

(No Model.)

2 Sheets—Sheet 1.

B. S. MOLYNEUX.
COIN CONTROLLED CYCLORAMA.

No. 438,170.

Patented Oct. 14, 1890.

Fig. 1.

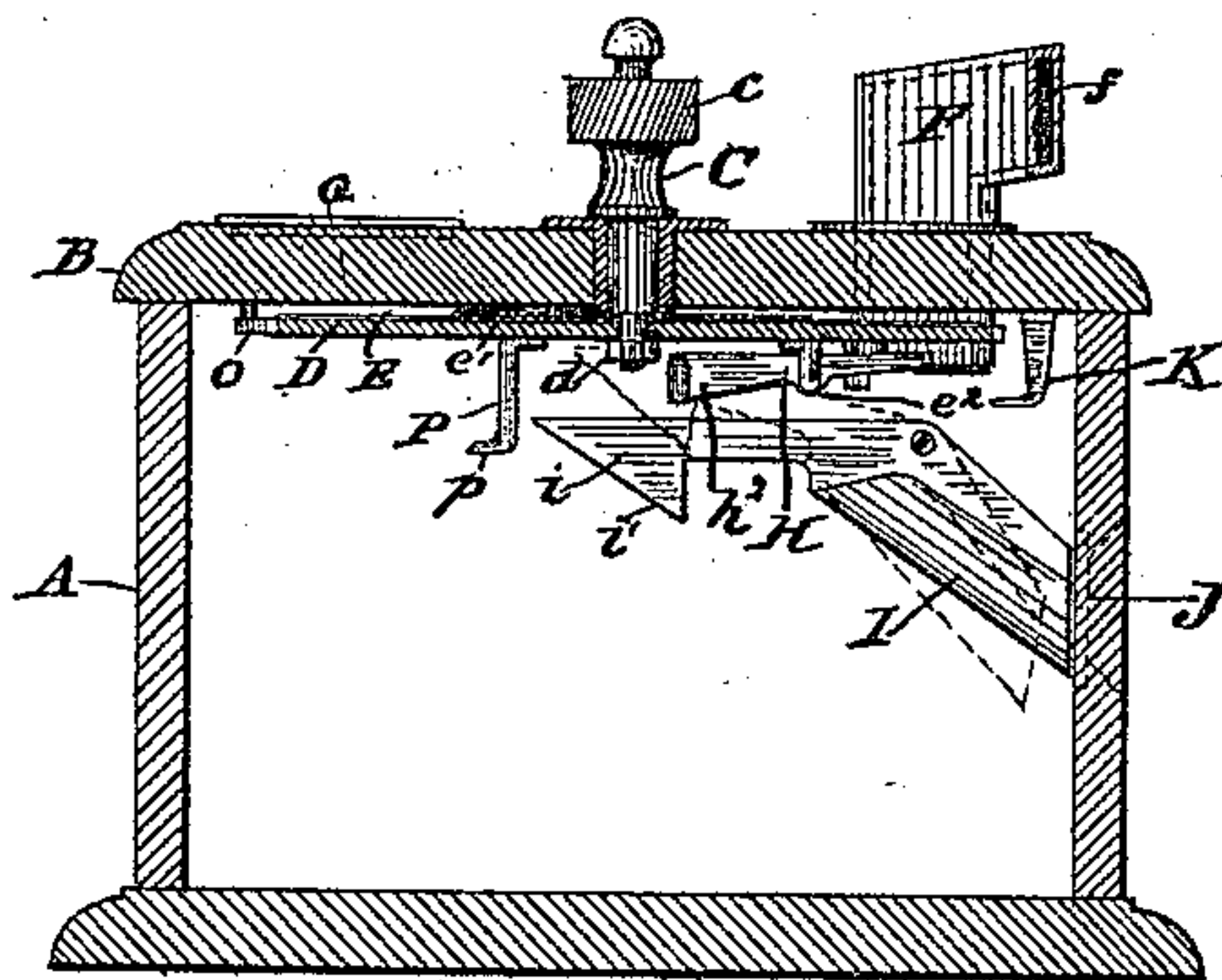


Fig. 2.

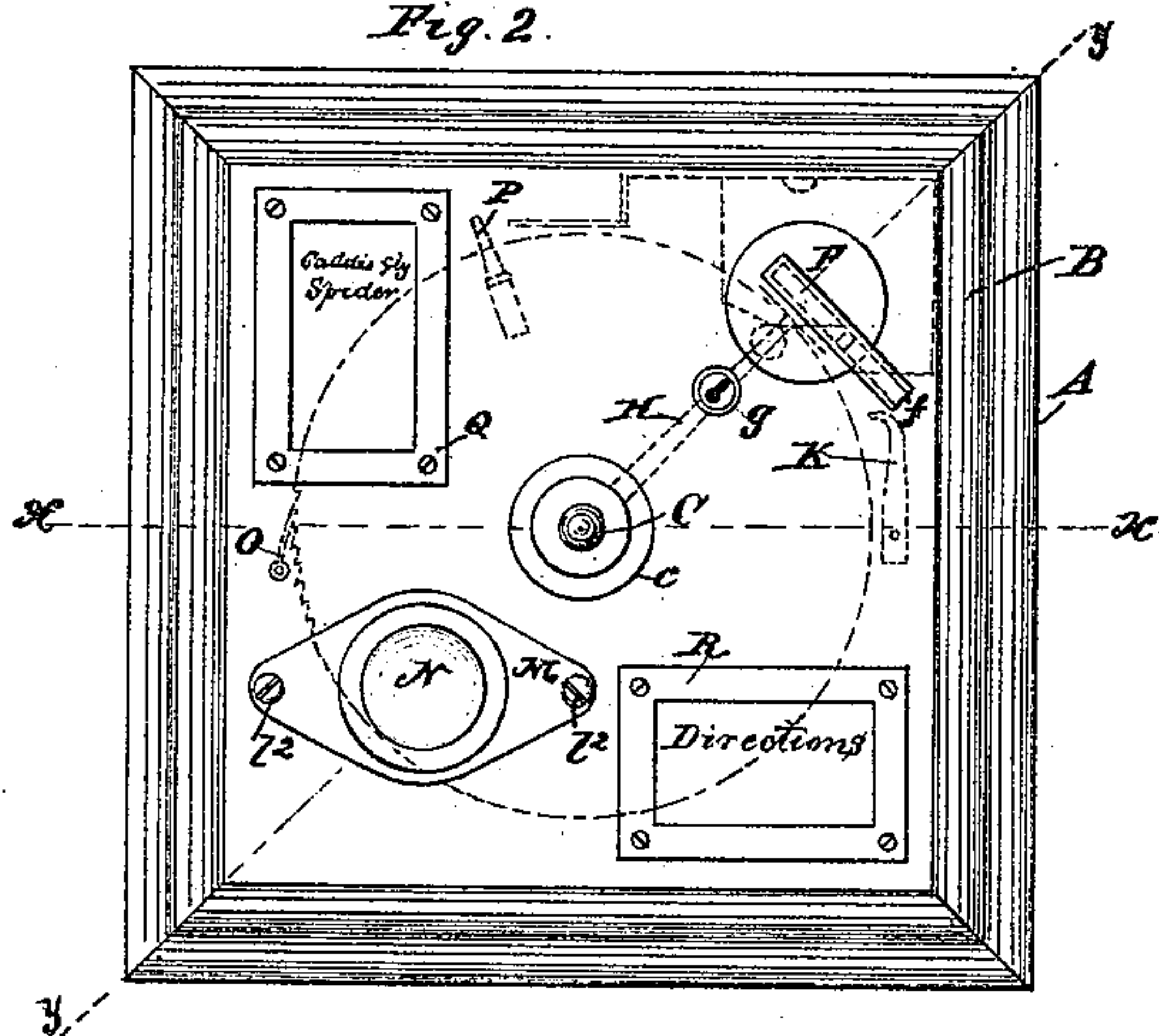


Fig. 3.

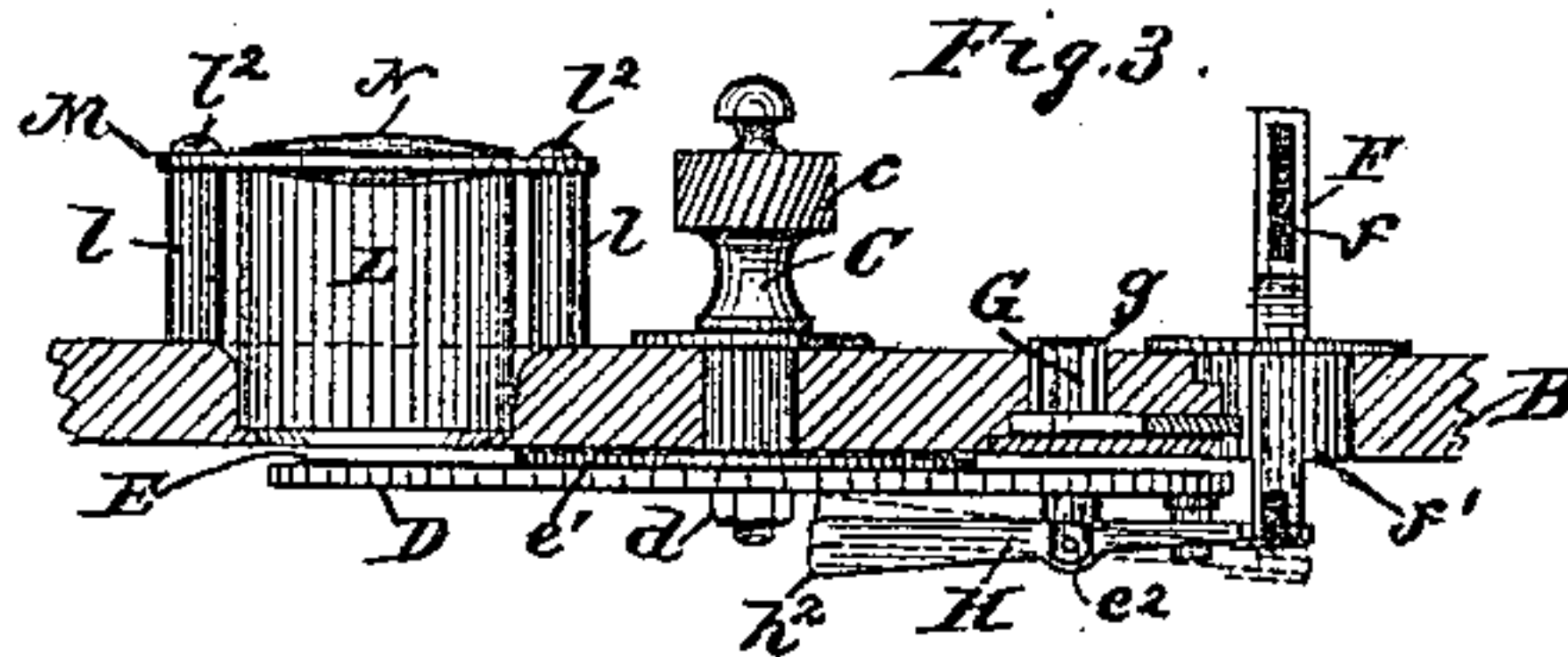
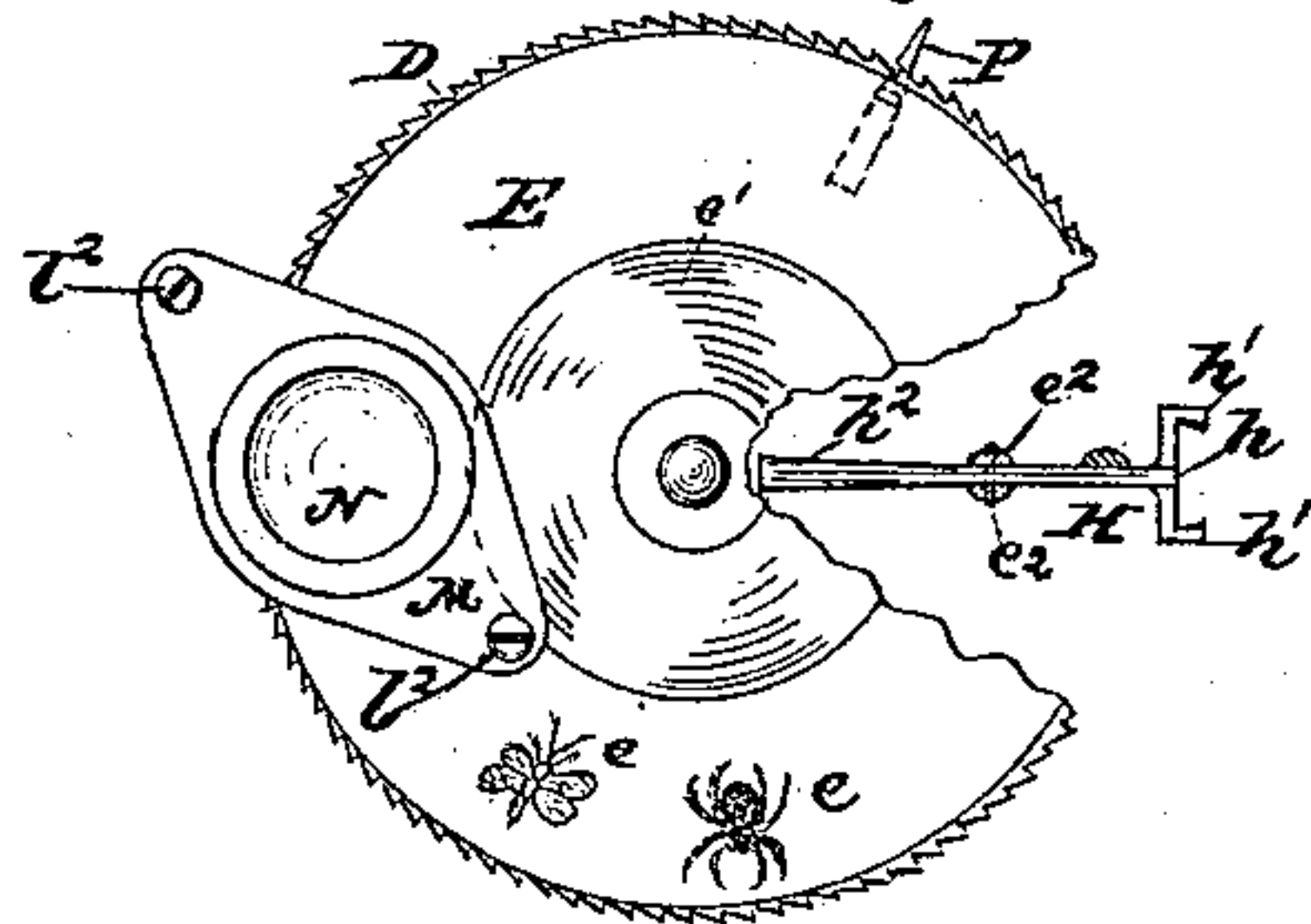


Fig A



Witnesses.
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Inventor,
Barton S. Molyneux
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UNITED STATES PATENT OFFICE.

BARTON S. MOLYNEUX, OF MINNEAPOLIS, MINNESOTA.

COIN-CONTROLLED CYCLORAMA.

SPECIFICATION forming part of Letters Patent No. 438,170, dated October 14, 1890.

Application filed November 9, 1889. Serial No. 329,736. (No model.)

To all whom it may concern:

Be it known that I, BARTON S. MOLYNEUX, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Coin-Controlled Microscopic Cycloramas; 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.

My invention relates to devices for exhibiting under the power of a magnifying-glass all sorts of objects mounted on a movable table at certain intervals apart and brought one by one beneath the lens, and has for its purpose to produce a highly-entertaining as well as instructive exhibition.

In the practical embodiment of my invention I construct a box-like case or frame having a cover. This cover is pierced at some convenient point to receive a vertical shaft or spindle having a knob or handle on its portion above the cover, and a stem with a screw-thread thereon extending below the cover. A table (shown as in the shape of a disk with a toothed periphery) is secured on the portion of the spindle below the cover, and on this table is a plate or chart of card-board or other material, upon which are mounted or otherwise applied the objects or representations thereof it is intended to exhibit, or the objects can be placed directly on the table. In the cover is a sight-opening, preferably covered by a glass or other transparent tube, upon the top of which is clamped the magnifying-lens. In another opening of the cover is a coin-receiving chute, which is detachably secured in position by a lock, the key-hole escutcheon of which is secured to the top surface of the cover. Pivoted in suitable lugs depending from the bottom surface of the disk or table is a lever weighted at one end and provided with a coin-receiving portion at the other. In the normal position of the disk or table the coin-receiving end of this lever lies directly beneath the opening of the chute, and the disk is prevented from movement by the contact of said lever with the chute. The weighted end of said lever is of almost equal

preponderance with the coin the machine is adapted to receive—a five-cent piece, for instance—and should a coin of a different denomination or a slug or disk of less weight be dropped in the chute the lever will not descend, and consequently the disk cannot be turned. A suitable pawl engages with teeth on the periphery of the disk and prevents it from being turned backward. Attached to the cover, adjacent to and in the path of movement of the coin-receiving end of the lever is a finger or projection which will come into contact with the coin and discharge it from the lever. As the coin falls from the lever, it drops into a chute pivoted to the side of the box, and is retained by said chute in front of an observation-pane until a second coin is dropped in the chute, when the disk will again be set free, and a projection depending from its lower surface will strike an arm of the chute and dump the same to discharge the coin into the box. By this means a clerk or other employé of the establishment in which the machine is placed is enabled to detect a spurious coin or other article and to note the person depositing the same. Attached to the top of the cover are label-holders, one of which contains a card with directions for operating the machine, and the other the names of the objects on the exhibition card or table. Interchangeable exhibition-cards are employed, and once in a given time the cards are changed and a new one is placed in the label-holder. In this way almost every conceivable object desired can be exhibited and the machine be made to present a perfect kaleidoscope of objects or views. Interchangeable lenses of more or less magnifying power can be employed, according to the number of diameters it is desired to enlarge the object or objects.

In the accompanying drawings Figure 1 is a vertical section of a machine embodying my invention on the line xx of Fig. 2. Fig. 2 is a plan view. Fig. 3 is a section of the cover, showing many parts in elevation on line yy , Fig. 2. Fig. 4 is a plan view of the lens, toothed disk, and exhibiting-card, broken away to show the pivoted coin-receiving lever mounted on the under surface of the disk. Fig. 5 is a side elevation of the invention,

with the cover raised. Fig. 6 is a plan view of the exhibiting-card and washer, and Figs. 7 and 8 are respectively a plan view and side elevation of the coin-receiving lever.

5 Similar letters refer to similar parts throughout the several views.

A is the box-like frame of the machine, and B the cover thereof.

10 C is a shaft or spindle mounted in a suitable bushing in the cover and having a milled or knurled finger-button *c*, and a reduced portion threaded upon its end to receive a suitable nut projecting below the cover.

15 D is a peripherally-toothed table, shown as in the shape of a disk perforated at its center to fit upon the reduced portion of the spindle.

E is an exhibition card or chart, on which is mounted the series of natural objects *eee*, or the representations thereof it is desired to 20 exhibit. This card is of nearly the same diameter as the table, and over it is placed a washer *e'*, also axially perforated to fit upon the reduced portion of spindle C, the table, card, and washer being clamped together 25 thereon by a nut *d*.

F is an angular coin-receiving chute mounted in a suitable perforation of the cover and extending below the same. The mouth portion *f* of said chute is inclined so that a coin 30 placed therein will roll down by gravity. The hub *f'* of the chute is grooved to receive the ward of a lock G, the key-hole escutcheon *g* of which slightly projects above the top surface of the cover. By detachably locking the 35 chute in position it can be readily removed should it become clogged.

H is a lever having a slot *h* of a size just sufficient to receive and retain a coin of the desired denomination—for instance, a five- 40 cent piece—provided with inclined end walls *h'*. This lever is pivoted at or about its center between suitable lugs or standards *e²*, secured to the under side of the disk D, and is provided with an end *h²* of sufficient pre- 45 ponderance to nearly counterbalance the weight of a coin—such as a five-cent piece—which the machine is designed to receive. It will be observed that this lever not only weighs the coin, but has a slot adapted to re- 50 ceive a coin of the desired denomination only, so that should a penny or other smaller coin be placed in the chute it will roll down the same and drop through the slot *h* of the lever into the box below. In this manner the coin 55 is not only weighed, but is also measured by the lever, so that slugs, disks, wads, or smaller coins will not depress the same to release the table.

I is a chute pivoted to the side of the box 60 or case, and *i* is an arm extending therefrom.

J is a pane of glass or other transparent media located in the side of the box opposite the delivery end of chute I.

65 K is a finger or projection depending from the cover and adapted to come into contact with the coin held in the slot of lever H and

discharge the same therefrom. The coin as it falls from said lever is caught and retained by chute I in front of the observation-pane J, so that its denomination or character can 70 be ascertained by the employé in charge of the machine.

L is a tube, preferably composed of glass or other transparent media, secured in an opening of the cover. *ll'* are tubes or rods with 75 threaded sockets mounted on the cover on opposite sides of the tube L.

M is a plate perforated and recessed to receive the magnifying-lens N, which plate is clamped to the devices *ll'* by suitable screws 80 *l²*. It is of course obvious that a series of interchangeable lenses N may be employed, any one of which can be secured on the top of the transparent tube L by the plate M. In this manner a glass of the desired magni- 85 fying power can be readily substituted for the one in use, if the objects on the table require more or less enlargement.

O is a pawl which engages with the teeth on the disk D and prevents it from being 90 turned backward.

P is a dog attached to the under surface of disk or table D and provided with a projection *p*, which engages with the inclined end *i'* of arm *i* of chute H just after the disk is 95 started, and dumps the chute to discharge the coin held therein into the box A.

Q is a label-holder attached to the top of the cover, containing a card with the names of the objects carried by the disk, and R is a 100 similar holder having a card with the directions printed thereon for operating the machine.

S S' is a suitable lock for the cover.

The operation of the invention is as fol- 105 lows: If a coin of the denomination the machine is adapted to receive is placed in the chute, it will roll down the inclined mouth portion thereof and drop upon the end of lever H and be caught and retained by the inclined 110 end walls *h'* of the slot thereof, depressing this end of the lever so that it will clear the chute or a projection on the side thereof. By then grasping the knurled knob or handle *c* the disk D and the object card or chart E 115 mounted thereon, if one is employed, can be rotated to bring each object beneath the lens N, or sight-opening, if the lens is not employed. During the first part of the revolution of the disk the coin held in the slot of 120 the lever will be discharged by the finger or stripper K and will drop into chute I and be retained opposite the observation-glass J, thus enabling it to be inspected and its character ascertained, the coin being retained in this 125 position until the motion of the disk is arrested by contact of lever H with the chute F, and thereafter until a new coin is dropped into said chute and the lever is again released, when the projection P will dump the 130 chute and the coin will drop into the box.

It will be seen that two safeguards are pro-

vided for the detection of spurious coins, slugs, wads, &c., and that if the coin-chute should become clogged by accident or design it can readily be detached to permit the removal of the obstruction.

Many modifications could be made that would come within the province of my invention. For instance, the object chart or card could be carried by a table mounted on a horizontal axis or on a sector-shaped table, or on a slide adapted to be moved under the microscope to bring each object or representation thereof in succession beneath the glass. A suitable motor could also be employed for intermittently moving the table beneath the glass, which motor would be released by the deposit of a proper coin. So, too, the objects could be attached to or representations thereof placed on the table itself and a series of interchangeable tables employed, each of which would present a different set of objects.

Many parts of the invention are adapted to be employed with various forms of vending apparatus, and I do not wish to be understood as limiting myself to their use in a device of the character described.

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

1. A cyclorama comprising a frame provided with a sight-opening, a table provided with a coin-controlled device, and a card or chart having a series of objects or representations thereof carried by said table and movable beneath said opening, substantially as and for the purpose specified.

2. A cyclorama comprising a frame provided with a magnifying-glass, a table provided with a coin-controlled device, and a card or chart having a series of objects or representations thereof carried by said table and movable beneath said glass, substantially as and for the purpose specified.

3. A cyclorama comprising a frame provided with a magnifying-glass, a card or chart having a series of objects or representations thereof movable beneath said glass, a table for supporting said card or chart, a coin-chute, and a coin-actuated releasing device carried by the table, substantially as and for the purpose specified.

4. A cyclorama comprising a movable table provided with a card having a series of objects to be exhibited, and a coin-controlled lever carried by the table, substantially as and for the purpose specified.

5. A cyclorama comprising a box-like frame having a suitable cover, a magnifying-lens located over an opening in said cover, a table movable beneath the cover, a card or chart having a series of objects or representations thereof, and a coin-controlled releasing device carried by the table, substantially as and for the purpose specified.

6. A cyclorama comprising a frame and a magnifying-glass mounted thereon, a table

carrying a series of objects or representations thereof movable beneath the glass, and a coin-controlled lever carried by the table, substantially as and for the purpose specified.

7. A cyclorama comprising a frame and magnifying-glass, a series of interchangeable cards or charts, a device on which any one of said cards or charts can be mounted to move beneath the glass, and coin-controlled means for releasing said device, substantially as and for the purpose specified.

8. A cyclorama comprising a box and cover having a coin-receiving chute and magnifying-glass, a shaft or spindle mounted in the cover, a disk having a series of objects or representations thereof secured to the spindle below the cover, and a coin-controlled lever carried by the disk, substantially as and for the purpose specified.

9. A movable table having a series of objects or representations thereof arranged in series thereon and provided with a coin-controlled lever, substantially as set forth.

10. The combination, with a coin-receiving chute, of a movable table carrying a series of objects or representations thereof, and a lever connected to the under side of said table and serving to lock the same from motion until a coin of the proper denomination is dropped into the chute, substantially as and for the purpose specified.

11. A cyclorama comprising a frame having a pane of transparent material, a coin-controlled exhibiting device, and a receptacle for temporarily holding the coin opposite the transparent pane, substantially as and for the purpose specified.

12. The combination, with a frame provided with a sight-opening, of a spindle having a knob or handle, and a coin-controlled table carrying a series of objects or representations thereof mounted on the spindle and movable beneath the sight-opening, substantially as and for the purpose specified.

13. The combination, with a frame, of a coin-chute having a shank mounted in an opening therein and a lock located adjacent to said chute, substantially as set forth.

14. The combination of a box-like frame provided with a sight-opening, a tube of translucent material placed over said opening, a lens carried by the tube, and a coin-controlled exhibiting device movable beneath the tube and lens, substantially as and for the purpose specified.

15. A lever counterbalanced at one end and provided with a slot having inclined end walls for the reception of a coin at the other, substantially as set forth.

16. A lever having a slot provided with inclined end walls of the proper dimensions to catch and retain a coin, said slot being open at one side, substantially as set forth.

17. The combination of a movable table carrying a series of objects or representations thereof, a lever pivoted to the under side of

said table, and a coin-chute having a depending portion with which said lever engages, substantially as set forth.

18. The combination of a movable table carrying a series of objects or representations thereof, a projection attached to said table, and a chute adapted to be dumped by said projection, substantially as set forth.

19. The combination of a movable table, a device connected thereto adapted to receive and retain a coin, and a stripper for discharging the coin, substantially as set forth.

20. In a cyclorama comprising a box, a cover, and a coin-receiving chute, a magnifying-glass and an exhibiting device carried by the cover, substantially as set forth.

21. A microscopic cyclorama comprising a box-like frame having a cover, a table rotatable beneath said cover and bearing a series

of objects or representations thereof, a coin-chute and a magnifying-glass carried by the cover, a device for preventing the table from being turned backward, and a coin-controlled lever pivoted to the under surface of the table, substantially as and for the purpose specified.

22. The combination of the frame having a sight-opening, the table movable beneath said opening, the coin-receiving lever pivoted on the under side of the table, and the stationary stripper, substantially as and for the purpose specified.

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

BARTON S. MOLYNEUX.

Witnesses:

WM. H. BLODGETT,
A. H. OPSAHL.