(No Model.) 3 Sheets—Sheet 1.

L. D. HASKELL, Jr.

COIN CONTROLLED ATHLETIC PUNCHING BAG.

No. 593,469. Patented Nov. 9, 1897.

FIG. 3.

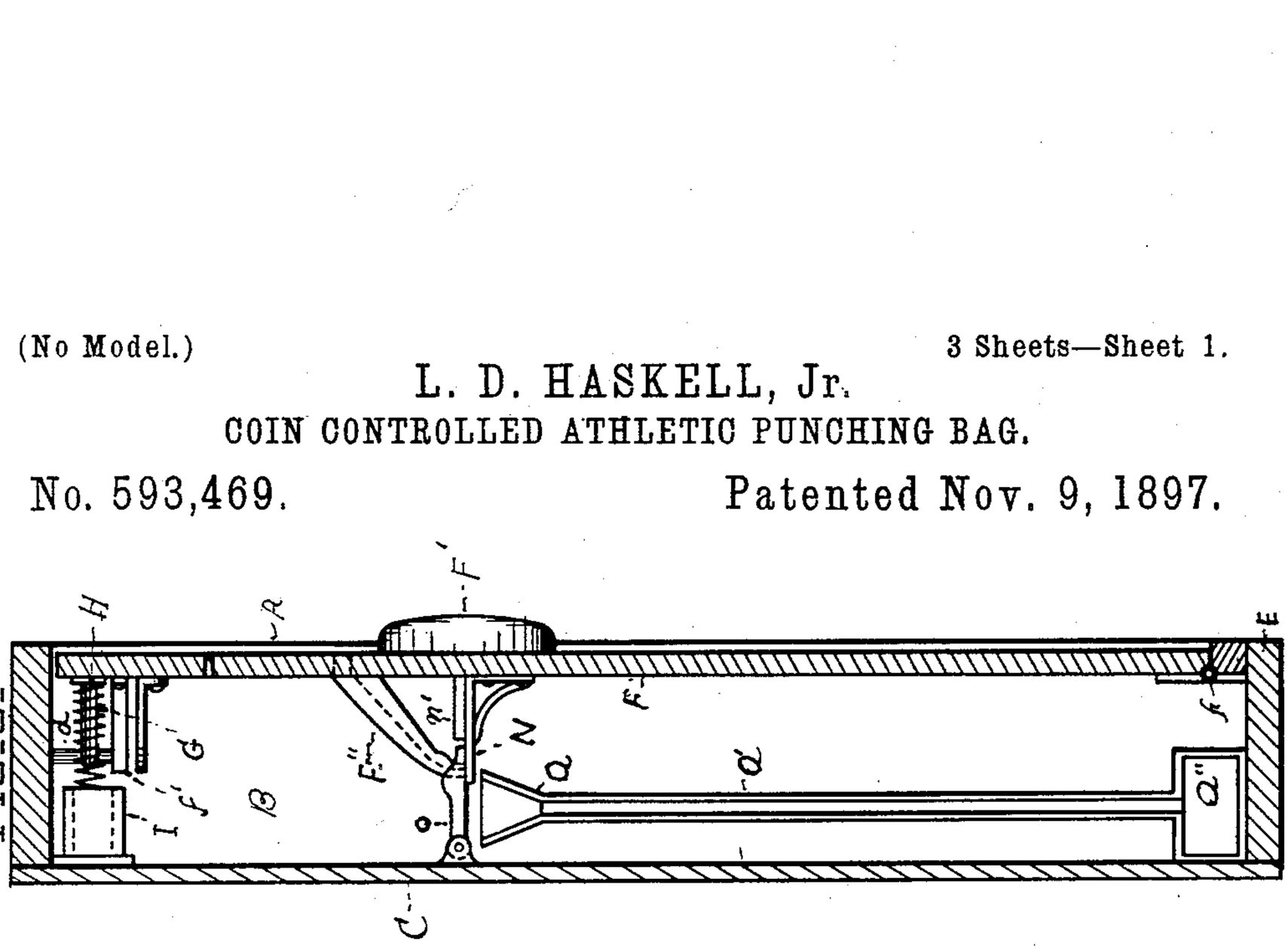


FIG. 2.

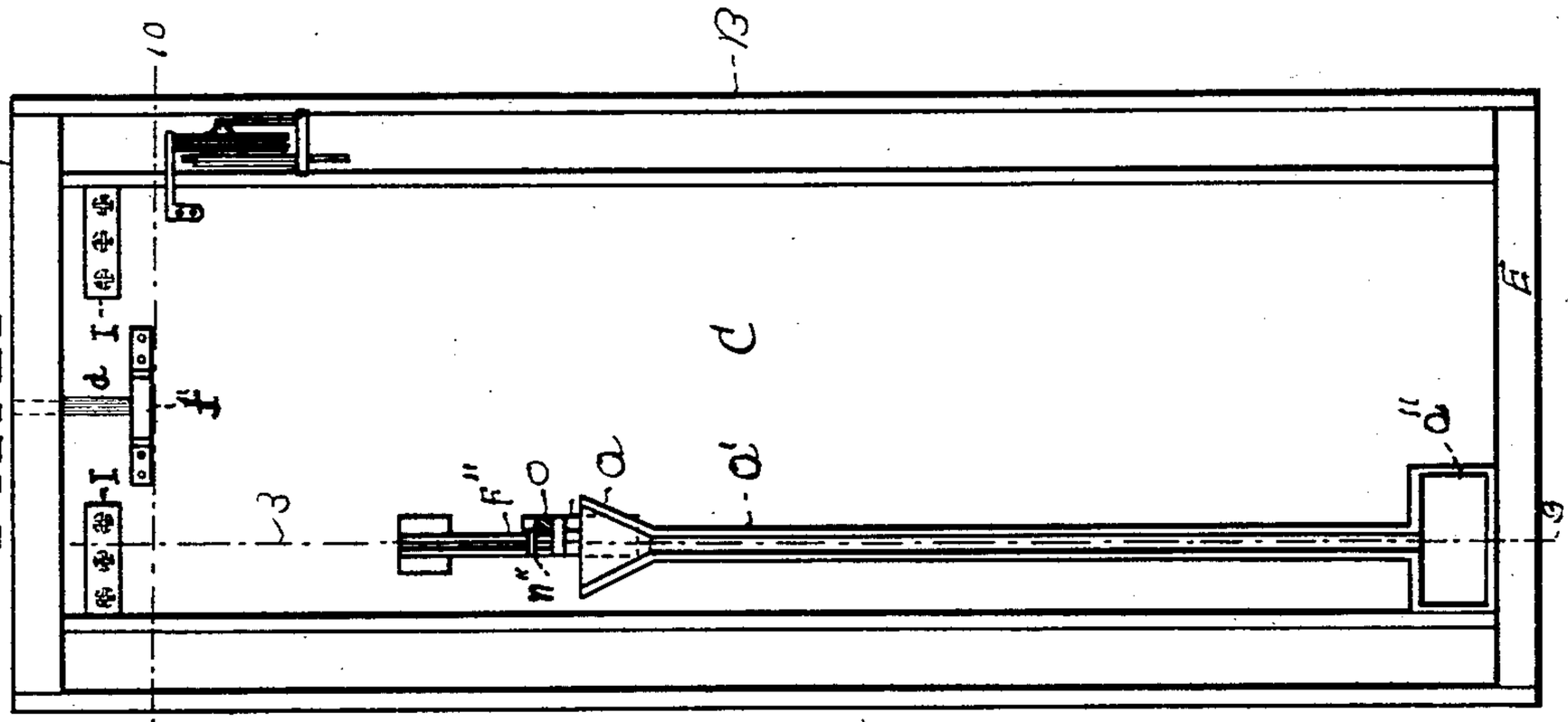
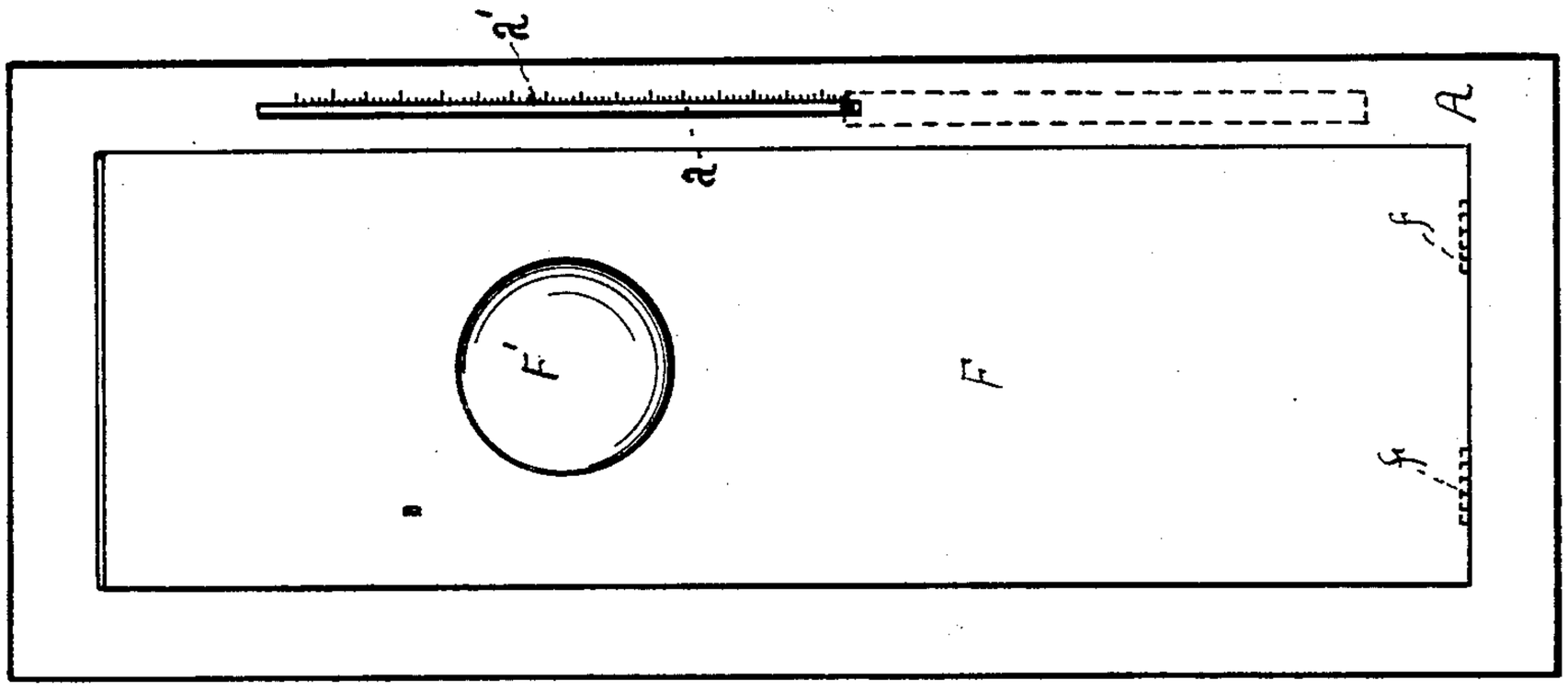


FIG. 1.



WITNESSES.

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(No Model.) 3 Sheets—Sheet 2.

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FIG. 4.

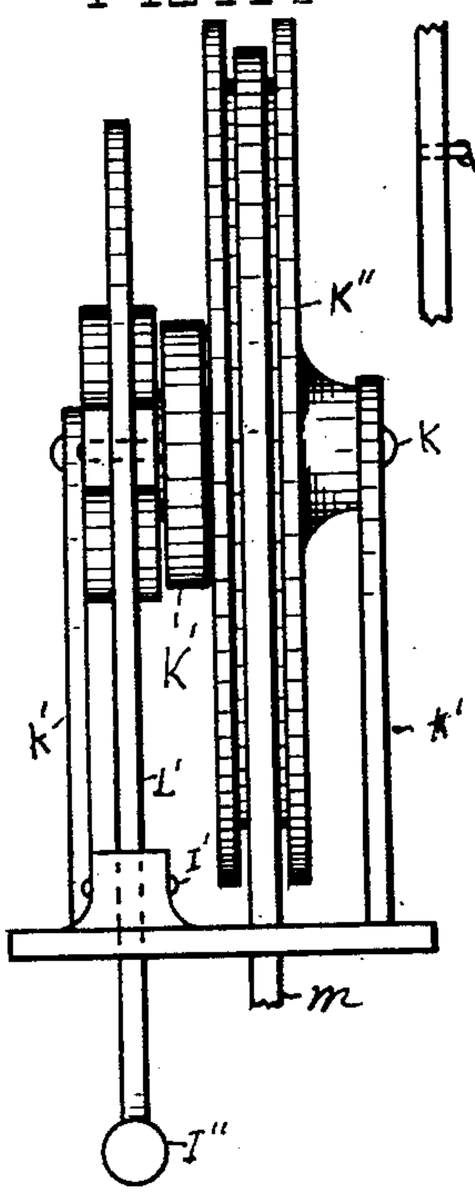


FIG. 5.

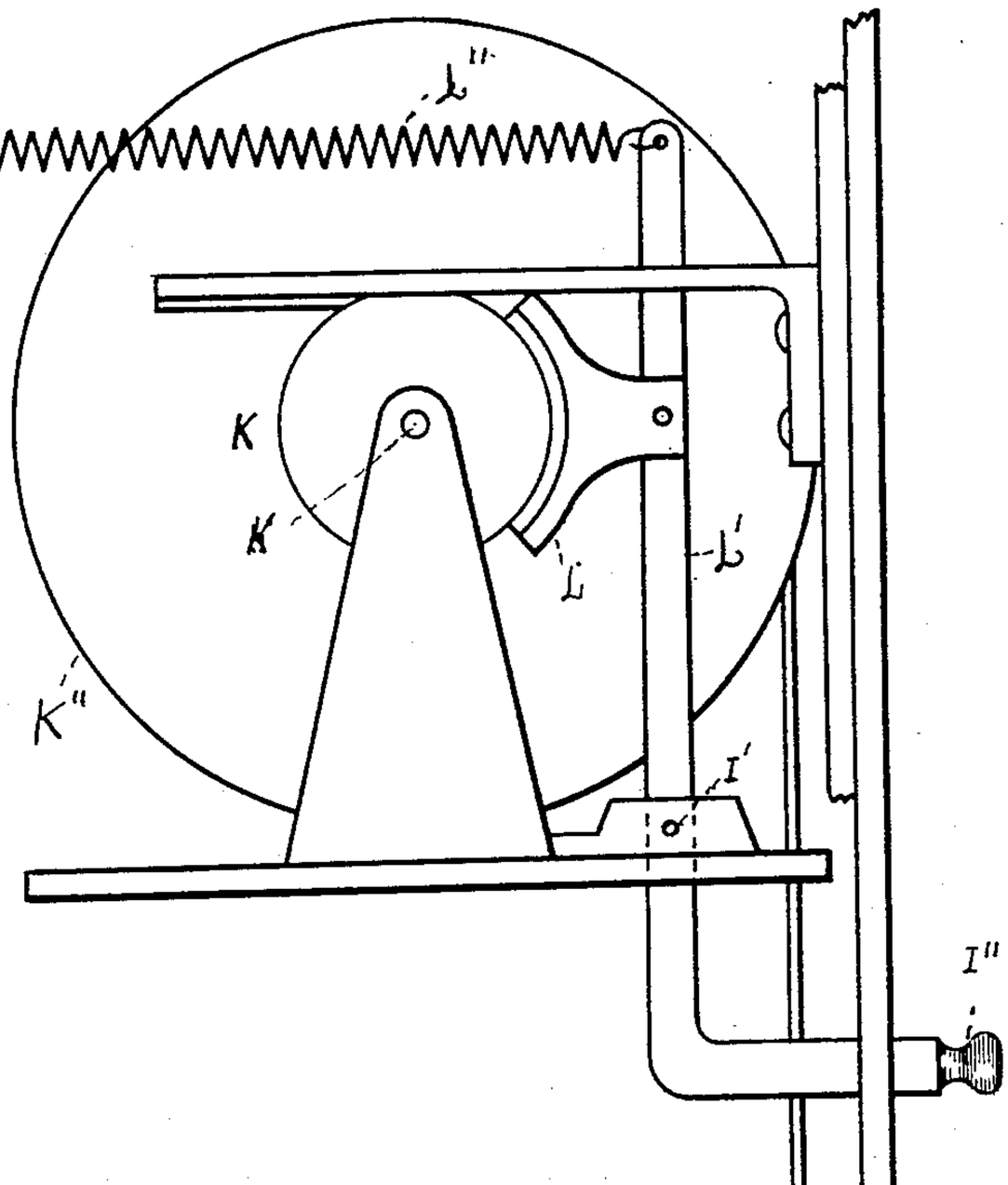
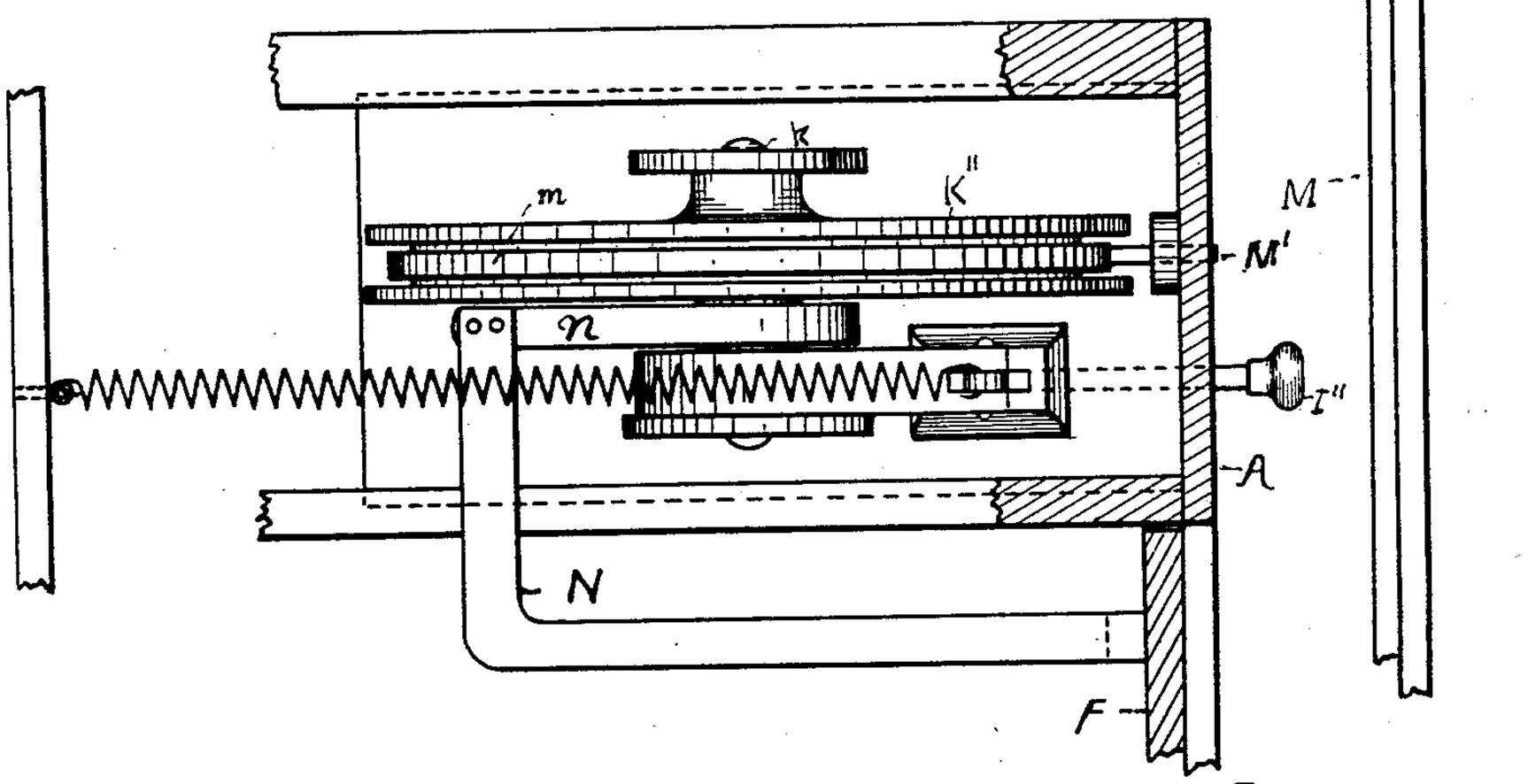


FIG. 6.



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(No Model.) 3 Sheets—Sheet 3.

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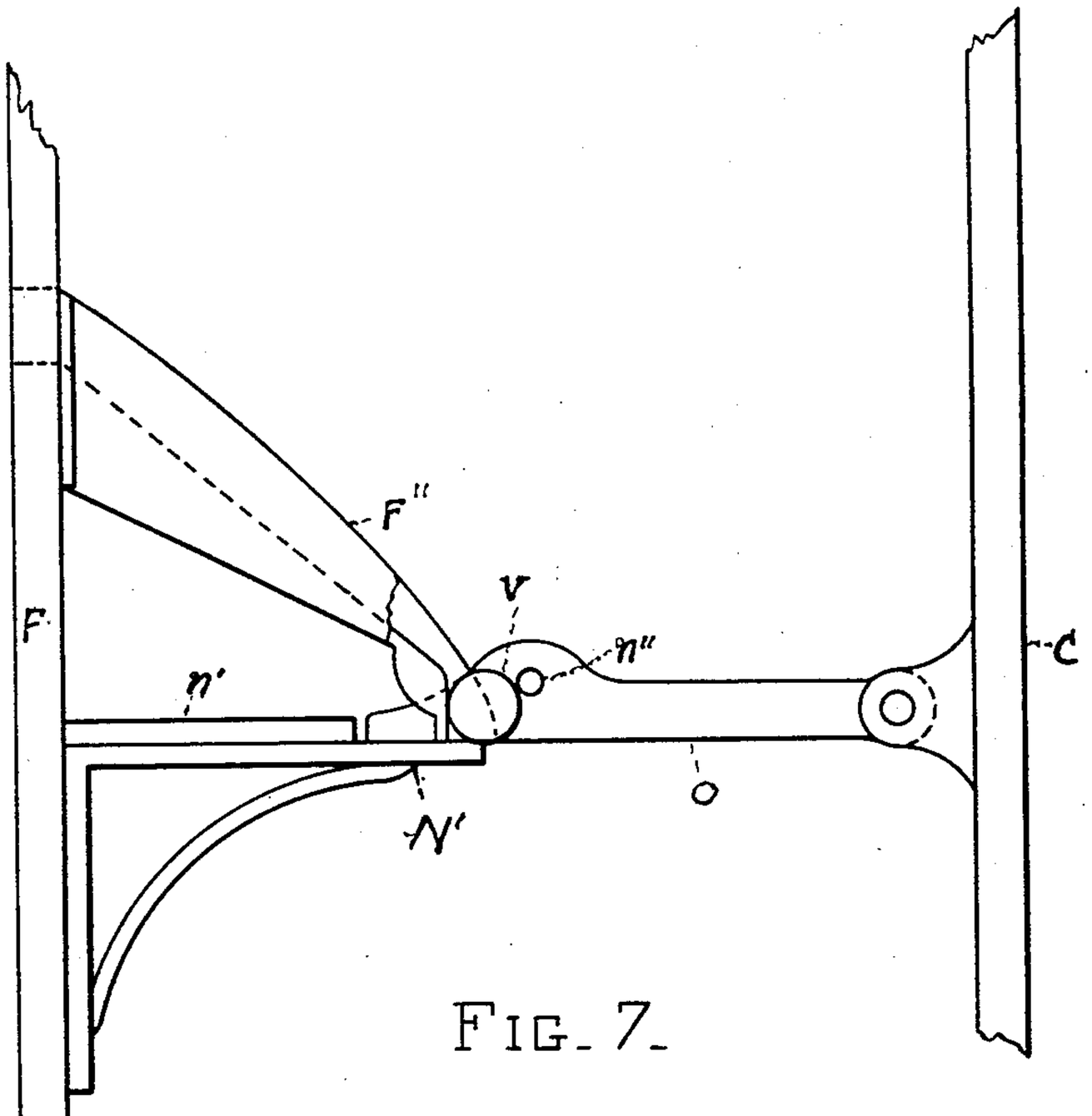
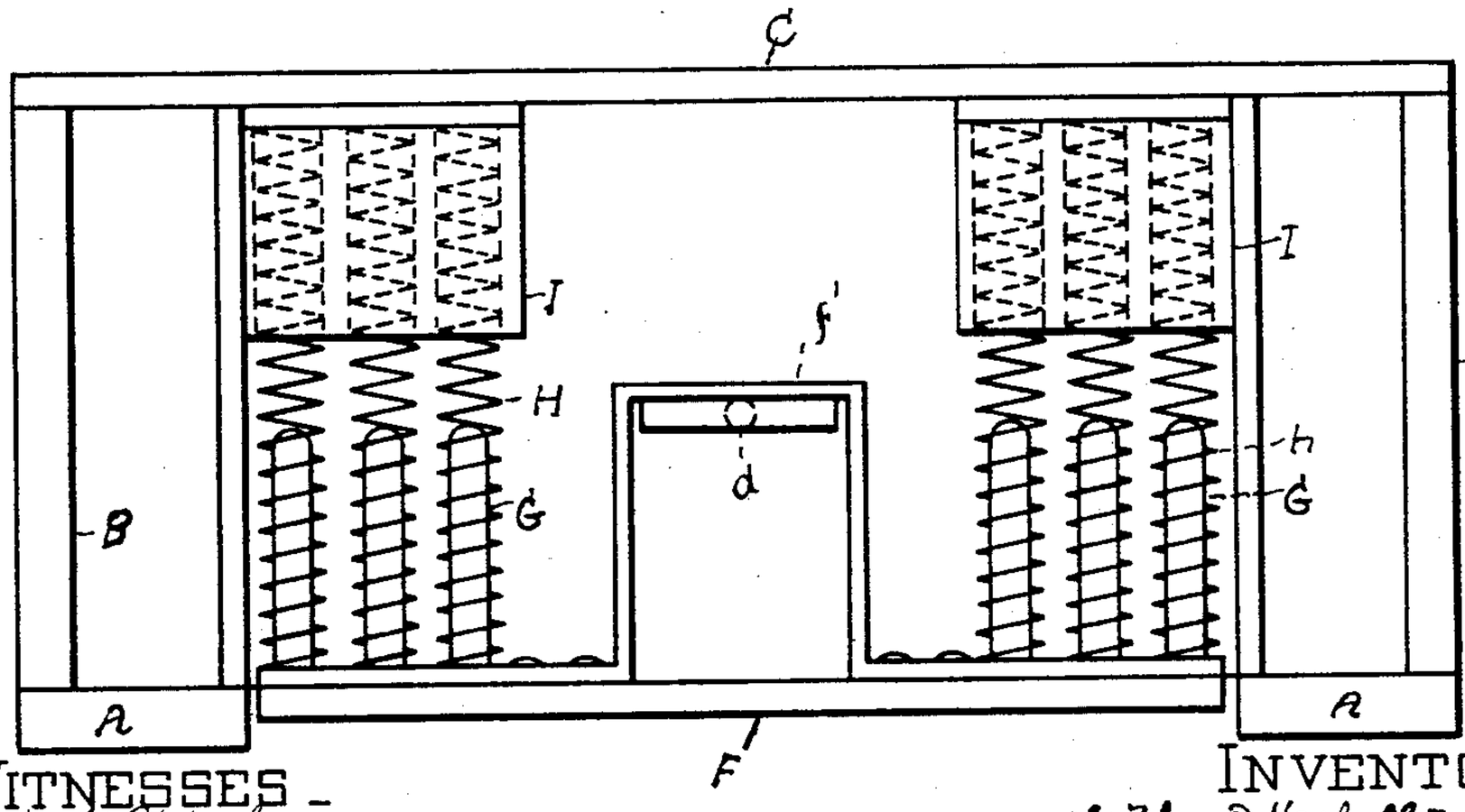


FIG. 7.

FIG. 8.



WITNESSES -
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INVENTOR -
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UNITED STATES PATENT OFFICE.

LUTHER D. HASKELL, JR., OF SALEM, MASSACHUSETTS.

COIN-CONTROLLED ATHLETIC PUNCHING-BAG.

SPECIFICATION forming part of Letters Patent No. 593,469, dated November 9, 1897.

Application filed February 23, 1897. Serial No. 624,536. (No model.)

To all whom it may concern:

Be it known that I, LUTHER D. HASKELL, Jr., of Salem, in the county of Essex and Commonwealth of Massachusetts, have invented certain Improvements in Athletic Punching-Machines, of which the following, read in connection with the accompanying drawings, is a specification.

Figure 1 represents a front elevation of the improved punching device. Fig. 2 represents an interior view showing the front door and front removed. Fig. 3 represents a vertical section on the line 3 3, shown in Fig. 2. Fig. 4 represents an enlarged detailed end view of the registering device. Fig. 5 represents a side elevation of said registering device. Fig. 6 represents a top plan view of such registering device. Fig. 7 is an enlarged side elevation, partly in section, of the parts which compose the stop mechanism for holding the door, the coin-conductor, and a coin of the proper denomination after it has been dropped into the coin-receiving slot and become engaged with the pivoted stopping-lever to coöperate in releasing the door. Fig. 8 is a section on line 10 10 of Fig. 2.

In carrying out my invention as shown in the present instance I make use of an inclosing case, of which A designates the front; B B, the sides; C, the back; D, the top, and E the base or bottom, as shown. The front A is preferably made in the form of a rectangular frame, to the lower end of which is pivoted at *f* the yielding door F, provided on its outside with a suitable punching pad or cushion F'. (Shown in Figs. 1 and 3.) To the inside of the upper portion of the door F are attached spring-guides G G, around which are arranged the coiled springs H H, having their ends interposed between the yielding door F and the back C of the case or frame, as shown in Figs. 2, 3, and 10.

In practice I prefer to secure to the interior of the back C guide-blocks I I, in which the rear ends of the springs H H are guided, as shown in Fig. 3.

Although I prefer to use coiled springs interposed between the yielding door F and the back C, I wish to state that other well-known forms of metallic or pneumatic springs may be employed for this purpose without departing from the essence of my invention.

d is a stop projection secured to the under side of the top D of the inclosing case or frame, and *f'* is a bail secured to the inside of the spring-pressed door F, which bail comes in contact with the projection *d* when the door is held in its normal position by the spring H H, thus preventing said door from being forced too far outward when released, as shown in Fig. 8.

In connection with the yielding door F, I use a registering device for the purpose of automatically registering the first blow imparted to the pad F', and such device is constructed as follows: On a spindle *k*, journaled in bearings *k' k'*, are attached a brake-drum K, a pulley K', and a larger grooved pulley K''. (Shown in detail in Figs. 4, 5, and 6.) Against the brake-drum K is normally held a brake-shoe L, attached to a lever L', pivoted at I', and normally held against said brake-drum by the influence of a spring L'', as shown in Figs. 5 and 6. The lower end of the brake-lever L projects loosely through a perforation in the front A of the inclosing case and is provided with a push-button I'', as shown in Figs. 1, 5, and 6. On the periphery of the pulley K'' is moved and attached a cord or band *m*, the lower end of which is attached to a vertically-sliding weight M, having an index-pointer M' projecting loosely through a vertical slot *a* in the front A of the inclosing case, as shown in Figs. 1 and 5. At the side of the slot *a* is a graduated scale *a'*, on which the rise of the index-pointer *a* is indicated when a blow is given on the pad F', attached to the yielding spring-pressed door F, as shown in Fig. 1. To the door F is attached a bar or rod N, having its inner end connected to a strap or cord *n*, which is wound upon and secured to the pulley K', as shown in Figs. 4, 5, and 6.

The operation of said registering device is as follows: As the door F is forced inwardly by a fist-blow given to its pad F a rotary motion is imparted to the pulley K'' in the direction of the arrow, as shown in Fig. 5. Such rotary motion is conveyed to said pulley K'' by the bar N, strap *n*, and pulley K'. When

the pulley K″ is thus rotated, it causes the weighted bar M to be drawn upward more or less, according to the force of the blow exerted on the pad F′, and to be held in such raised position by the brake-shoe L. The index-pointer M′, being thus raised and held in the raised position, will indicate on the scale *a′* the force or strength of the blow exerted on the pad F′ and the yielding door to which it is attached. To return the weighted bar M and its index-pointer M′ to their normal zero positions after a blow has been given on the cushion F′, it is only necessary to release the brake-shoe L from the pulley K, which is done by pressing inwardly on the button I″, when the now released weight M will fall by gravity to its lowest zero position. The hinged door F is normally held locked and released by the action of a coin dropped through a slit in said door, as will hereinafter be described. To the inside of said door F is secured a bracket N′, on which is the fixed stop *n′*, and to a bracket on the rear side of the inclosing case is pivoted the stopping-lever O, its face end normally resting on the bracket N′ to engage the stop *n′* for holding the door closed. The coin-conductor F″ opens its outer end through the door F, and terminates its inner end adjacent to the lever O, so that a coin passing down the conductor is arrested by a pin *n″*, which to that end extends across the conductor in position to engage the coin above the horizontal diameter thereof. Said pin *n″* is fixed in the stopping-lever O, and the first inward movement of the door moves the coin-conductor forward, whereby the coin is pressed under the pin *n″*, which is lifted thereby, and therewith the lever O is also lifted above the stop *n′* to allow of the door being opened. To facilitate this operation of lifting the lever O, I set the stop *n′* slightly away from the end of lever O in order to permit the required movement of the door.

It will now be understood that if a blow is applied to the cushion on door F while the coin-conductor is unloaded inward movement of the door is stopped by the end of lever O engaging with the stop *n′;* but if a coin is in the conductor it coöperates with the pin *n″* to lift the lever O, allowing the door F to be forced inwardly against the springs H H. The coin V presses under pin *n″* when lever O is lifted and deposits in the funnel Q and is conducted through the tube Q′, leading to the coin-drawer Q″, from which the coin accumulating may be removed from time to time, as is common in coin-operating devices.

Having thus fully described the nature, construction, and operation of my invention, I wish to secure by Letters Patent and claim—

1. In an athletic punching device an inclosing case, or frame and a yielding spring-pressed door pivoted thereto and having a pad or cushion on its outside, combined with a slit and coin-conductor attached to said door, a pivoted lever normally holding the door locked and connections to coöperate with a coin in the conductor for lifting said lever, substantially as described.

2. In an athletic punching device, an inclosing case or frame, and a yielding spring-pressed door pivoted thereto and having a pad or cushion on its outside, combined with a stop device for preventing the door from being moved too far forward when released, a slit and coin-conductor attached to said door, a stop on the inside of the door, a pivoted stopping-lever engageable with said stop for preventing the door from being pushed inwardly until a coin is dropped into the slit, and coin-conductor, substantially as described.

3. In an athletic punching device an inclosing case or frame, and a yielding spring-pressed door pivoted thereto combined with a graduated scale, a vertically-adjustable weight, provided with an index-pointer having a strap or cord attached to it and to a rotary drum actuated by the inward movement of the door, and a brake and releasing device, substantially as described.

4. In an athletic punching-machine the combination of a movable part having a pad or cushion supported thereon, an indicating mechanism actuated by the movement of said part, a movable stopping member normally holding said part against movement, a coin-conductor and connections actuated by movement of said part and a coin in said conductor for moving the stopping member to release the said movable part, substantially as described.

5. In an athletic punching-machine the combination of a movable part having a pad or cushion supported thereon, an indicating mechanism actuated by the movement of said part, a movable stopping member adapted to stop the said movable part, a coin-conductor on the movable part and connections put in action by movement of said part to coöperate with a coin in said conductor for moving the stop member to release the said movable part, substantially as described.

6. An athletic punching-machine, having a movable part with a blow-receiving pad mounted thereon, an indicating mechanism put in operation by the movement of said part, and a stop mechanism normally in the path of movement of the movable part, and permitting limited movement thereof, combined with a coin-conductor and connections actuated by a blow upon the pad of said movable part and a coin in said conductor for moving the stop member to give way for extended movement of the movable part, substantially as described.

7. An athletic punching-machine, having a movable part with a blow-receiving pad or cushion mounted thereon, and an indicating mechanism actuated by movement of said part and a lever pivoted in alinement with the path of movement of said movable part

and normally arresting the movement of said part, combined with a coin-conductor and connections, the same to be actuated by a blow upon the pad of said movable part and a coin in said conductor for moving the lever to give way for the movable part, substantially as described.

Signed at Lynn, Massachusetts, this 30th day of December, A. D. 1896.

LUTHER D. HASKELL, JR.

Witnesses:
C. B. TUTTLE,
A. M. TUTTLE.