

F. HARTMANN
Kaleidoscopic Lanterns.

No. 155,085.

Patented Sept. 15, 1874.

Fig: 1.

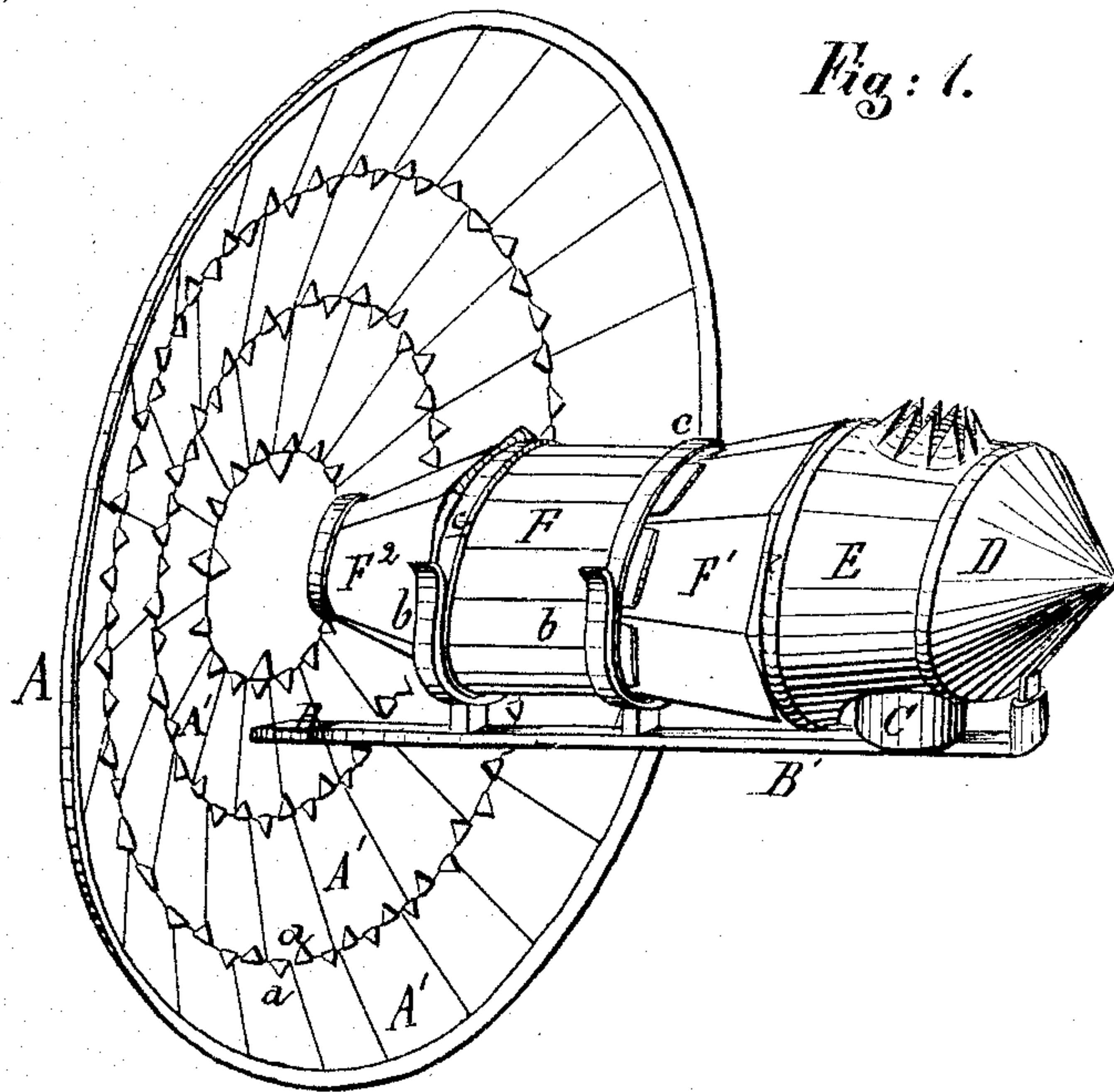
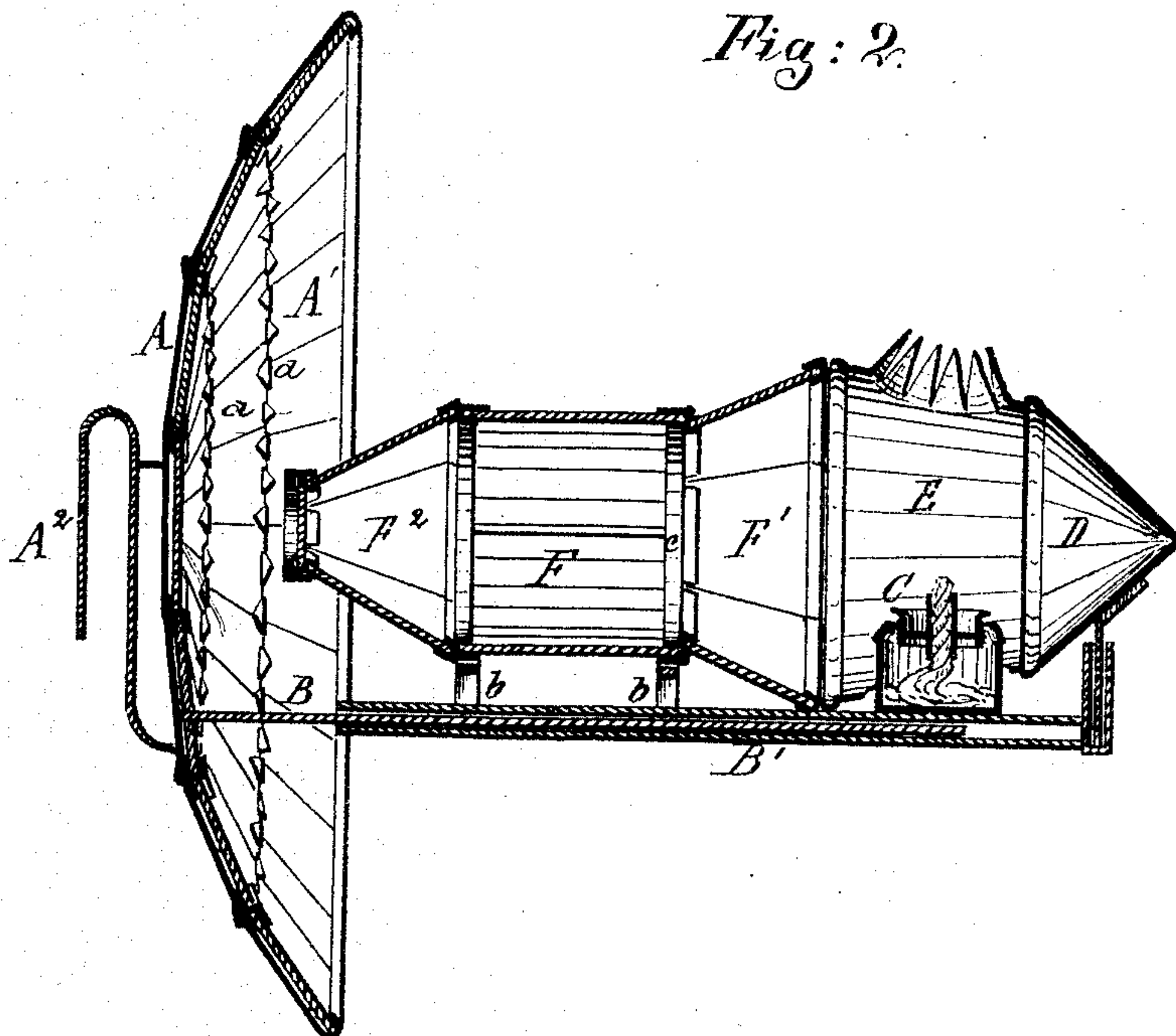


Fig: 2.



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FREDERICK HARTMANN, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN KALEIDOSCOPIC LANTERNS.

Specification forming part of Letters Patent No. **155,085**, dated September 15, 1874; application filed July 20, 1874.

To all whom it may concern:

Be it known that I, FREDERICK HARTMANN, of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Kaleidoscopic Lantern, of which the following is a specification:

The object of my invention is to provide a kaleidoscopic lantern for store-windows, which, from the brilliancy of the colors reflected in the mirror which forms the background, will attract the attention of passers-by; and it consists in the combination, with a reflector having its reflecting-surface lined with mirror-facets, of a lamp and reflector supported in the focus of the large reflector, with a cone or a cylinder, or a combination thereof, of parti-colored glass, either stationary or rotating, through which the light is transmitted to the reflector, as more fully hereinafter set forth.

Figure 1 is a perspective view. Fig. 2 is a longitudinal vertical section.

In the drawing, A represents a sheet-metal reflector, having a hook, A², at the back to secure it to any suitable support in a show-window in a vertical position, as shown. The inner surface is set with radial mirror-facets A¹, secured by sheet-metal clips *a* turned over their ends. These facets are disposed in three or more concentric circles, and at varying angles of inclination. B is a rod projecting horizontally from the face of the reflector A below the focal plane, and on it is sleeved a support, B', for a lamp, C, in the focus of the reflector A. At the outer end of said sleeve-support is a small reflector, D, which reflects the light of the lamp into the large reflector

A. To the smaller reflector is secured one end of a conical casing, E, for the lamp, both being made of polished sheet metal.

A circular kaleidoscope is made of glass staves of various colors. The central portion F is cylindrical, while the outer end F¹ is flaring, and the inner section F² conical. The kaleidoscope is supported by two yokes, *b b*, rising from the support B', and which partially embrace the hoops *c c* of the central section.

The colored lights transmitted through the kaleidoscope into the reflector A¹ are reflected by its facets in a thousand different forms as the observer passes by, while, if the kaleidoscope be axially rotated by clock-work, or otherwise, the effect is indescribably beautiful, and cannot fail to attract attention.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination, with the reflector A A¹, constructed substantially as described, of the lamp C in the focus thereof, the small reflector D, casing E, and kaleidoscope F F¹ F², either stationary or axially rotating in the focal plane, substantially as described.

2. In combination, the rod B, projecting horizontally from the reflector A, with the sleeve B', the lamp C, reflector D, and a kaleidoscope, F F¹ F², in the focal plane of the reflector A, substantially as described and shown.

FREDERICK HARTMANN.

Witnesses:

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