

W. H. LEWIS.
Stereoscope.

No. 201,804.

Patented March 26, 1878.

Fig. 2.

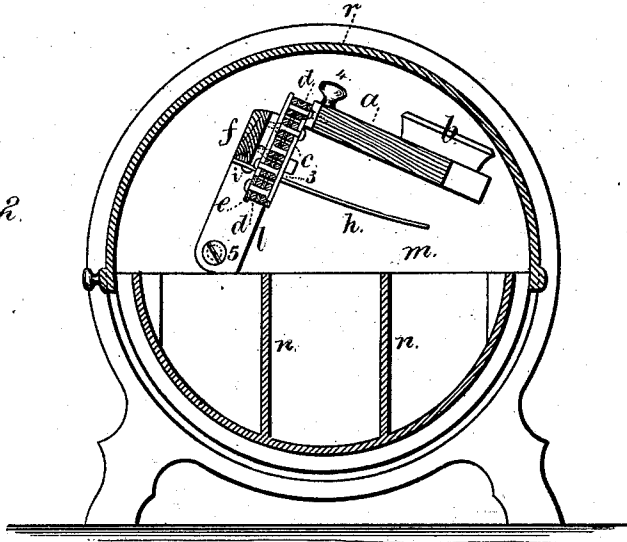
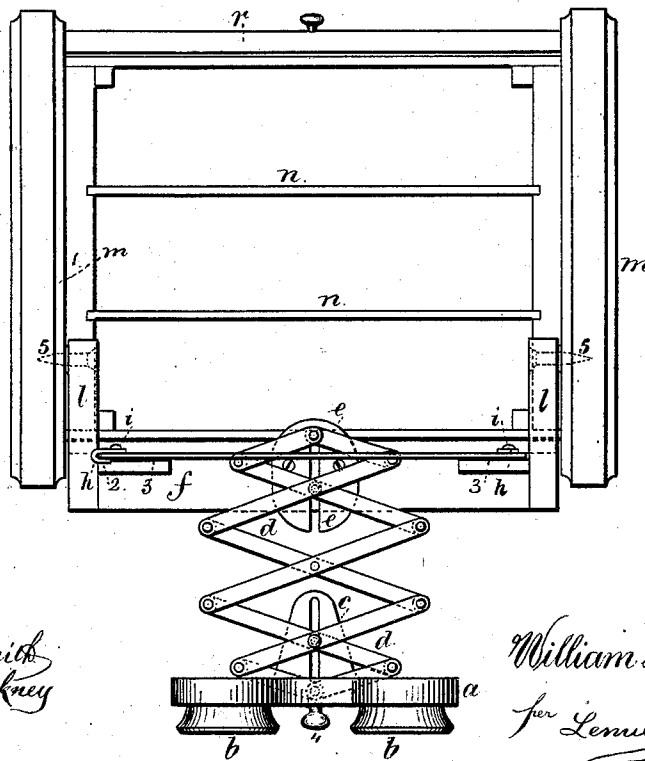


Fig. 1.



Witnesses

*Chas. H. Smith
Geo. F. Pinckney*

Inventor

*William H. Lewis
per Lemuel W. Perrell
att'y*

UNITED STATES PATENT OFFICE

WILLIAM H. LEWIS, OF BROOKLYN, E. D., ASSIGNOR TO E. AND H. T. ANTHONY & CO., OF NEW YORK, N. Y.

IMPROVEMENT IN STEREOSCOPES.

Specification forming part of Letters Patent No. **201,804**, dated March 26, 1878; application filed December 18, 1877.

To all whom it may concern:

Be it known that I, WILLIAM H. LEWIS, of Brooklyn, E. D., in the county of Kings and State of New York, have invented an Improvement in Stereoscopes, of which the following is a specification:

A lazy-tongs has been used between the lens-holder and picture-holder; but as the ends of the joint-bars slide in transverse grooves or slots in the instrument, there is friction that produces inequality when moving the lens and picture-holder toward or from each other.

The ends of the lazy-tongs in my instrument are pivoted directly and firmly to the picture-holder and lens-holder, respectively, and there are longitudinal guide bars or plates, that maintain the proper parallelism of the parts as they are moved to adjust the focus.

Stereoscopes have been made to fold into boxes to exclude dust. I construct the box in a peculiar manner, so that it is adapted to hold numerous pictures in receptacles provided for them, and also to receive the instrument.

In the drawing, Figure 1 is a plan of the instrument as in position for use, and Fig. 2 is a vertical section of the instrument and case in their folded position.

The lens-holder *a*, eye-pieces *b*, or shield and lenses, are of any usual character, and to the bottom edge there is a slotted metal plate, *c*, and *d d* are the parallel cross-bars, riveted together at the meeting ends and at the intersections, forming the device known as "lazy-tongs," and one central rivet is attached to this plate, and the next slides in the slot of the plate *c*, and the picture-holder *f* is provided with a similar slotted plate, *e*, so that the picture-holder and the lens-holder are always parallel to each other; but they can be moved nearer together or farther apart, as desired, the parallel extension cross-bars allowing of such movement.

The picture is held by spring-arms *h*, of sheet metal, attached by screws *i* to the vertical surface of the picture-holder, and the upper end of one or of both arms may be bent around, as at 2, to pass from the back of the picture toward the front and steady the stereoscope-picture, and it is also preferable to have the lower edge of the picture rest in a groove or rabbet, 3, at its lower edge.

The picture-holder is represented as provided with the side arm-pieces *l*, by means of which it is connected with the picture-holding case; but the stereoscope-instrument may be detached or detachable from the case.

The handle or downward projection at 4 is convenient for moving the lens-holder and adjusting the focus.

At 5 the arms *l* are united by screws or pivot-pins to the interior surfaces of the end pieces *m m* of the stereoscope-holding case. In the lower part of this case are the partitions *n n*, that divide up the box portion of the case into which the card-board or other views or pictures are placed. There is space for a large number of these views, and the construction of the box and the proportioning of the parts are such that when the stereoscope-instrument is folded it can be swung back upon the pivots 5, and occupy a position above the pictures, and beneath the inclosing-cover *r*, so that both instrument and pictures are inclosed and preserved from dust or injury.

I have shown this case as cylindrical, with the bottom a half-cylinder, and the cover a half-cylinder of larger diameter, so that the cover will slide in circular grooves in the inner opposite faces of the end pieces or heads.

In place of the slotted plates *c*, to keep the parts of the lens-holder and picture-holder parallel, any other suitable guides, such as bars passing through eyes, may be used.

I claim as my invention—

1. The stereoscope-instrument provided with lazy-tongs that are pivoted at their ends to the middle of the picture-holder and lens-holder, respectively, and provided with guides *c*, as and for the purposes set forth.

2. A case for holding stereoscope-pictures, provided with a box in the lower part for the pictures, and a movable cover, in combination with a folding stereoscope-instrument, connected to said case, and folding beneath the cover thereof, substantially as set forth.

Signed by me this 13th day of December, A. D. 1877.

WILLIAM H. LEWIS.

Witnesses:

GEO. T. PINCKNEY,
CHAS. H. SMITH.