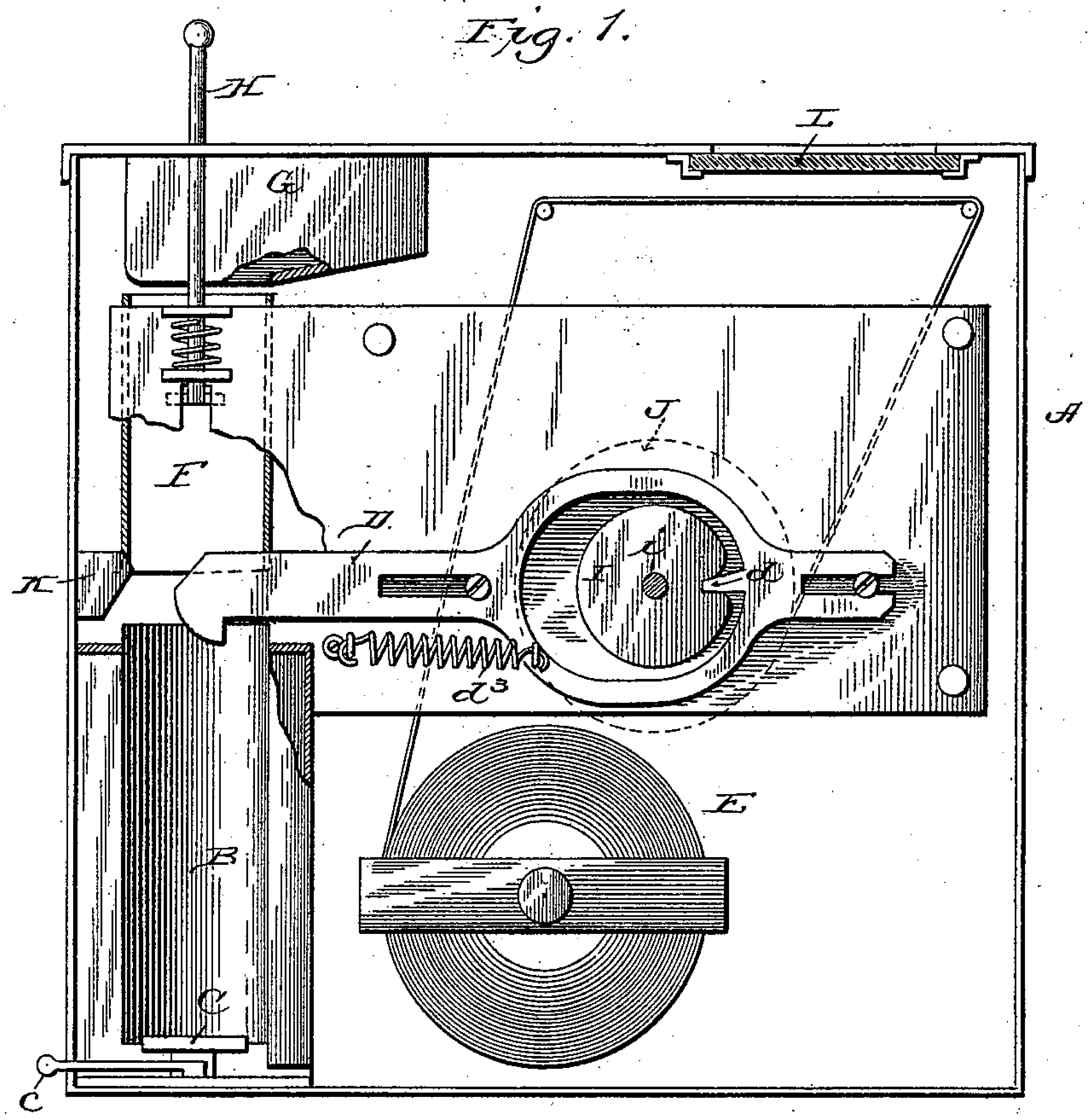
(No Model.) 3 Sheets—Sheet 1.

J. S. BARCUS.

COIN CONTROLLED APPARATUS FOR ADVERTISING AND EDUCATIONAL SYSTEMS.

No. 538,636. Patented Apr. 30, 1895.

Fig. 1.



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his attorney.

(No Model.) 3 Sheets—Sheet 2.

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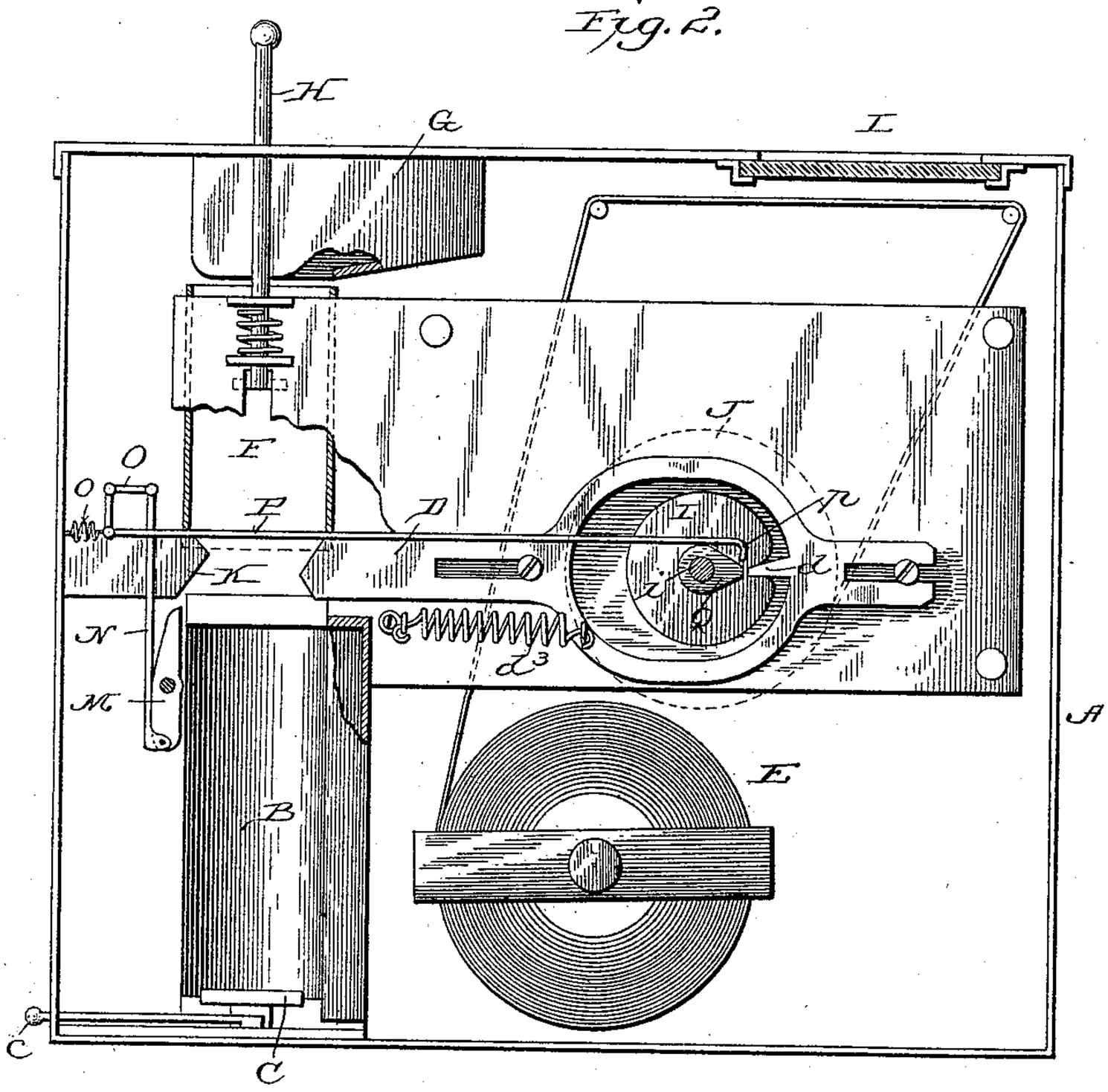
Fig. 2.



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(No Model.) 3 Sheets—Sheet 3.

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Fig. 3.

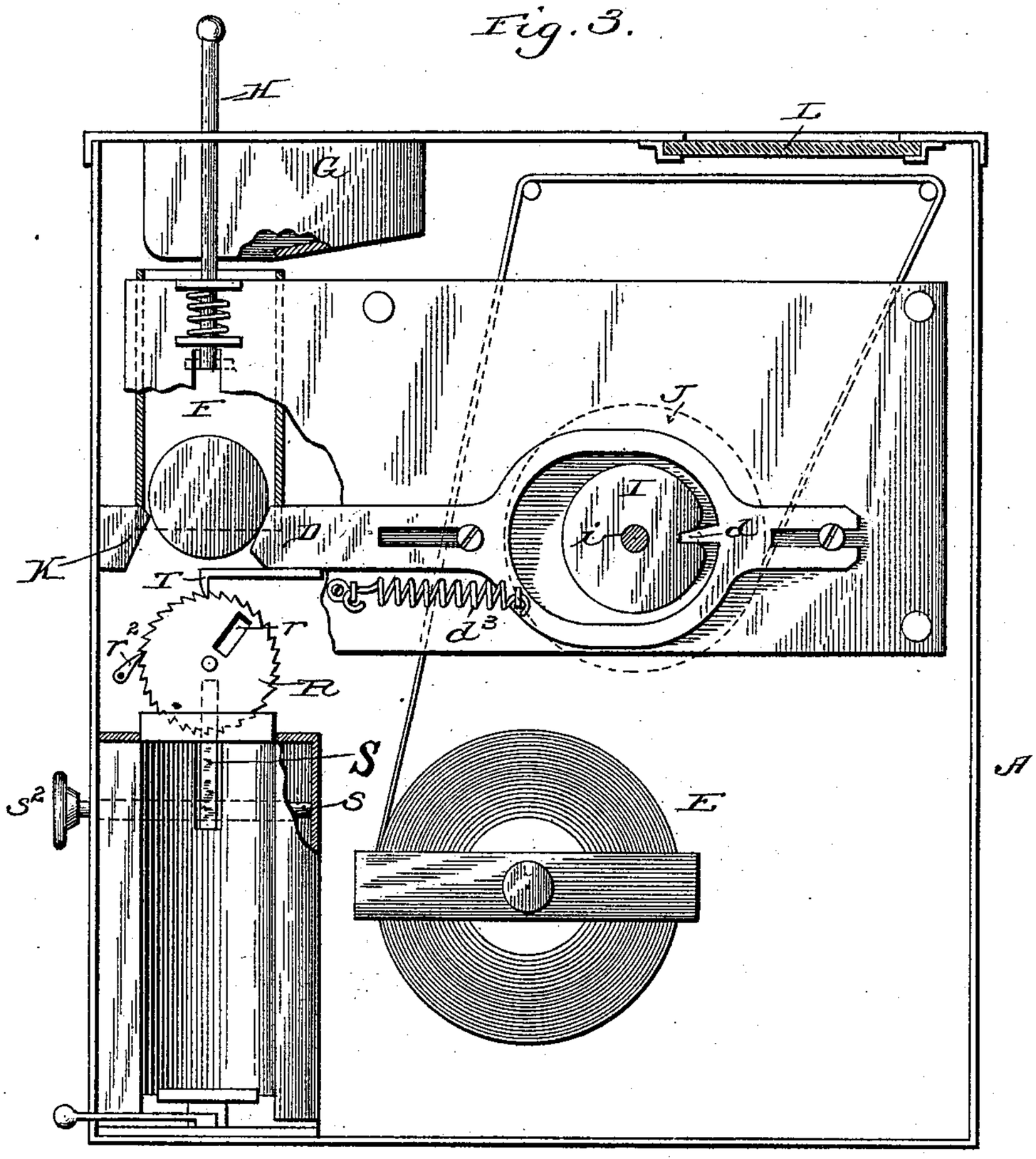
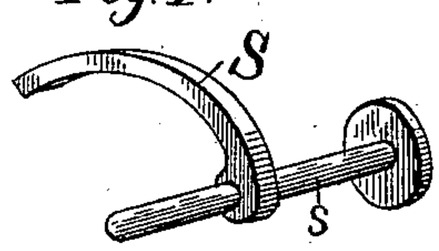


Fig. 4.



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UNITED STATES PATENT OFFICE.

JAMES S. BARCUS, OF CHICAGO, ILLINOIS.

COIN-CONTROLLED APPARATUS FOR ADVERTISING AND EDUCATIONAL SYSTEMS.

SPECIFICATION forming part of Letters Patent No. 538,636, dated April 30, 1895.

Application filed March 20, 1895. Serial No. 542,485. (No model.)

To all whom it may concern:

Be it known that I, JAMES S. BARCUS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Coin-Controlled Apparatus for Advertising and Educational Systems; 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 apparatus for advertising and educational systems.

The object of the invention is to provide a device in the nature of a savings bank, having a receptacle for containing a predetermined, or definite, fixed number of coins, combined with a feeding or supply-device, or an information-presenting device, the coin receptacle to be provided with means actuated through the medium of the information presenting device to permit of the removal of the coins after such accumulation; furthermore, to provide a device containing a coin-receptacle adapted to contain a predetermined number of coins, a feeding or supply-device, and mechanism actuated by the insertion of a coin to release the feeding or supply-device, and, also, after the accumulation of a certain number of coins, to unlock the coin-device to permit of the removal of the coins.

With these objects in view, the invention consists in the combination of a feeding or supply device, a locked coin-receptacle, and mechanism adapted on one movement to release the feeding or supply device, and, on the other movement, to unlock the coin-receptacle when there shall have accumulated therein the predetermined number of coins; furthermore, in the various novel details of construction as will be hereinafter fully described and claimed.

In the accompanying drawings, I have illustrated novel apparatus, in various forms, by which my invention may be carried into effect,-and, in these drawings, which are in the nature of mere examples—

Figure 1 is an elevation, partly in section, with the front of the casing of the apparatus removed to display the internal parts of the apparatus, the mechanism in this instance for unlocking the coin-receptacle comprising a sliding latch which normally locks the feeding or supply device against operation, a lug on the free end of the latch serving to contact with the uppermost coin in the coin-receptacle and thereby force the bottom of the coin-receptacle downward. Fig. 2 is a similar view to Fig. 1, showing a different combination of mechanism for effecting the automatic release of the bottom of the receptacle. Fig. 3 is a view similar to Figs. 1 and 2, showing a still further arrangement of mechanism for effecting the purpose above referred to. Fig. 4 is a detached detail view in perspective of the releasing-arm used in connection with the apparatus illustrated in Fig. 3.

Referring to the drawings, and to Fig. 1 thereof, A designates a casing; B, a coin-receptacle having a spring-bottom C, adapted normally to project upward within the lower portion of the receptacle; D, a latch operating normally to prevent operation of the feeding or supply device E, which may be either a web of paper bearing certain information, as shown in the drawings, or a receptacle containing confection or the like, but for purpose of illustration of the manner of carrying the invention into effect, a web of paper is shown in this instance.

F designates a coin-chute; G, a hopper or the like for directing the passage of the coin to the coin receptacle B, and H a push-rod by which the coins are forced downward against the latch D and thereby give it the initial movement to remove the detent *d* carried thereby out of engagement with a cam I mounted on the shaft *i* of a take-up roll J.

The coin-receptacle may be of any preferred construction,—that is, either a tube, or a semicircular section of metal held in place against the face of the casing. The said receptacle is of a size to contain a predetermined number of coins,—say, for instance, thirty-one. The locking-latch D is provided on its free end with a bevel-face lug d^2, which is adapted to project downward a slight distance within the coin-receptacle, a spring d^3 being employed for the purpose of retracting the latch and of keeping the detent *d* in engagement with the notch of the cam I, and the free end of the latch within the coin-receptacle, there-

by preventing any operation of the feeding or supply device, unless a coin has first been inserted within the apparatus.

The operation of the apparatus just described, is as follows: A coin, of a predetermined denomination, is inserted within the slot,(not shown) and passes into the hopper G from whence it drops into the chute F, and lodges against the free end of the locking-latch D and a lug or projection K affixed to the end of the casing. The push-bar H is now forced downward, and causes the coin to remove the detent *d* out of engagement with the notch in the cam. The shaft I being now turned, causes the detent *d* to ride up the inclined face of the cam and thus effect a further lateral movement of the latch, which will release the coin and permit it to drop into the receptacle, the turning of the shaft also causing the web of paper to be unwound from the delivery-wheel E, and wound upon the storage-reel J, thereby presenting information beneath a window or opening L in the top of the casing. As soon as the cam has made one complete revolution, the detent *d* again engages the detent in the cam and locks it against further rotation until another coin has been inserted. These operations are continued until thirty-one coins have been inserted, but, on the retracting of the locking-latch D after the insertion of the thirty-first coin, the lug d^2 rides up upon the uppermost coin and thereby exerts a downward pressure on the coins, which forces the bottom C a sufficient distance downward to clear it from contact with the inner walls of the receptacle, and by pulling on a handle *c*, the bottom is removed to one side and the coins will drop without the apparatus through an opening, (not shown) in the casing immediately beneath and in line with the coin receptacle. In this form of apparatus, the unlocking of the coin-receptacle is automatic, as will be clearly understood from the description.

In Fig. 2, the same elements are employed to constitute the apparatus *per se*,—that is to say, the coin-receptacle, hopper, feed-chute, locking-latch, and feeding or supply-device. The difference in the mechanism resides in the means for releasing the bottom of the coin-receptacle. Instead of providing the locking-latch D with the lug d^2, I dispense with such arrangement and employ, as a means for effecting this result, the pivoted-arm M, the upper end of which, when the arm is rocked, being designed to project within the receptacle and contact with the coin. To the lower end of the arm is attached a rod N having its upper end connecting to a bell-crank lever O, which is normally held in the position shown in the drawings by means of a spring *o*. To the other member of the bell-crank-lever is pivotally connected a rod P having its free end provided with a hook *p*. The shaft *i* is provided with a second cam Q, upon which rests the rod P.

The operation of the apparatus thus described, is as follows: A coin having been inserted and forced to its position by means of the push-bar H in the manner already described, the shaft *i* is rotated, and with it, the cam Q. As the long end of the cam passes the dead-center and begins to rise, it lifts the push-bar upward until the long end of the cam engages with the hook *p*, whereupon, on the further rotation of the shaft, a pulling action is exerted upon the bar P, thereby causing it to rock the bell-crank lever, and thus project the upper end of the arm M into the coin-receptacle. This happens after the insertion of each coin, and when the predetermined number of coins have accumulated within the receptacle, the arm will effect the release of the bottom of the coin-receptacle in a manner that will be perfectly obvious. The unlocking of the coin-receptacle in this case is, also, automatic.

In Fig. 3, the mechanism for preventing the opening of the locked coin-receptacle until after a predetermined number of coins have accumulated therein, comprises a ratchet-wheel R, provided with a slot or recess *r*, through which the upper end of an arm S is adapted to project when the proper number of coins has accumulated within the receptacle. The arm S is carried by a shaft *s* to which is attached a knob s^2 by which motion may be imparted to the shaft. The ratchet-wheel R may be provided with any number of teeth, say, in this instance, thirty-one, that number representing the holding capacity of the coin-receptacle. Motion is imparted to the ratchet-wheel by means of a pawl T carried by the locking-latch D the said wheel being moved the space of one tooth at each projection of the locking latch, a pawl r^2 being provided to prevent back lash of the said wheel. When the wheel is in the position shown in Fig. 3, the arm S cannot be projected into the receptacle for the reason that it will contact with the surface of the wheel, but, as soon as the wheel has been turned a sufficient number of teeth to bring the slot *r* into alignment with the said arm, the latter may then be turned by means of the knob s^2, and by pressing upon the coins force the bottom downward and thereby permit of the removal of the coins.

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

1. The combination with a feeding or supply device and a sliding latch adapted, normally, to lock the said device against movement, of a coin-receptacle having a bottom adapted to be unlocked by the pressure exerted by mechanism operatively connected with the sliding latch and contacting with the uppermost coin in the receptacle, after the latch shall have been operated a predetermined number of times, substantially as described.

2. In a coin-controlled apparatus, the combination of a feeding or supply-device, a

locked coin receptacle, and mechanism adapted on one movement to release the feeding or supply-device, and, on the other movement, to unlock the coin-receptacle when there shall have accumulated therein the predetermined number of coins, substantially as described.

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

JAMES S. BARCUS.

Witnesses:
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JAS. L. BOWEN.