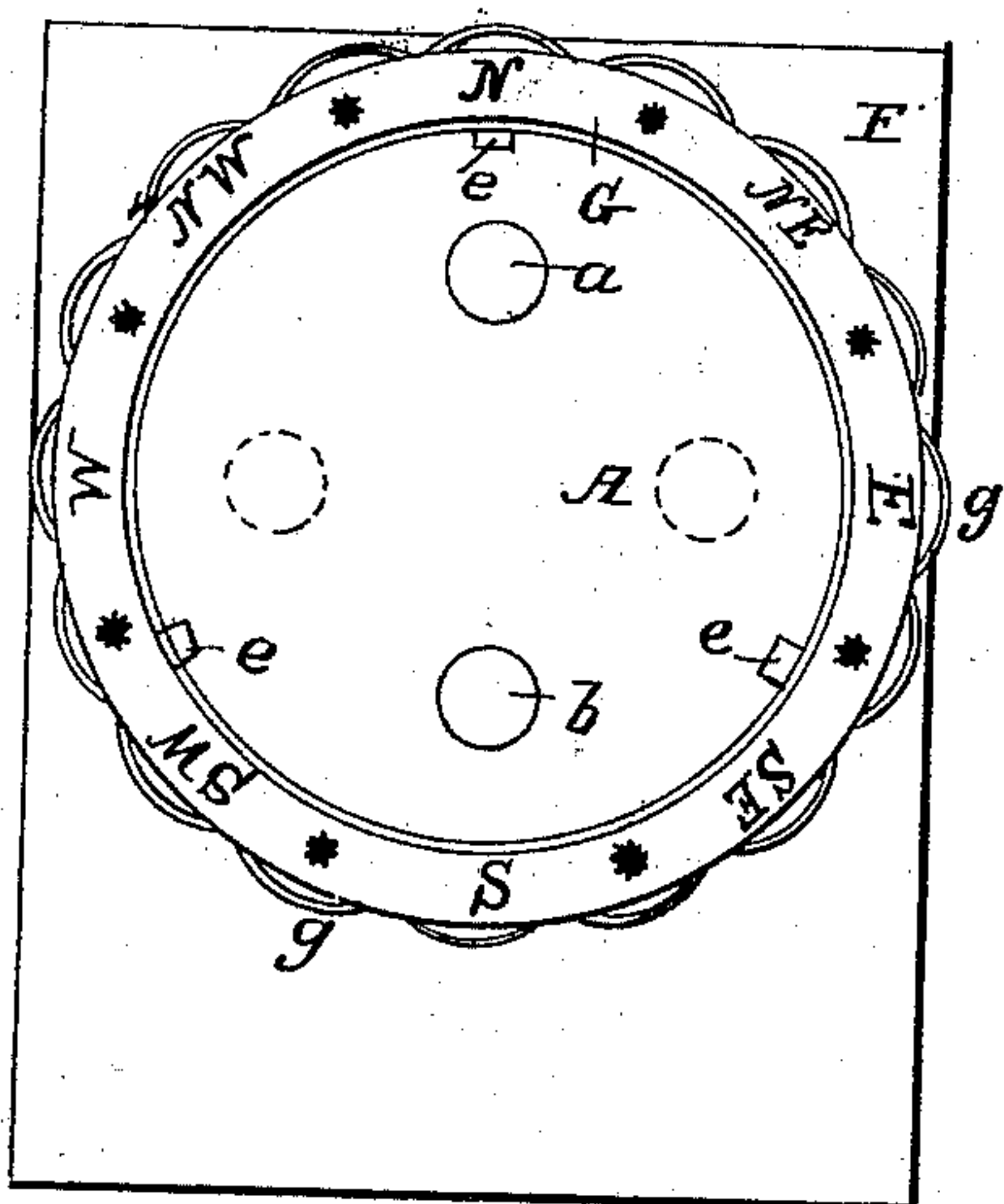


Fig. 2.

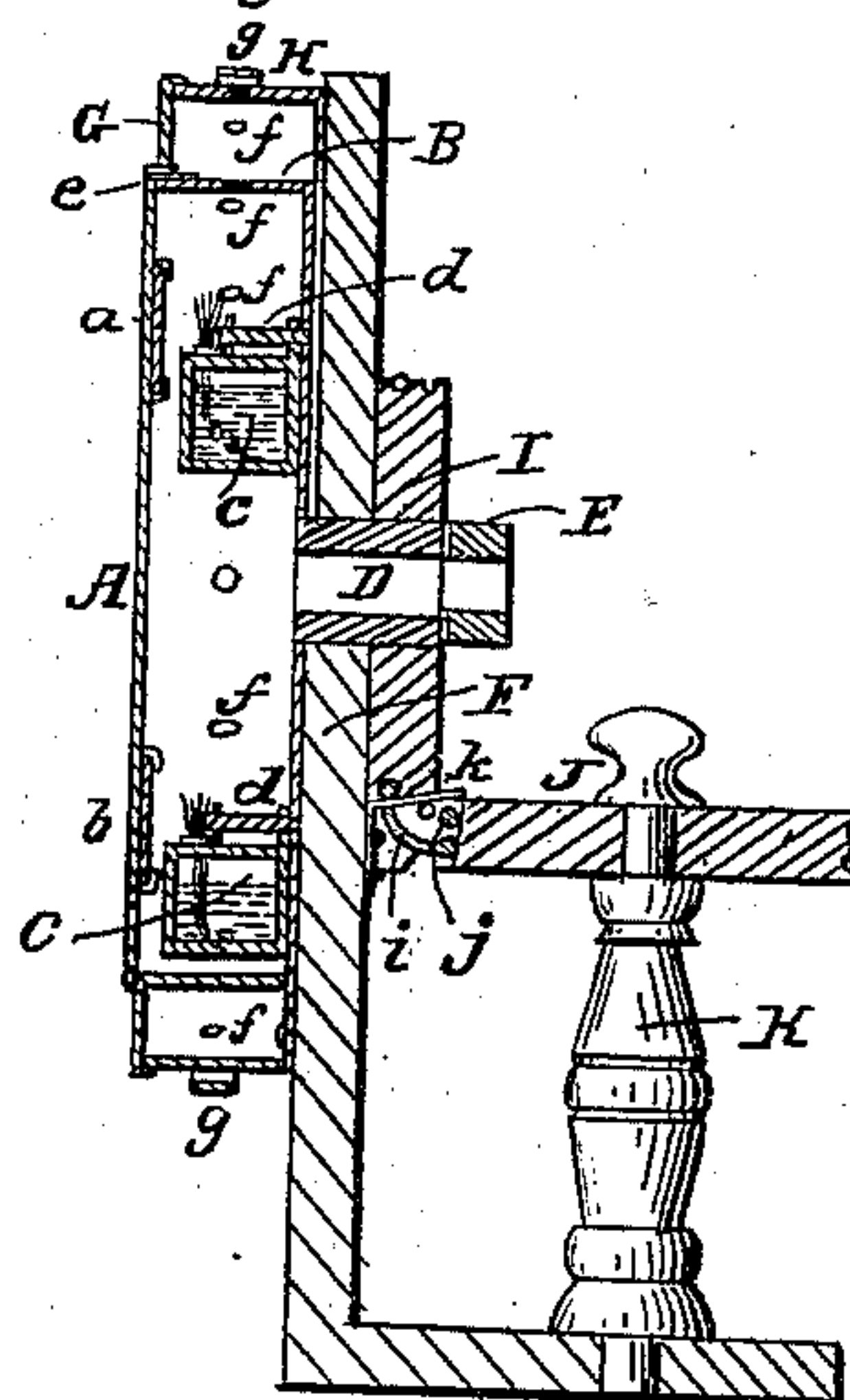


Fig. 3.

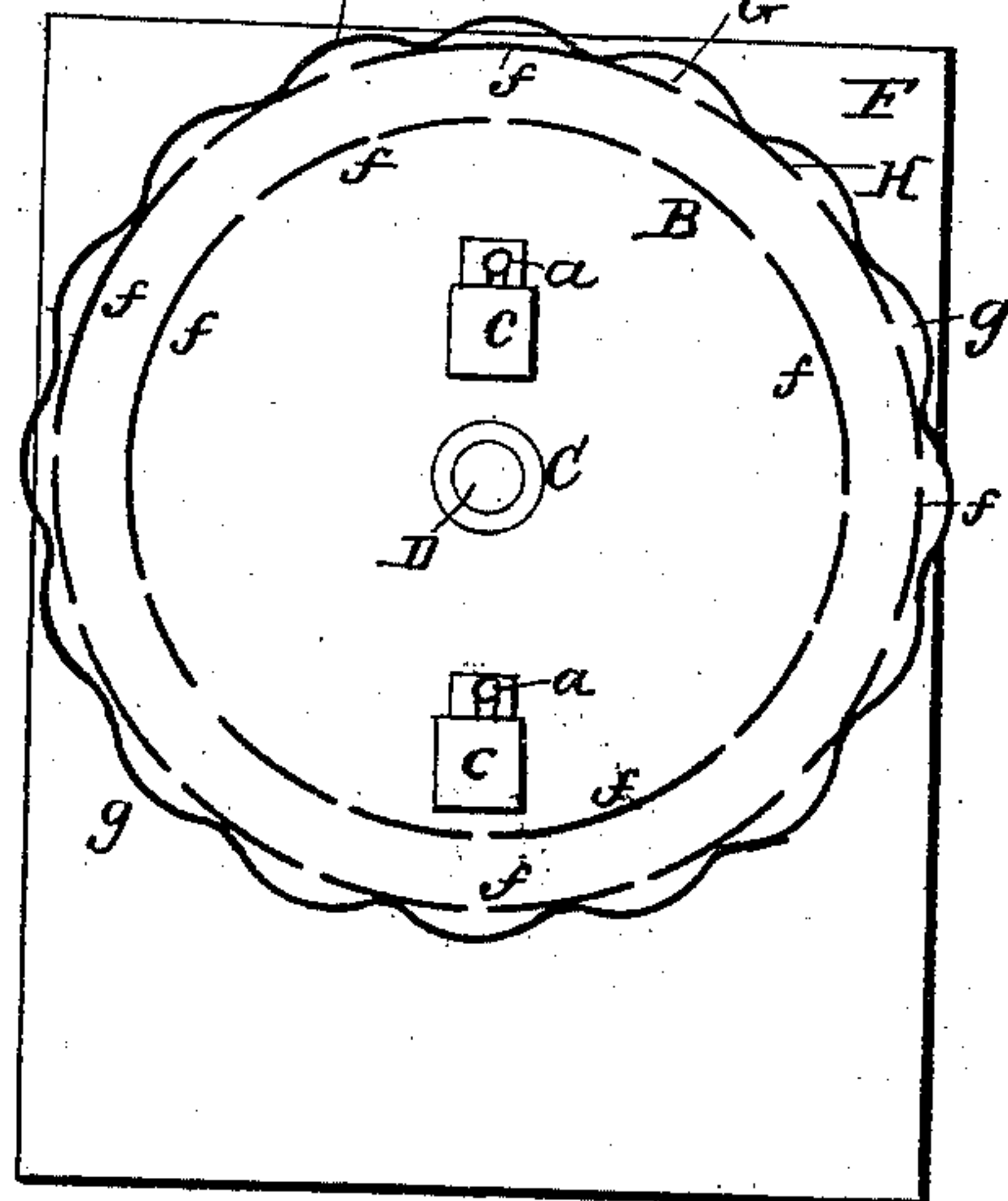
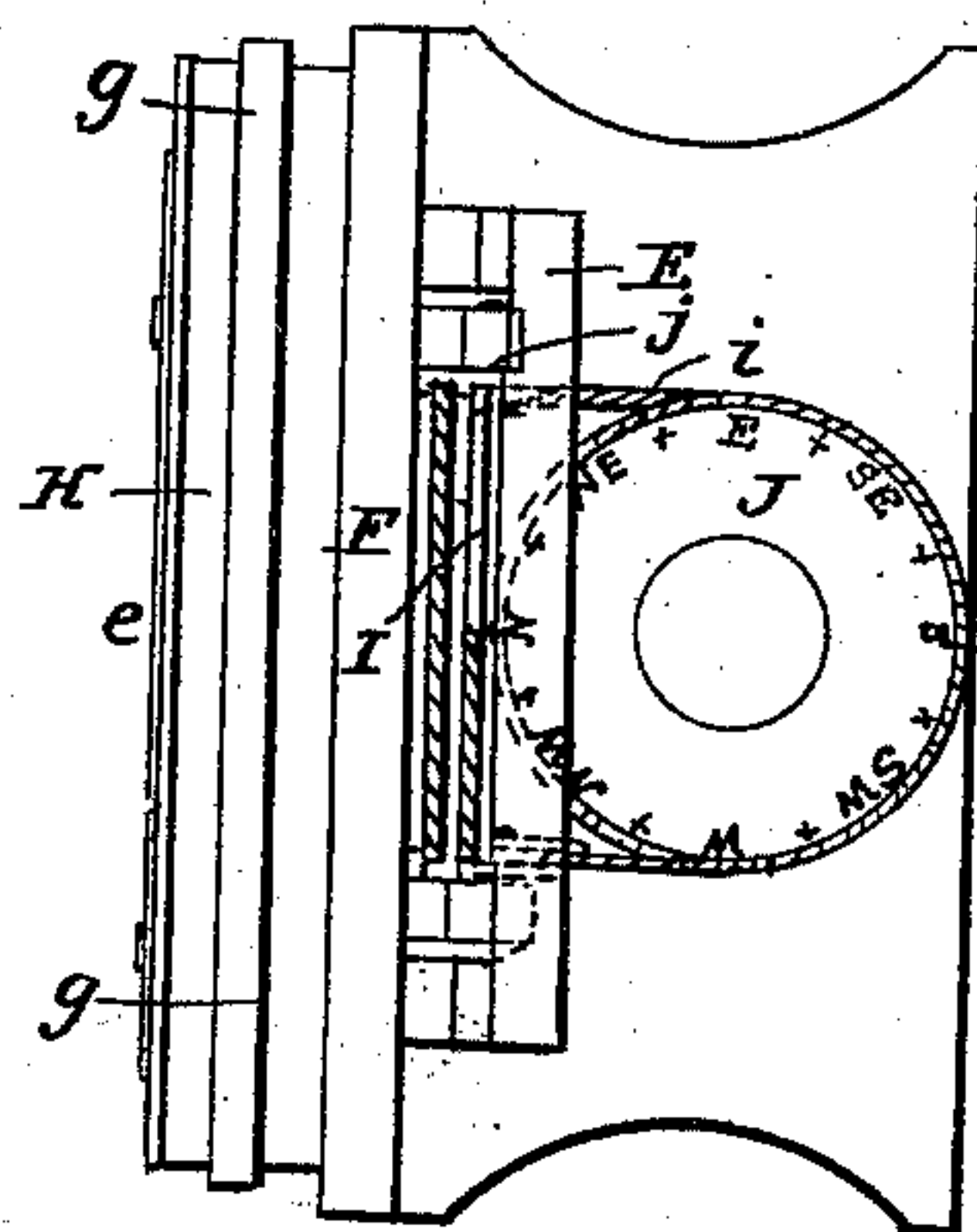


Fig. 4.





# UNITED STATES PATENT OFFICE.

THOMAS H. DODGE, OF NASHUA, NEW HAMPSHIRE.

## MARINE SIGNAL.

Specification of Letters Patent No. 8,822, dated March 23, 1852.

*To all whom it may concern:*

Be it known that I, THOMAS H. DODGE, of Nashua, in the county of Hillsboro and State of New Hampshire, have invented certain new and useful Improvements in Night-Signals to be Used on Steam and Sailing Ships and other Vessels; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a front view of one of my improved signals. Fig. 2 is a vertical section of the same taken through the center at right angles to its face. Fig. 3 is a vertical section of the same in a plane parallel to its face, and Fig. 4 is a plan of the same.

Similar letters of reference indicate corresponding parts in each of the several figures.

This invention consists in the employment of two lights of different colors, applied in the same diametrical line, to a revolving vertical disk, which is surrounded by a stationary ring upon which the points of the compass are graduated; by turning the disk, to bring the lights in such a position, that an imaginary line drawn through them, will intersect that point of the compass upon the ring, corresponding to the actual point in which the vessel is heading, the color of the light which is the pointer, being known, a vessel's course will be visible at night, to the crews of other vessels, and collision may be thereby with certainty prevented.

To enable those skilled in the art to make and use my invention I will proceed to describe its construction and operation.

The revolving disk A, forms the head of a cylinder or drum B, which has a hollow axle C, which fits on a stationary axle D, secured in any convenient place in the vessel so as to make the disk face the head. The axle D, is here represented as secured in a rail E, attached to the back of a board F, which may be supposed to represent part of the wheel house of a steam vessel, or any part of a vessel. The revolving disk A, has two circular holes *a*, and *b*, of equal size, diametrically opposite each other one of which is furnished with a white or colorless, and the other with a red glass. Behind the glasses lamps *c*, *c*, are hung upon pins *d*, *d*, secured in the back of the drum B. These lamps are so arranged that the lights are

always opposite the glasses *a* and *b*, whatever may be the position of the drum; and they always hang vertically. The disk is hinged to the drum and capable of opening for trimming and adjusting the lamps, and is secured when closed by fastenings *e*, *e*.

The ring G, which has the points of the compass graduated upon it—north being placed at the top—forms part of a cylindrical casing or frame H, which surrounds the drum B, and is secured to the board F. Both the drum B, and the cylindrical casing H, are perforated with holes *f*, *f* around their periphery to admit air to the lights; those holes in H, being covered by strips of metal *g*, *g*, to protect them against the entrance of water.

At the back of the board F, there is secured to the hollow axle C, a band wheel I, and another band wheel J, is fitted on a stationary axis *h*, at the top of a standard K, behind the board. The two band wheels are of equal diameter and their peripheries are connected by bands *i*, *i*, which are conducted around guide rollers *j*, *j*; when J, is moved upon its axis, it causes I, to move the same distance. The top of J, forms a table which is graduated as a compass; and there is a stationary pointer *k*, attached to the back of the board F, whose point reaches over the edge of the said table. The position of the two wheels bear such relation to each other that when any particular point of the compass on the wheel J, is opposite the stationary pointer *k*, the white or colorless light points to the corresponding point on the compass which surrounds the revolving disk. The object of the wheel J, is to set the lights, from the deck, in the proper position to indicate the vessel's course, when they (the lights) are at an elevation above the deck.

The operation of the signal is conducted in the following manner. When it is put in operation, and every time the vessel's course is changed, the wheel J, is turned to bring the point on its table, which corresponds to the point in which the vessel heads, to the pointer *k*, this brings the white or colorless light *a*, opposite the corresponding point on the ring G. In Fig. 4, the pointer *k*, indicates north, and in Fig. 1, the white light is shown above the red or pointing to the north, this would show the vessel to be on a northward course. When the disk is turned to bring the red light to the



right, and the white to the left, as indicated by dotted lines in Fig. 1, the white points west, and shows the vessel to be on a westward course. It being always understood that the white light is the pointer, any person familiar with the position of the points of the compass, will be able to distinguish, though nothing but the light may be visible, in what direction the signal points. The red light may be stationary in the center of the disk, and the white may revolve around it, the effect will be the same, but the arrangement shown economizes space, and enables them to be placed at a greater distance apart within a disk of a given diameter.

This signal may be also made to serve as a signal of distress or for assistance, in the following manner. In a steam vessel, if the assistance of other vessels were required the white light might be kept moving a short distance from side to side above the red light; and in a sailing vessel, it might be moved in the same manner below it. Such

a signal could not fail to attract notice at a considerable distance. As a signal of distress, in a steam vessel the white light might be kept moving back and forth in a semi-circle above the red; and in a sailing vessel below the red. It would by these means be known what vessel it was, that required assistance. The signal by various movements might be made to answer for many purposes.

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

The employment for signaling or indicating the course of a vessel, of two lights of different colors, attached to or hung in a cylinder or disk, which is capable of revolving on a fixed axis so as to change the position of the lights; the position of either light relatively to the other being made to point the course, in any manner substantially as described.

THOMAS H. DODGE.

Witnesses:

A. G. REED,  
GEO. Y. SAWYER.