No. 793,348. PATENTED JUNE 27, 1905.

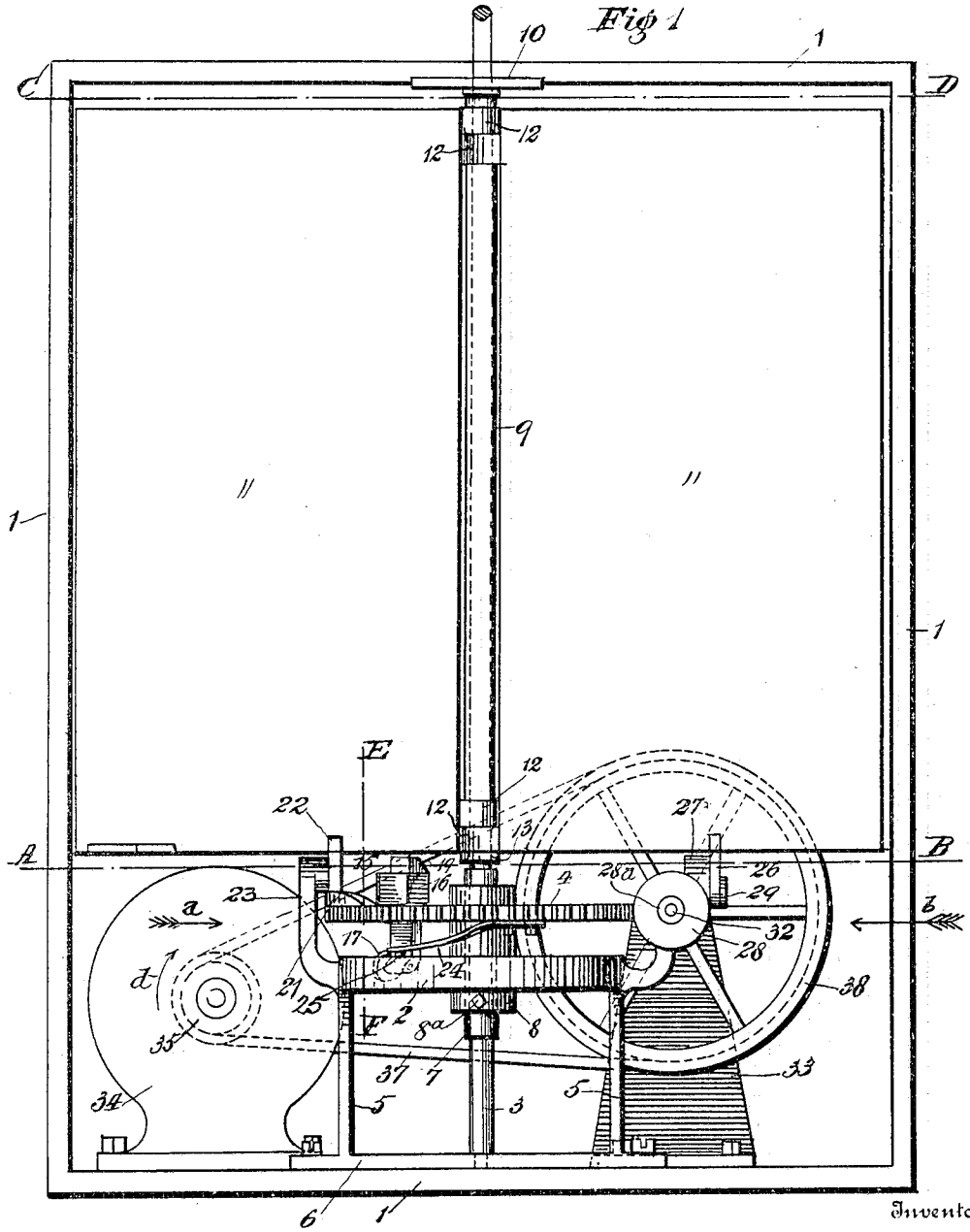
W. C. CARR.

ADVERTISING DEVICE.

APPLICATION FILED JULY 30, 1904.

2 SHEETS—SHEET 1.

Fig 1



Inventor

William C. Carr

By Thompson & Bell

Attorney

Witnesses

T. T. Ayers.

Florence Gimbel.

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2 SHEETS—SHEET 3.

Fig 3

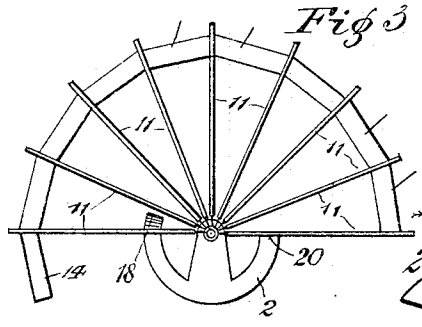


Fig 4

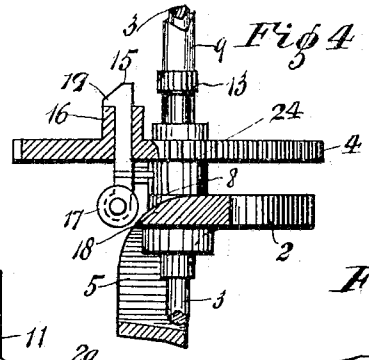


Fig 5

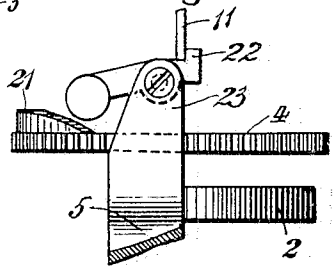


Fig 6

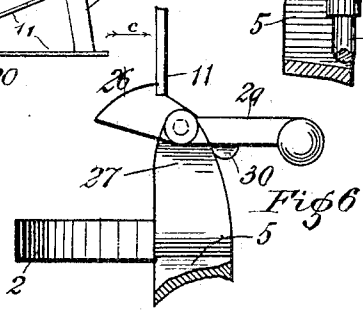
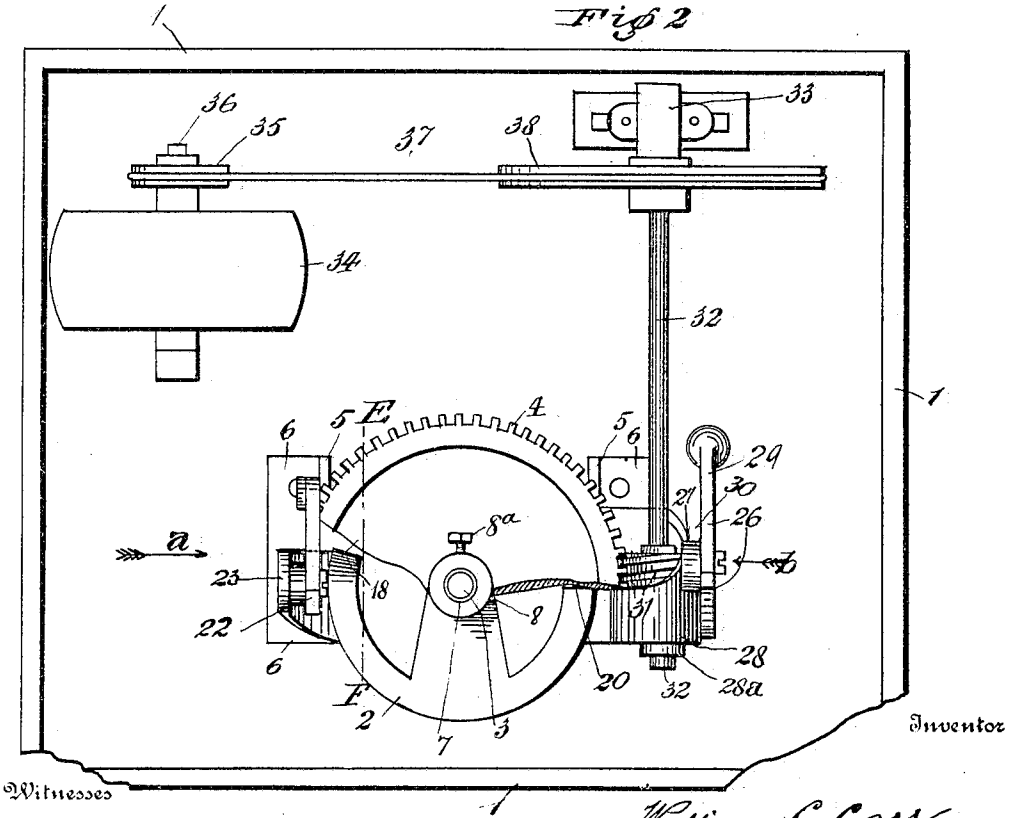


Fig 2



Witnesses

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No. 793,348. Patented June 27, 1905.

UNITED STATES PATENT OFFICE.

WILLIAM C. CARR, OF INDIANAPOLIS, INDIANA, ASSIGNOR TO GEORGE W. CARR, OF INDIANAPOLIS, INDIANA.

ADVERTISING DEVICE.

SPECIFICATION forming part of Letters Patent No. 793,348, dated June 27, 1905.

Application filed July 30, 1904. Serial No. 218,862.

To all whom it may concern:

Be it known that I, WILLIAM C. CARR, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Advertising Devices, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to an improved device for exhibiting display-cards, such as engravings, printed or other advertising matter; and the same consists in a simple mechanism whereby the advertising-cards are turned successively into position to exhibit or expose to view two cards at one time, as will be hereinafter more fully described, and particularly pointed out in the claims.

The object of this invention is to construct an advertising device in which the mechanism for turning the cards successively into position to exhibit one of the faces of each of two cards at one time will be reduced to a simpler form, which mechanism will permit a cabinet of very small dimensions to be used to inclose the entire advertising device and which mechanism is operated to positively and automatically turn the advertising-cards in their order of succession into position to exhibit their opposite faces alternately and two at a time. I attain these objects by means of the mechanism illustrated in the accompanying drawings, in which similar numerals of reference designate like parts throughout the several views.

Figure 1 is a front elevational view of a cabinet, showing a series of advertising-cards mounted to be turned into position to be exhibited and the mechanism for turning said cards inclosed therein. Fig. 2 is a sectional plan view of the same, taken through the line A B. (See Fig. 1.) Fig. 3 is a reduced plan view of the cabinet, taken through the line C D (see Fig. 1) and showing the disposition of the display or advertising cards and the means for holding and retaining same in their relative positions. Fig. 4 is a detail broken side sectional elevational view of a portion of the card-transferring mechanism, taken through the line E F (see Figs. 1 and 2) and looking in the direction of the arrow *a*. Fig. 5 is a broken side elevational view of the same looking in the direction of the arrow *a*, (see Figs. 1 and 2,) and Fig. 6 is a similar side elevational view looking in the direction of the arrow *b*. (See Figs. 1 and 2.)

The cabinet or inclosing case 1 is open at its front portion, or that portion opposite the cards to be exhibited, and this front portion may be closed by a glass or other transparent material to protect the interior and the mechanism from the dust, and the said cabinet or case is of a size sufficient to completely surround the inclosed advertising-cards and the working mechanism thereof.

The semicircular cam 2 is situated concentric with the axis of the vertically-extending shaft 3 and is situated horizontally beneath the worm-wheel 4, and the said cam 2 is supported by the standards 5, which are formed integral therewith and terminate in their common base 6, which latter is secured to the floor of the cabinet 1.

Surrounding the vertically-extending shaft 3 is the tube 7, which has its bearing 8 formed integral on the cam 2, wherein it is adapted to rotate, and on the said tube 7 is secured the worm-wheel 4. A set-screw 8^a is screwed in the hub of the worm-wheel 4 to clamp the tube 7 on the shaft 3, thereby causing the shaft 3 and the tube 7 to rotate with said wheel 4.

An upper vertically-extending fixed tube 9 surrounds the upper prolonged portion of the vertically-extending shaft 3 and is provided at its top end with a flange 10, which is secured to the inner surface of the top portion of the cabinet 1.

The display-cards 11 are provided with hinges 12, which are hinged on the tube 9, and the said cards are held in position on said tube by a collar 13, formed on the end of the said vertically-extending tube 9. In order that the cards may be maintained at equal distances apart or separated sufficiently to permit the turning-pawl 15 to engage the cards one at a time, I provide the distance-bars 14, which bars are secured to the bottom edges of the cards, one to each. The catch

or pawl 15 is of rectangular or square section, and the same is arranged to accurately fit and to slide vertically in its guide-socket 16, formed integral on the worm-wheel 4, which guide-socket 16 is situated at radial distance from the axis of the wheel so that the cam-roller 17, pivoted on the bottom or lower end of said catch 15, will engage the initial or starting end 18 of the cam 2. A shoulder 19 serves the purpose of a stop to prevent the pawl 15 from falling through the guide-socket 16 when disengaged from the cam 2. The release end 20 of the cam 2 is formed at right angles with the top bearing-surface of the cam 2 to provide an abrupt release of the pawl 15 when the latter reaches this point in order to promptly and quickly release the card engaged.

A cam 21 is either secured on or formed integral on the top surface of the worm-wheel 4 in position thereon to pass under the primary latch 22, and the said cam is provided for the purpose of engaging the latch 22 to operate the same to first release the card to be turned prior to the engagement of the same by the pawl 15 to permit the said card to be freely turned from left to right in order to exhibit its reverse side. The primary latch 22 is weighted at the free end of its arm, and the said latch is pivoted and supported on the arm 23 in such position as to engage the card in proper position to be exhibited.

A spring 24 is secured to the bottom side of the worm-wheel 4, and the same has its free end adapted to engage a retaining-pin 25, secured to the bottom end of the pawl 15, and the said spring 24 is provided for the purpose of forcing said pawl 15 downwardly when the roller 17 of the latter is disengaged from the cam 2.

A secondary latch 26 is pivoted to the boss 27, formed integral on the worm-casing 28, and the said latch is adapted to engage the cards 11 as they are moved into position to be engaged by said secondary latch 26. The secondary latch 26 is provided with the weighted arm 29 and the stop 30, which stop is adapted to engage the side of the casing 28.

The worm 31, whereby the worm-wheel 4 is rotated or driven, is secured on its shaft 32, and the said shaft has its worm end fitted to turn in the bearing 28^a, formed on the end of the worm-casing 28, and its opposite end journaled in the standard-bearing 33, which standard-bearing has its foot or base secured to the floor of the cabinet 1. A motor 34 is also secured in position on the cabinet 1, which motor is provided with a drive-pulley 35, secured on its shaft 36. The shaft 32 is driven by a belt 37, which extends around the pulley 35 and the pulley 38, secured on the worm-shaft 32.

The operation of this apparatus is as follows: The motor 34 is first started to drive the shaft 32 and its worm 31, which latter rotates the worm-wheel 4 in the direction of the arrows *d*. (See Figs. 1 and 2.) Immediately the cam 21 on the worm-wheel 4 contacts the free end of the primary latch 22 to disengage its card the pawl 15 is moved into position by the fixed cam 2 to engage the card thus released to turn the same from left to right. Immediately the pawl 15 reaches a position at or near the release end 20 of the cam 2 the card thus released is in position to be engaged by the secondary latch 26. Immediately the secondary latch 26 has engaged said card the continuously-rotating worm-wheel 4 has moved the pawl 15 into position over the release end 20 of the cam 2 to be released to permit said pawl 15 to drop out of engagement with its card to be carried around with the wheel 14 into position again to permit its roller 16 to contact and ascend the entering or inclined end 18 of the cam 2 to again move the pawl 15 into engagement with another or second card to turn the latter, and thus the operation is continued.

Having thus fully described this my invention, what I claim as new and useful, and desire to cover by Letters Patent of the United States therefor, is—

1. In an advertising device, the combination with a vertically-extending fixed shaft and a series of display advertising-cards hinged thereon, of a revoluble gear-wheel situated beneath said vertically-extending fixed shaft and concentric therewith, primary and secondary card-retaining latches situated on diametrically opposite sides of the axis of rotation of said revoluble gear-wheel, a cam on said wheel whereby the primary retaining-latch is operated to disengage the card to be released, a card-engaging catch carried by said wheel, means for automatically operating said catch to alternately move the latter into engagement with the card to be turned and finally drop it out of engagement with said card when the latter has been secured in its new position.

2. In an advertising device, the combination with a vertically-extending fixed shaft and a series of display advertising-cards hinged thereon, of a revoluble gear-wheel situated beneath said vertically-extending fixed shaft and concentric therewith, primary and secondary card-retaining latches situated on diametrically opposite sides of the axis of rotation of said revoluble gear-wheel, a cam on said wheel whereby the primary retaining-latch is operated to disengage the card to be released, a card-engaging catch carried by said wheel, and a cam situated in a plane beneath the said engaging catch for operating the same to engage and release the card to be turned and having its center concentric with the axis of rotation of said wheel.

3. In an advertising device, the combination with a vertically-extending fixed shaft and a series of display advertising-cards hinged

thereon, of a revoluble gear-wheel situated beneath said vertically-extending fixed shaft and concentric therewith, primary and secondary card-retaining latches situated on diametrically opposite sides of the axis of rotation of said revoluble gear-wheel, a cam on said wheel whereby the primary retaining-latch is operated to disengage the card to be released, a card-engaging catch carried by said wheel, and a semicircular cam situated in a plane beneath said engaging catch for operating the same to engage and release the card to be turned and having its center concentric with the axis of rotation of said wheel.

4. In an advertising device the combination with a vertically-extending fixed shaft and a series of display advertising-cards hinged thereon, of a revoluble gear-wheel situated beneath said vertically-extending fixed shaft and concentric therewith, primary and secondary card-retaining latches situated on diametrically opposite sides of the axis of rotation of said revoluble gear-wheel, a cam on said wheel whereby the primary retaining-latch is operated to disengage the card to be released, a card-engaging catch carried by said wheel, a semicircular cam provided with an incline starting end and an abrupt releasing end and situated in a plane beneath said engaging catch for operating the same to engage and release the card to be turned and having its center concentric with the axis of rotation of said wheel.

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

WILLIAM C. CARR.

Witnesses:
THOMPSON R. BELL,
FLORENCE GIMBEL.