

(No Model.)

C. ANDERSON.

SIGNAL FOR LOCOMOTIVE HEAD LIGHTS.

No. 287,079.

Patented Oct. 23, 1883.

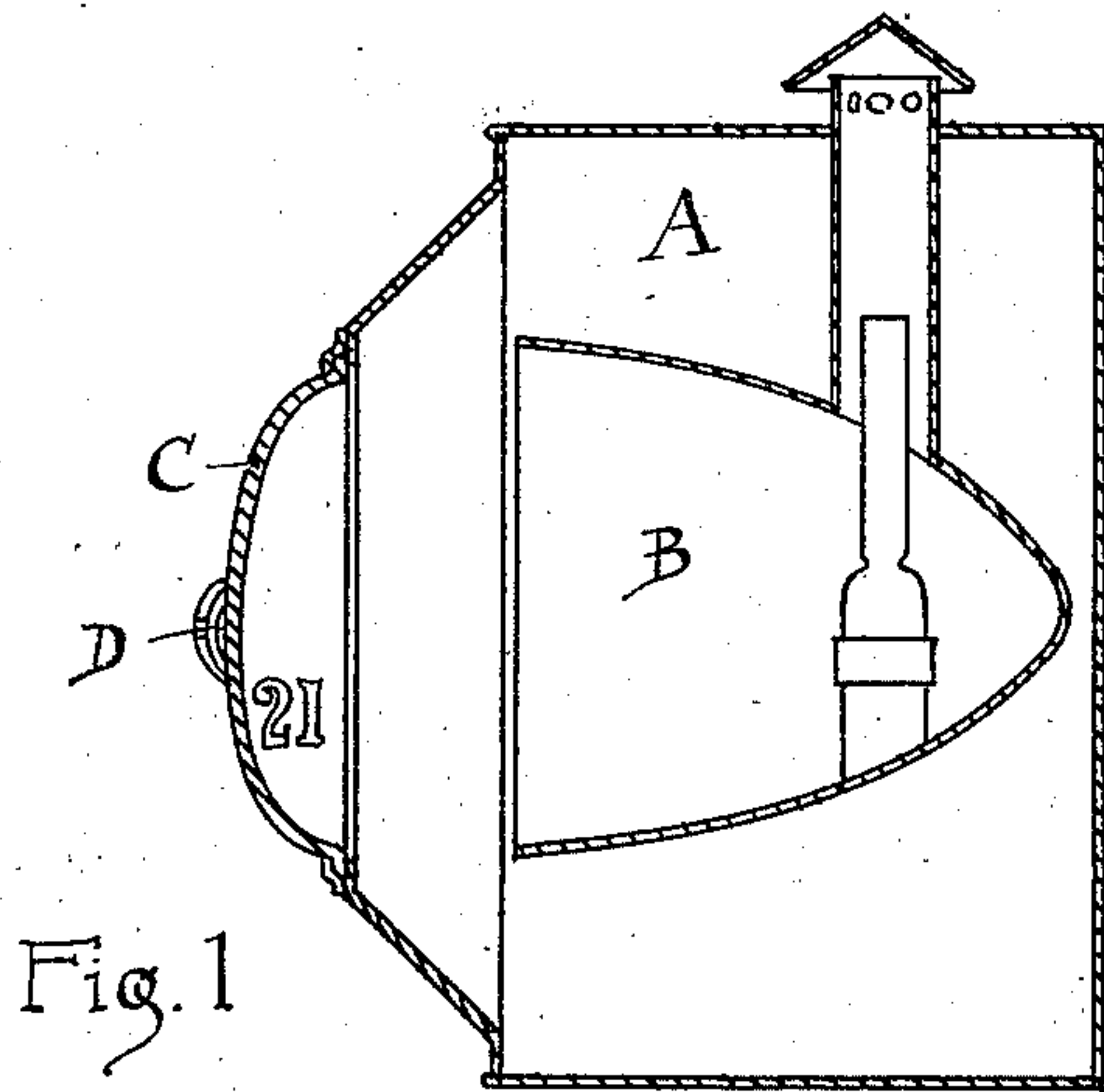


Fig. 1

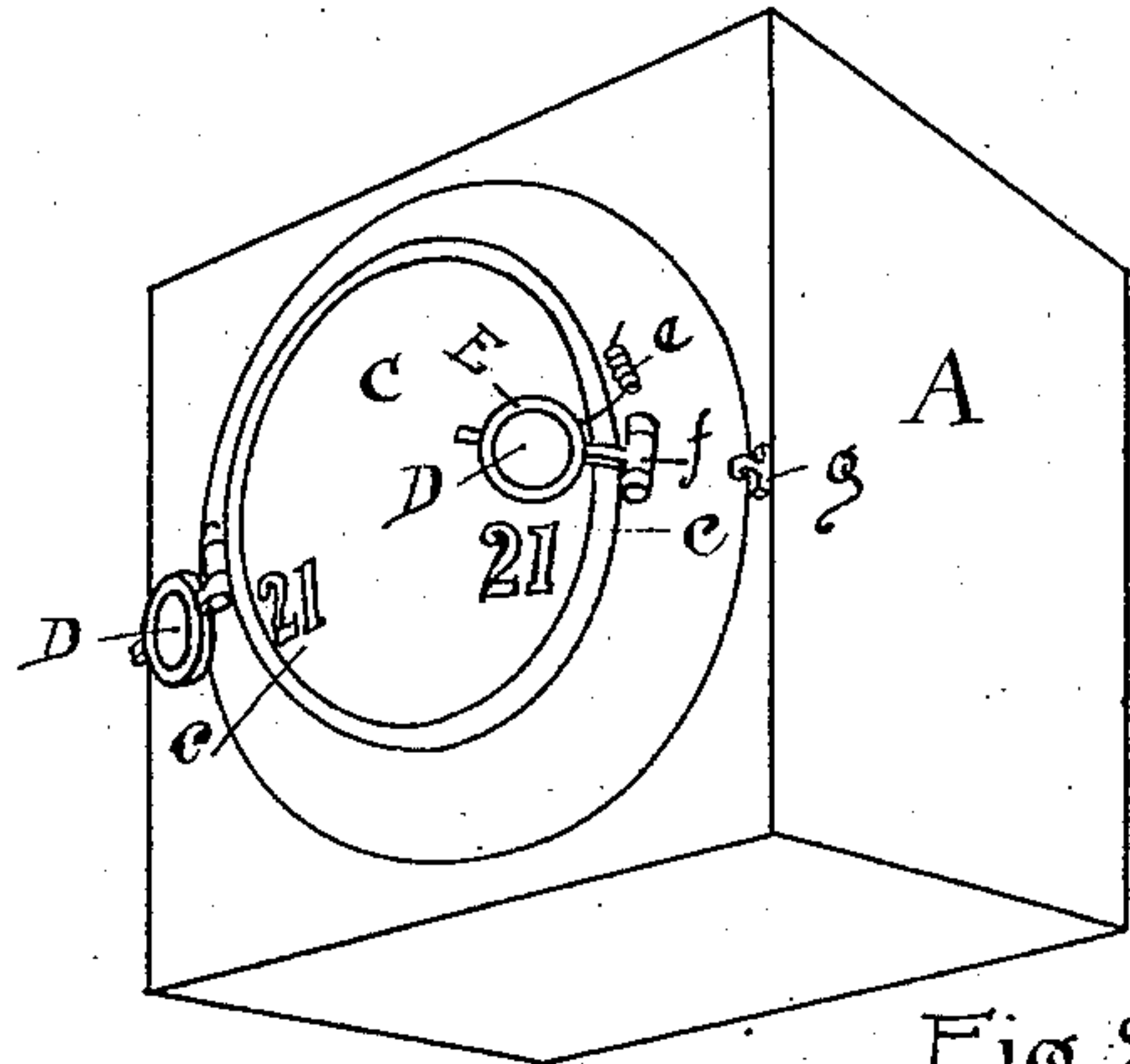


Fig. 2

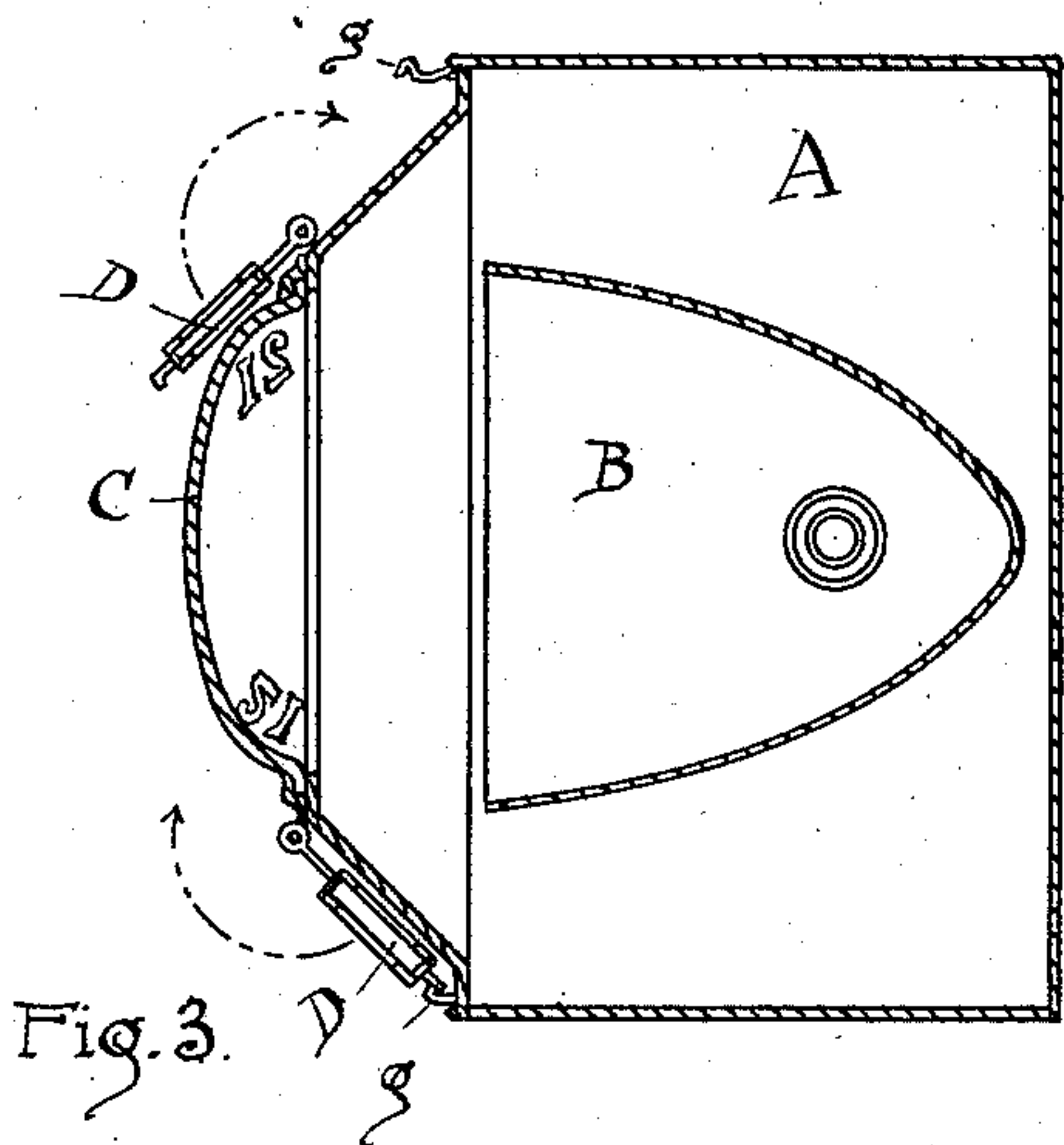


Fig. 3

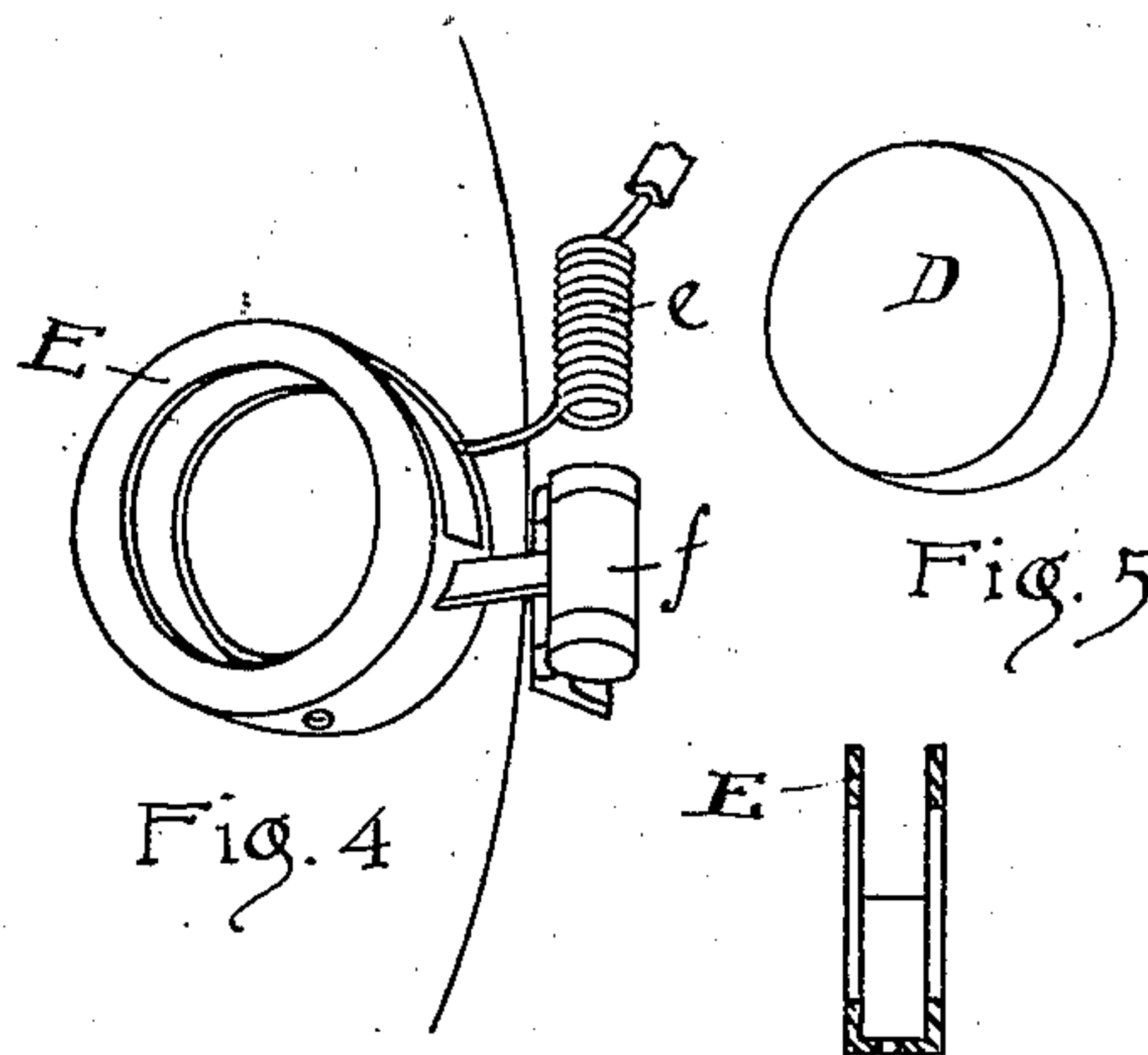


Fig. 4

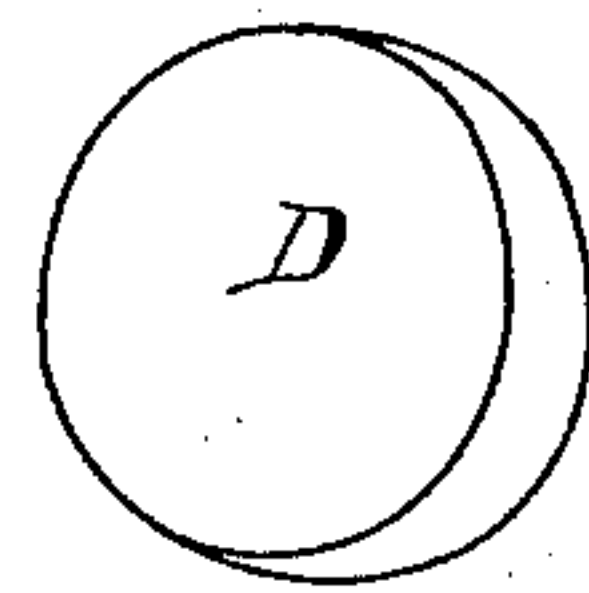


Fig. 5

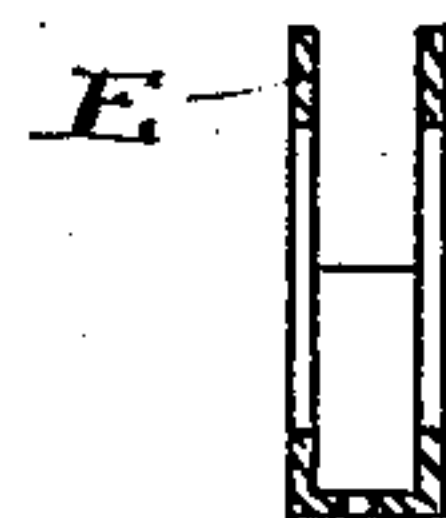


Fig. 6

Witnesses:

A. O. Elzner.  
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Inventor:

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# UNITED STATES PATENT OFFICE.

CHARLES ANDERSON, OF LUDLOW, KENTUCKY, ASSIGNOR TO POST & CO.,  
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## SIGNAL FOR LOCOMOTIVE HEAD-LIGHTS.

SPECIFICATION forming part of Letters Patent No. 287,079, dated October 23, 1883.

Application filed April 4, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES ANDERSON, of Ludlow, Kenton county, and State of Kentucky, have invented a new and useful Improvement in Signals for Locomotive Head-Lights, of which the following is a full, clear, and exact specification, reference being had to the accompanying drawings, forming part of this statement of invention, in which—  
10 Figure 1 is a vertical section. Fig. 2 is a general perspective view. Fig. 3 is a sectional plan. Fig. 4 is a perspective view of metal signal-holder with spring-hinge. Fig. 5 is a perspective view of glass signal-plate. Fig. 6  
15 is a section of metal signal-holder.

Similar letters of reference in the several drawings indicate the same parts.

My invention relates to signals for locomotive head-lights, and to that class of signals  
20 which is illuminated by the lamp and main reflector of the head-light; and it consists—

First, of a convex main glass plate, C, having side portions, c, and placed in front of the reflector, where the flat glass plate of the case  
25 is usually fixed. On this, near the edge, on both sides of the glass plate, I paint any figures or letters that may be desired. Figure 21 is shown in the drawings in position on the convex glass plate.

30 Second, in combination with the convex main glass plate C, a signal-holder, E, hinged to the rim of the head-light case A, which, when in position for signaling, is resting on the glass plate C. (See Figs. 1, 2, and 3.) This signal-holder E is hinged to the head-light case,  
35 as shown at f, Fig. 4, and is open on top, to admit of the ready insertion and removal of colored signal-plates. One such plate, D, is shown in Fig. 5. The signal-holder E is fitted  
40 with a spring, e, at or near its hinge, to keep it in place on the convex glass plate C, and is held back to the case, when not in use for signaling, by engaging its edge in the latch-spring g, attached to the case.

45 I am aware that signal-holders have heretofore been made to hinge to the case and swing in front of the head-light glass. I therefore do not claim, broadly, a hinged signal-holder, but a hinged signal-holder in combination with a  
50 convex glass of the head-light case.

I am also aware that signal-holders with glass plates fixed therein have heretofore been made. I therefore claim the holder only as constructed—viz., open above to receive plates, and closed or nearly closed below to  
55 form a receptacle for the signal-plates.

I am also aware that slightly-convex front glass plates have been used in lanterns; but the convexity has been so slight that they are not adapted to my invention, where a deep curved  
60 portion at each side is required. I am not aware that a convex main glass suitable for my purpose has heretofore been employed.

The advantages of my invention over the devices ordinarily used for the same purpose are  
65 many. Among others, I mention the following:

(a.) Signals of different colors are used on the same engine during one trip. It is manifest that the ready removal of a signal of one color  
70 and insertion of a signal of another color is desirable.

(b.) The track is better defined.

(c.) The advantage of my convex glass as a signal-displayer over the flat glass in common use is this: The signal number or lettering may be seen from in front equally as well  
75 as when the glass is flat, and may also be seen from the sides and from behind at an extremely obtuse angle.  
80

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is as follows:

1. In combination with a head-light having a convex front glass deeply curved at the sides,  
85 a signal-holder to rest against said curved portion and receive its light from said sides, as set forth.

2. In combination with a head-light having a convex front glass deeply curved at the sides  
90 and marks inscribed on said sides, a signal-holder to rest against said curved portion and containing a colored signal-plate illuminated from the sides, as set forth.

3. In combination with a head-light having  
95 a convex front glass with deeply-curved sides and marks or letters inscribed on said sides, the hinged signal-plate holders to rest on said curved portion and to be illuminated from the sides, as set forth.  
100

4. In combination with a head-light having a convex front glass deeply curved at the sides, a signal-holder to rest on said curved portion, and having an opening at top for the insertion  
5 and removal of the signal-plates, and receiving its light from said sides, as set forth.  
5. In a head-light of a locomotive, a signal-plate holder hinged to the case, having its upper end open and its lower end closed or nearly  
10 closed, substantially as described.  
6. In a head-light of a locomotive, a signal-

plate holder hinged to the case, in combination with a spring to hold said holder on or before the glass, and a retaining-catch spring, substantially as described.

15

The foregoing specification of my invention signed by me this 30th day of March, A. D. 1883.

CHARLES ANDERSON.

Witnesses:

E. H. BAKER,  
J. C. KELLAR.