

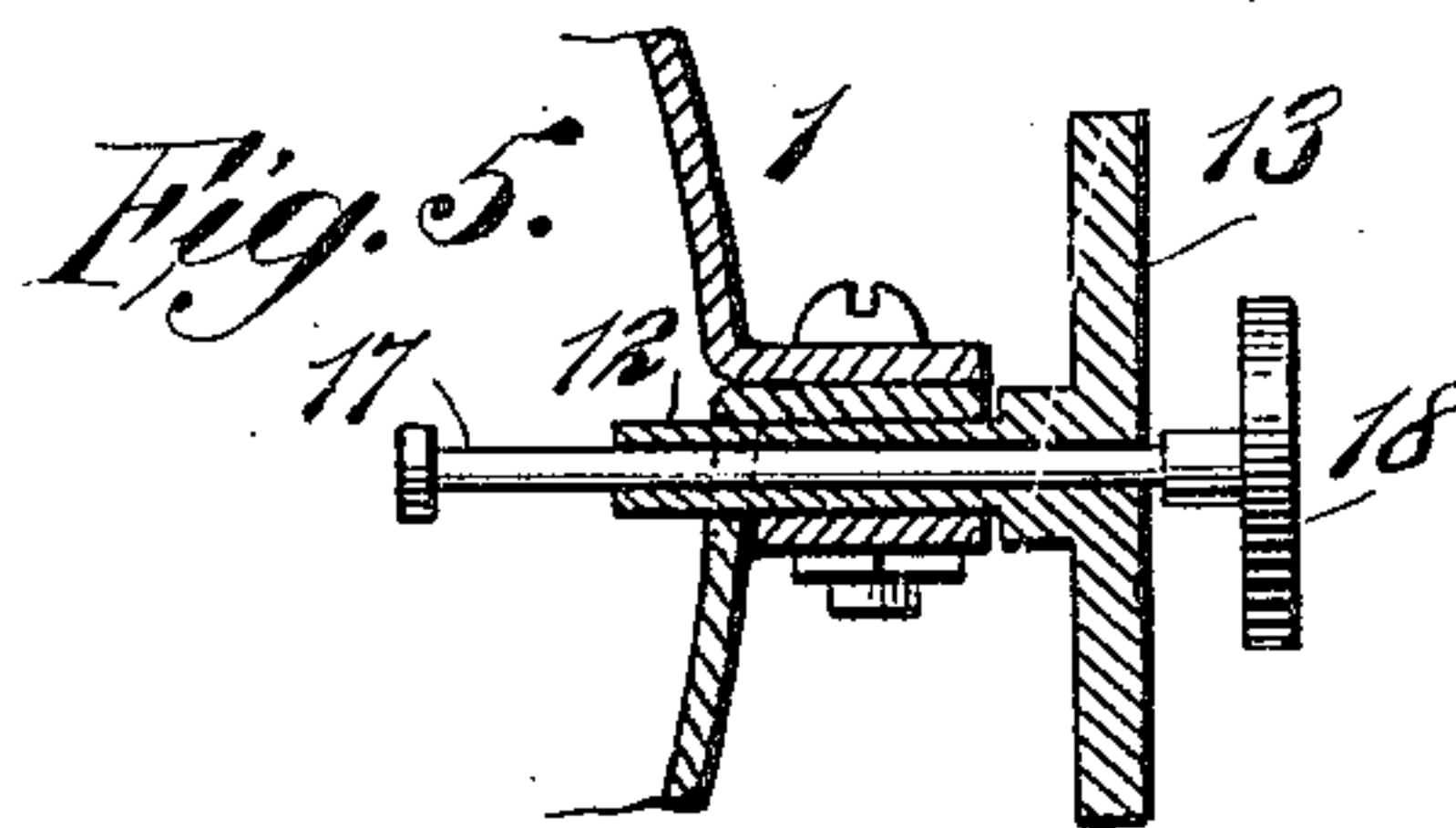
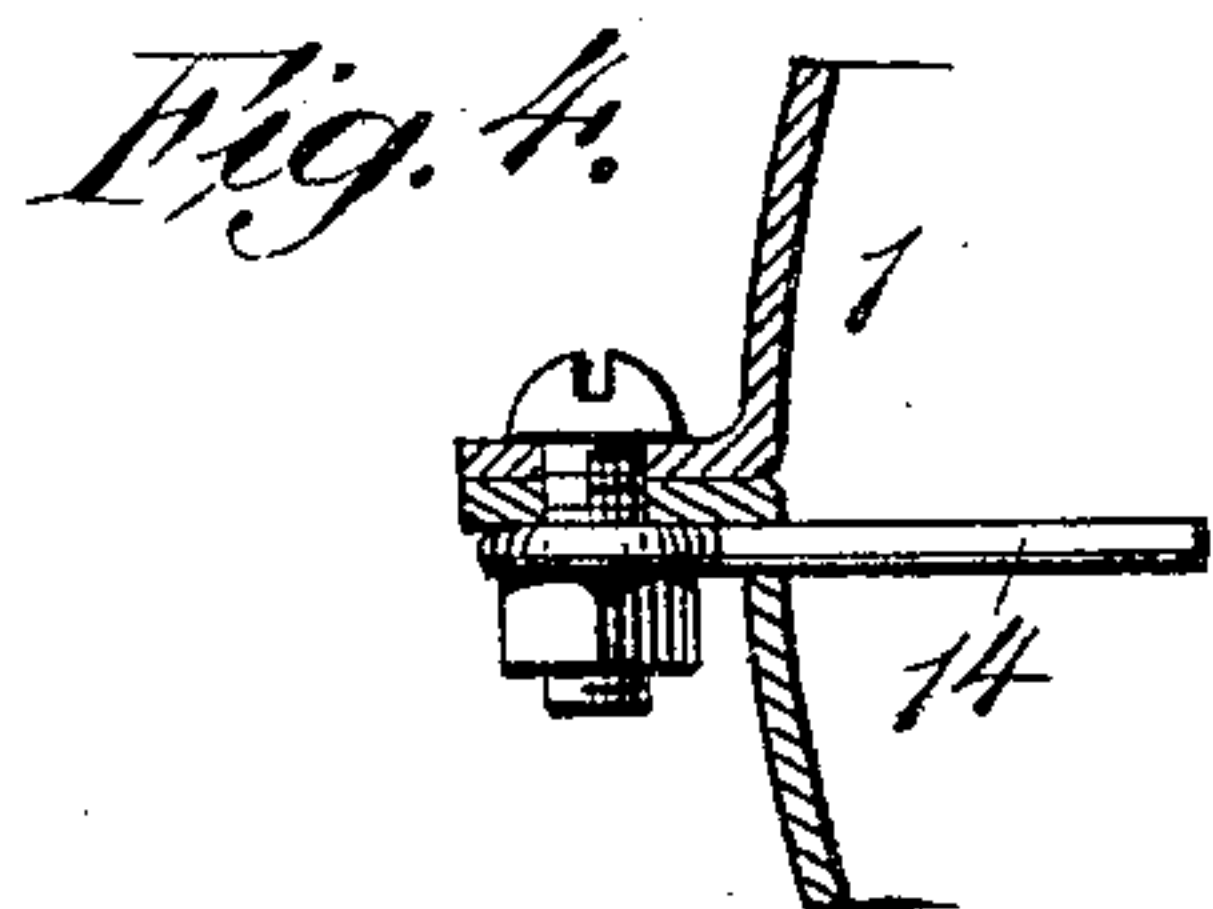
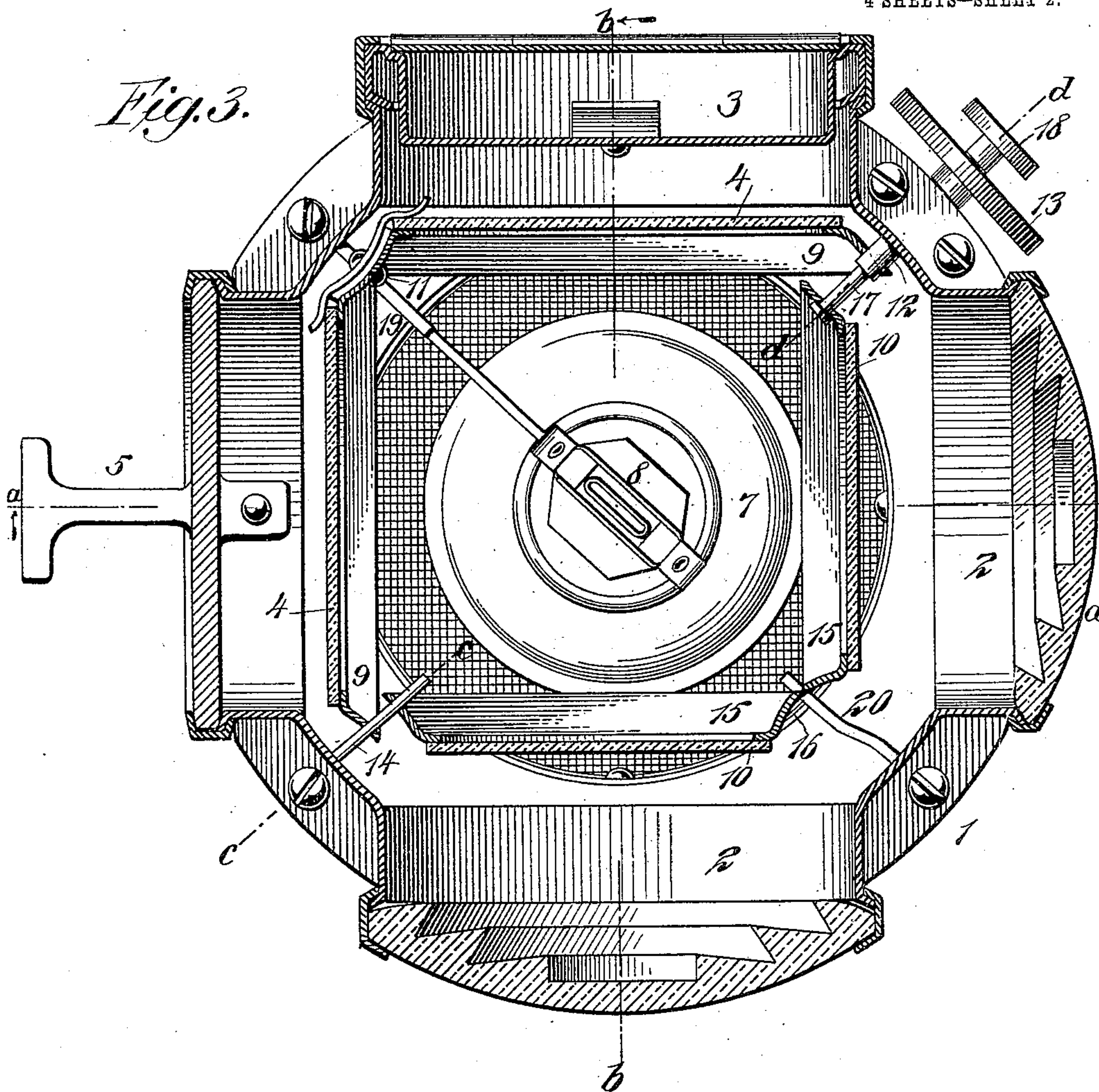
No. 816,509.

PATENTED MAR. 27, 1906.

F. D. SPEAR.
SIGNAL LAMP.

APPLICATION FILED NOV. 8, 1904.

4 SHEETS—SHEET 2.



WITNESSES:
J. A. Curtiss
Elsie Soppett.

Frederic D. Spear, INVENTOR

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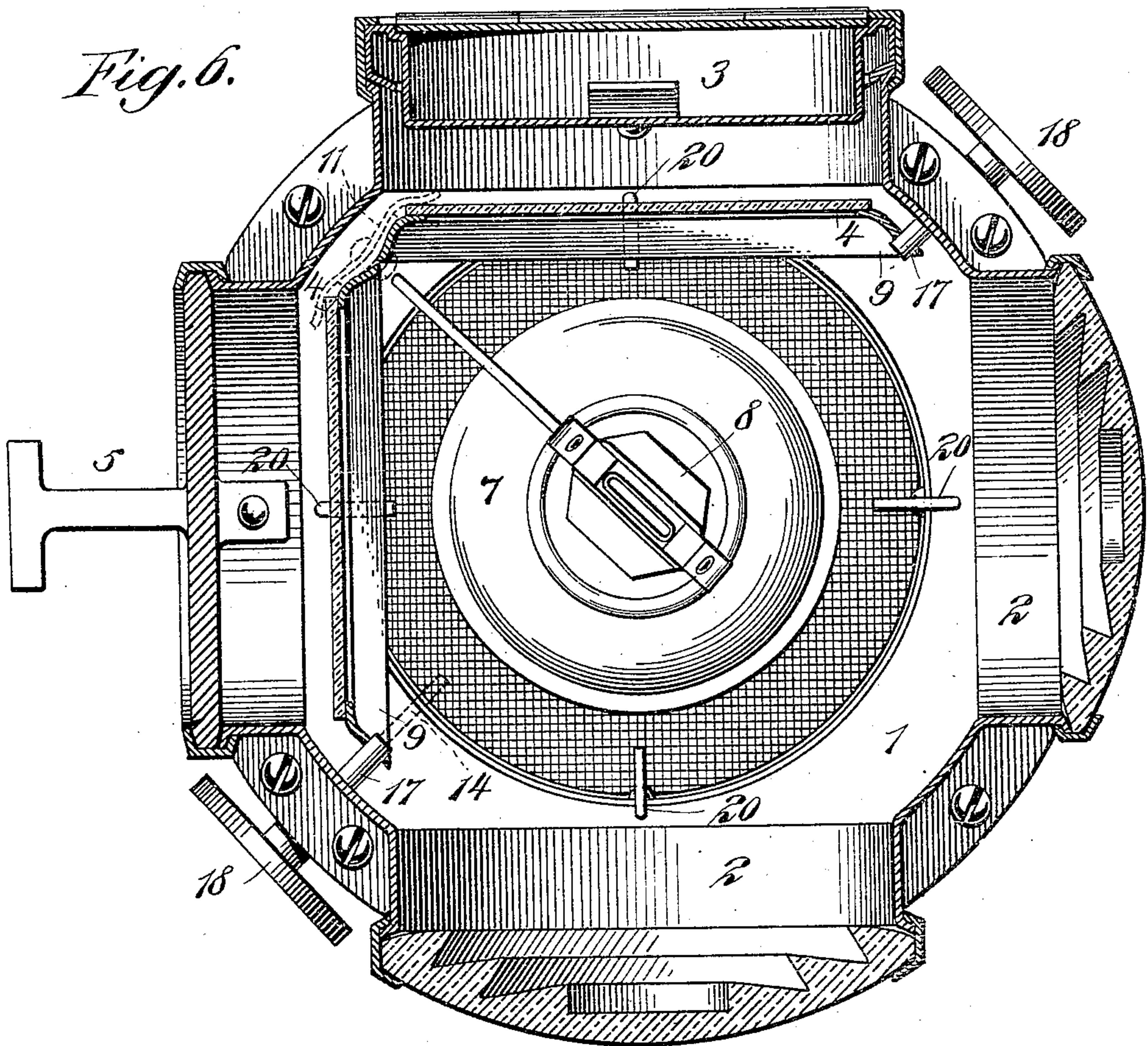
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Fig. 6.



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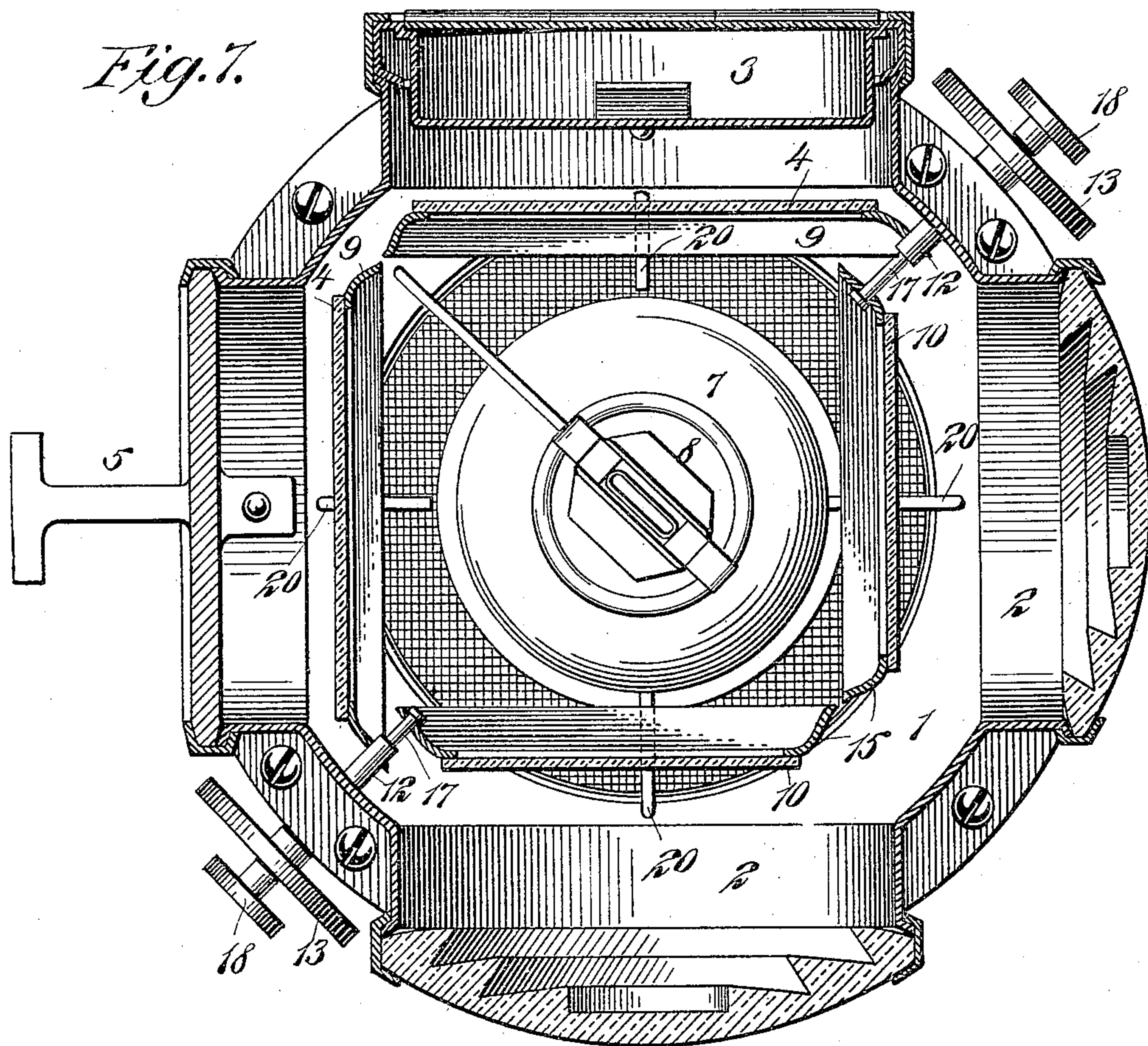
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UNITED STATES PATENT OFFICE.

FURMAN D. SPEAR, OF BROOKLYN, NEW YORK, ASSIGNOR TO ARM-SPEAR MANUFACTURING COMPANY, OF NEW YORK, N. Y.

SIGNAL-LAMP.

No. 816,509.

Specification of Letters Patent.

Patented March 27, 1906.

Application filed November 8, 1904. Serial No. 231,834.

To all whom it may concern:

Be it known that I, FURMAN D. SPEAR, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Signal-Lamps, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates especially to that class of signal-lamps the body whereof has one or more light-openings and wherein colored glasses are provided for interposing between the flame of the lamp and a light-opening when it is desired to change the signal given, and has for its object the provision of simple and effective means for manipulating such colored glasses from the exterior of the lamp-body and without the necessity of opening any part of the body to reach the interior to effect the change.

To attain the desired end, my invention consists, essentially, in a lamp in which is comprised a lamp-body provided with one or more light-openings, one or more colored glasses mounted within the lamp-body, and means for moving said glasses over the lamp-burner to or from the light-openings, all of which will be hereinafter first fully described and then pointed out in the claims.

In the accompanying drawings, forming a part hereof, Figure 1 is a vertical central sectional view of a lamp embodying my invention at line *a a* of Fig. 3, and Fig. 2 is a like view at line *b b* of the same figure. Fig. 3 is a horizontal sectional view at line *e e* of Fig. 1. Fig. 4 is a vertical sectional view at line *c c* of Fig. 3, and Fig. 5 is a like view at line *d d* of the same figure. Fig. 6 is a horizontal sectional view of a lamp wherein two movable colored glasses are employed, and Fig. 7 is a like view of a lamp wherein each colored glass may be separately manipulated.

Similar numerals of reference wherever they occur indicate corresponding parts in all the figures.

1 is the body of the lamp, made of any suitable material.

2 represents light-openings. In the present instance the said openings are shown as provided with lenses; but plain glass or the equivalent may be substituted therefor, if desired.

3 is a holder for spare colored glasses 4 and 10.

5 is a supporting-bracket.

7 is an oil-pot provided with a burner 8.

9 represents frames for carrying the larger size of glasses 4, which may be of any color designed for giving the requisite signal. Two frames 9 are connected together at 11, (see Fig. 3,) one frame being secured to a sleeve 12, forming a shaft which passes through the lamp-body and provided with a manipulating knob or button 13. The other frame 9 is pivoted on a finger 14, fixed to the lamp-body. A second set of glasses 10 is carried by frames 15, connected together at 16.

17 is a shaft fixed to one of the frames 15, said shaft passing through the sleeve or hollow shaft 12 and being provided with a button 18 or the equivalent. The other frame 15 is pivoted on the finger 14.

19 and 20 are fingers on which the frames rest, supporting the glasses in a proper position.

Referring to Fig. 3 of the drawings, the smaller set of glasses in the frames 15 is shown as in position between the lamp-burner and the lenses or openings 2, and the color of the light transmitted will be obtained through the medium of such glasses, one of which may be green and the other red. If it is desired to show white light only, the turning of the shaft 17 by means of the button 18 will throw the glasses over the top of the burner, and the frames will rest on the finger 19 in front of the other frames 9. The glasses in the frames 9 are green and revolved over the burner by means of the button 13 to or from the light-openings 2.

In the lamp illustrated by Fig. 6 of the drawings the light-openings are provided with white lenses, and the movable glasses within the lamp-body are green. They may be carried by connected frames, or the frames may be disconnected, in which case separate manipulating-shafts are required.

In the lamp illustrated by Fig. 7 of the drawings each glass is separately mounted and provided with a manipulating shaft and button.

It will thus be seen that I have provided a very simple means of producing the light or combination of different-colored lights required for signaling, the same being devoid of complicated mechanism and without the necessity of changing the glasses by hand. By revolving the glasses over the burner it is not

necessary to provide any extension or enlarge the lamp-body in order to accommodate the parts for holding the colored glasses I have added to the ordinary signal-lamp.

5 Having now fully described my invention, what I claim as new therein, and desire to secure by Letters Patent, is—

1. A lamp-body having light-openings, in combination with one or more colored glasses
10 within the lamp-body, carried by a horizontally-revoluble shaft, the axis of rotation being oblique to the axes of the light-openings.

2. A lamp-body having light-openings, in combination with a plurality of colored
15 glasses within the lamp-body, carried by a horizontally-revoluble shaft, the axis of rotation being oblique to the axes of the light-openings.

3. A lamp-body having light-openings, in
20 combination with a plurality of colored glasses within the lamp-body, carried by a horizontally-revoluble shaft, the axis of rotation being oblique to the axes of the light-openings, and means for manipulating the
25 shaft from the exterior of the lamp-body.

4. A lamp-body having light-openings, in combination with a plurality of sets of colored glasses mounted on independent, horizontally-revoluble shafts within the lamp-
30 body, the axes of rotation being oblique to the axes of the light-openings.

5. A lamp-body having light-openings, in combination with a plurality of sets of colored

glasses mounted within the lamp-body on independent, horizontally-revoluble shafts, the
35 axes of rotation being oblique to the axes of the light-openings, and means for manipulating said shafts from the exterior of the lamp-body.

6. The combination with a lamp-body pro-
40 vided with a light-opening, of a colored glass mounted within the lamp-body, and means for rotatably moving said glass over the plane of the lamp-burner, across the interior of the lamp-body, to or from the opening. 45

7. The combination with a lamp-body provided with a plurality of light-openings, of a plurality of glasses mounted within the lamp-
body, and means for rotatably moving said
50 glasses over the plane of the lamp-burner, across the interior of the lamp-body, to or from the lenses or openings.

8. The combination with a lamp-body provided with a plurality of light-openings, of a plurality of sets of glasses mounted within
55 the lamp-body, and means for independently rotatably moving either of said sets of glasses over the plane of the lamp-burner, across the interior of the lamp-body, to or from the
60 lenses or openings.

In testimony whereof I hereto affix my signature in presence of two witnesses.

FURMAN D. SPEAR.

Witnesses:

A. M. PIERCE,
C. A. PIERCE.