H. RIGBY.

Stereoscope.

No. 161,278. Patented March 23, 1875.

Fig. 1.

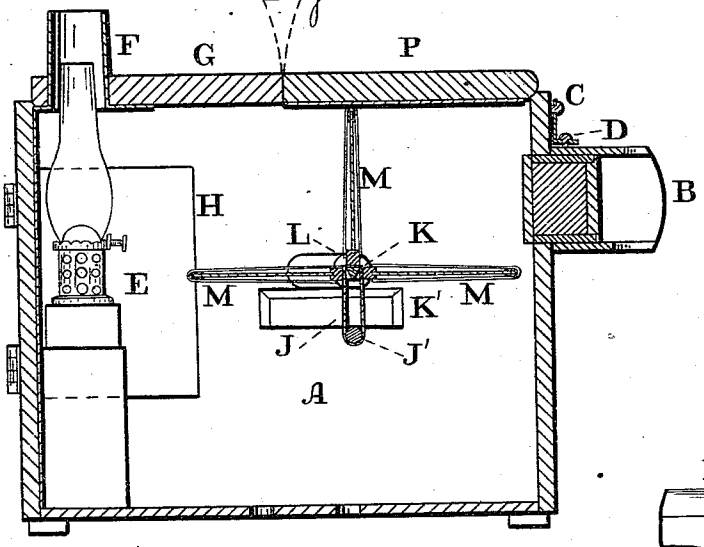



Fig. 3.

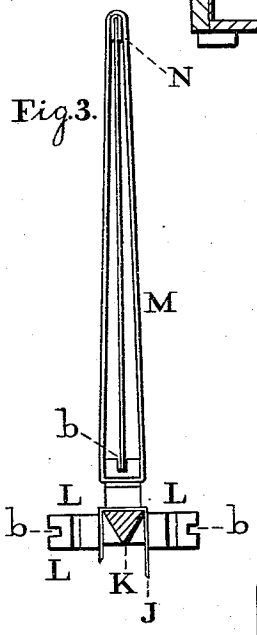



Fig. 4.

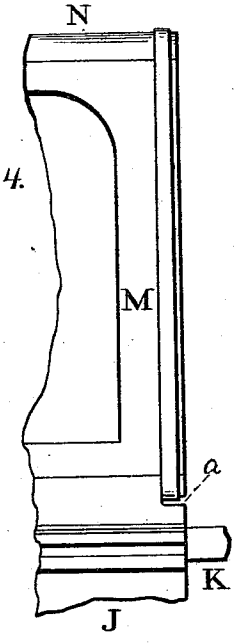
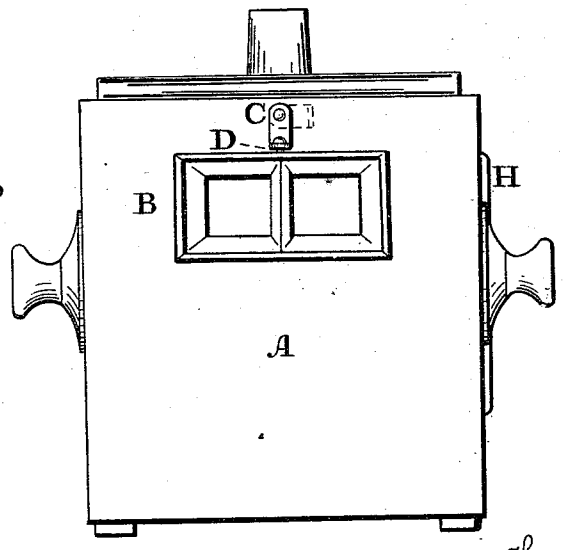



Fig. 2.

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# UNITED STATES PATENT OFFICE.

HENRY RIGBY, OF PHILADELPHIA, PENNSYLVANIA.

## IMPROVEMENT IN STEREOSCOPES.

Specification forming part of Letters Patent No. **161,278**, dated March 23, 1875; application filed December 24, 1874.

*To all whom it may concern:*

Be it known that I, HENRY RIGBY, of the city and county of Philadelphia, and State of Pennsylvania, have invented a new and useful Improvement in Stereoscopes; and I do hereby declare the following to be a clear and exact description of the nature thereof, sufficient to enable others skilled in the art to which my invention appertains to fully understand, make, and use the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a central longitudinal vertical section of the device emboding my invention. Fig. 2 is a front view thereof. Fig. 3 is a side view of a detached portion.

Similar letters of reference indicate corresponding parts in the several figures.

My invention consists in the lens-frame, fitted to the box so that it may be readily removed therefrom. It also consists in a lamp within the box for illuminating transparent pictures. It further consists in means for supporting the views on the conveying-band.

Referring to the drawings, A represents the stereoscopic box, which may be of well-known form and construction. B represents the lens-frame or eyeglass-holder, which is fitted into an opening in box A, and adapted to be removed therefrom. In order to hold the frame in position, I employ a catch, C, which is secured to the box, and engages with a pin or keeper, D, on the frame B.

In cases where the box is to be carried or transported the lens-frame may be removed by releasing the catch from said frame and withdrawing the latter from the box, whereby the frame may be placed within the box or otherwise, and is in no danger of breakage or injury.

Within the box, at the rear thereof, there is mounted a lamp or illuminator, E, behind which is a suitable reflector, and said lamp is so arranged that it will illumine transparent views interposed between the lens and lamp, such views being constructed to be illuminated, in order to properly exhibit their beauty and effect. The chimney of the lamp projects into a guard, F, which consists of a tubular metallic piece secured to an upwardly-swinging lid, G, at the top of the rear of the box. This guard directs the smoke and heat from the box, and prevents the burning thereof. When the lamp is to be removed or lighted the lid G is swung up, the guard F following the motion, and the lamp is then accessible. During the exhibition of the views the condition of the lamp may be examined by opening a door, H, at the side of the box. The views are advanced by means of an endless band or conveyer, J, and an angular shaft, K, mounted on the sides of the box A, on which shaft the portion of the conveyer which is uppermost has a bearing. By rotating the shaft the conveyer is carried around a sufficient distance to bring a view upright in line with the lens. In order to keep the conveyer properly taut, the lowering portion thereof passes around a shaft, J′, whose upward movement is limited by blocks K′, secured to the inner sides of the box A, and against which the shaft J′ comes to a bearing. On the conveyer are secured strips L, whose ends are notched, as at *a*, and whose outer faces are grooved, as at *b*.

The view is placed in the groove *b*, and distended rubber bands M slipped over the top of the view, at the sides thereof, with the notched end *a*, whereby the view will be nicely held, this construction permitting at any time the removal and application of views.

In order that the views may stand the strain, which is apt to bend the top edges thereof, I secure thereto metallic strips N, which stiffen the views and protect their upper edges.

When light is to be thrown on the views in front, the front lid P is opened and manipulated in a manner similar to that in common use. The box will be provided with suitable openings for admission of air to the lamp.

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

1. The stereoscopic box A, in combination with the removable eyeglass or lens frame B and catch C D, substantially as and for the purpose set forth.

2. The stereoscopic box A, provided with

stereoscopic lens and lens-frame in front, an illuminator at the rear, and a revolving view-holder arranged between the lens and illuminator, substantially as and for the purpose set forth.

3. The view-holder, constructed of the piece L, with horizontal notch *a* and vertical grooves *b*, in combination with the vertically-arranged rubber bands M, substantially as and for the purpose set forth.

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