(No Model.)

V. P. DE KNIGHT.

COIN CONTROLLED SURFACE EXHIBITOR.

No. 523,569. Patented July 24, 1894.

FIG. 1.

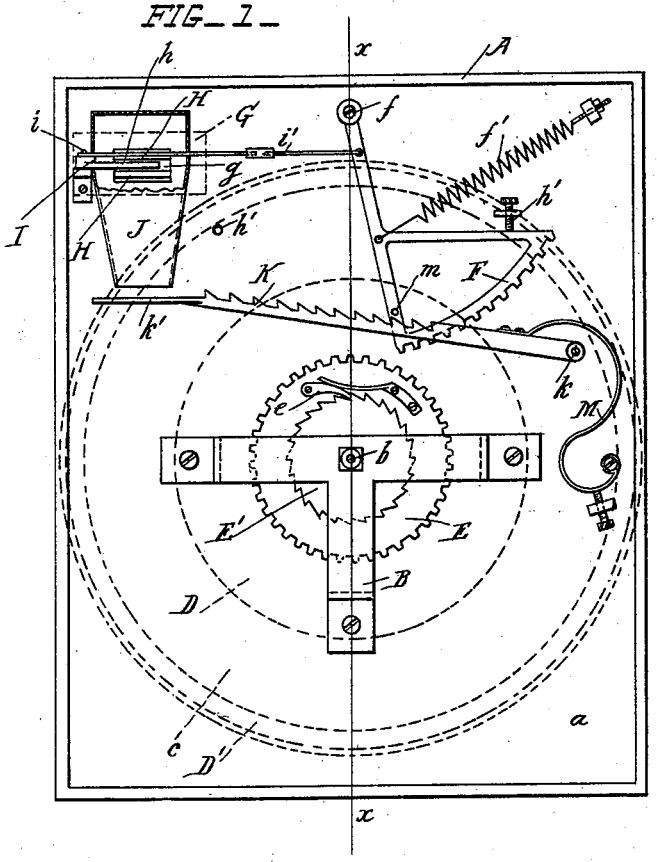


FIG. 2.

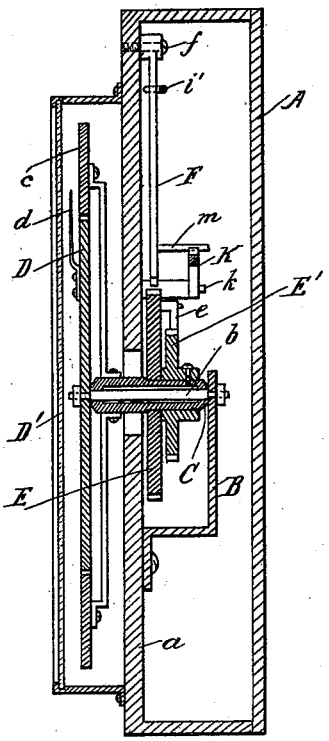


FIG. 3.

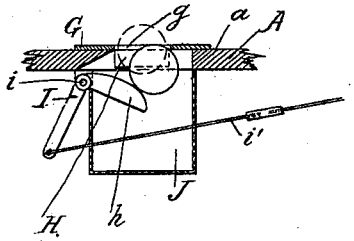
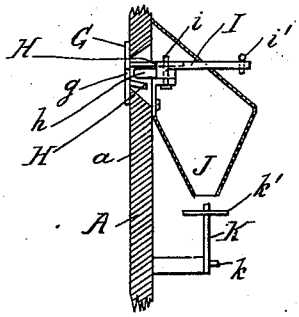


FIG. 4.



WITNESSES

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COIN-CONTROLLED SURFACE EXHIBITOR.

SPECIFICATION forming part of Letters Patent No. 523,569, dated July 24, 1894.

Application filed April 30, 1894. Serial No. 509,506. (No model.)

To all whom it may concern:

Be it known that I, VICTOR P. DE KNIGHT, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Coin-Controlled 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.

This invention relates to coin controlled surface exhibitors; and it consists in the novel construction and combination of the parts hereinafter fully described and claimed.

In the drawings: Figure 1 is a front view of the operating mechanism secured inside the case. Fig. 2 is a vertical section taken on the line *x x* in Fig. 1. Fig. 3 is a plan view of the coin-operated bell-crank lever; and Fig. 4 is a side view of the same and the coin guide plates.

A is an inclosing case of any convenient form or design, and *a* is a plate to which the working mechanism of the device is secured.

B is a bracket secured to the plate *a*, and *b* is a pin secured to the said bracket and projecting through a hole in the plate *a*.

C is a sleeve journaled on the pin *b* and arranged to turn thereon with as little friction as possible; and *c* is an exhibiting disk secured to the said sleeve C.

D is a stationary disk secured on the end of the pin *b*. D′ is a glass window arranged in front of the disks D and *c*, but this window may be dispensed with if desired. The front of the disk *c* is the surface upon which the pictures or other subject matter to be exhibited are placed.

The pictures are exhibited by the disk *c* when revolved, and may be seen through the window D′. A pointer *d* or a mark on the disk D is used to call attention to whichever picture or subject that may be behind it when the disk *c* stops after having been revolved or spun, or, if desired, the window D′ may be partially opaque and have only a small sight hole through which a single picture or subject may be displayed in the manner commonly used in picture exhibitors of this class.

The pictures may be men, horses or other figures in racing attitudes, or mottoes such as ordinarily found on wheels of fortune.

E is a toothed wheel operatively connected to the sleeve C. In a simple machine the wheel E is secured to the sleeve C, but it is preferably connected to it by a ratchet mechanism.

E′ is a ratchet wheel secured to the sleeve C, and *e* is a spring-actuated pawl pivoted to the wheel E and engaging with the ratchet wheel. This ratchet wheel permits the wheel E to run loose on the sleeve C in one direction.

F is a toothed segment journaled on the pin *f* projecting from the plate *a*, and *f′* is a spring normally holding the toothed segment out of gear with the toothed wheel E.

G is a plate secured to the front of the plate *a* and provided with a slot *g* of a size suitable to permit a small coin, such as a cent, to be inserted through it, and to pass through a hole in the plate *a*.

H are guide plates adjacent to the slot *g*. These guide plates are of any convenient size and shape which will prevent the coin from dropping prematurely when thrust into the slot.

I is a bell-crank lever pivoted on the pin *i* behind the slot *g*. One arm *h* of this bell-crank lever is arranged in the path of the coin and is preferably curved and provided with a rounded edge so that the coin may slip off it suddenly.

J is the chute the coin slides down after passing through the slot *g*.

The other arm of the bell-crank lever I is pivotally connected to the toothed segment F by the rod *i′*.

When a coin is thrust through the slot *g* it pushes back the arm *h*, as shown in Fig. 3, and moves the toothed segment F into gear with the wheel E. When the ratchet mechanism is not used the toothed segment revolves the disk *c* for a part of a revolution, and the use of the said ratchet mechanism is to permit the toothed segment to revolve the wheel E for a part of a revolution in one direction without turning the disk *c*. When the coin slips off the arm *h* and falls down the coin chute, the spring *f′* pulls back the toothed segment suddenly. This gives the

toothed wheel E and the disk *c* a sharp spin, and they continue to revolve for some time after the toothed segment has passed out of gear with the wheel E. The impulse given to the disk *c* is a mere matter of chance depending upon the slipping of the coin off the arm *h* and the accidental suddenness with which the spring *f'* is permitted to act. The position of any particular picture or motto on the disk *c* with regard to the pointer or sight hole when the disk stops, is therefore a matter of great uncertainty and this constitutes the attraction or pleasure to be derived by using the device. The toothed segment is preferably provided with stops *h'* to limit its movements.

In order to prevent the device from being used otherwise than by inserting a coin in a legitimate manner, a toothed bar K is pivoted on the pin *k* projecting from the plate *a*.

M is a spring which normally supports the bar K and holds it in contact with the under side of a pin *m* which projects from the toothed segment F. The bar K is provided with a plate *k'* at its end, and this plate is arranged under the coin chute. If a knife blade is inserted through the coin slot, the arm *h* is pushed back and the toothed segment is turned to the left, but the spring *f'* fails to spin the disk *c* because the teeth of the bar K engage with the pin *m* and prevent the toothed segment from moving to the right.

When the device is operated by a coin inserted in a legitimate manner, the toothed segment is first turned to the left and the pin *m* caused to engage with one or another of the teeth of the bar K according to the accidental slipping of the coin off the arm *h*, and the toothed segment is then released suddenly by the weight of the coin which falls onto the plate *k'* and depresses the toothed bar K. The coin then slides off the plate *k'* and falls to the bottom of the case A.

What I claim is—

1. The combination, with a revoluble exhibiting disk, and a toothed wheel operatively connected therewith; of a pivoted toothed segment adapted to gear into the toothed wheel, a plate provided with a coin slot, an arm pivoted behind the slot in the path of the coin, and operated thereby when pushed forcibly through the slot a rod pivotally connecting the said arm and segment, and a spring normally holding the said segment out of gear with the said wheel operating to retract the segment and spin the exhibiting disk upon the passage of a coin past the said arm, substantially as set forth.

2. The combination, with a revoluble exhibiting disk, a toothed wheel journaled concentric therewith, and ratchet mechanism connecting the said disk and wheel and permitting the wheel to run loose in one direction; of a pivoted toothed segment, a spring normally holding the said segment out of gear with the said wheel, a pivoted arm adapted to be forcibly pushed back by a coin, and a rod pivotally connecting the said arm and segment, whereby the disk is spun upon the passage of a coin past the said arm, substantially as set forth.

3. The combination, with a revoluble exhibiting disk, and a toothed wheel arranged concentric with the disk and operatively connected with it; of a pivoted toothed segment, a spring normally holding the said segment out of gear with the said wheel, and a pivoted arm connected with the said segment, and adapted to be forcibly pushed back by a coin thereby moving the segment into gear with the wheel and permitting the said spring to retract the said segment and spin the said disk when the coin slips past the said arm, substantially as set forth.

4. The combination, with a revoluble exhibiting disk, and a toothed wheel operatively connected therewith; of a pivoted toothed segment provided with a projecting pin, a spring-supported toothed bar engaging with the said pin, coin-controlled operating devices for moving the toothed disk into gear with the said toothed wheel, and a spring for retracting the said toothed segment suddenly and causing the said disk to spin freely upon the insertion and descent of a coin, substantially as set forth.

5. The combination, with a revoluble exhibiting disk, and a toothed wheel operatively connected therewith; of a pivoted toothed segment, a plate provided with a coin slot and coin guide plates, a bell-crank lever pivoted behind the slot and having one arm arranged between the guide plates in the path of the coin, a rod pivotally connecting the other arm of the bell-crank lever with the toothed segment, and a spring normally holding the toothed segment out of gear with the said wheel and operating to spin the said disk upon the insertion of a coin, substantially as set forth.

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

VICTOR P. DE KNIGHT.

Witnesses:
HERBERT W. T. JENNER,
SAML. A. DRURY.