

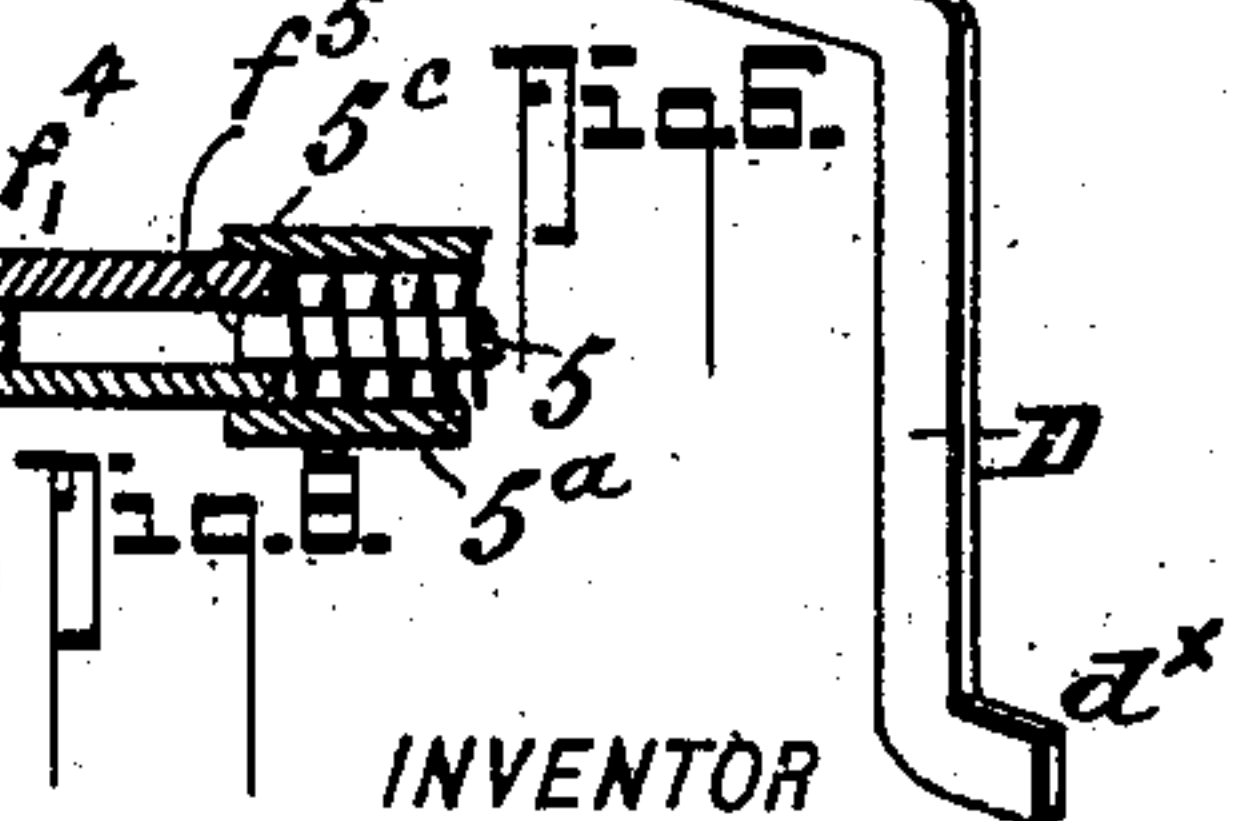
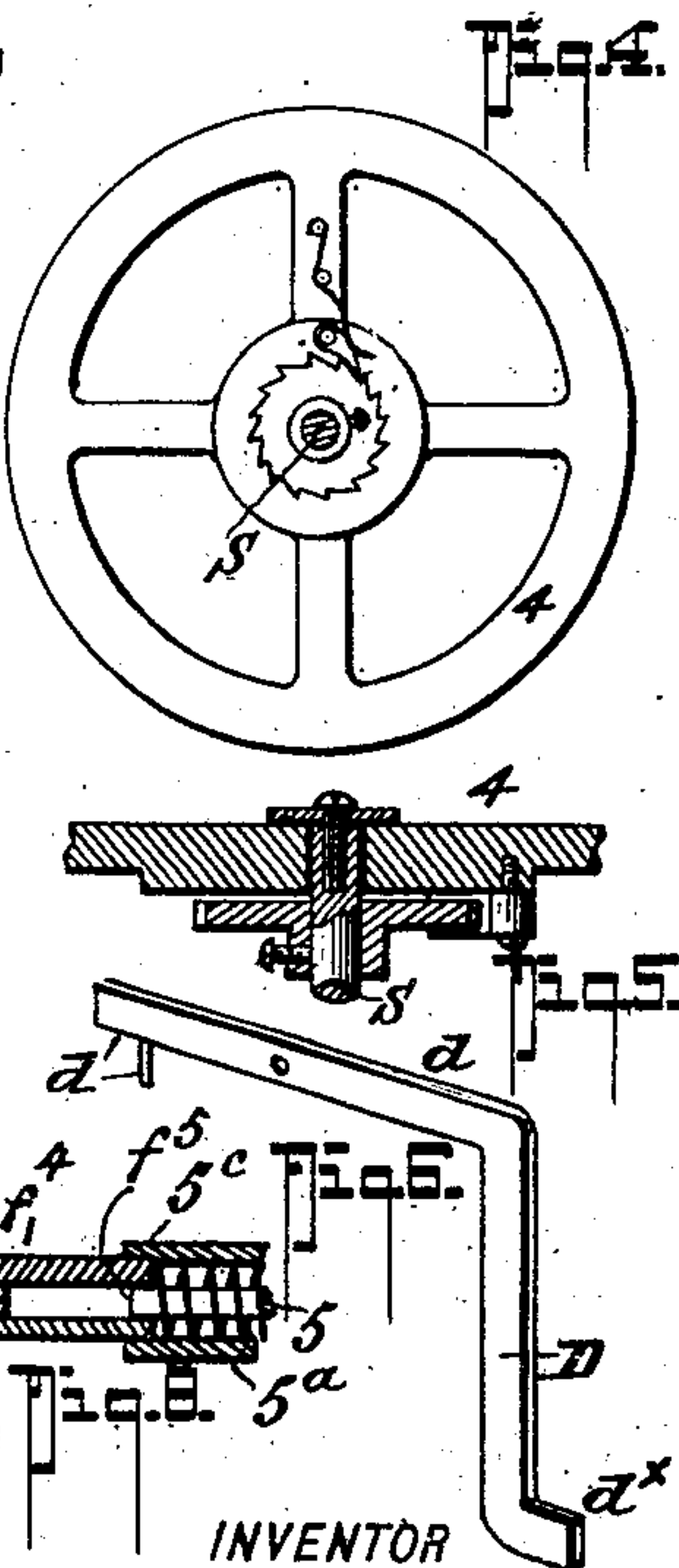
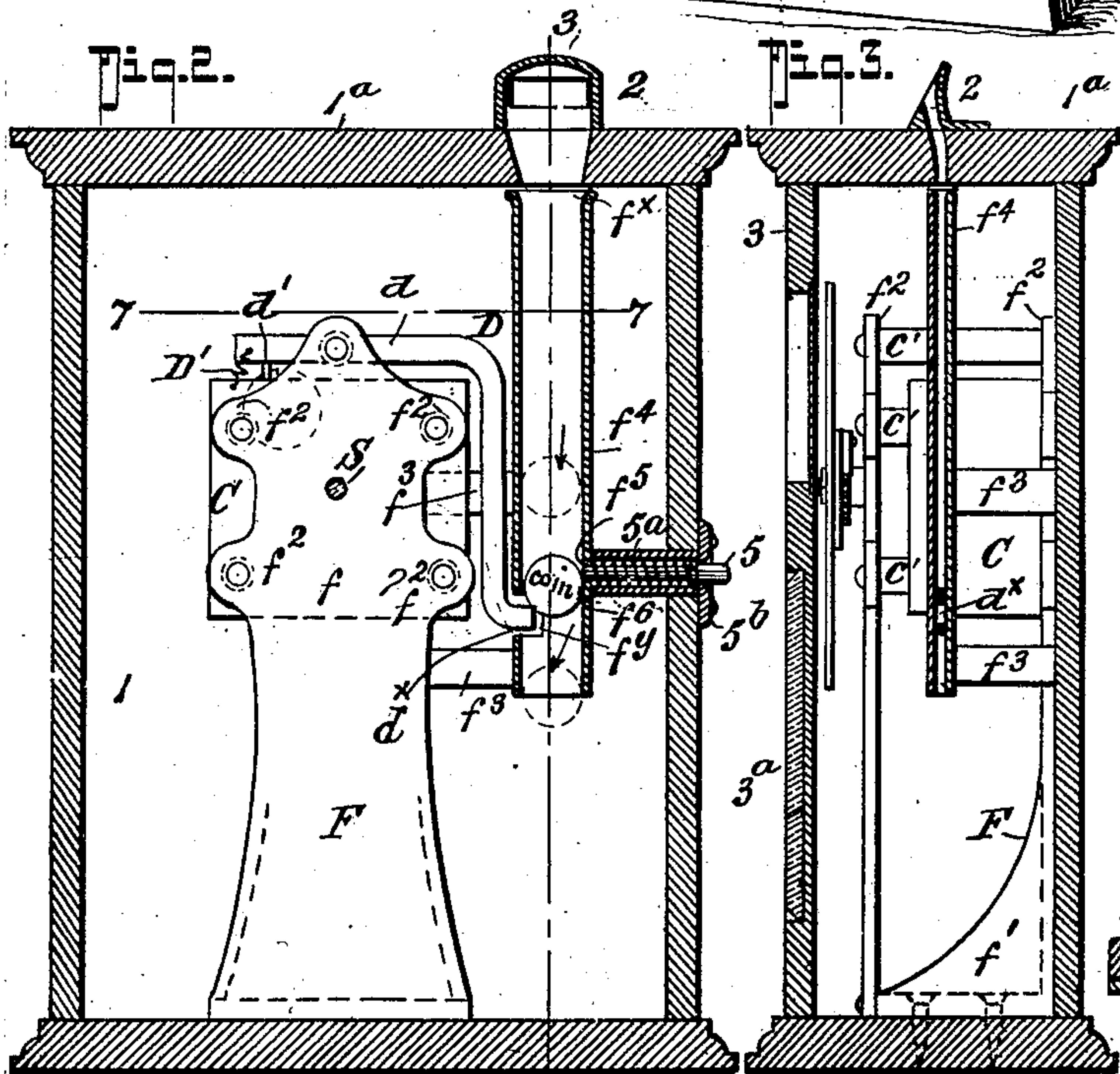
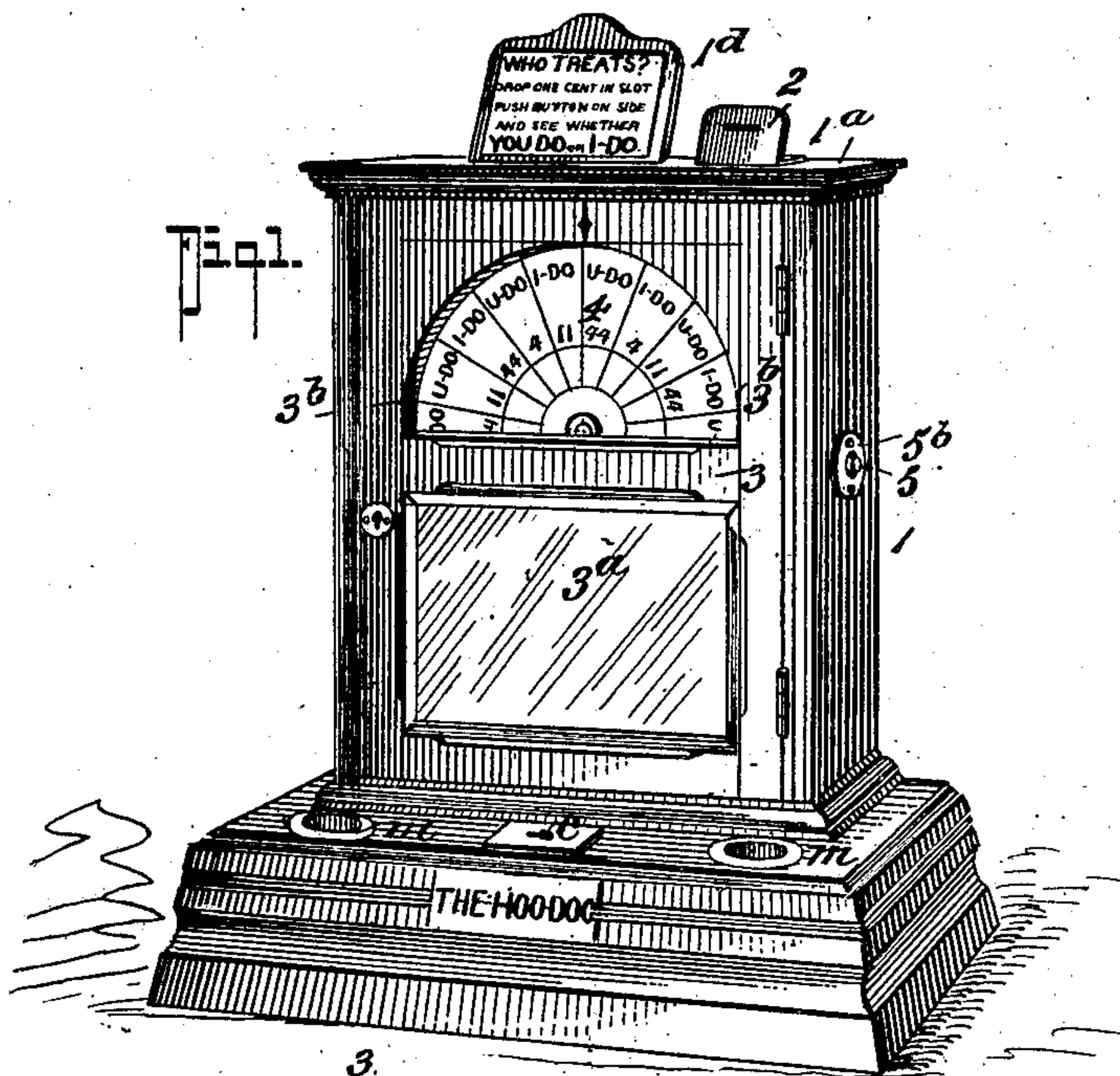
No. 677,963.

Patented July 9, 1901.

R. T. DURHAM.
COIN OPERATED MACHINE.

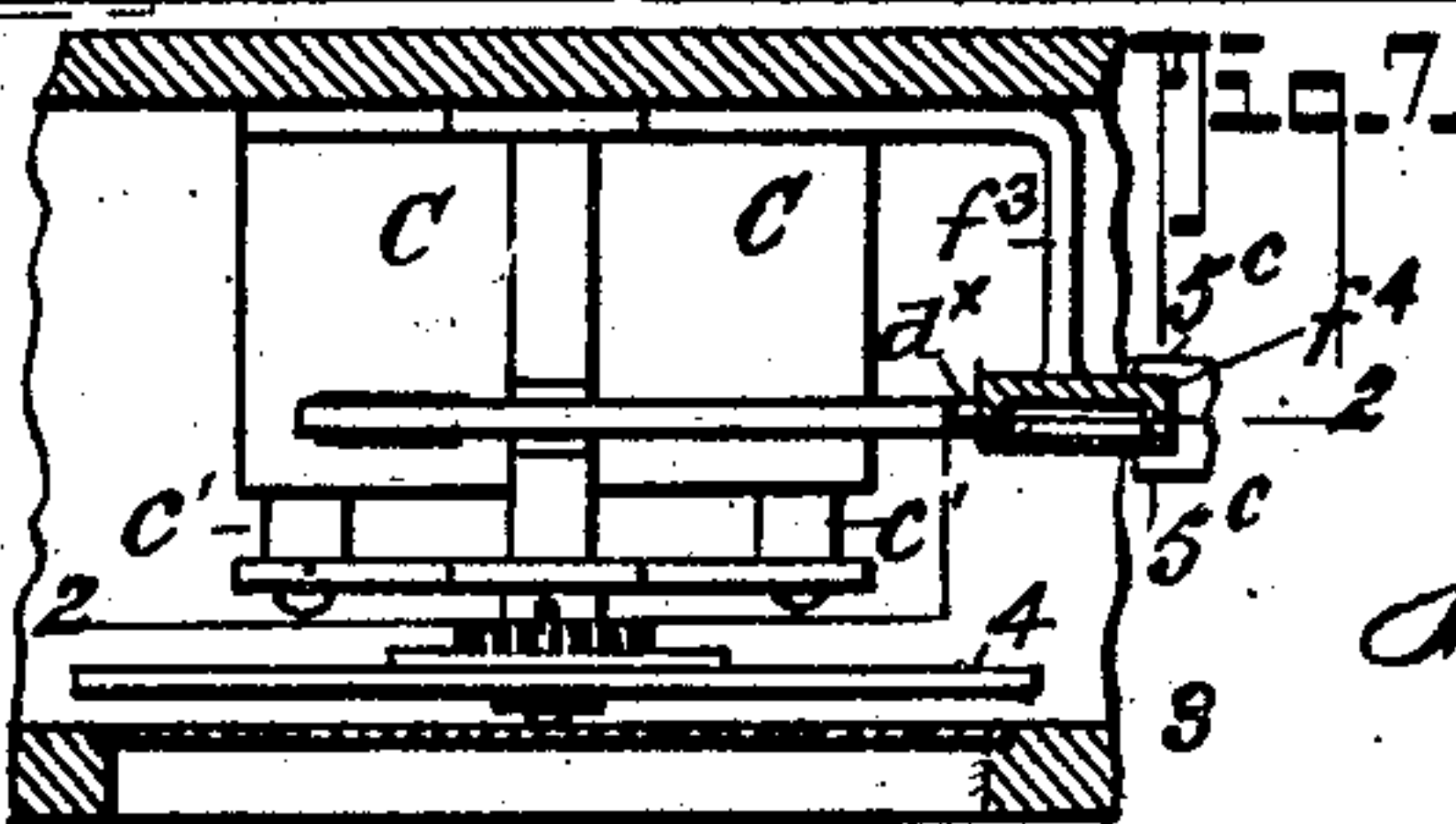
(Application filed Apr. 2, 1901.)

(No Model.)



WITNESSES:

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UNITED STATES PATENT OFFICE.

RICHARD T. DURHAM, OF RICHMOND, VIRGINIA.

COIN-OPERATED MACHINE.

SPECIFICATION forming part of Letters Patent No. 677,963, dated July 9, 1901.

Application filed April 2, 1901. Serial No. 54,004. (No model.)

To all whom it may concern:

Be it known that I, RICHARD T. DURHAM, residing at Richmond, in the county of Henrico and State of Virginia, have invented a new and Improved Coin-Operated Machine, of which the following is a specification.

My invention relates to that class of coin-operated machines having movable indicator-dials operated by spring force and normally held from movement until released by the insertion of a coin in the coin-slot; and it has for its purpose to provide a machine of the character stated, especially adapted for use in stores, restaurants, and other like public places, of a very simple and attractive appearance, capable of being easily manipulated, and positive in its operation, and in its complete make-up it embodies a coin-chute and means, including a plunger-detent cooperating therewith, for engaging the coin.

In its subordinate features my invention consists in certain details of construction and peculiar combination of parts, all of which will hereinafter be fully described, and particularly pointed out in the appended claim, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of my machine. Fig. 2 is a transverse section of the same on the line 2 2 of Fig. 7. Fig. 3 is a longitudinal section thereof on the line 3 3 of Fig. 2. Fig. 4 is a rear view of the dial, the dial-shaft, and the ratchet-and-pawl mechanism carried thereby. Fig. 5 is a detail sectional view showing the manner of mounting the dial on the dial-shaft. Fig. 6 is a detail view of the trip-lever. Fig. 7 is a section on the line 7 7 of Fig. 2, and Fig. 8 is an enlarged detail section showing the manner of connecting the pusher member to the coin-slot.

In the accompanying drawings my machine is especially designed to be placed upon counters of restaurants and to indicate "Who treats," the dial being especially prepared by signs, characters, or numerals divisionally spaced around the face to work in harmony with an indicating point or finger.

The casing 1 is of rectangular shape in horizontal section, suitably ornamented, and mounted upon an ornamental base, which can be utilized for holding a cigar-tip-cutting

means at the point indicated by *c* and match-box receivers, as indicated by *m*. The top 1^a has a vertical extension 1^b to receive the "directions-plate," (see Fig. 1,) and adjacent said member 1^b is the coin-slot plate 2.

3 indicates a door that forms practically the entire front of the machine, hinged to swing outward. The lower part of the door is shown having a mirror 3^a; but said part may be utilized, if desired, for advertising purposes.

The upper part of door 3 has a glazed semi-circular opening 3^b, of a diameter approximately that of the indicator-dial 4, which carries the indicator-marks on its front face. The dial 4 may have any desired arbitrary arrangement of indicator-marks, spaced off radially. In the drawings it is shown as having a series of equally-spaced sections, at the peripheral edge of which in alternate arrangement appear the characters "I do" "U do," such characters being especially designed when the machine is to be used jointly by two persons. The spaces on the dial may have designating numerals or characters to adapt the machine for joint use by a greater number of persons—for example, three—by using three different characters, as indicated by 4, 11, and 44.

The dial 3 is rotated by ordinary clock mechanism which is normally held from operation by a detent or pawl mechanism released only on the insertion of a coin and the action of a plunger or pusher member that operates with the coin-chute and the clock-mechanism detent. The clock mechanism (indicated by *C* in the drawings) is mounted on a cast-metal frame *F*, the construction of which is best shown in Figs. 2 and 3, by reference to which it will be seen the same comprises a vertical standard *f*, having a base *f'*, adapted to be screwed down on the bottom of the casing, its upper end being formed with ears *f*² to receive the fastening-posts *c'* of the clockwork. The upper end of the casing has laterally-extending brackets *f*³, that merge with the integrally-formed coin-chute portion *f*⁴, open at the upper and lower ends, the upper end *f*^x being slightly flared outward to facilitate the entrance of the coin into the coin-slot, as shown. Near the lower

end and preferably between the lateral brackets f^3 the coin-chute has an opening, into which projects one end of a spring-retained pusher 5, held to operate in a barrel 5^a , that projects through one end of the casing and is made fast thereto by the cap-plate 5^b . The inner end of the barrel is formed with lateral flanges 5^c , adapted to extend over the front and back edges of the coin-chute to steady the same and form a brace for the upper end of the frame F.

D designates the detent or pawl, which consists of an angle-bar, the horizontal arm d of which is fulcrumed on the clockwork-casings and carries at its outer end a pawl or tooth d' , adapted to engage the clock mechanism to prevent its operating, and the vertical or pendent arm of the part D passes down and terminates in a toe or detent portion d^x , adapted to extend into the opening f^y in the coin-chute that opposes the barrel 5^a , the end d^x being disposed in a plane slightly below the barrel and in line with the coin-rest edge f^6 , said edge and the member d^x serving as the retarding means for holding the coin in the chute in position to be engaged by the pusher 5, and to prevent the member D being easily dislodged by shaking the casing a spring D' is provided for holding the member D from such motion.

So far as described, it will be apparent that when the coin is inserted it will drop down into the chute and stop in line with the pusher 5, as indicated in Fig. 2, and when thus lodged by pressing the pusher member it will engage the coin at a point above the axis and force it down in direction indicated by the arrow, and in so doing the member D is swung back to cause its pawl end to become disengaged from the clock mechanism, which being thus released serves to give motion to the dial-wheel 4 until the coin disengages the pawl D and it (the pawl D) again engages the clock mechanism, it being obvious that the time in which the pawl D remains disengaged depends somewhat on the manner in which the pusher is pressed inward, a quick short pressure serving to throw the pawl D farther from the clock mechanism than a slow weak pressure does.

The spring for holding the pawl D in its normal position is sufficiently weak to not materially interfere with the impact force

applied to the pawl D through the media of the coin and pusher 5.

S designates the drive-shaft of the clock mechanism, upon which the dial and the ratchet member are mounted, the pawl for engaging the ratchet being on the dial, as usual.

From the foregoing, taken in connection with the drawings, it is thought the manner in which my machine operates and its advantages will be readily apparent.

While the machine is more especially intended as a "Who treats" machine, it is obvious the dial may be delineated to present instructive and amusing matter or games.

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

The hereinbefore-described coin-operated machine, comprising in combination, a casing having a sight-opening in its front end, an indicating-point, a coin-receiving slot in its top, and a spring-actuated pusher in its side, a casting adapted to be made fast to the bottom of the casing, said casting having laterally-extending brackets and a coin-chute integrally joined therewith, said chute having opposing openings in its two edges, the one adjacent the body of the casing being in a plane below that of the other, a clock mechanism mounted upon the casting, a dial co-operatively joined with the clock mechanism and turned thereby, said dial having a part thereof alined with the sight-opening in the casing, and having an annular ratchet-flange on its rear face, a pawl adapted to normally engage the said rack-surface, said pawl being pivotally mounted on the clock-mechanism case, and provided with a pendent arm having a detent adapted to project through the lowermost one of the slots in the coin-chute, and form a rest for the coin, a barrel secured to the side of the casing, and having side flanges lapping the adjacent edge of the coin-chute, said barrel being projected into the slot in the said chute edge, and a spring-retained pusher held in the barrel, all being arranged substantially as shown and for the purposes described.

RICHARD T. DURHAM.

Witnesses:

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