

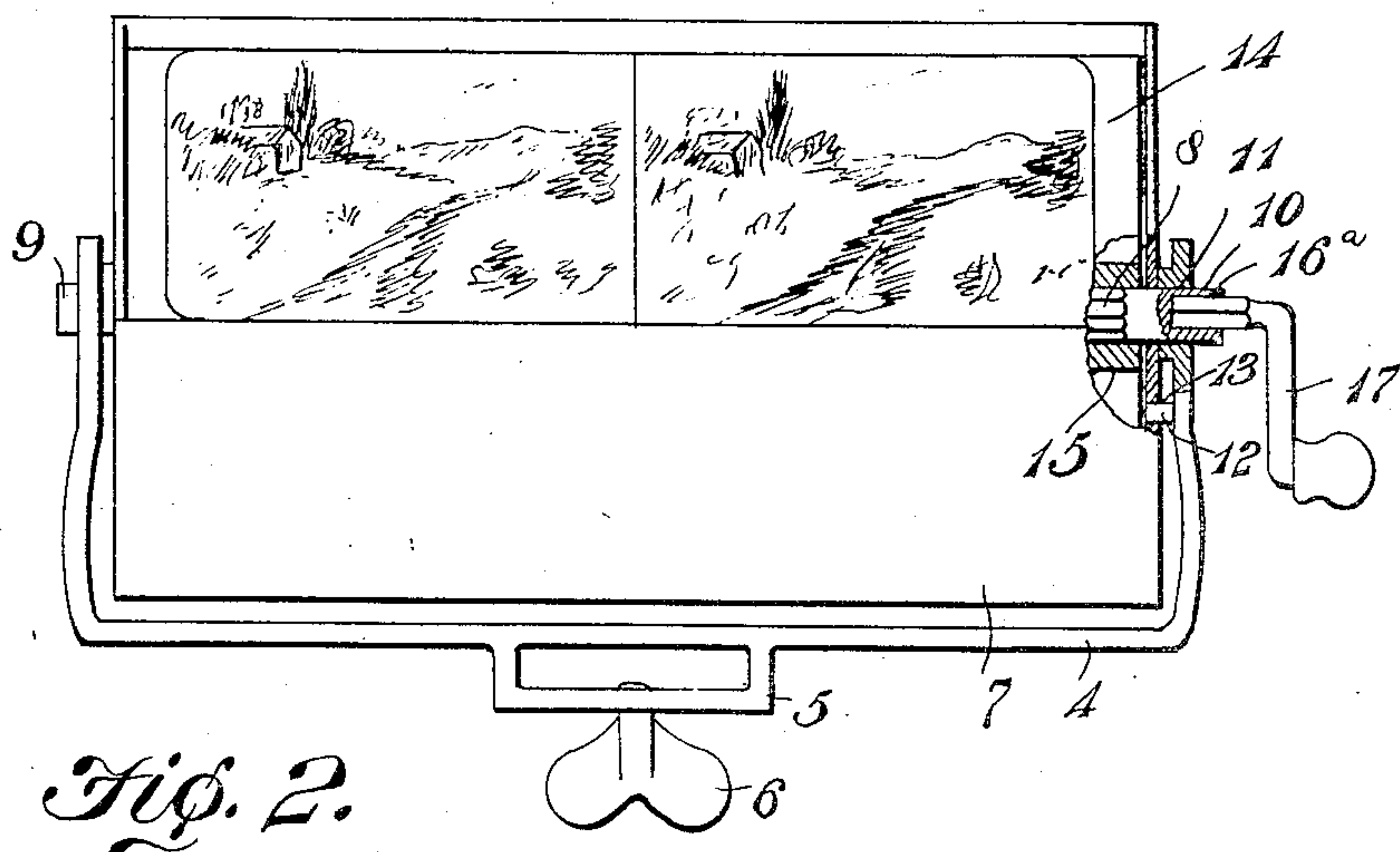
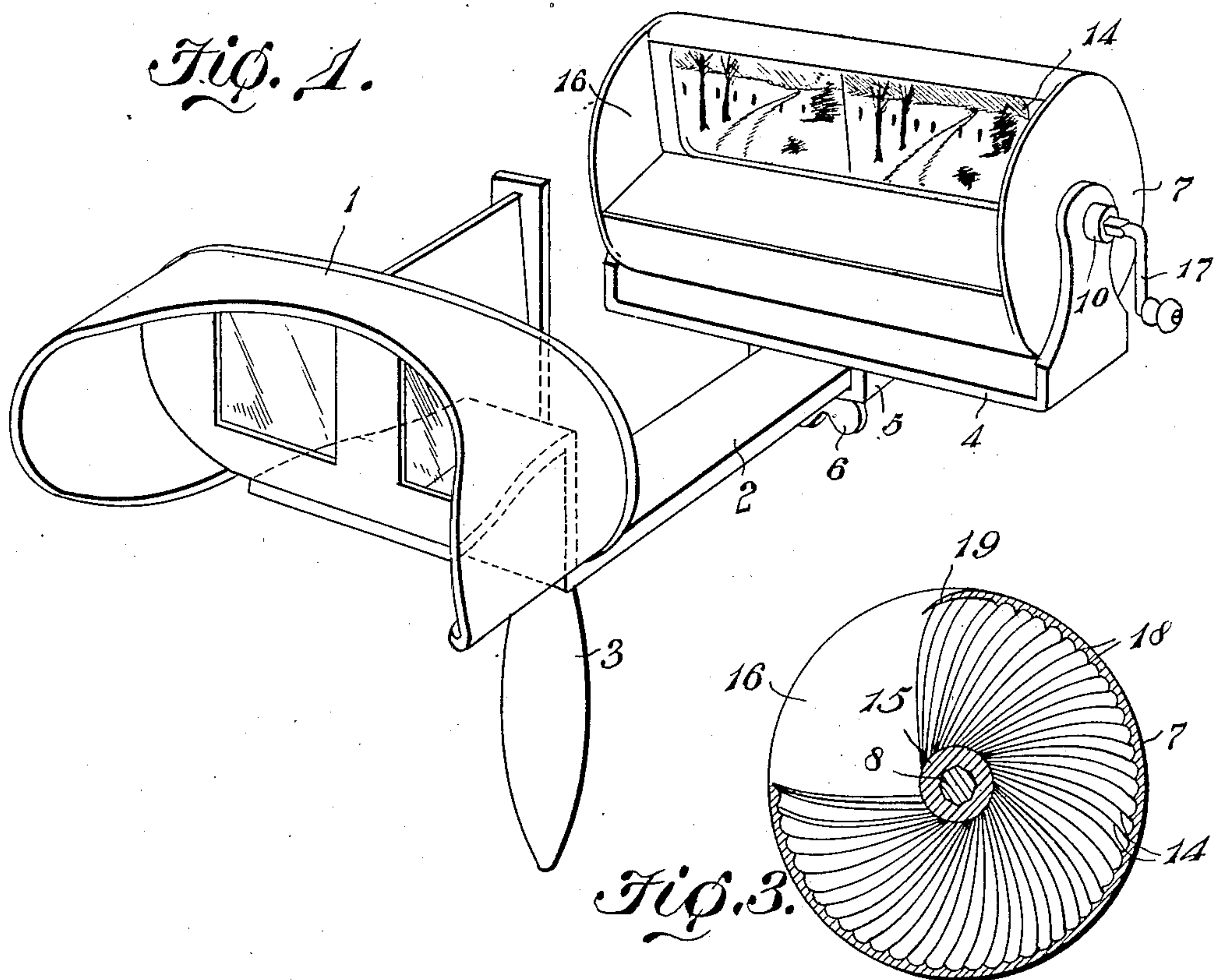
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H. H. ELDREDGE & C. J. DOTY.

MUTOSCOPE.

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UNITED STATES PATENT OFFICE.

HARRY H. ELDREDGE AND CHARLES J. DOTY, OF GUTHRIE, OKLAHOMA TERRITORY.

MUTOSCOPE.

No. 822,438.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that we, HARRY H. ELDREDGE and CHARLES J. DOTY, citizens of the United States, residing at Guthrie, in the county of Logan and Territory of Oklahoma, have invented a new and useful Mutoscope, of which the following is a specification.

This invention relates to stereoscopes, and is primarily designed to avoid the individual handling of the several pictures and to equip the device with improved mechanical means for successively bringing a series of pictures into position for viewing the same through the eyeglasses of the stereoscope. In this connection it is proposed to arrange the picture-handling mechanism for moving the pictures in rapid succession so as to give the effect of a moving picture and also to enable the holding of each picture for any suitable period of time in front of the eyeglasses to permit careful scrutiny of the several pictures.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a perspective view of a stereoscope equipped with the picture-handling mechanism of the present invention. Fig. 2 is a front elevation of the picture-handling mechanism with parts broken away to show the manner of rotatably supporting the picture-containing case. Fig. 3 is a detail cross-sectional view of the picture-containing case.

Like characters of reference designate corresponding parts in all of the figures of the drawings.

To illustrate the application and operation of the present invention, there has been shown in the accompanying drawings the eyeglass-frame or lens-frame 1 of a conventional form of stereoscope, said lens-frame being carried in an elevated position at the front end of an arm 2 and there being a handle 3 depending from the front of the arm.

These parts are common and well known, and therefore may be varied considerably without affecting the spirit of the present invention.

In carrying out the present invention there is mounted upon the arm 2 a mutoscope or mechanism for handling a series of pictures. This mutoscope includes a yoke-shaped bracket 4, disposed transversely across the top of the arm 2 and carrying at its middle a depending loop 5, slidably embracing the arm 2 and equipped with a set-screw 6, piercing the bottom of the loop for engagement with the under side of the arm to rigidly secure the bracket to the arm at any adjusted position thereon. The arms of the yoke-shaped bracket extend upwardly, and a cylindrical case 7 is mounted between said arms loosely upon a rotatable shaft 8, which pierces the ends of the case and has its terminals formed into cylindrical journals 9 and 10, rotatable in bearing-openings 11, formed in the arms or sides of the bracket. To prevent rotation of the case, there is a pin or projection 12, carried by the inner side of one of the arms of the bracket and adapted to be snapped into a socket or opening 13 in the adjacent end of the case.

The series of picture-leaves 14 are bound radially upon a tubular core 15, having a non-circular bore for engagement with the similarly-shaped non-circular middle portion of the rotatable shaft, thereby to interlock the series of picture-sheets and the shaft for simultaneous movement. The series of pictures is introduced as a whole through the opening 16, formed in the upper front quarter of the case, after which the case is placed within the bracket, and then the shaft is thrust through one of the bearing-openings 11 of the bracket, then through the shaft-opening in the adjacent end of the case, thence through the core 15, and finally through the other end of the case and the bearing-opening in the other arm of the bracket. The journal-terminal 10 of the shaft is provided with a non-circular socket 16^a for the reception of the non-circular terminal of a removable crank-handle 17, whereby the series of pictures may be rotated at any desired rate of speed within the case.

Upon reference to Fig. 3 of the drawings it will be noted that the interior of the case

is corrugated longitudinally, so as to form a series of longitudinal ribs 18, over which the free ends of the picture-leaves wipe, thereby to maintain the leaves individually separated in order that they may pass one at a time across the opening 16 rather than to move thereacross in bunches.

In practice the device being assembled as hereinbefore described, the lens-frame or eye-glass-frame is fitted to the eyes, and then the mutoscope is adjusted along the arm 2 until properly focused, whereupon the set-screw 6 is tightened and the device is in condition for use. If it is desired to carefully scrutinize each picture, the crank-handle 17 is given a very slight movement, so as to permit the exposed picture to slip past the top edge of the opening 16, and thus expose the next succeeding picture, which may be viewed as long as desired, and then the crank is given another slight movement to bring the next picture into view. When it is desired to produce the effect of moving pictures, the crank-handle is rapidly rotated, so as to swing the pictures in rapid succession across the opening of the case 7, which produces the desired effect in the well-known manner.

Attention is directed to the fact that the top edge 19 of the opening 16 is deflected inwardly, so as to somewhat constrict the opening 16, thereby to effectually hold each picture in an upright position until it snaps past the confining flange or lip 19, which has the effect of accelerating the rotary movement of each picture as it passes across the view-opening of the case.

Having thus described the invention, what is claimed is—

1. A mutoscope comprising a non-rotatable case having a view-opening, a yoke-shaped bracket straddling the case, there being a pin-and-socket engagement between the case and one arm of the bracket to prevent rotation of the case, a tubular rotatable core within the case, a series of radially-disposed pictures carried by the core, an endwise-movable rotatable shaft piercing the arms of the bracket and the ends of the case and passing through the core, there being an

interlocking connection between the shaft and the core, and means to rotate the shaft.

2. A mutoscope comprising a cylindrical case having a view-opening and provided with an internal series of longitudinal ribs, and a series of radially-disposed pictures mounted to rotate within the case with their free ends working across the ribbed interior of the case.

3. A mutoscope comprising a cylindrical case having its inner surface ribbed longitudinally in close succession, there being a view-opening in one side of the case, the top edge of the opening being bowed inwardly, and a series of radially-disposed pictures mounted to rotate within the case with their free edges working over the ribbed interior of the case and the inturned upper edge of the view-opening.

4. A mutoscope attachment for stereoscopes comprising a yoke-shaped bracket provided upon its under side with a loop having a set-screw, an endwise-removable rotatable shaft piercing the arms of the bracket and having an intermediate non-circular portion, a non-rotatable cylindrical case pierced by the shaft and having a socket and projection engagement with one of the arms of the bracket to prevent rotation of the case, a tubular core having a non-circular bore receiving the non-circular portion of the shaft, a series of radially-disposed pictures carried by the core, the case being provided with a longitudinal view-opening and having its interior provided with longitudinal ribs in close succession, the top edge of the view-opening being inclined inwardly, the free edges of the pictures working over the ribbed interior of the case and the inturned edge of the view-opening, and means associated with one end of the shaft for rotating the same.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in the presence of two witnesses.

HARRY H. ELDREDGE
CHARLES J. DOTY.

Witnesses:

J. W. McNEAL,
A. L. COCKBURN.