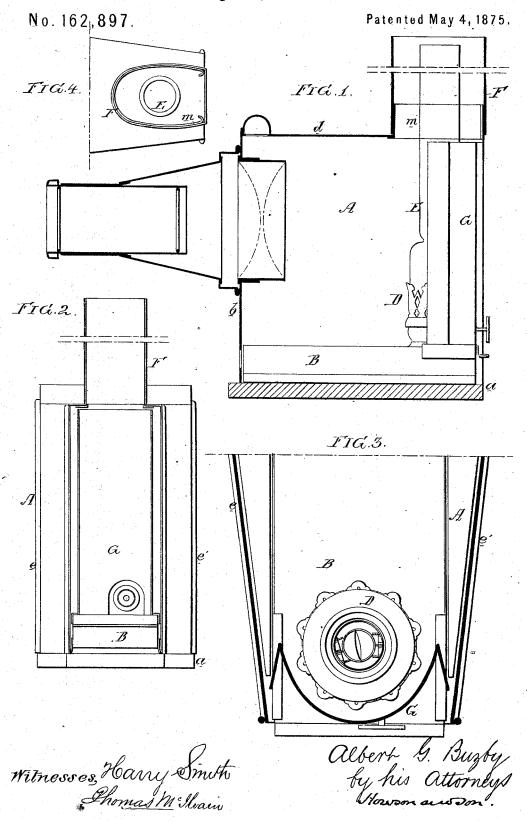
A. G. BUZBY. Magic-Lantern.



## UNITED STATES PATENT OFFICE.

ALBERT G. BUZBY, OF PHILADELPHIA, PENNSYLVANIA.

## IMPROVEMENT IN MAGIC LANTERNS.

Specification forming part of Letters Patent No. 162,897, dated May 4, 1875; application filed March 12, 1875.

CASE B.

To all whom it may concern:

Be it known that I, Albert G. Buzby, of Philadelphia, Pennsylvania, have invented certain Improvements in Magic Lanterns, of which the following is a specification:

The object of my invention is to construct a cheap and effective magic lantern; and this object I attain in the manner which I will now proceed to describe, reference being had to the accompanying drawing, in which—

Figure 1 is a vertical section, Fig. 2 a rearview, and Fig. 3 a sectional plan, of the lantern

The outer casing of the body A of the lantern consists of the base a, the front b, top d, and sides e and e', which are inclined inward from front to rear, this casing being made, by preference, of ordinary tinned plate, with the exception of the base a, which may be made of wood. As regards the lenses, lens-tubes, and space for admitting the pictures, they are the same as in magic lanterns heretofore used. B is the reservoir of the lamp, and consists of a flat box, of such a width as to be easily introduced into and withdrawn from the interior of the body A through the open rear of the same; and to the top of this reservoir, near its outer end, is secured a burner, D, which may be similar to that of an ordinary coal-oil lamp, the glass chimney E of the burner projecting upward through the body A of the lantern and into the lower portion of the metal chimney F, the upper end of which is, as usual, bent at right angles, and which is detachable from the body A. To the reservoir B of the lamp is attached the shield G, of the curved form represented in the sectional plan, Fig. 3, this shield serving the twofold purpose of closing, or nearly closing, the rear of the body A, and of a reflector for the burner; or a reflector may be interposed between the lamp and the

shield. This shield may be so connected to the reservoir B that it can be readily detached therefrom.

One of the main advantages of my improvement is the facility with which the entire lamp, with its glass chimney, may be removed from the body of the lantern, all that is necessary for this purpose being to detach the metal chimney F from the body, when the glass chimney will be at liberty, and can be removed outward with the lamp, for the flange m, to which the said metal chimney is fitted, is open at the rear, as shown in Fig. 4, the chimney itself being tubular, and, when in its place, inclosing the upper portion of the glass chimney.

Another advantage of my invention is the

decreased bulk of the body A.

Lanterns have been heretofore made to receive ordinary lamps; but the body of the lantern, in such cases, has always been made high enough to receive the glass chimney.

I am enabled to reduce the height of the body, and, consequently, its cost, by making the glass chimney project into the metal chimney, as described.

I claim as my invention—

1. A magic lantern having a body to the rear of which is adapted a shield, G, combined with a removable lamp, all substantially as set forth

2. The combination of the flange m, open at the rear, with the tubular metal chimney F

and chimney E.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ALBERT G. BUZBY.

Witnesses:

HUBERT HOWSON, HARRY SMITH.