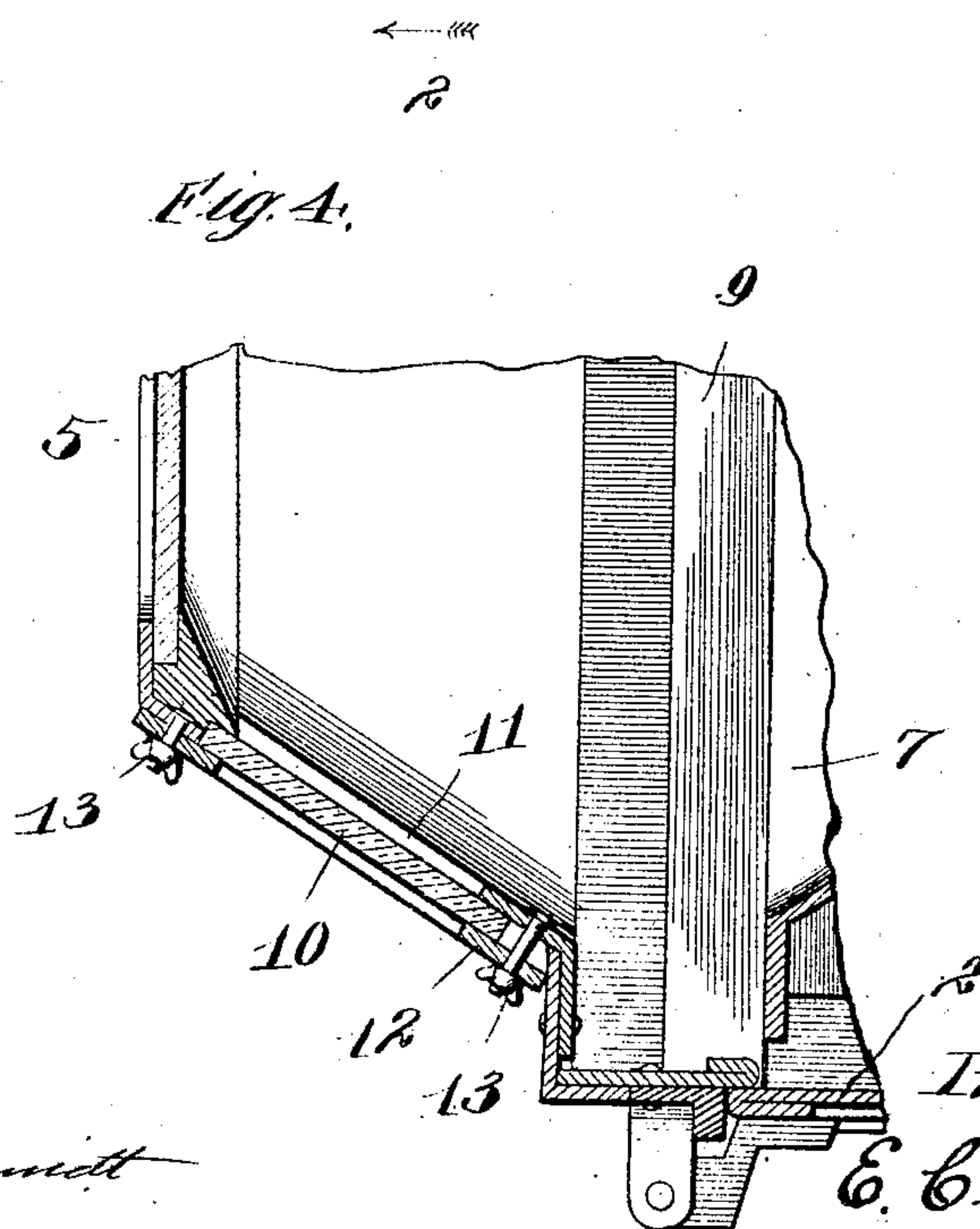
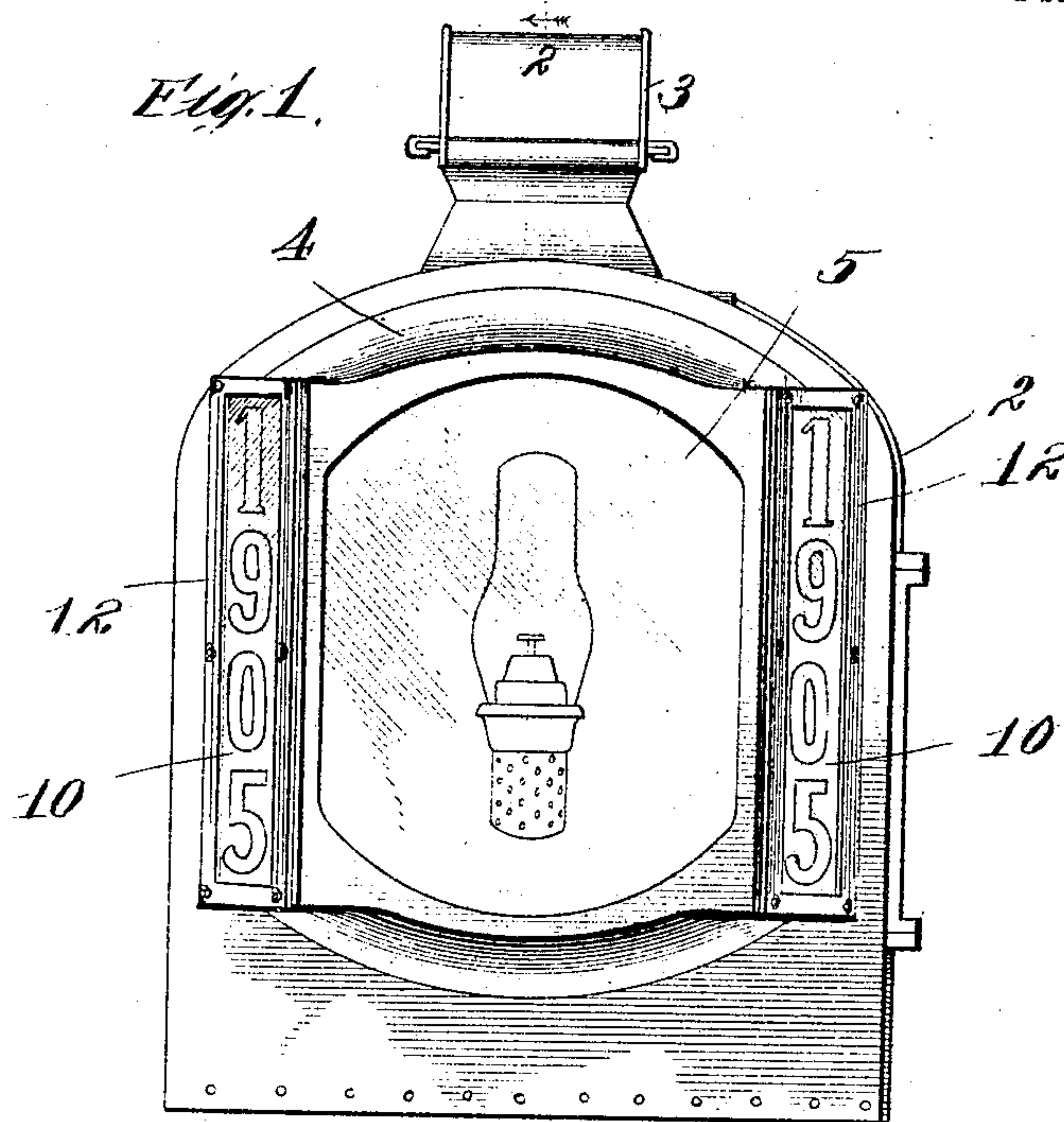


No. 827,943.

PATENTED AUG. 7, 1906.

E. C. SAWYER.
LOCOMOTIVE HEADLIGHT.
APPLICATION FILED JUNE 21, 1905.

2 SHEETS—SHEET 1.



Witnesses:
J. W. Pauberschmidt
George L. Chindahl

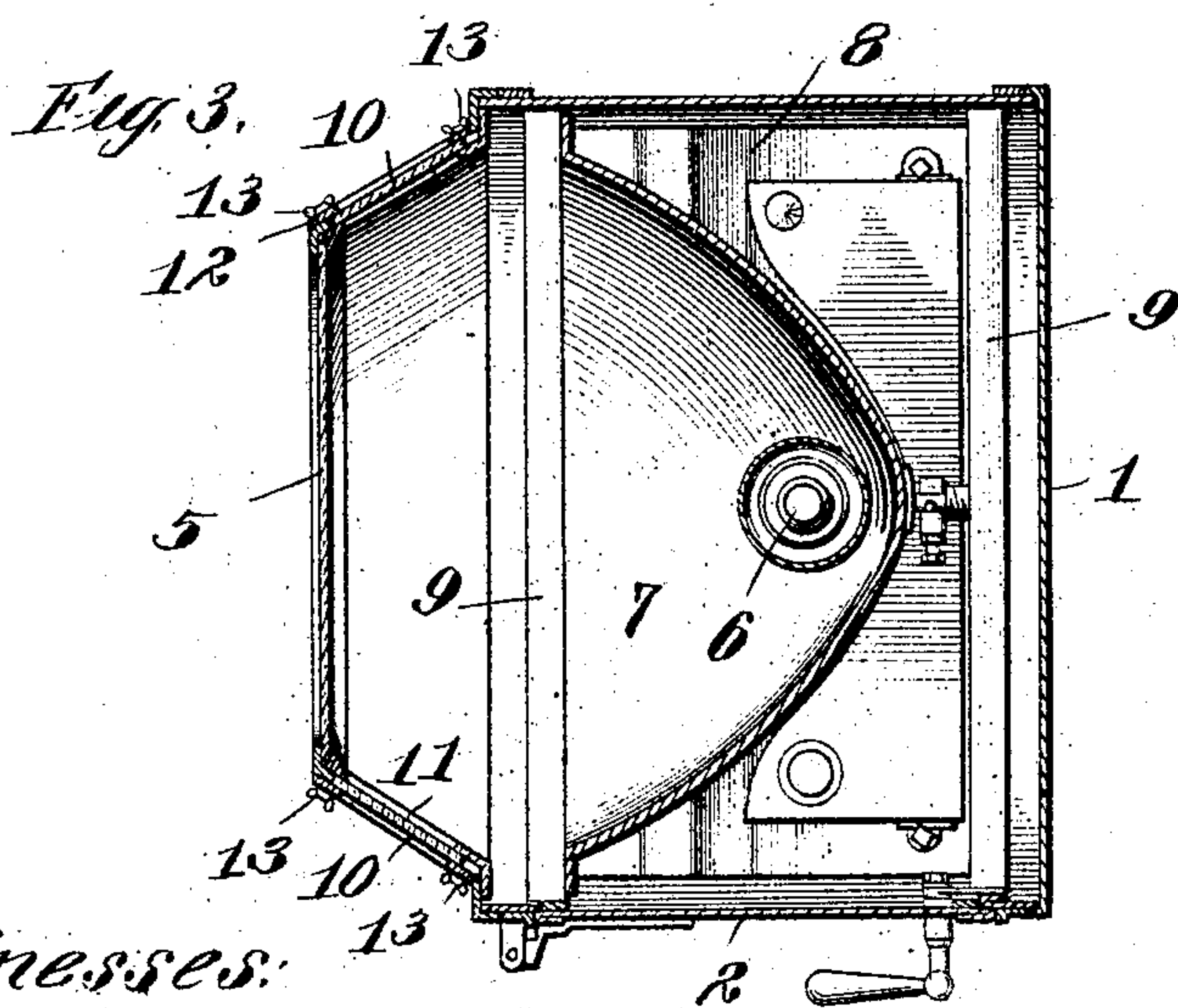
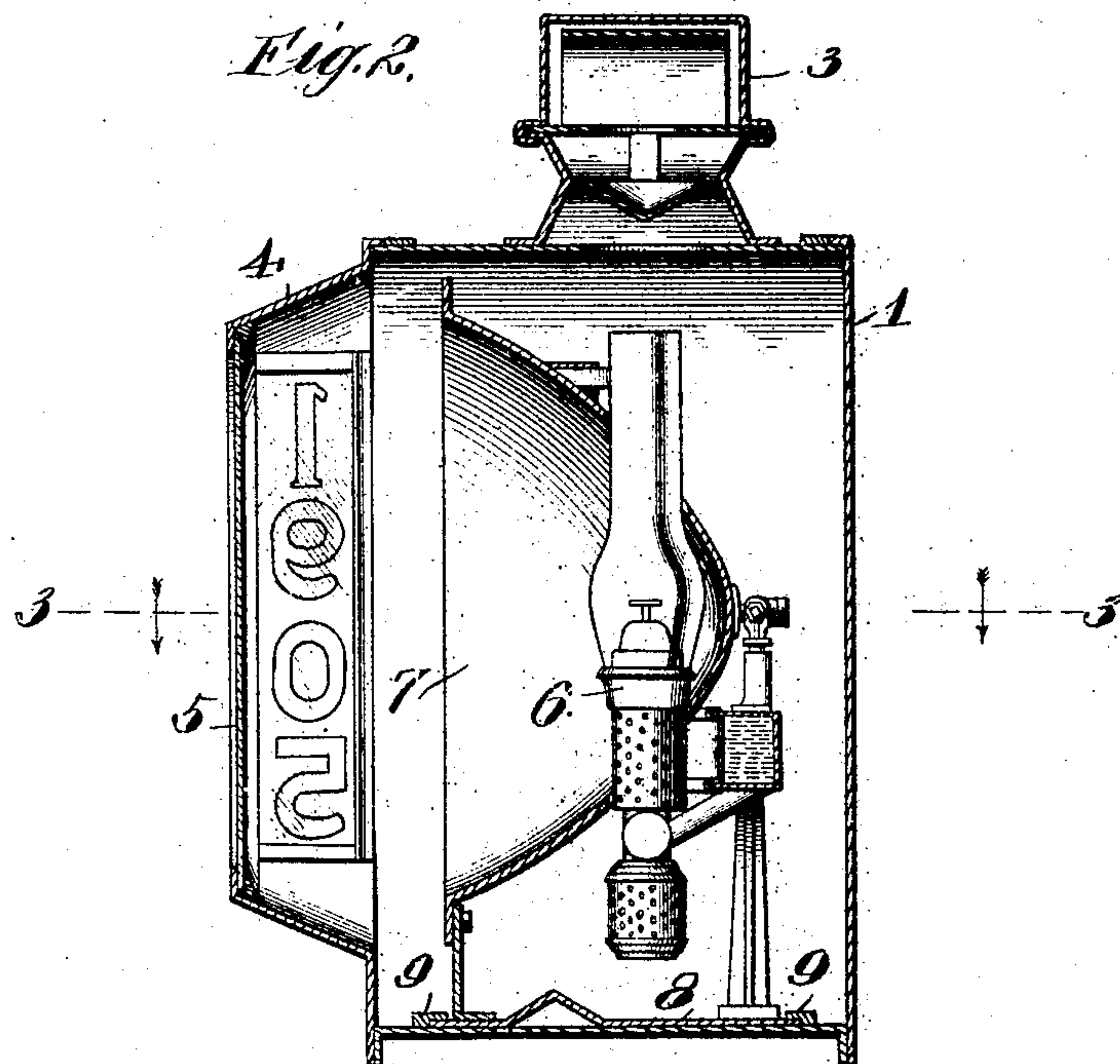
Inventor:
E. C. Sawyer.
By *Luther L. Miller*
Mly

No. 827,943.

PATENTED AUG. 7, 1906.

E. C. SAWYER.
LOCOMOTIVE HEADLIGHT.
APPLICATION FILED JUNE 21, 1905.

2 SHEETS—SHEET 2.



Witnesses:

W. A. Pauberschnitt
George L. Chindahl

Inventor:

Edward C. Sawyer
By *Luther L. Miller*
Att'y

UNITED STATES PATENT OFFICE.

EDWARD C. SAWYER, OF CHICAGO, ILLINOIS.

LOCOMOTIVE-HEADLIGHT.

No. 827,943.

Specification of Letters Patent.

Patented Aug. 7, 1906.

Application filed June 21, 1905. Serial No. 266,350.

To all whom it may concern:

Be it known that I, EDWARD C. SAWYER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Locomotive-Headlights, of which the following is a specification.

This invention relates to the headlights for locomotives; and its object is the production of a headlight having means for displaying the number of the locomotive in such a manner that said number may be read from any point beside or in front of the engine. This object I accomplish without impairing the efficiency of the reflector and with but a slight loss of light by arranging at each side of the reflector and near the front end thereof a glass plate bearing the locomotive-number, the numerals in the embodiment hereinafter described being alined vertically instead of horizontally, as usual, in order to economize space. The said glass plates are arranged at an angle of about forty-five degrees with the length of the headlight and engine, whereby the numbers displayed on said plates may be read from a point in front of the engine as well as from a point opposite the side thereof.

In the accompanying drawings, Figure 1 is a front elevation of a locomotive-headlight embodying the features of my invention. Fig. 2 is a vertical central section through said headlight, taken on dotted line 2 2 of Fig. 1. Fig. 3 is a horizontal section through the headlight on the plane of dotted line 3 3 of Fig. 2. Fig. 4 is a detail sectional view, on an enlarged scale, illustrating the construction of the side-number frames.

In the embodiment shown in said drawings the headlight-case 1 is provided with a door 2 at one side, a ventilator 3, and the forward extension or goggle 4. The forward side of the goggle is closed by the glass plate 5, held in place by any suitable means.

The lighting apparatus may be of any usual or preferred form, and, as shown herein, comprises an oil-lamp 6 and a parabolic reflector 7, both supported in proper relation to each other upon a base 8. The base 8 is held in

position within the headlight-case by means of flanged rails 9, fixed to the floor of the case and adapted to overlie two opposite side edges of said base.

To provide means for reading the number of the locomotive from either side of the engine, I place at each side of the headlight-case at a point forward of the front end of the reflector 7 a glass plate 10, bearing such number. In the embodiment herein shown these plates are placed one in each side of the goggle; but it will be apparent that where the forward side of the headlight-case is of a form different from that illustrated in the drawings said plates might be placed somewhat nearer together or farther apart or somewhat nearer to or farther from the reflector than as herein shown.

The means for supporting the glass plates 10 may be of any preferred construction. In the present instance said plates are shown as supported within elongated vertically-extending openings 11, formed in each side of the goggle 4, over which openings said glass plates are arranged to be secured by means of a retaining-frame 12, removably secured to the goggle by means of screws 13.

In use most of the light issuing from the lamp is projected by the reflector 7 through the glass plate 5 in a beam along the track. A portion, however, of the light passes through the side glass plates 10, illuminating the numbers painted thereon. Being disposed at an angle of about forty-five degrees with reference to the length of the locomotive, the numbers may be read from a point beside the track in front of the engine or from a point directly opposite the side of the headlight. By disposing the side plates vertically they can be made of sufficient size to display three or four numerals of standard height and width. Being arranged somewhat in front of the forward end of the reflector, the numbers are illuminated with a trifling loss of light compared with the loss occasioned by placing the side-number plates opposite the sides of the reflector and cutting away a portion of said reflector, as has heretofore been

proposed. When it is desired to replace a side glass for any reason, the glass may be removed upon taking off the retaining-frame 12.

I claim as my invention—

- 5 A headlight-case comprising a substantially circular goggle having two opposite flattened side walls, each of said walls extending at an angle of substantially forty-five degrees with the length of the headlight-
10 case, each of said side walls having an elon-

gated vertically-extending opening therein, means of substantially the form of said openings for displaying in each of said openings a locomotive-number consisting of vertically-aligned numerals, and means for securing said number-displaying means in said openings. 15

EDWARD C. SAWYER.

Witnesses:

L. L. MILLER,
M. M. DALEY.