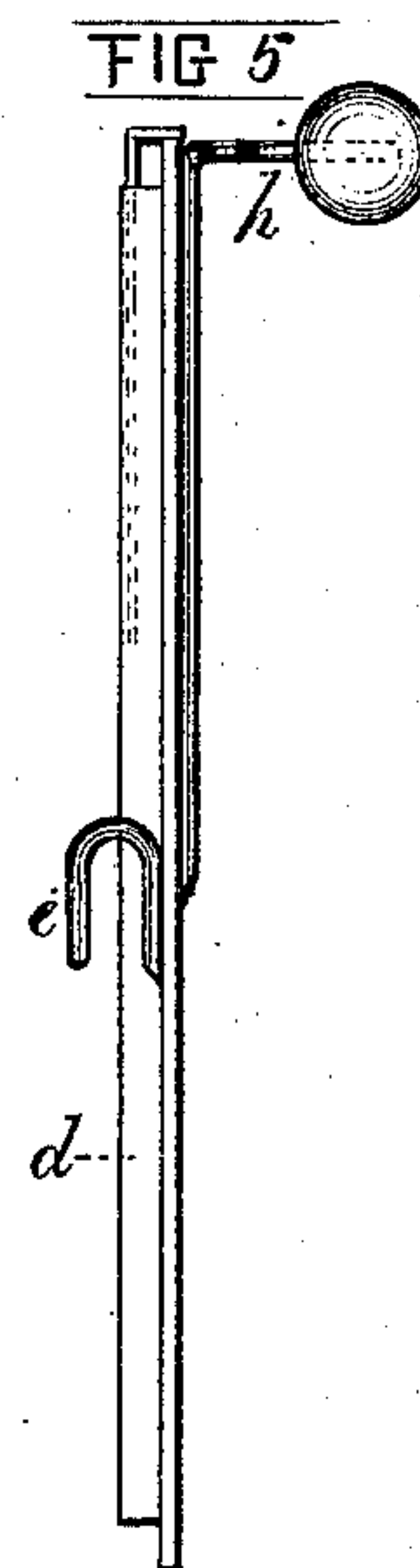
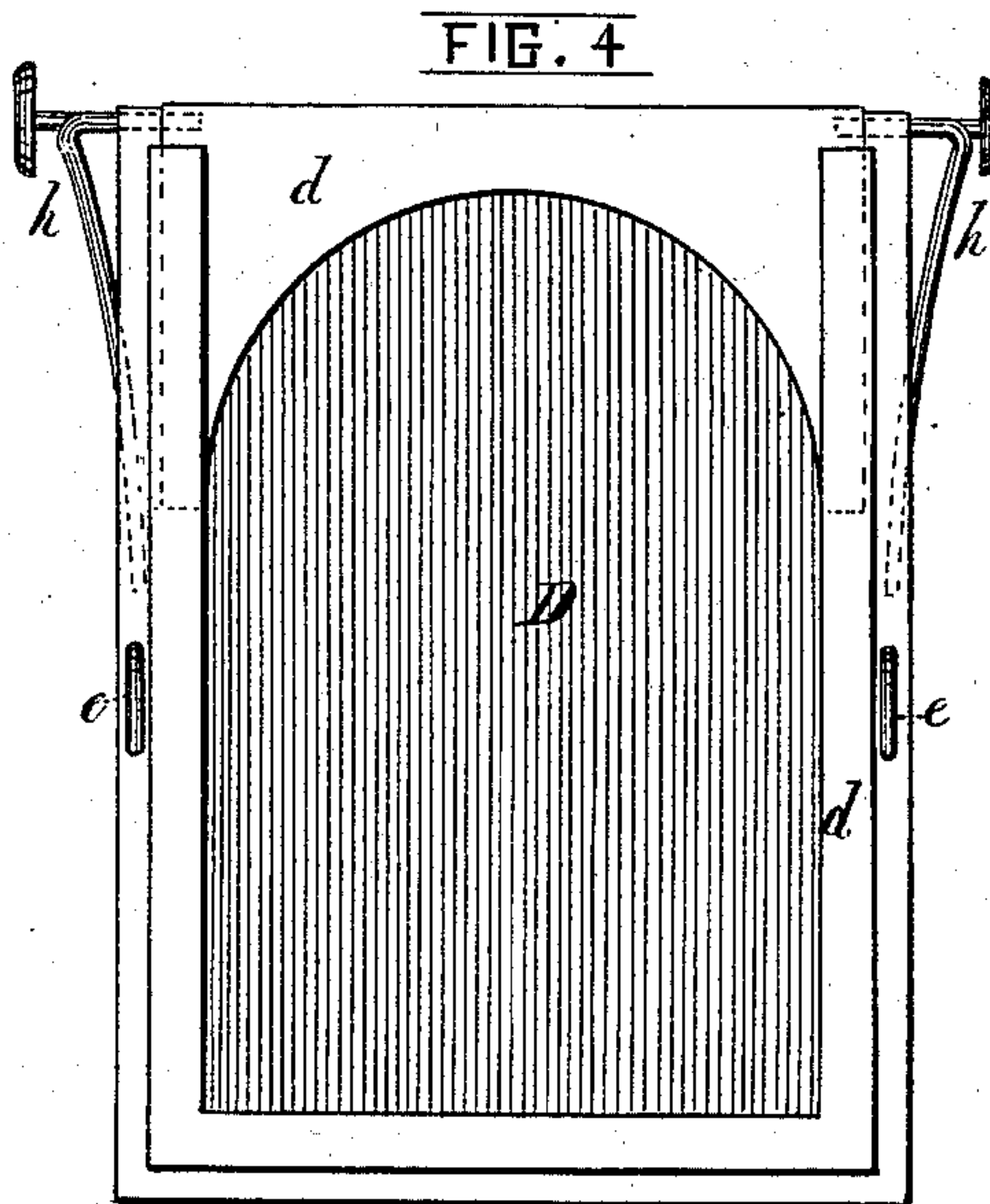
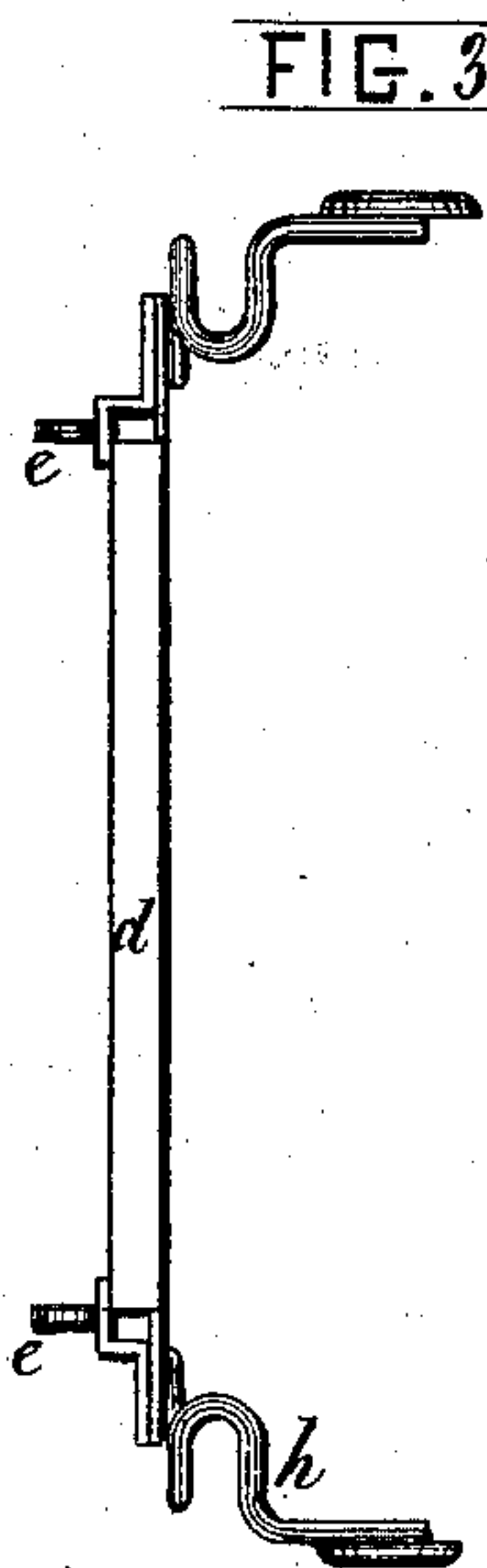
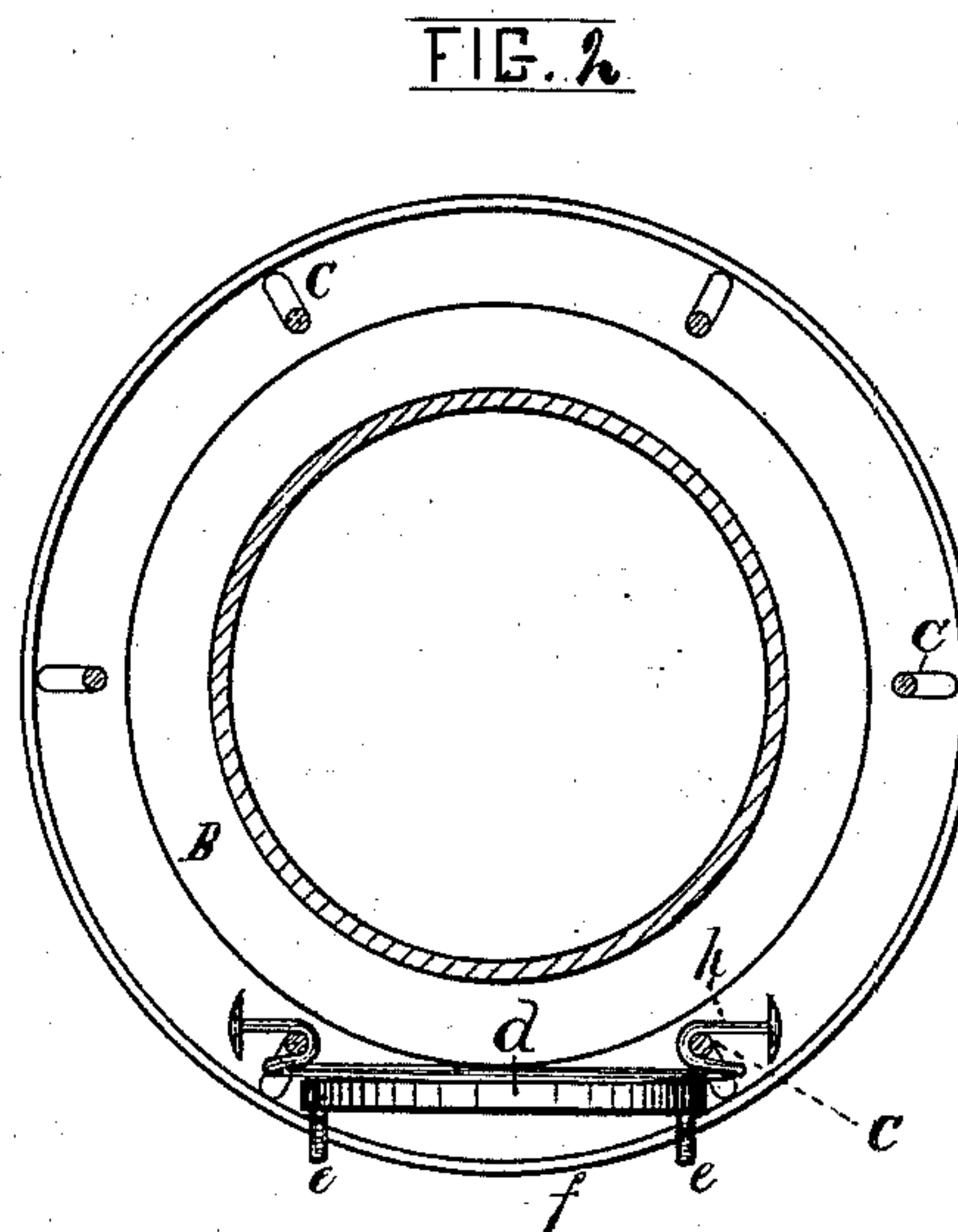
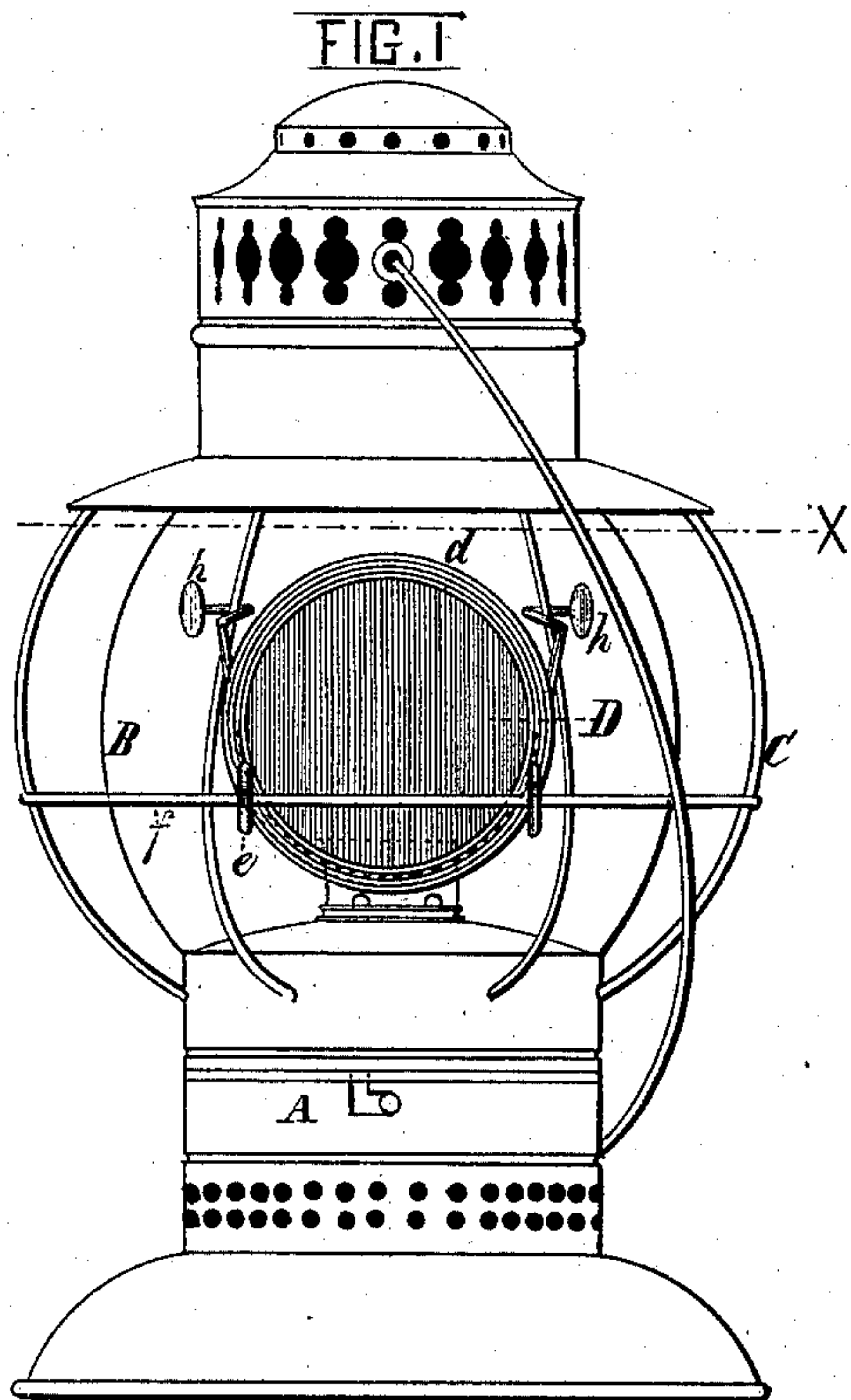


D. W. F. De GRANGE.  
Railroad Signal Lantern.

No. 231,702.

Patented Aug. 31, 1880.



WITNESSES

Yes A. Boyden  
A. C. Eader

INVENTOR

Danl. W. F. De Grange  
By his Atty  
Chas. B. Mann

# UNITED STATES PATENT OFFICE.

DANIEL W. F. DE GRANGE, OF BALTIMORE, MARYLAND.

## RAILROAD SIGNAL-LANTERN.

SPECIFICATION forming part of Letters Patent No. 231,702, dated August 31, 1880.

Application filed June 19, 1879.

*To all whom it may concern:*

Be it known that I, DANIEL W. F. DE GRANGE, of the city of Baltimore and State of Maryland, have invented a new and useful Improvement in Railroad Signal-Lanterns, of which the following is a specification.

My invention relates to an improvement in the construction of colored signal-glasses for attachment to the hand-lanterns used by railroad train-men and station-agents, the object of the invention being to provide for the attachment of a signal-glass to the wire frame surrounding the glass globe, as hereinafter described.

In the accompanying drawings, Figure 1 is a view of a hand-lantern, showing a colored signal-glass attached outside of the globe. Fig. 2 is a horizontal cross-section of same. Fig. 3 is a top view of a different-shaped signal-glass and on a larger scale, showing the means for attachment to the wire frame. Fig. 4 is a front view of the same. Fig. 5 is a side edge view of the same.

The letter A represents the oil-fount; B, the glass globe. C are the vertical wires of the frame that surrounds the globe. These represent the parts of an ordinary hand-lantern.

D is the signal-glass, of any desired color, such as red, green, or blue, and is surrounded on the edge by a suitable frame of metal, *d*. The frame and the glass may be round, hexagonal, or square, and is provided on one side with hooks *e*, which are adapted to set over a wire hoop, *f*, of the lantern-frame. The signal-glass frame is also provided on the edge of two opposite sides with a spring-catch, *h*, which is of such shape as to hook partly around the vertical wires of the lantern-frame, and thereby serve to retain the signal in position. By compressing the spring-catches together they are disengaged from the vertical wires and the signal may be detached.

It is obvious the signal-glass frame may be

provided on each side with two spring-catches, and thereby retain the signal to the wire frame of the lantern without the aid of the hooks, which, in such case, may be dispensed with.

It will be seen that by thus attaching the colored signal-glass upon the outside of the glass globe of an ordinary hand-lantern the signal may be removed at any time without withdrawing the oil-fount, as would be necessary if the signal were attached to the oil-fount and inserted within the globe.

The signal attached to the lantern in Fig. 1 is round or circular in shape, while Figs. 3, 4, and 5 represent a square-shaped signal.

The provision made for attaching the signal to the wire frame of lanterns affords the advantage that all lanterns now in use having wire frames surrounding the globe may have a colored-glass signal attached without any alteration being made in the lantern.

I do not herein claim the combination, in a hand-lantern having a plain glass globe, of a wire frame surrounding the globe and a colored signal-glass attached at one side of said globe to the frame, the same being the subject of a claim in another patent.

Having described my invention, I claim and desire to secure by United States Letters Patent—

1. A signal-glass for a hand-lantern provided with hooks *e*, adapted to engage with a wire of the lantern-frame and having spring-catches of the described shape, so as to hook partly around a wire of the frame, substantially as set forth.

2. A signal-glass for a hand-lantern provided on the side or edge with spring-catches of such shape as to hook partly around a wire of the lantern-frame, as set forth.

DANIEL W. F. DE GRANGE.

Witnesses:

CHAS. B. MANN,  
G. A. BOYDEN.