

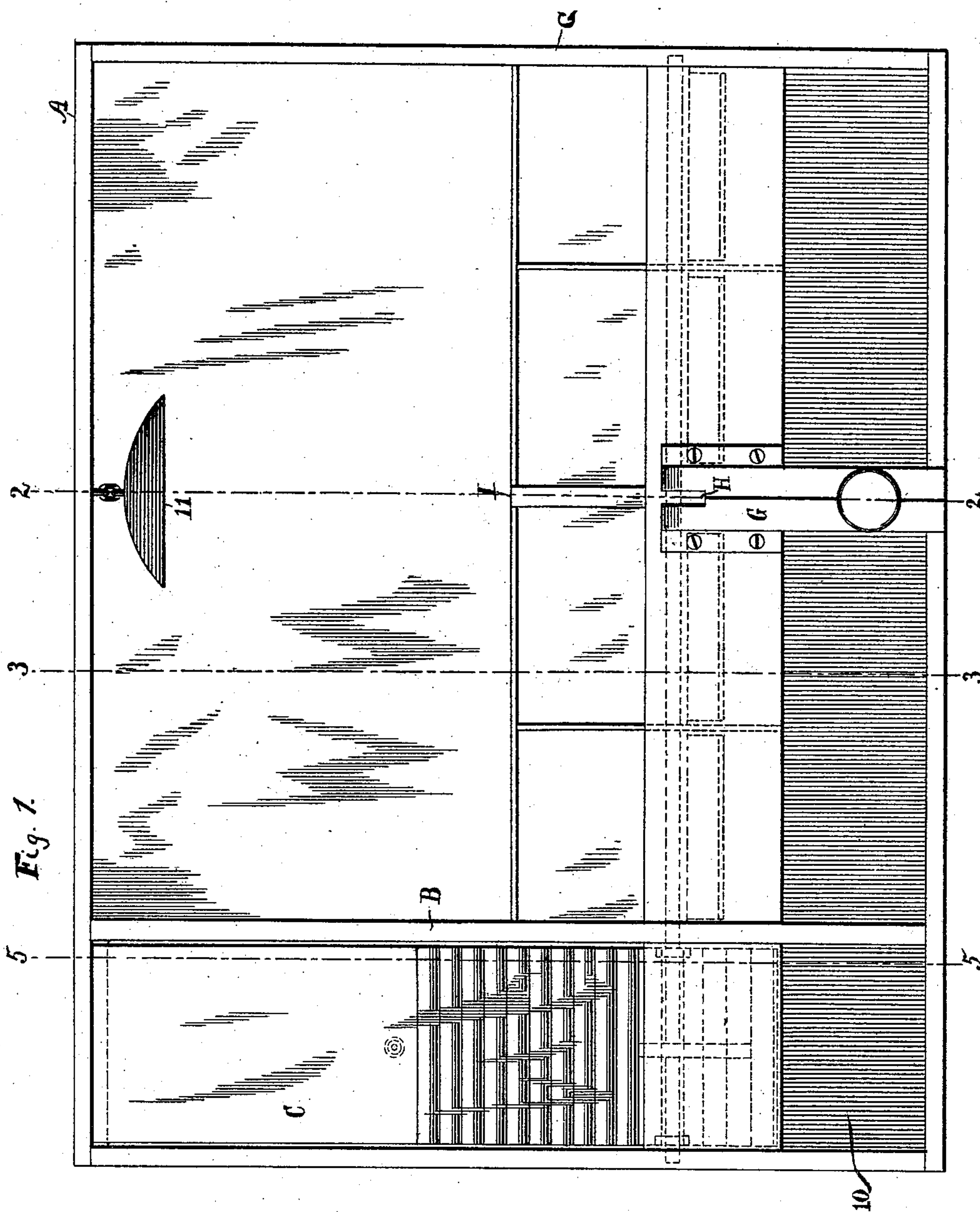
(No Model.)

3 Sheets—Sheet 1.

F. M. ARCHER.
ADVERTISING AND VENDING MACHINE.

No. 536,713.

Patented Apr. 2, 1895.



WITNESSES:

Frank S. Ober

Charles M. Catlin

INVENTOR

Frank M. Archer

BY

G. H. Stockbridge
his ATTORNEY

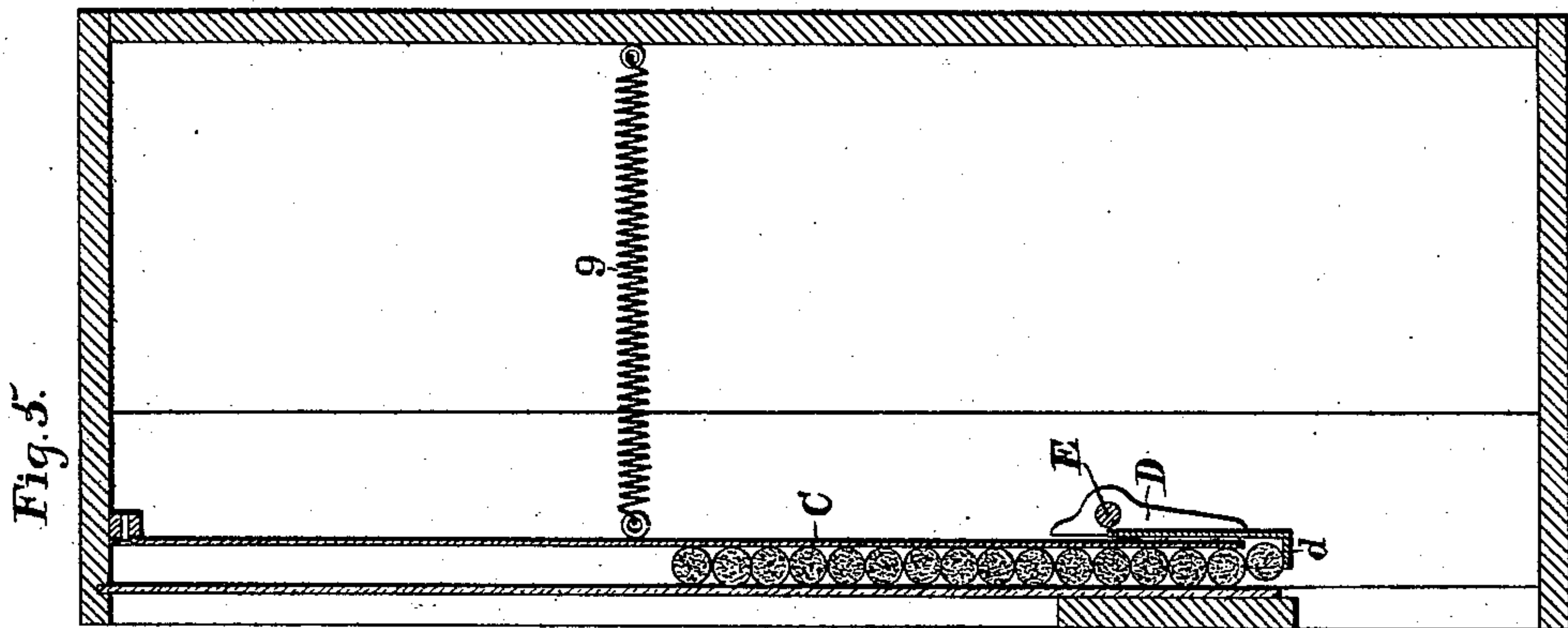
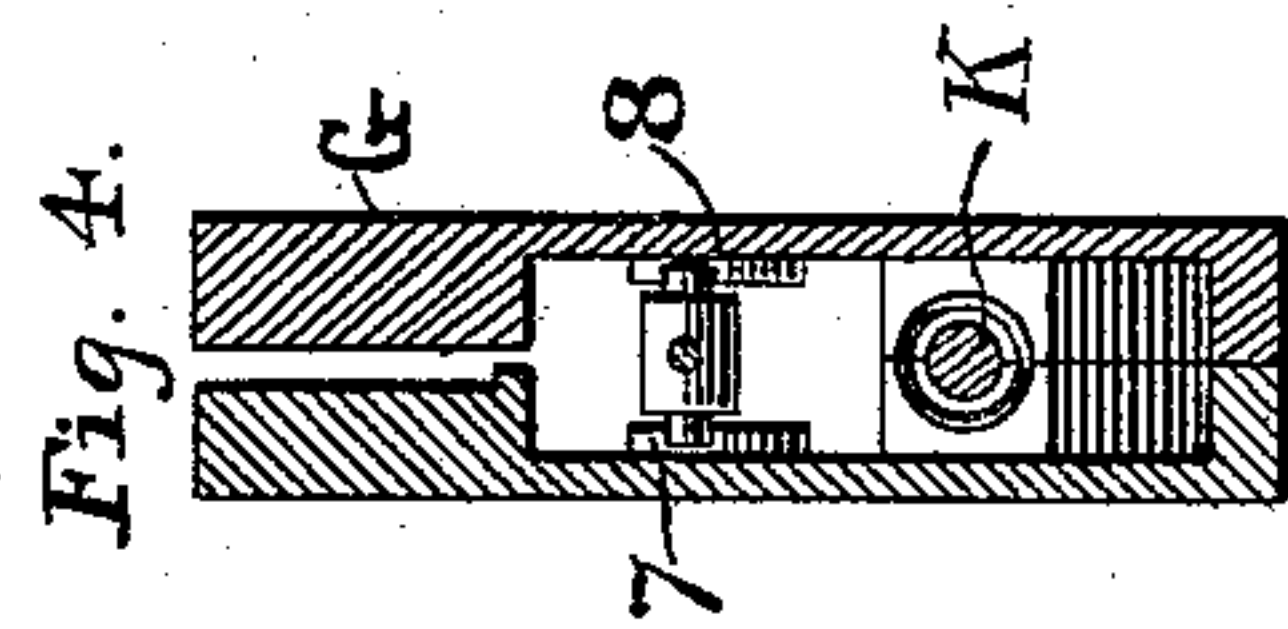
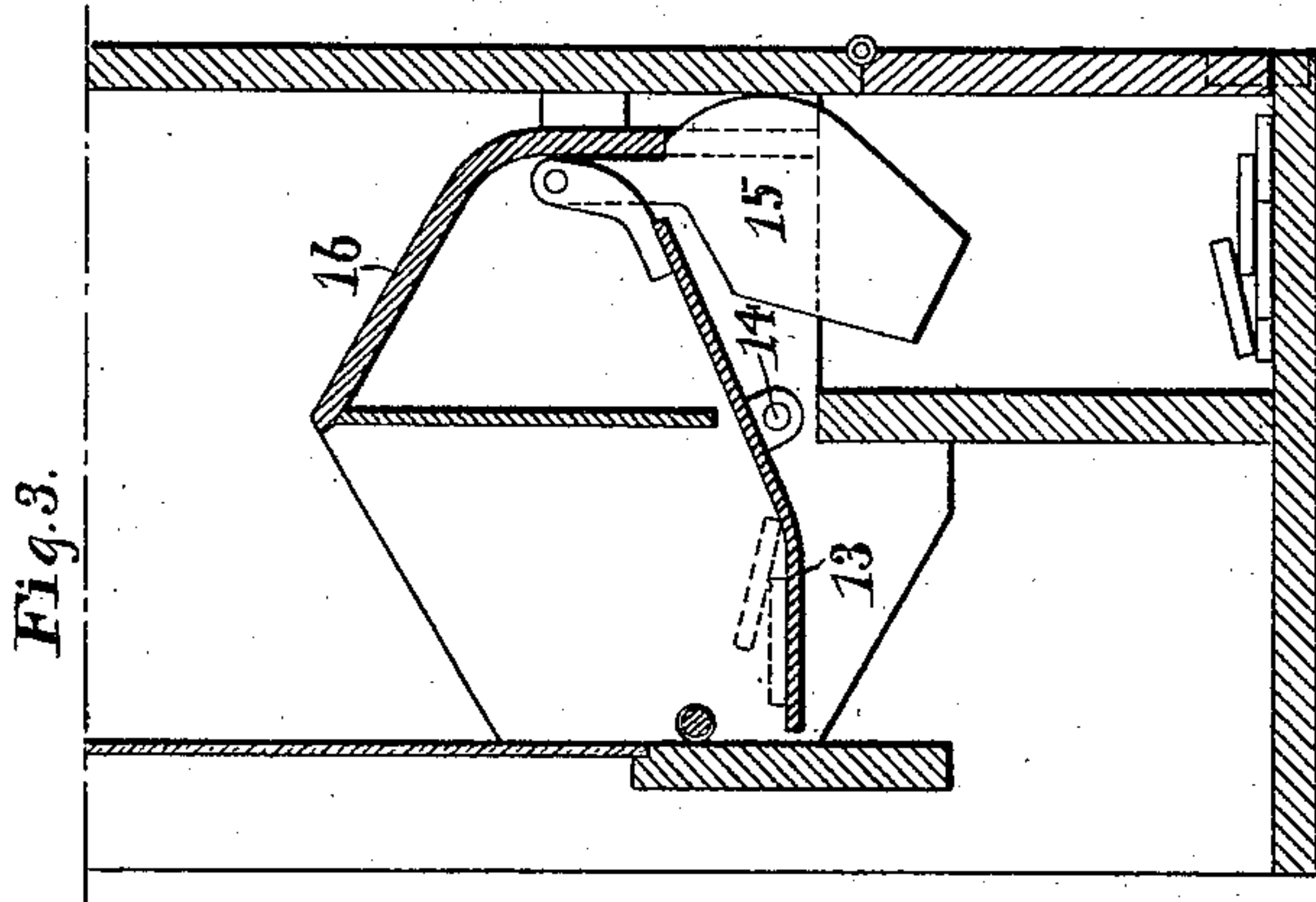
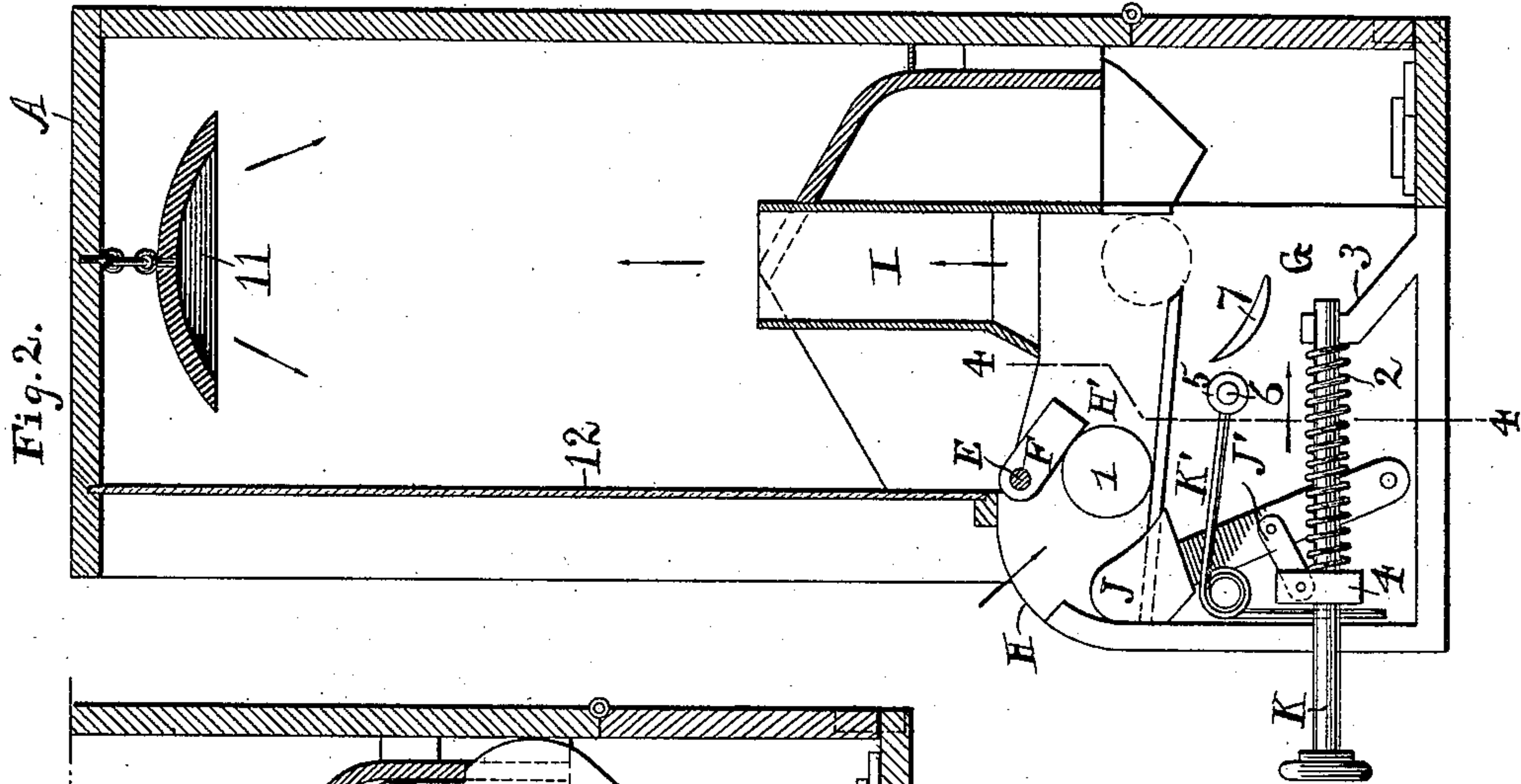
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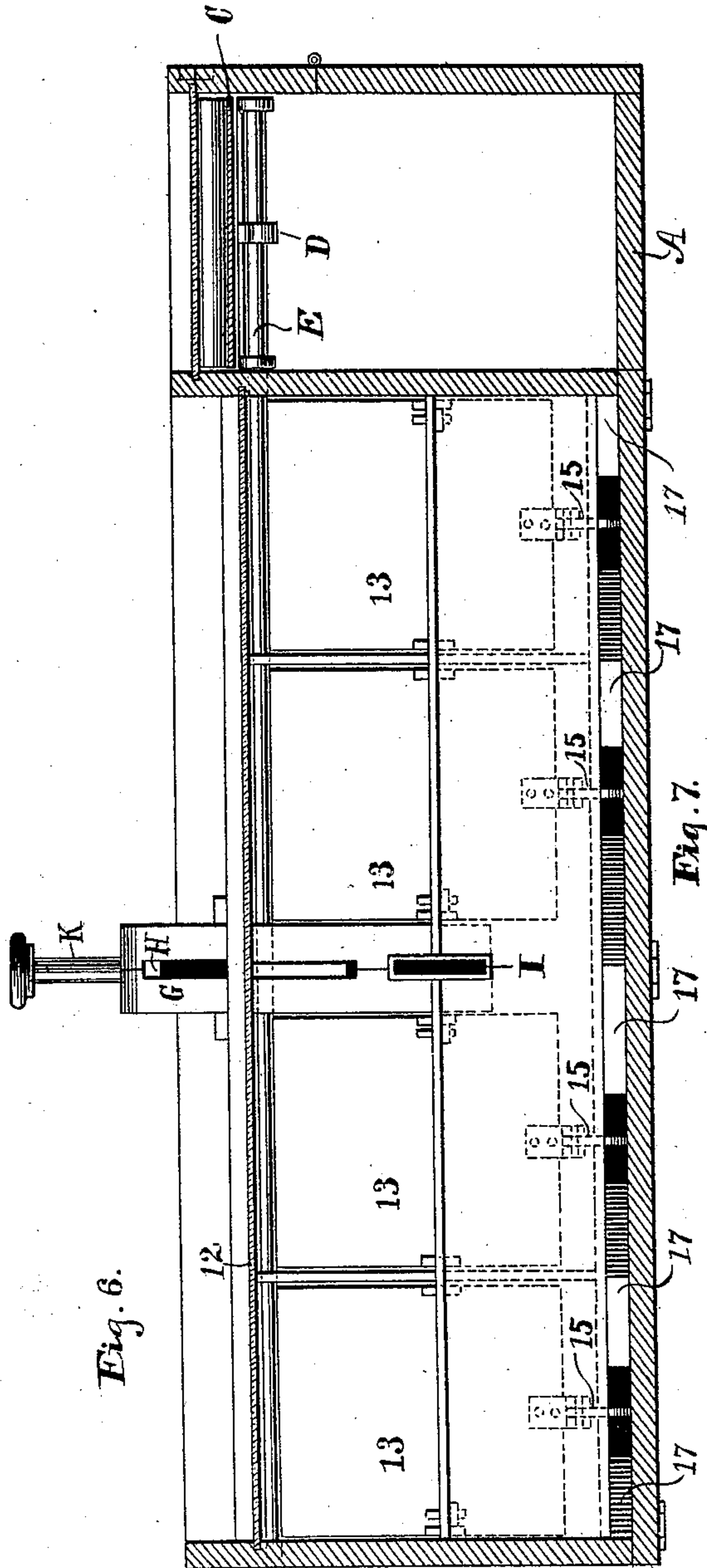


Fig. 6.

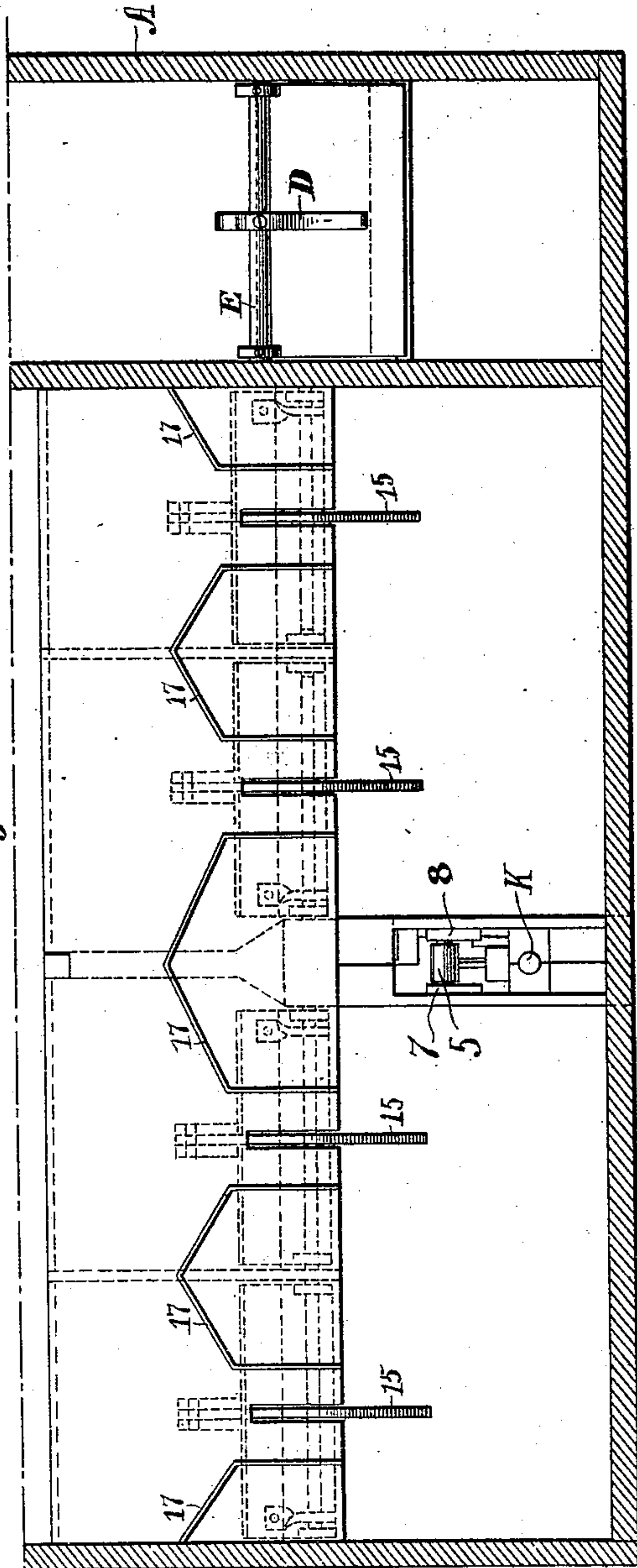


Fig. 7.

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UNITED STATES PATENT OFFICE.

FRANK M. ARCHER, OF NEW YORK, N. Y., ASSIGNOR TO THE SAVOY
MACHINE COMPANY, OF NEW YORK.

ADVERTISING AND VENDING MACHINE.

SPECIFICATION forming part of Letters Patent No. 536,713, dated April 2, 1895.

Application filed June 29, 1894. Serial No. 516,042. (No model.)

To all whom it may concern:

Be it known that I, FRANK M. ARCHER, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Advertising and Vending Machines; 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.

It has occurred to me that I can construct a novel advertising apparatus and combine it with a vending apparatus as a more or less incidental feature, in such a manner as to make a device which will attract great attention to the wares which it may be desired to advertise. I have, in fact, constructed such an apparatus in the form of a closed box or casing in which the wares to be advertised are contained and from which they are dropped one by one whenever a customer puts into the box or casing the necessary coin for the purchase of one of the articles on sale. In another part of the machine, shut off from the articles to be sold by a suitable partition, I make compartments capable of holding coins and provided with tilting or dumping bottoms in the form of pans. The coins are thrust into the machine through an inclined passage way leading to the foot of a vertical passage when they are thrown up by a spring or other power through the vertical passage into a chamber above the compartments already mentioned. This chamber also communicates with a space behind the said compartments and provided with sloping walls which lead to narrow spaces, one behind each compartment. In each of these narrow spaces lies the projecting portion of a catch, which catch is attached to a pan forming the floor of one of the compartments, the attachment being so made that the said catch just balances the said pan or floor. Now the coins when thrust into the inclined passage way can not reach the bottom thereof until a suitable device, such as a push rod, is actuated from the outside of the apparatus; but when the push rod is operated after the insertion of a coin, it acts through the medium of the said coin to rock a lever controlling the articles on sale and permits one such article to be dropped into a

space where it can be easily reached. This takes place every time the push rod is operated provided that a coin has first been put into the inclined passage way. There is, accordingly, an actual scale of some article in every instance and it is my expectation that the article sold will be the full value of the coin demanded and made use of. It will be understood that my machines will be constructed so as to operate with special coins and no others; that is, one machine will be capable of operating by a dime, another by a five-cent piece, and another by a cent.

In combination with this vending feature, I use as an advertising device the other parts of the apparatus already described. For example, when a coin has actually been pushed through to the bottom of the inclined passage and has dropped some article of sale, such as a cigarette, a cigar, or a package of chocolate, or tutti-frutti, it is thrown upward through the vertical passage by means of a spring which has been put under tension by the movement of the push rod and released thereby, and having been so thrown upward the coin strikes a distributor or deflector at the top of the chamber and is thrown either into or behind one of the compartments into which this part of my machine is divided. If it is thrown into a compartment, it stays there, and if it is thrown behind a compartment, it operates the catch connected with the floor of that compartment and releases the said catch. In case there is a coin or more than one coin in the compartment effected, the floor of the said compartment will be tilted by the weight of the said coin or coins and thrown out within the reach of the purchaser. On the other hand, the coin which passes behind the compartments drops into a closed and locked receptacle where it can be collected by the owner of the machine at his leisure. These coins which fall toward the rear of the machine are the only return which the vender gets for the articles sold through the machine. All the rest go to the purchasers and are designed to serve as an advertisement of the wares displayed and sold in the apparatus. To this end, also, I purpose attaching to the rear walls of the several compartments reading matter which will call attention to the wares on sale. I should say that the interior of these compart-

ments is clearly visible from the outside of the machine, a glass window being provided for that purpose. Moreover, the articles on sale are likewise held in full view behind a glass partition and these articles may themselves be supplied with advertising material in any desired form.

In view of the fact that the vender will get less than the value of his wares out of the machine, it is expected that these machines will be utilized only for short periods during which it is desired to secure good advertising in a taking way. Even so, it may be found that the advertising will be cheaper than many of the methods at present in use.

I have illustrated my invention in the accompanying drawings, in which—

Figure 1 is a front elevation of my apparatus including both the vending and the advertising portions thereof. Fig. 2 is a section along line 2—2 in Fig. 1. Fig. 3 is a section along line 3—3 in Fig. 1, showing only the lower parts of my apparatus. Fig. 4 is a section along the line 4—4 in Fig. 2. Fig. 5 is a section along line 5—5 in Fig. 1. Fig. 6 is a plan of my apparatus with its top removed; and Fig. 7 is a rear view of the apparatus after the rear wall thereof has been taken away.

In the drawings, A is the casing of my apparatus, the same being divided off from front to back by a partition B. To the left of the partition are arranged the articles to be vended, which articles are represented in the drawings as cigarettes. The cigarettes are held, one above another, between the front wall of my machine and a strip C of metal suspended at the top, as shown in Fig. 5. At the lower end of the said strip, behind the same, is pivoted an angular piece D, a portion of which is extended down along the lower end of the strip C and is there bent under so as to catch the column of cigarettes. The lowermost cigarette lies on this bent-under portion of ledge *d* and in this way the column is sustained. The angle piece D is mounted upon a rod or shaft E which extends entirely across the apparatus behind the front casing thereof. Upon another portion of the rod E is mounted a lever F which lever (shown in Fig. 2) stands at an angle inside a frame or casing G which is set in through the front plate of the machine and carries the coin operating devices.

At H is shown the opening through which the coin enters the passage way H' leading down an incline to the foot of the vertical passage I. One of the coins used in operating the apparatus is shown at 1. The main portions of the coin operating apparatus appear in Fig. 2 of the drawings. Here a lever J connected by a link J' to the push rod K is shown, the free end of the said lever being adapted to move, when the push rod is thrust inward along the path of the coin 1 so as to push the same ahead of it. A spring K' also partakes of the motion of the push rod K, being set into the same, as shown, and neces-

sarily moving with it. The push rod itself is normally kept in the position shown in Fig. 2 by a coil spring 2 resting at one end against its support 3 and at the other against a collar 4 on the push rod, which collar forms the direct means of connection between the push rod and the link J'. The forward end of the spring K' carries a hammer 5 with a pin 6 extending through it, the said pin 6 being adapted to strike at both ends against crescent shaped pieces 7 and 8 on the two parts of the frame G. (See Fig. 4.) The consequences of a forward movement of the push rod after a coin has been inserted are, first, that the lever J is pushed forward and carries with it the coin 1, thus lifting the lever F and rocking the shaft E; second, that the coin is carried by gravity to the bottom of the vertical passage I as shown in dotted lines in Fig. 2; third, that the spring K' is carried forward and that, through the action of the crescent shaped pieces 7 and 8, the forward end of the said spring is depressed thus storing power in the spring K', which power is afterward released when the hammer passes beyond the pieces 7 and 8 and is brought to bear upon the coin 1 so as to shoot it up through the vertical passage I. The parts are so arranged and proportioned that the hammer is not released until the lever J has done its work, and the coin has had time to find its place at the bottom of the passage I. These are the consequences inside the frame G of the coin operating apparatus. A further consequence of rocking of the shaft E through the lever F and the coin itself is that the angle piece D (see Fig. 5) is rocked so as to release the lowermost cigarette from the ledge *d*. While this ledge is being withdrawn from under the said cigarette the upper end of the angle piece D is pressing the lower end of the strip C against all the cigarettes except the lowermost one, whereby the cigarettes are held from dropping when the ledge *d* is removed. Upon the restoration of the shaft E after the coin 1 has slipped past the lever F, the parts, including the angle piece D with its ledge *d* are resorted to their first position, thus bringing the ledge *d* under the column of cigarettes. The medium of restoration is a spring 9 which is attached both to the rear wall of my machine and to the strip C. This spring pulls the strip back as soon as the coin 1 has passed the lever F and draws with the strip the upper end of the angle piece D in an obvious manner. Hereupon, the tension upon the column of cigarettes is relieved and they are free to fall down, but not until the ledge *d* is in place to catch the lowermost cigarette and uphold the column.

The single cigarette which has been dropped by the operation above described falls into an open space 10 at the front of the machine and can be reached and taken possession of by the person who has deposited the proper coin and operated the push rod in the manner described.

We have seen that the operation of the push

rod has another effect; namely, that of shooting the coin through the passage I. From the upper end of the said passage the coin is carried up until it strikes against a bell shaped suspended distributor or deflector the object of which is to throw the coin to one side or the other of the chamber, as will presently appear. The front wall of this chamber is a glass partition 12 through which the interior can be seen. Near the bottom of the chamber I set in a frame of any suitable material which divides the front side of the chamber at the bottom into a series of compartments having tilting floors or bottoms. In the accompanying drawings I show four such compartments. Referring to Fig. 3, it will be seen that the tilting floor 13 of one of these compartments is pivoted at 14 and has attached to the rear end a catch 15 which is so weighted as to balance the said floor. It will also be seen that the rear half of the chamber or rather of the frame which is set into the chamber is provided with a sloping wall 16 inclining down toward the catches 15 which project through the said wall. In Fig. 7, other inclined walls or partitions 17, 17, will be seen, all inclining toward the catches in such a manner that a coin which drops behind the middle portion of the main chamber will be directed necessarily against one or the other of the catches 15. On striking one of the catches, the coin, by gravity, removes the catch and leaves the floor connected with that catch free to drop and dump its contents, in case there should be one or more coins upon the floor.

It will be understood that the machine is never operated effectually until a purchaser comes along who drops the proper coin into the opening H and afterward actuates the push rod by pressing upon it with his thumb. It has also been explained that the performance of this act results always in the dropping of a cigarette or some other article of sale into the hands of the purchaser. It remains to state that the coin after being thrown up into the open chamber above the compartments is deflected either into one of the said compartments or behind one of the compartments. The first coin may drop into a compartment, and so may the second, third, fourth and fifth; but there will come a time when a coin will drop behind the sloping wall and dislodge the coins, few or many, which may have collected in some one or other of the compartments. Whatever coins drop behind the sloping wall in this manner fall into a locked receptacle and become the property of the owner of the machine.

I believe that with an apparatus of this sort the greatest interest might be made to attach to particular articles of sale and that persons who should purchase such articles through a machine of this kind would retain a lively impression of the occurrence and

would remember the name and character of the articles purchased.

Having described my invention, I claim—

1. A combined vending and advertising apparatus, comprising a chamber having a support for a number of articles to be sold, and a chamber constituting the advertising portion of the machine, the chambers being arranged adjacent to each other and being separated by a suitable partition, in combination with a coin passage choked by a lever upon a rocking shaft, a push rod adapted to tilt the said lever and the shaft through the medium of the coin, a channel leading up into the advertising chamber and a spring at the bottom of the said channel, the said spring being released when the push rod has been fully operated, whereby one of the articles of sale is dropped, and at the same time the coin is thrown up into the upper portion of the advertising chamber.

2. A coin apparatus for vending and advertising articles of sale, the same comprising a coin passage which is choked by a lever upon a rocking shaft, a push rod adapted to tilt the said lever and shaft through the medium of the coin, a support for a number of articles of sale, the said support being connected with the said shaft, a flexible or movable strip lying vertically along side the articles of sale, except the lowermost of the said articles, and a projection or lug connected with the said shaft and extending into range with the said strip, whereby on the insertion of a coin and the operation of the push rod, the support for the articles of sale will be momentarily removed and the remaining articles of sale will be held in place by friction.

3. A combined advertising and vending apparatus comprising compartments for the receipt of coins and other spaces for allowing the coins to pass through, the said other spaces being choked by catches supporting the floors of the said compartments, a separate chamber having a support for the articles of sale, in combination with a coin passage choked by a lever upon a rocking shaft, a push rod adapted to tilt the said lever and shaft through the medium of the coin, a channel leading to the space above the said compartments, and a spring at the bottom of the said channel, the said spring being released when the push rod has been fully operated, whereby, one of the articles of sale may be dropped, and at the same time the coin be carried into a position to fall into one of the said compartments or into one of the spaces behind the same.

In testimony whereof I have signed my name, in the presence of two witnesses, this 30th day of April, A. D. 1894.

FRANK M. ARCHER.

Witnesses:

C. L. BELCHER,
G. H. STOCKBRIDGE.