

No. 897,823.

PATENTED SEPT. 1, 1908.

H. ENDALL.

MARINE SIGNALING LAMP AND THE LIKE.

APPLICATION FILED AUG. 5, 1907. RENEWED JULY 27, 1908.

2 SHEETS—SHEET 1.

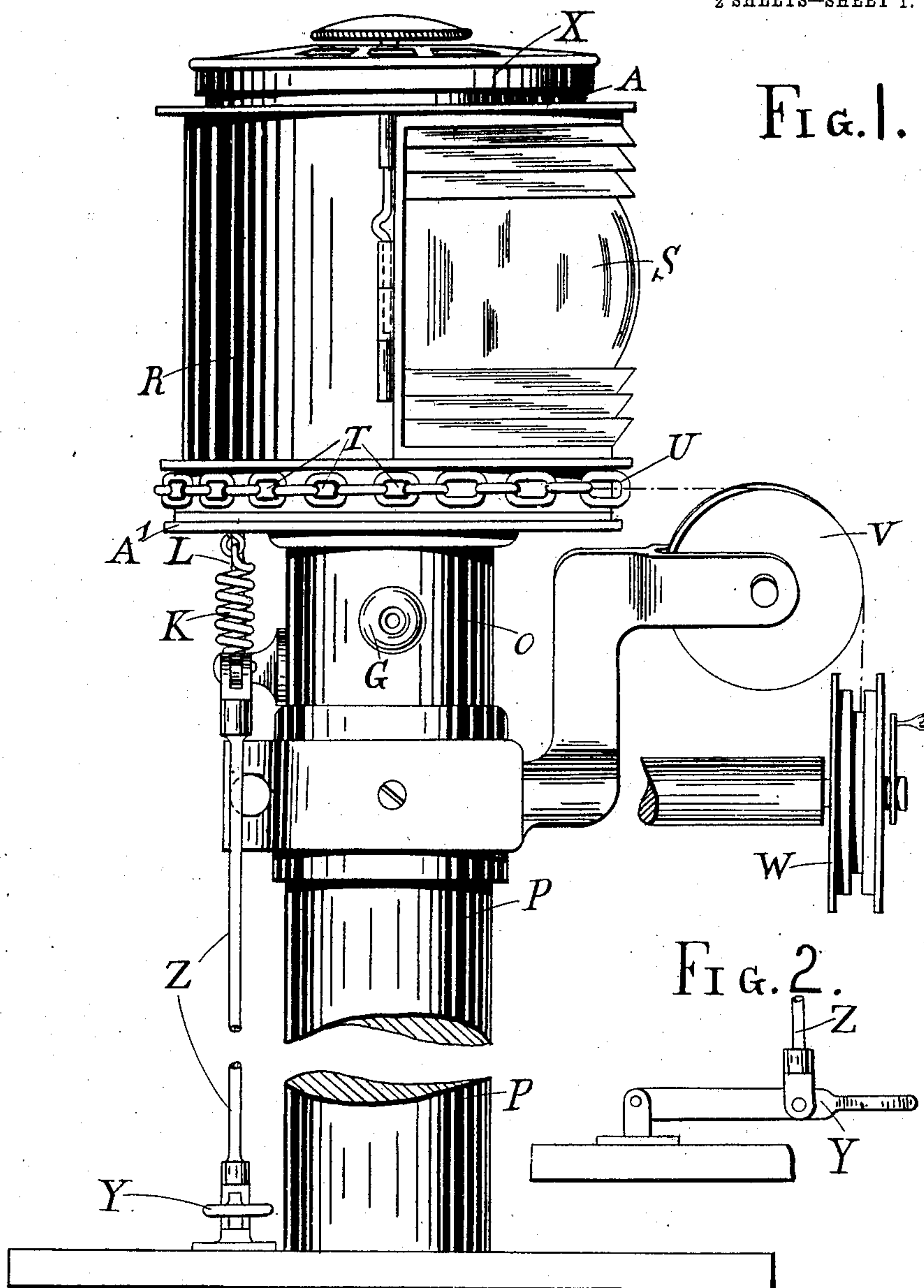


FIG. 1.

FIG. 2.

Witnesses.

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2 SHEETS—SHEET 2.

FIG. 3.

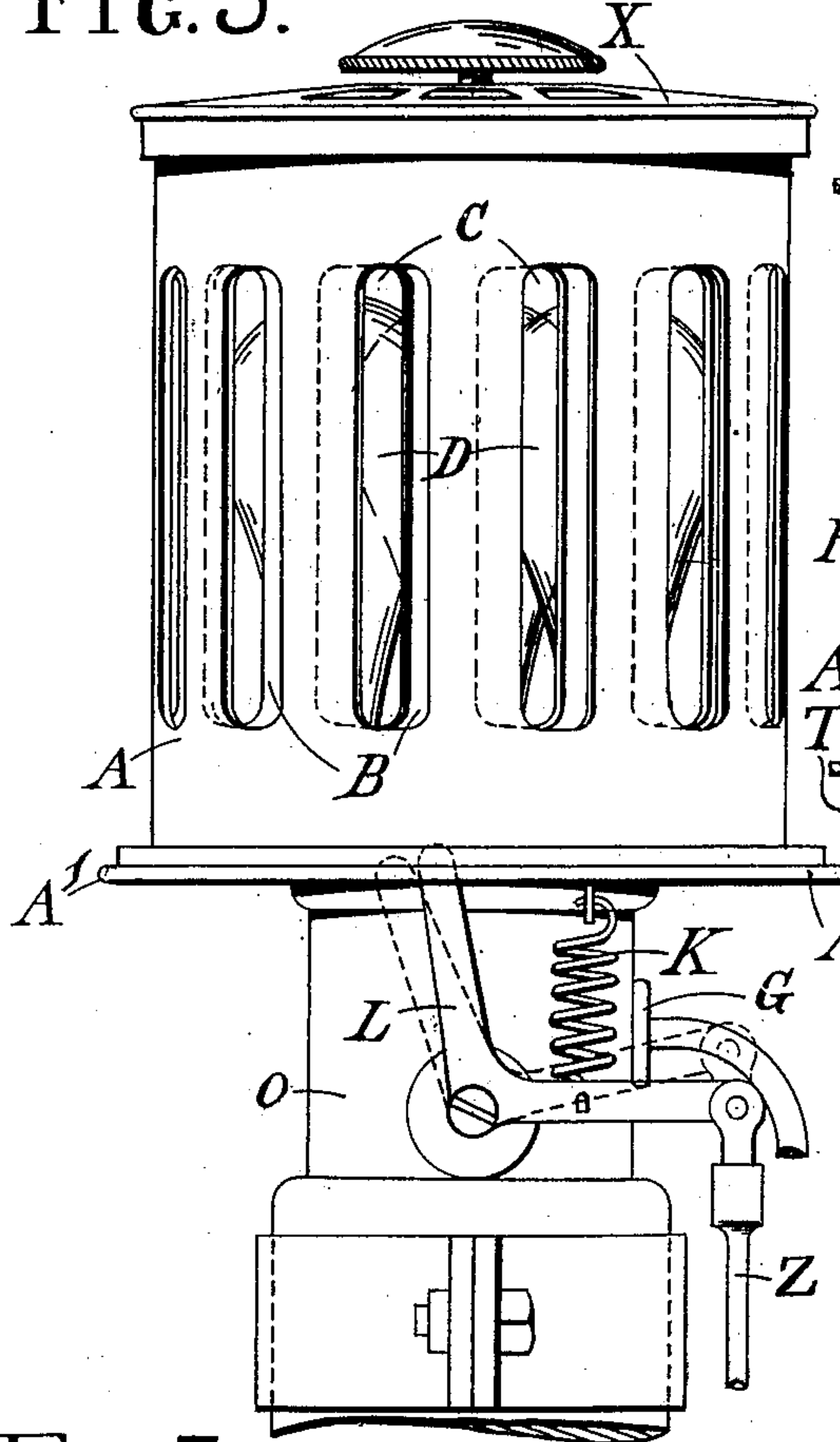


FIG. 4.

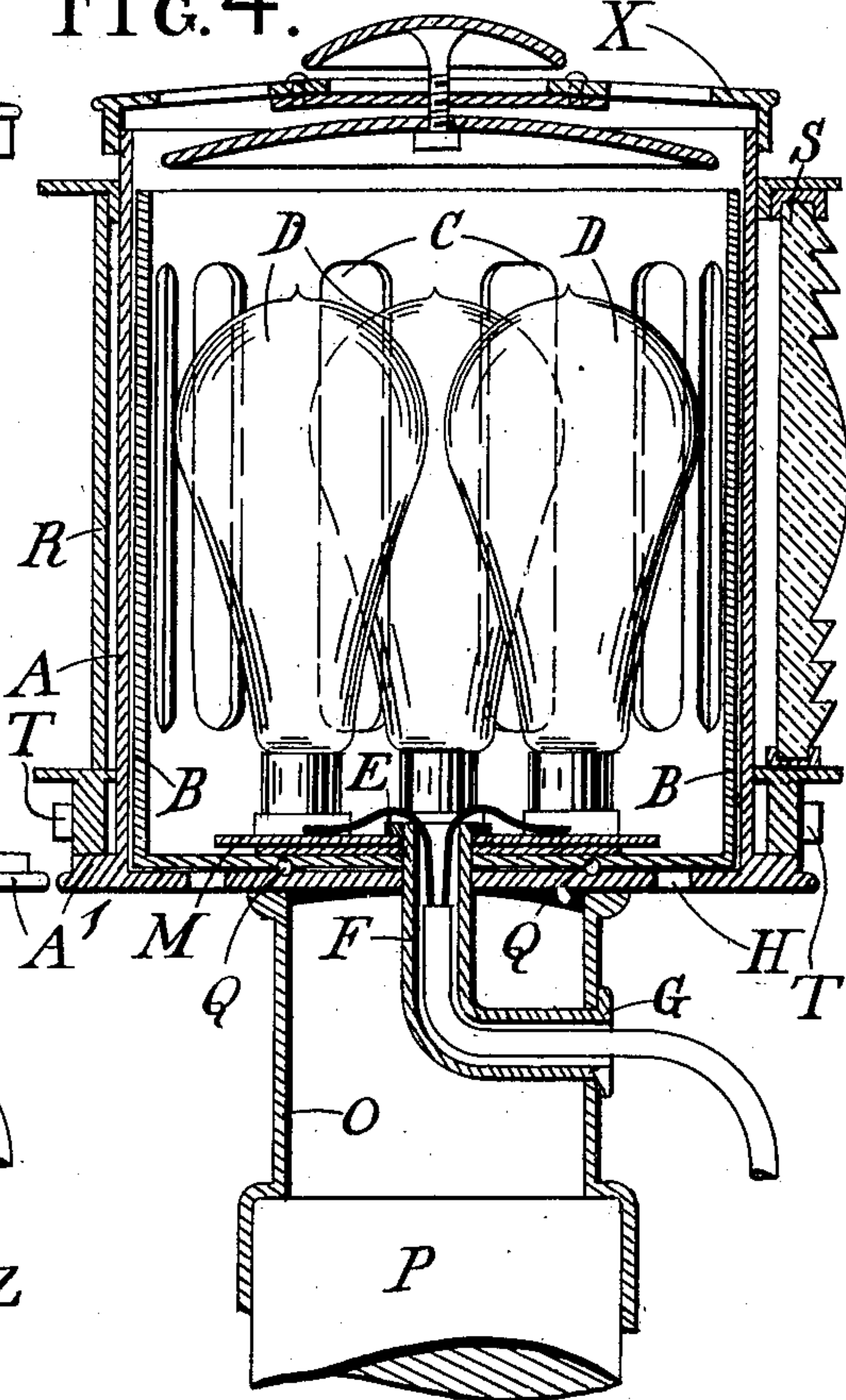


FIG. 5.

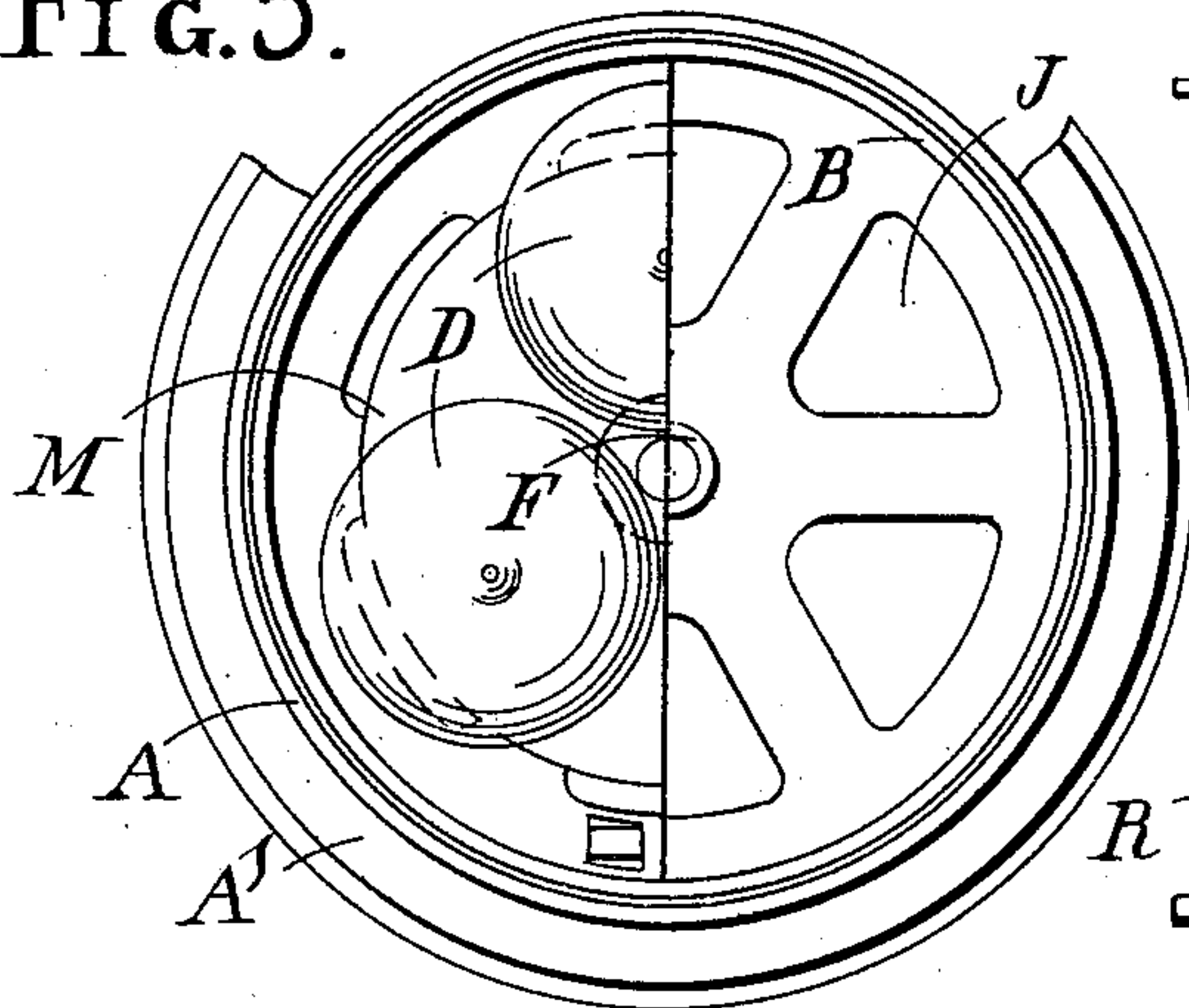
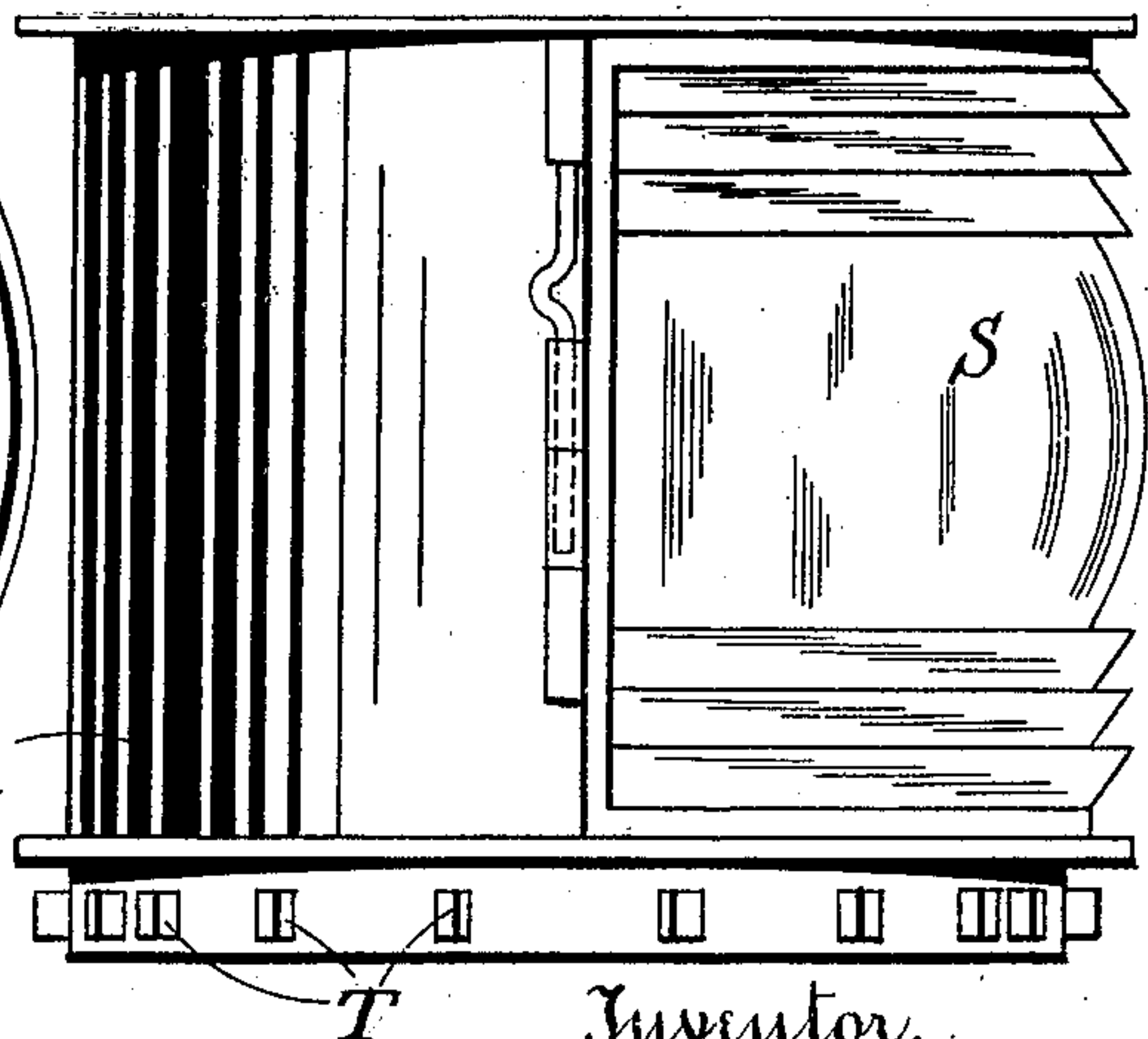


FIG. 6.



Witnesses.

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UNITED STATES PATENT OFFICE.

HENRY ENDALL, OF SOUTHAMPTON, ENGLAND.

MARINE SIGNALING-LAMP AND THE LIKE.

No. 897,823.

Specification of Letters Patent.

Patented Sept. 1, 1908.

Application filed August 5, 1907, Serial No. 387,188. Renewed July 27, 1908. Serial No. 445,525.

To all whom it may concern:

Be it known that I, HENRY ENDALL, a subject of Edward, King of Great Britain and Ireland, residing at 55 Arthur road, Southampton, in the county of Hants, England, have invented certain new and useful Improvements in and Relating to Marine Signaling-Lamps and the Like, of which the following is a specification.

The present invention consists of certain improvements in and relating to marine signaling lamps and the like.

The objects and advantages of these improvements will be clearly indicated in the following description of the apparatus, which is adapted for producing a flash light according to the Morse or any other suitable code, more particularly for use upon or in association with ships.

A signaling lamp made according to my invention gives much better results than any lamp heretofore used for such purpose.

The lamp as well as the mechanism for working same is of exceedingly simple design, and there is little or no liability of its getting out of order.

In order to aid the present description, the accompanying drawings which illustrate the invention will be referred to, wherein

Figure 1 is a general front elevation and Fig. 2 a side view of a small detail thereof; Fig. 3 is a side elevation of the lantern with the lens attachment omitted, and Fig. 4 is a central vertical section through the same including the lens attachment; Fig. 5 is a plan of Fig. 3 without the cover, the interior being shown partly above the level of the lamps and partly below the level of the same; Fig. 6 is an elevation of the lens attachment which was omitted in Fig. 3.

The same reference letters in the several figures denote the same or corresponding parts of the apparatus.

The lights are inclosed by a pair of cylinders, one fitted into the other, snugly but not tightly, so as to form practically a double-walled cylinder, the inner one B being so mounted as to be capable of a limited rotary movement and the other cylinder A being stationary. The cylinders are both provided with slots C, spaced preferably at equal distances apart around the circumference in the fashion of a grid, so that the slots are open or shut according as the cylinders A and B are relatively in one position or the other,

but they are normally kept closed. Either cylinder may be rotatable, but in the accompanying drawings the inner one rotates within the outer, the latter being fixed to a convenient base or support. As the drawings show, the inner cylinder B is actuated—in other words, the slots are opened—by an elbow L or other suitable lever operated from the outside, one arm of which enters a recess in the base of the rotatable cylinder and the other arm of which carries a depressing key, or is adapted to be acted upon directly. In the case of a lamp upon a standard as in the drawings, this key may be a lever v hinged near to the base of the standard P and connected to the lever L by a rod Z of suitable length. Nevertheless any other suitable mechanism may be employed to produce the desired movement.

The lamps D, preferably electric, are carried upon a disk or plate M which is situated at the bottom of the inner (*i. e.* the movable) cylinder B, but is not integral therewith, being immovably fixed upon a stationary hollow stem F which is carried down through the mounting O or standard P and firmly held in place by a screw nut E such stem F forming an axle on which the inner cylinder B can rotate, a ball bearing with balls Q (or a washer or collar) being under the base of such cylinder to reduce friction. This stem F forms a casing for the electric wires which enter the side of the mount O through an opening G. Surrounding the stationary cylinder A is a revolving lens attachment in the form of a cylindrical sleeve R having an opening in one part of it fitted with a suitable lens S hinged thereto on both sides which not only increases the range over which the light is visible but provides for a screen which protects the operator from the blinding glare of the same and prevents the light from being seen at all points, its rays being thus concentrated directly on to the object of intercourse, and so keeping the signal individual and private, and at the same time preventing the signal light from interfering with other operations being carried out on a ship's bridge or in the vicinity of the signaling device. The sleeve R just mentioned may rest upon a flange A¹ around the base of the cylinder A which it surrounds and it may be rotated by hand, so as to direct the rays toward the desired quarter, but where this part of the apparatus can not be conveniently worked di-

rectly by hand, it may be driven round by a pinion acting on a toothed ring and actuated from a shaft in any suitable manner. The drawings (excepting Figs. 3 and 5) show a simple arrangement in which teeth T are inserted into the lower part of the sleeve R, forming as it were a toothed ring surrounding the lens attachment, adapted to be actuated by an ordinary chain such as *u* passing over a pair of guide pulleys V (one shown) and extending vertically to any desired level, where an actuating wheel W suitable for turning by hand is mounted in any convenient manner, such as upon a bracket standing out from the standard P.

Ventilation holes H are provided in the base of the fixed cylinder A, and the inner or rotatable one B also has spaces J to promote ventilation and cooling of the lantern. A cover X provided with ventilating means is fitted upon the stationary cylinder A and its flange may serve to retain the sleeve R in position, without however interfering with its rotation, which furthermore is quite independent of the rotation of the inner cylinder B already described. After each impulse of the latter by the lever L in one direction, it is returned to its original position by a spring K, which is strained when the lever is actuated and forces the lever back again when the hand of the operator is released. Any suitable kind of spring, may, of course, be used. The revolving lens attachment R can, if desired, be made so as to provide an opening of variable size, such as by adding a sliding shutter as will be well understood. The post or standard P on which the whole of the lighting apparatus is mounted may be adapted for any height which is convenient and means for raising and lowering may be provided.

I claim,

1. A signaling lamp comprising in combination a rotatable cylinder and a stationary cylinder one fitting freely into the other, and both provided with slots which coincide or alternate with one another according to the respective positions of the said cylinders in relation to each other, lamps mounted within the inner cylinder upon an immovable member at the bottom thereof, a revoluble lens attachment surrounding the stationary cylinder and means for imparting to said rotatable cylinder a limited rotary movement in two directions.

2. A signaling lamp comprising in combination a rotatable cylinder and a stationary cylinder, one fitting freely into the other, and both provided with slots which coincide or alternate with one another according to the respective positions of the said cylinders in relation to each other, a disk or plate at the bottom of the inner cylinder, and a stem for carrying the same and keeping it stationary, such stem forming an axle on which the rota-

table cylinder may turn, and lamps mounted upon said disk or plate, a revoluble lens attachment surrounding the stationary cylinder and means for imparting to said rotatable cylinder a limited rotary movement in two directions.

3. A signaling lamp comprising in combination a rotatable cylinder and a stationary cylinder, one fitting freely into the other, and both provided with slots which coincide or alternate with one another according to the respective positions of the said cylinders in relation to each other, lamps mounted within the inner cylinder upon an immovable member at the bottom thereof, a revoluble lens attachment surrounding the stationary cylinder, means for actuating said revoluble lens attachment, and means for imparting to said rotatable cylinder a limited rotary movement in two directions.

4. A signaling lamp comprising in combination a rotatable cylinder and a stationary cylinder, one fitting freely into the other, and both provided with slots which coincide or alternate with one another according to the respective positions of the said cylinders in relation to each other, a disk or plate at the bottom of the inner cylinder, and a stem for carrying the same and keeping it stationary, such stem forming an axle on which the rotatable cylinder may turn, and lamps mounted upon said disk or plate, a revoluble lens attachment surrounding the stationary cylinder, means for actuating said revoluble lens attachment, and means for imparting to said rotatable cylinder a limited rotary movement in two directions.

5. A signaling lamp comprising in combination a rotatable cylinder and a stationary cylinder, one fitting freely into the other, and both provided with slots which coincide or alternate with one another according to the respective positions of the said cylinders in relation to each other, lamps mounted within the inner cylinder upon an immovable member at the bottom thereof, a revoluble lens attachment surrounding the stationary cylinder, a lever for actuating the rotatable cylinder, one arm of said lever entering a recess in the base of the latter and the other arm being adapted to be depressed and a spring for returning said lever to its original position after each depression.

6. A signaling lamp comprising in combination a rotatable cylinder and a stationary cylinder, one fitting freely into the other, and both provided with slots which coincide or alternate with one another according to the respective positions of the said cylinders in relation to each other, a disk or plate at the bottom of the inner cylinder and a stem for carrying the same and keeping it stationary, such stem forming an axle on which the rotatable cylinder may turn, and lamps mounted upon said disk or plate, a revoluble lens at-

tachment surrounding the stationary cylinder, a lever for actuating the rotatable cylinder, one arm of said lever entering a recess in the base of the latter and the other arm being
5 adapted to be depressed and a spring for returning said lever to its original position after each depression.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

HENRY ENDALL.

Witnesses:

G. F. GARDNER,
W. A. SWINERT.