(No Model.)

M. O. GRISWOLD.

COIN CONTROLLED PICTURE OR SURFACE EXHIBITOR.

No. 472,704. Patented Apr. 12, 1892.

Fig. 1.

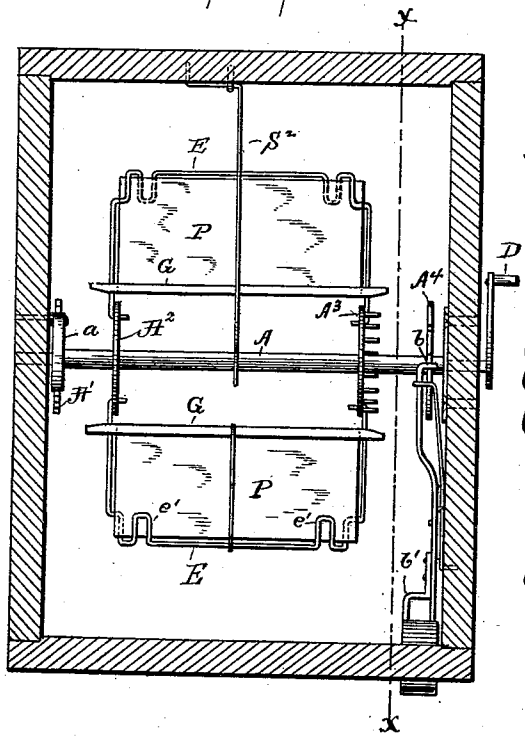


Fig. 2.

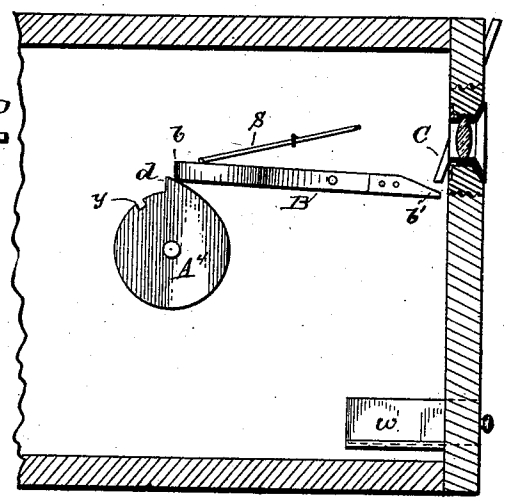


Fig. 3.

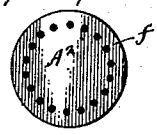


Fig. 4.

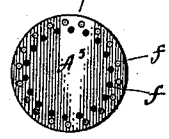
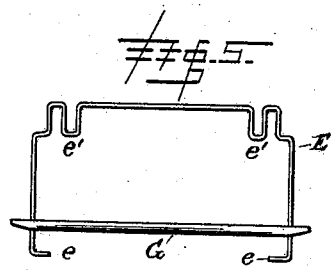


Fig. 5.



WITNESSES

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MILTON OLIVER GRISWOLD, OF ROCK ISLAND, ILLINOIS.

COIN-CONTROLLED PICTURE OR SURFACE EXHIBITOR.

SPECIFICATION forming part of Letters Patent No. 472,704, dated April 12, 1892.

Application filed May 14, 1891. Serial No. 392,784. (No model.)

To all whom it may concern:

Be it known that I, MILTON OLIVER GRISWOLD, a citizen of the United States, residing at Rock Island, in the county of Rock Island and State of Illinois, have invented certain new and useful Improvements in Coin-Controlled Picture or Surface Exhibitors; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The object of my invention is to provide a coin-controlled mechanism for picture-exhibitors operated by hand.

It is also my object to simplify and improve upon the mechanism for coin-controlled picture-exhibitors operated by any suitable motor.

It is also my object to provide an improved picture-carrier which shall present and hold each picture at right angles to the plane of vision.

In the accompanying drawings, forming a part of this specification, my invention is shown as applied to a stereoscope operated by hand.

Figure 1 is a plan view with the top of the stereoscope removed. Fig. 2 is a cross-section taken on the line $x\ x$ of Fig. 1, and Figs. 3, 4, and 5 are detail views.

A denotes a shaft having rigidly secured thereto near one end a ratchet-wheel A′, provided with a suitable pawl *a*. A^2 and A^3 denote disks rigidly secured to said shaft at suitable distances apart and having a series of perforations *f* near their peripheries, the disk A^3 being also provided with a series of small pins *f′* just above and a little to one side of the perforations *f*, as shown in Fig. 4. A^4 denotes a disk rigidly secured to said shaft near the end and provided with a cam *d* and having a rectangular notch *y* in its periphery, as shown in Fig. 2.

B denotes a lever pivoted to a wear-plate secured to the wall of the stereoscope, said lever having a lip *b* formed on one end, which rests in the notch *y* or rides upon the periphery of the disk A^4 when in motion. The other end of said lever is provided with a fork or prong *b′*, riveted thereto, which in its normal position bears against the lower end of the coin-chute.

S denotes a spring secured at one end to the wall of the stereoscope, the other end bearing upon the lever B, as shown in Fig. 2.

The coin-chute C has its upper end formed for a coin-slot of a size to allow the admission of a predetermined coin.

W denotes a drawer for removing the coin which falls from the chute C.

D denotes a crank-handle rigidly secured to the end of the shaft A projecting through the case.

E denotes a wire frame made in one piece, as shown in Fig. 5, having its ends bent inward at right angles to form hooks *e e*, the top piece or cross-bar having formed therein rectangular clamps *e′ e′*, projecting downwardly. These clamps pass behind the picture, as shown in Fig. 1, by the descending picture. The ascending picture shows how said frame engages the corners of the same in front. G denotes a rest or bottom piece to said frame. P denotes the pictures in the holders or frames. Said bottom piece is formed of a narrow strip of metal doubled lengthwise upon itself and secured near the lower ends of said frame above the hooks *e e*. The bottom of the picture rests in this metal strip.

S^2 denotes a spring secured to the upper part of the rear wall of the stereoscope, its free end extending forward in the plane through which the tops of the wire frames E pass. Said frames E are secured to the disks A^2 A^3 by inserting the hooks *e e* into the holes or perforations *f*. The pins *f′* serve as supports to the picture frames or holders, and the spring S^2 serves to keep the picture-holders thus mounted at right angles to the focal plane of the lenses.

The operation is as follows: The mechanism being locked, a coin of a predetermined weight is inserted in the coin-slot and passes through the chute to the forked end of the lever B, striking said forked end and overcoming the resistance of the spring S sufficient to release the lip *b* of the lever B from the notch in the disk A^4, thus unlocking the mechanism. This allows the shaft carrying the picture holders or frames to be revolved by the crank in the direction shown by an arrow. As the picture-frames are revolved the pins *f′* engage with the right side of the

frames or holders, lifting them upward to present the picture and then allowing them to fall forward a short distance and supporting them in their downward course. The top pieces or cross-bars of the frames come in contact with the spring S^3 as the pictures approach the plane of vision, and said spring impinges against the cross-bars as they pass, preventing each frame from falling forward immediately after it passes the center of gravity, thus presenting the picture as it is revolved for a given distance at right angles to the plane of vision. After the picture-holder passes from contact with said spring S^2 it falls forward until the side of the frame strikes against the pin next ahead. After the series of pictures have been exhibited the shaft A, carrying the disk A^4, will have made one revolution, bringing the cam *d* in the position shown in Fig. 2, in the act of raising the end of the lever bearing upon said disk and lowering the ends bearing upon the coin-chute, which allows the escape of the coin into the drawer W. After the cam *d* passes under the lever it drops behind said cam. The spring S bearing upon said lever all the while forces the lip of the same into the notch and raises the forked end again in contact with the coin-chute, where it remains locked in position until another coin strikes it.

The ratchet-wheel A′ serves to prevent the shaft A being turned backward after one or more of the pictures have been shown.

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

1. A coin-controlled picture-exhibitor consisting of the spring-actuated coin-lever, the detent-cam disk mounted upon a shaft, said shaft carrying a picture-holder consisting of two perforated disks, one of which has a series of pins, and a series of picture holders or frames having their ends bent inward to form hooks or feet to engage with said perforations and pins, substantially as shown and described.

2. In a coin-controlled locking mechanism for displaying pictures, a picture-carrier consisting of two disks mounted upon a shaft and perforated near their peripheries, one of said disks having a series of pins, picture holders or frames made in one piece, having their ends bent inward to form hooks, the top pieces or cross-bars having formed therein rectangular clamps, and a spring suspended above said cross-bars to present the frames at right angles.

In testimony whereof I affix my signature in presence of two witnesses.

MILTON OLIVER GRISWOLD.

Witnesses:

JOHN S. BELL,

FRANK. H. WARREN.