

No. 685,457.

Patented Oct. 29, 1901.

H. S. MILLS.
VENDING MACHINE.

(Application filed Mar. 22, 1901.)

(No Model.)

3 Sheets—Sheet 1.

Fig. 2.

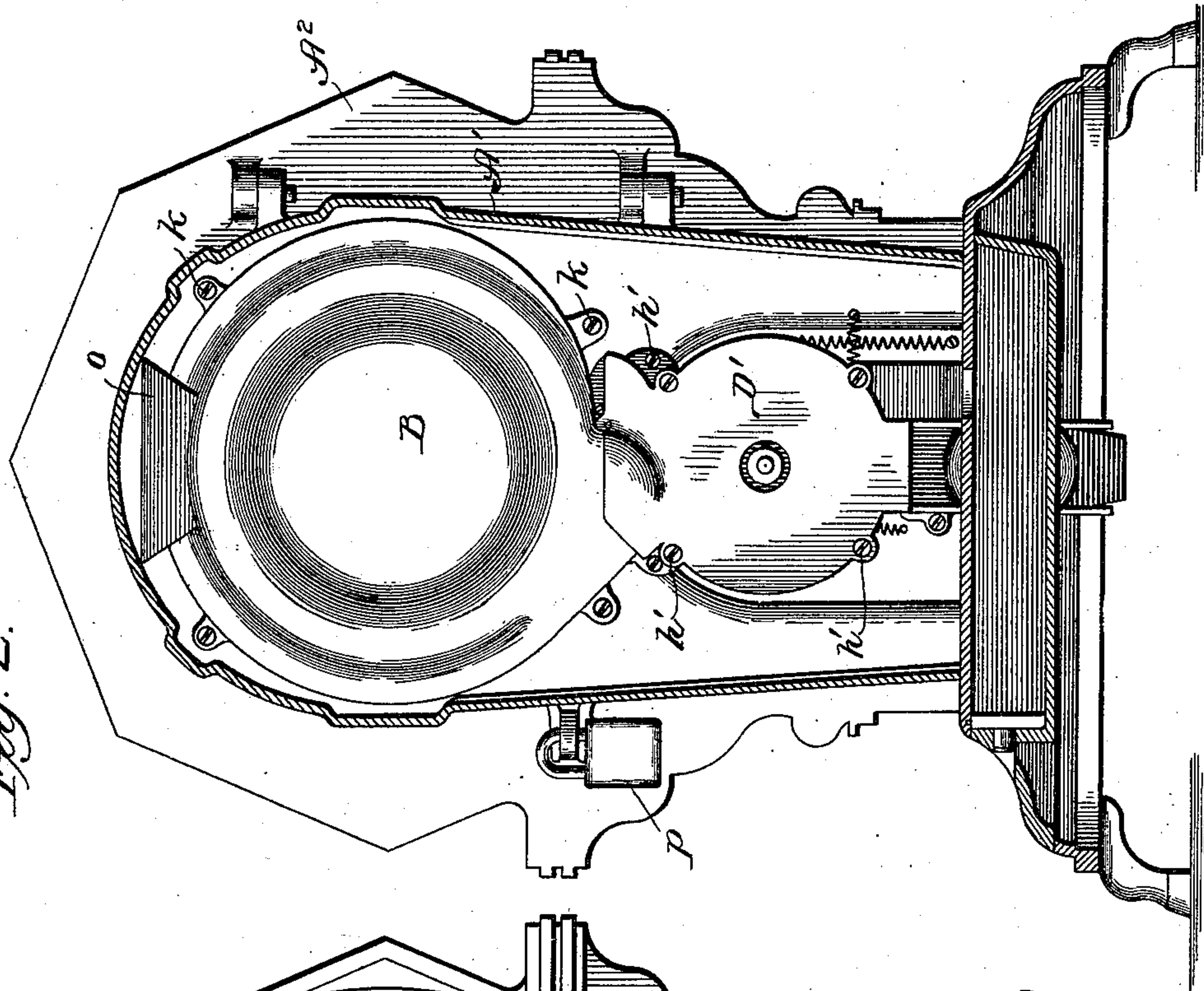
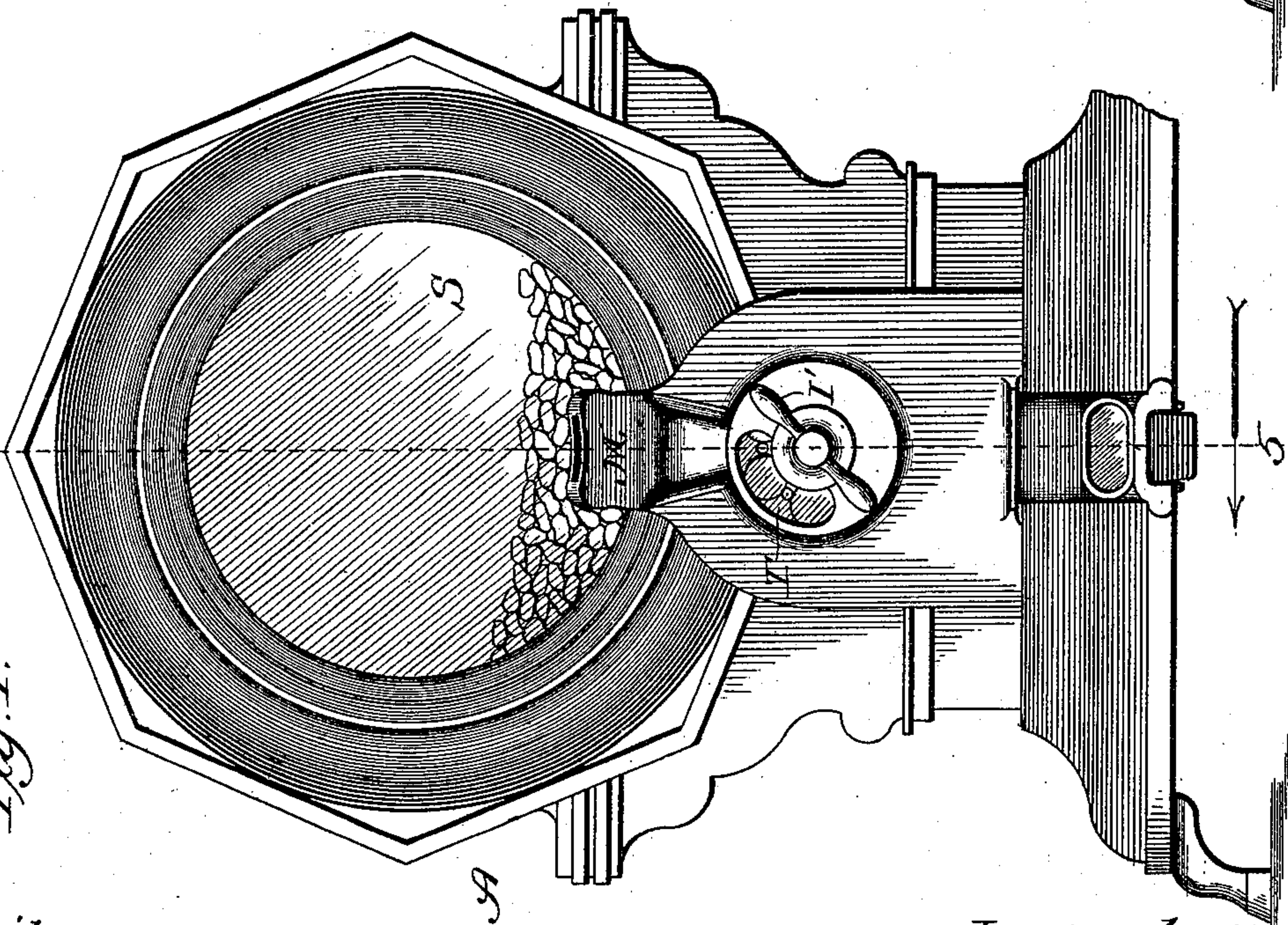


Fig. 1.



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Fig. 4.

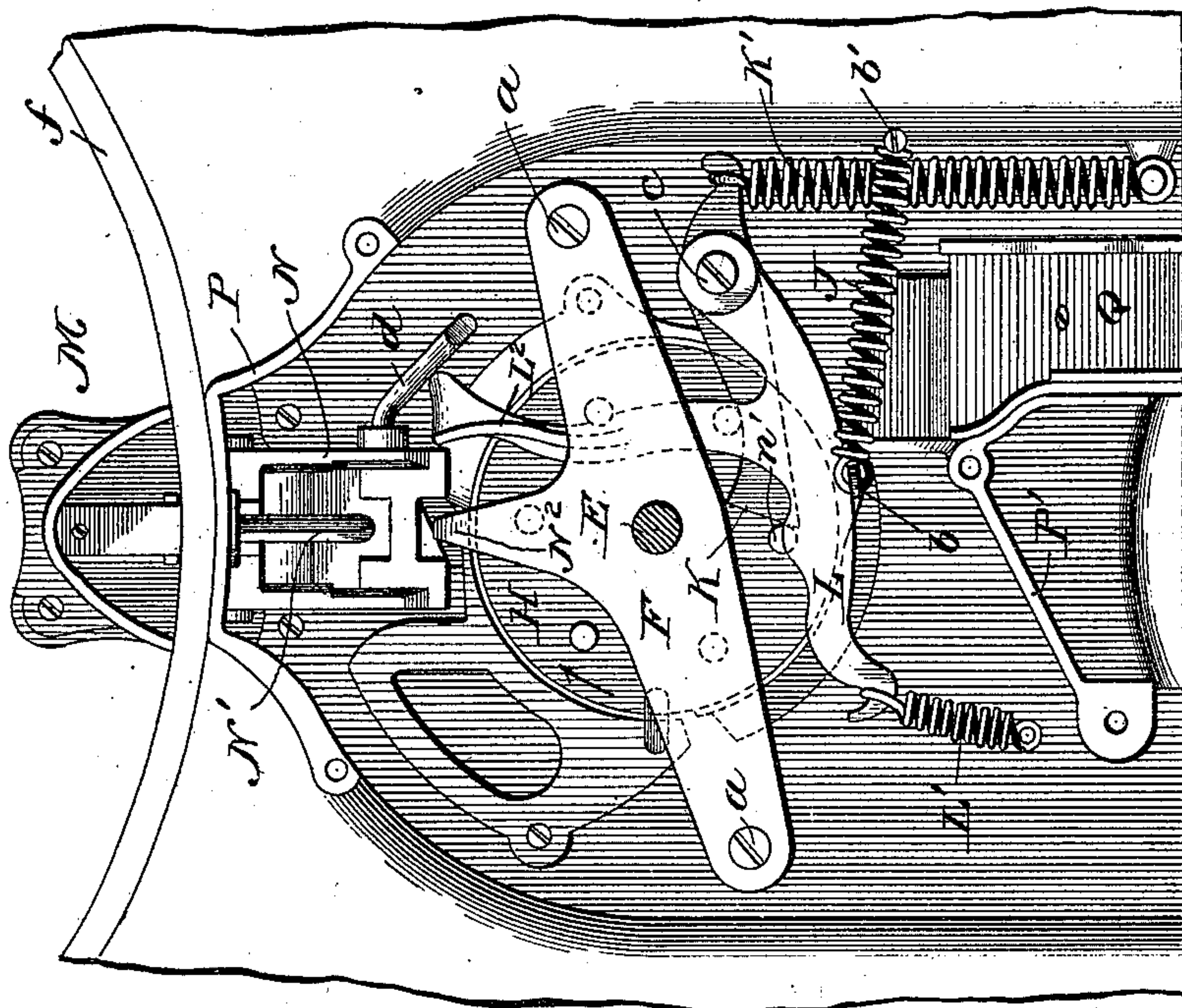
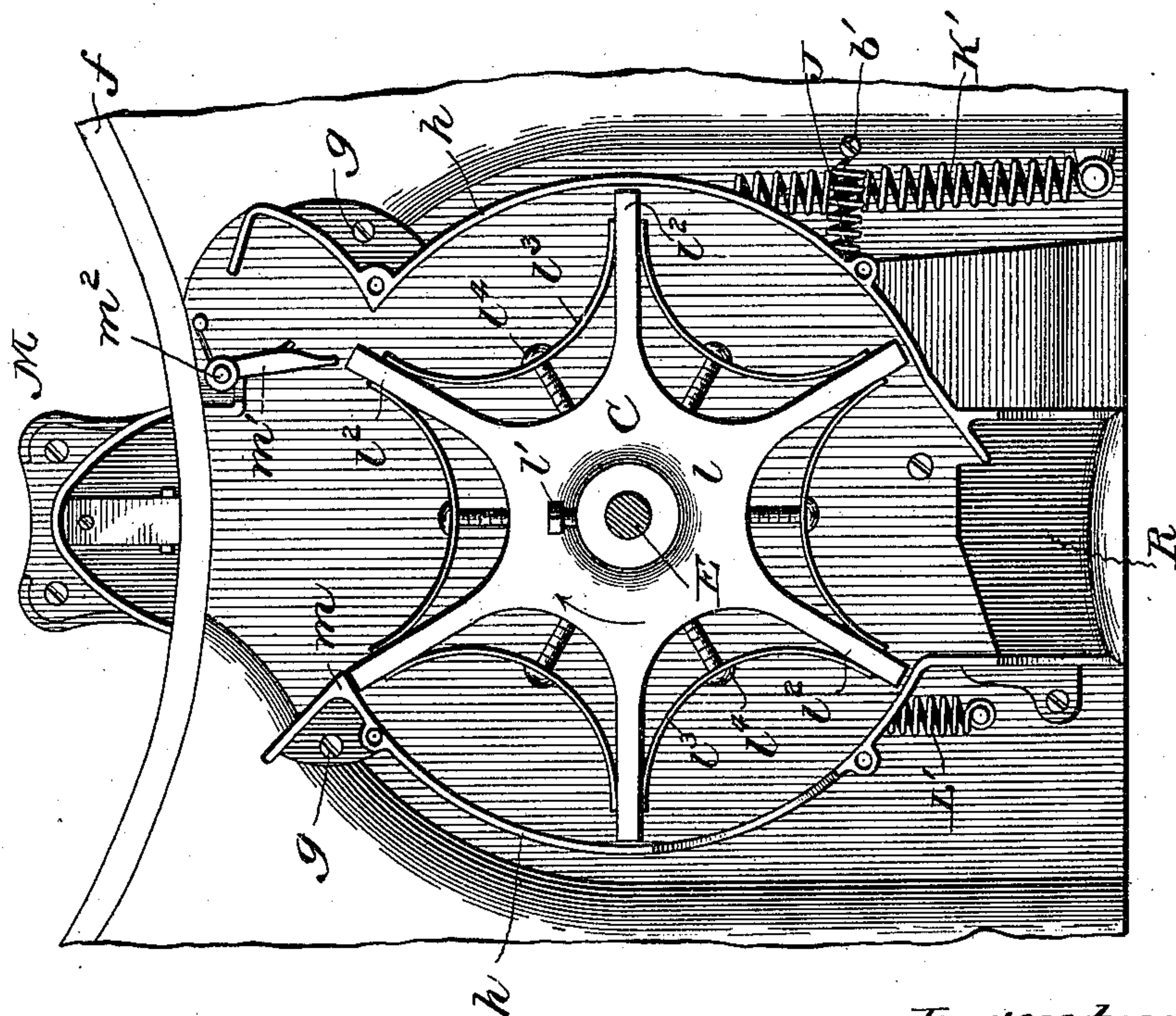


Fig. 3.



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3 Sheets—Sheet 3.

Fig. 6.

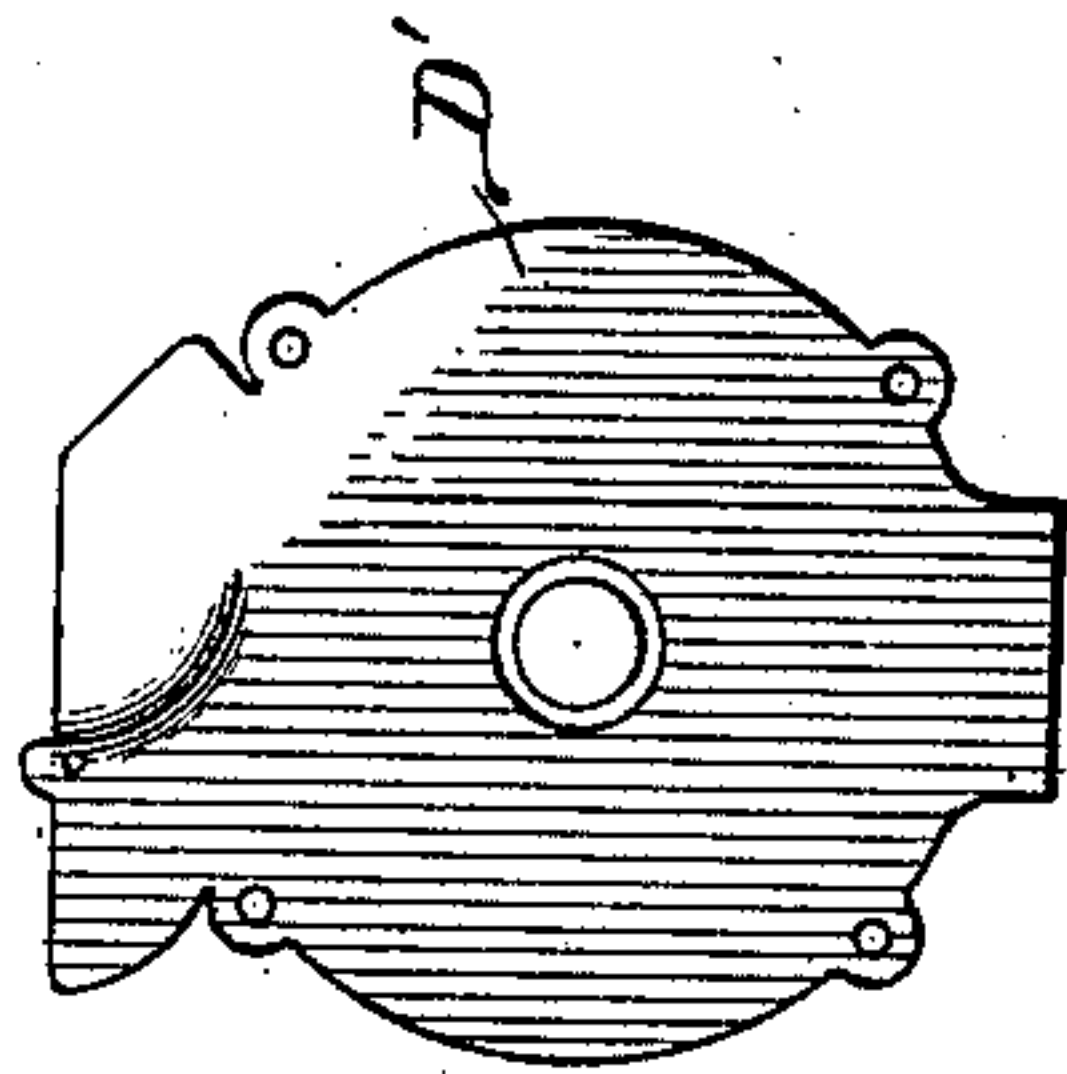


Fig. 7.

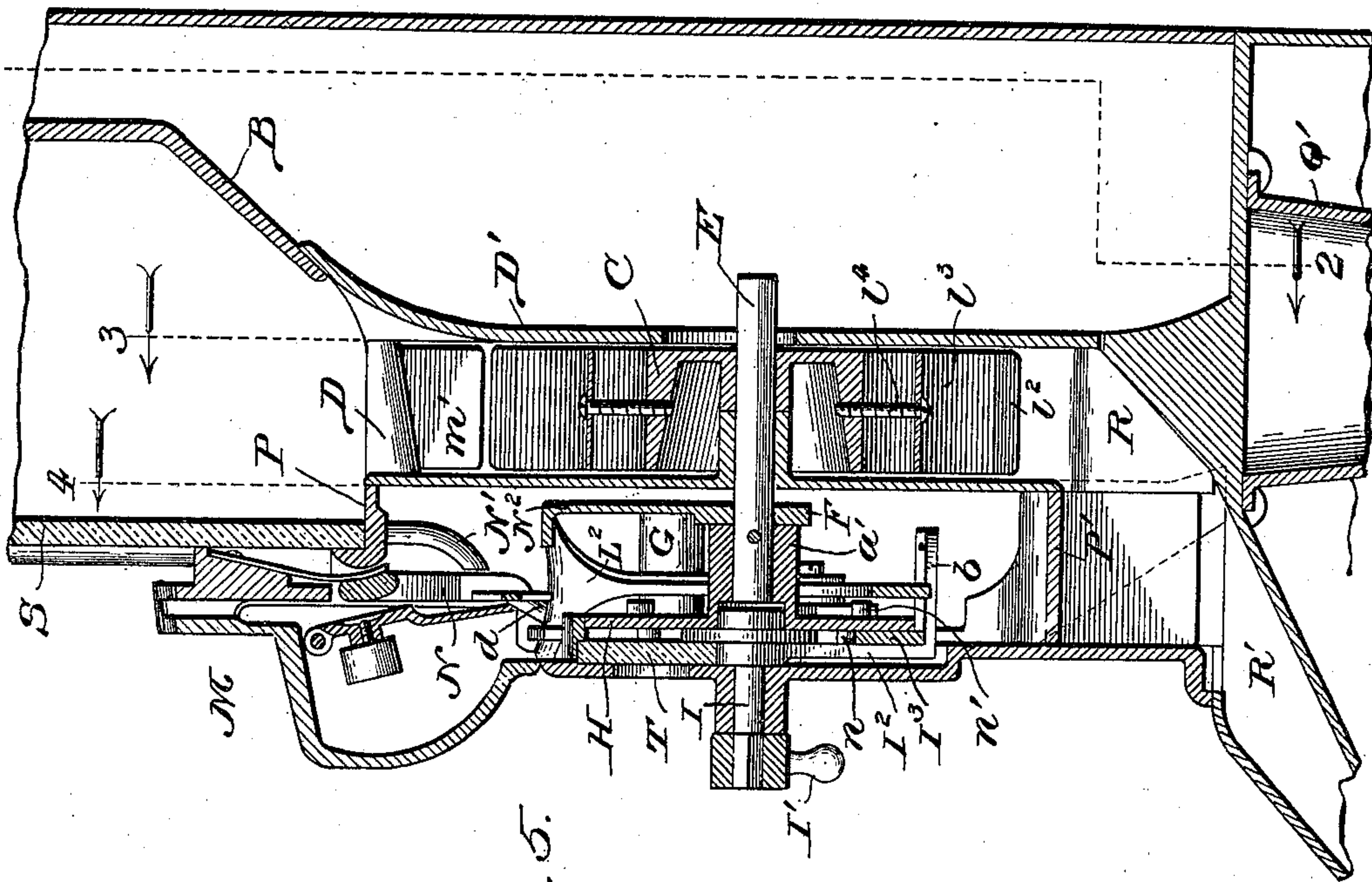
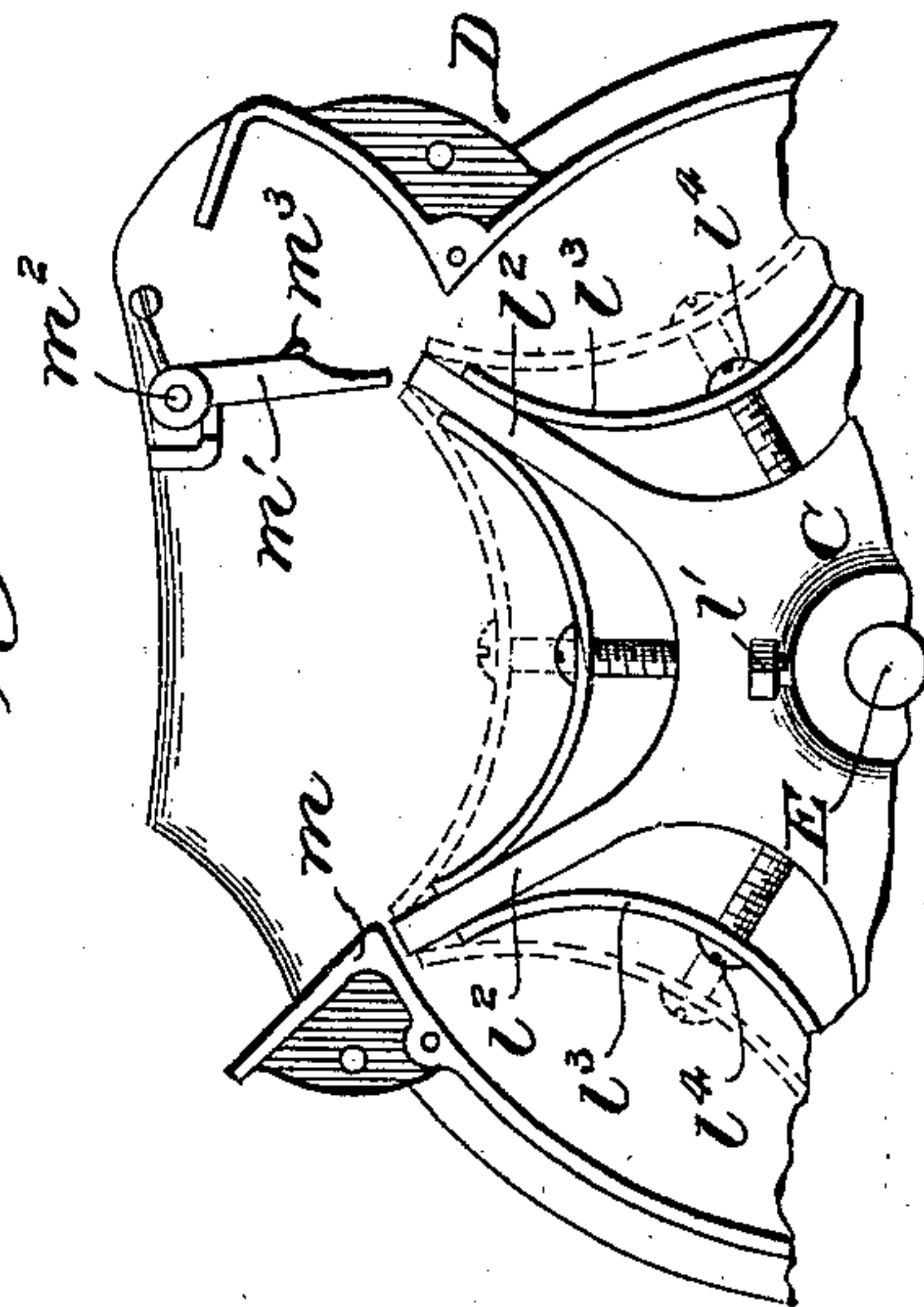


Fig. 5.

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UNITED STATES PATENT OFFICE.

HERBERT S. MILLS, OF CHICAGO, ILLINOIS.

VENDING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 685,457, dated October 29, 1901.

Original application filed September 24, 1900, Serial No. 30,899. Divided and this application filed March 22, 1901. Serial No. 52,369. (No model.)

To all whom it may concern:

Be it known that I, HERBERT S. MILLS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Vending-Machines, of which the following is a specification.

My invention relates particularly to machines for vending material in bulk, the present application being a divisional application of application Serial No. 30,899, filed September 24, 1900.

My primary object is to provide a machine of improved general construction for use in vending peanuts, candy, and like articles, particular attention being paid to the provision of a measuring device of adjustable capacity and to the provision of means for preventing the clogging of the machine at the measuring device.

My invention is shown in its preferred form in the drawings, in which—

Figure 1 is a view in front elevation of a machine for vending peanuts or other articles from the bulk; Fig. 2, a vertical sectional view, the section being taken parallel to the front of the casing, as indicated at line 2 of Fig. 5; Figs. 3 and 4, broken sectional views taken as indicated at the corresponding lines of Fig. 5; Fig. 5, an enlarged broken central vertical section perpendicular to the front of the machine; Fig. 6, a detached view of the rear plate of the measuring-device chamber; and Fig. 7 an enlarged broken view of the measuring device, the rear plate of its casing being removed.

A represents the frame of the machine, comprising a casing A' and a swinging door A²; B, a commodity-chamber supported on the inner side of the door A² and within the casing A'; C, a rotatable measuring device provided with peripheral pockets; D, a casing for the same, having a removable rear face-plate D'; E, a stud or shaft upon which the measuring device C is supported; F, a support for the stud E, which is itself rigidly attached to lugs G on the inner face of the door A² by screws a; H, a coin-operated disk of well-known general construction, the same being provided, however, on its rear face with a hollow boss a', which receives the front end

of the shaft E; I, a rock-shaft journaled in the casing-front A² and provided at its outer end with an operating-knob I' and at its inner end with a rigid transverse arm I², bearing a coin-actuated curved arm I³ of known form; J, a spring connected with a rearwardly-extending lug or arm b at the outer end of the arm I² and connected also to a screw or stud b', rigid with the casing-front; K, a pawl pivoted on a stud c, projecting from the inner face of the casing-front and connected to the casing-front by a spring K'; L, a magnet-actuating device pivotally connected with the stud c and connected with the casing-front by a spring L', said device being provided with an upwardly-extending magnet-actuating arm L²; M, a bogus-coin detector, fully described and claimed in the above-entitled application; N, a magnet forming a part of the bogus-coin detector and provided with an arm d, with which the arm L² engages; N' N², stationary prongs which serve to remove bogus coins from the magnet N; P, an upper rearwardly-projecting curved flange connected with the casing-front and serving as a portion of the supporting means for the casing D; P', a lower flange or projection with which the casing D is connected; Q, a coin-delivery tube leading from the coin-controlled mechanism to a receptacle Q' in the base of the main casing; R, an inclined way for the material delivered thereto by the measuring device; R', a discharge-chute to which the material gravitates from the inclined part R; S, a glass plate forming a front for the chamber B and itself supported in an annular rim f, and T a sight-glass located in the coin-actuated wheel H and serving to expose to view coins which are in contact with the front face of said wheel.

As appears particularly from a view of Figs. 1 and 5, the lower portion of the casing-front is bowed or bulged outwardly to afford a housing for the coin-actuated wheel and the attendant parts. As appears from Figs. 4 and 5, the casing D affords virtually a removable cover for the depression, wherein are housed said coin-wheel and attendant parts, and the casing D is itself secured in position by screws g. The casing D has rearwardly-projecting curved flanges h, to which is secured by

means of screws h' , Fig. 2, the removable rear face-plate D' of said casing. Both the front and rear walls of the casing are perforated to receive the shaft E . The upper portion of the casing D is in communication with the lower portion of the chamber B . The chamber B is secured to the inner face of the casing-front by screws k .

The measuring device C comprises a hub portion l , secured to the shaft or stud E by a set-screw l' and provided with radial arms l^2 , and adjustable bottoms between said radial arms, comprising spring-metal pieces l^3 , having out-turned ends contacting with said arms, and central screws l^4 , extending into the hub l . Thus the depth of the peripheral receptacles can be readily regulated by adjustment of the screws l^4 . As shown in Figs. 3 and 5, the entrance to that receptacle of the measuring device which chances to be uppermost is between lugs or flanges m m' , the latter being pivotally connected at m^2 with the front of the casing D and yieldingly held by a spring m^3 . The newly-filled receptacle rotates toward the yielding lug m' , and the latter acts as a leveling device.

The coin-wheel H is provided on its front face with coin-engaging lugs n and on its rear face with pawl-engaging lugs n' , the latter being engaged by the pawl K . The coin-passage leads to the front side of the coin-wheel, where the coins are engaged in a well-understood manner by the arm I^3 , by which they are forced against the lugs n when the rock-arm I is moved in operating the machine. The coin-wheel is advanced the distance between two lugs at each operation of the machine, and the pawl K engages the lugs n' to prevent retraction of the wheel.

The manner of adjusting the peripheral receptacles of the measuring device is sufficiently illustrated in Fig. 7, where the full lines represent receptacles of greater depth than the dotted lines.

In Fig. 2 the receptacle B is shown provided with a hopper o , whereat material may be introduced into said chamber. The front of the main casing is shown secured by a pad-

lock p . When it is desired to charge the receptacle B , the padlock is removed and the front of the casing is swung forward on its hinges, thereby giving access to the hopper o .

In operation, assuming the receptacle B to have been charged and the measuring device C to have been rotated in any suitable manner to have three of its pockets charged, a coin may be dropped into the coin-chute to pass through the bogus-coin detector, and thence to the front face of the coin-wheel. Operation of the rock-shaft I by means of the knob I' serves in a well-known manner to actuate the coin-wheel. As the coin-wheel is rotated through one space the shaft E is rotated thereby, advancing the measuring device C through one space. This brings a new receptacle of the measuring device beneath the commodity-receptacle B and causes the lowermost charged receptacle to deliver its charge at the inclined surface R , from whence it passes through the discharge-chute R' to any suitable receptacle which may be provided therefor. At each actuation of the rock-shaft I the magnet N is actuated, as described in the above-named divisional application.

Changes in details of construction within the spirit of my invention may be made. Hence no limitation is to be understood from the foregoing detailed description, except as shall appear from the appended claim.

What I claim as new, and desire to secure by Letters Patent, is—

In a machine for vending material from the bulk, a rotatable measuring device comprising a central hub provided with radial arms and adjustable bottoms for the receptacles formed between said arms, comprising spring-metal pieces contacting at their ends with said arms, and radial screws for adjusting said pieces at their central portions, substantially as described.

HERBERT S. MILLS.

In presence of—

D. W. LEE,

ALBERT D. BACCI.