

No. 612,784.

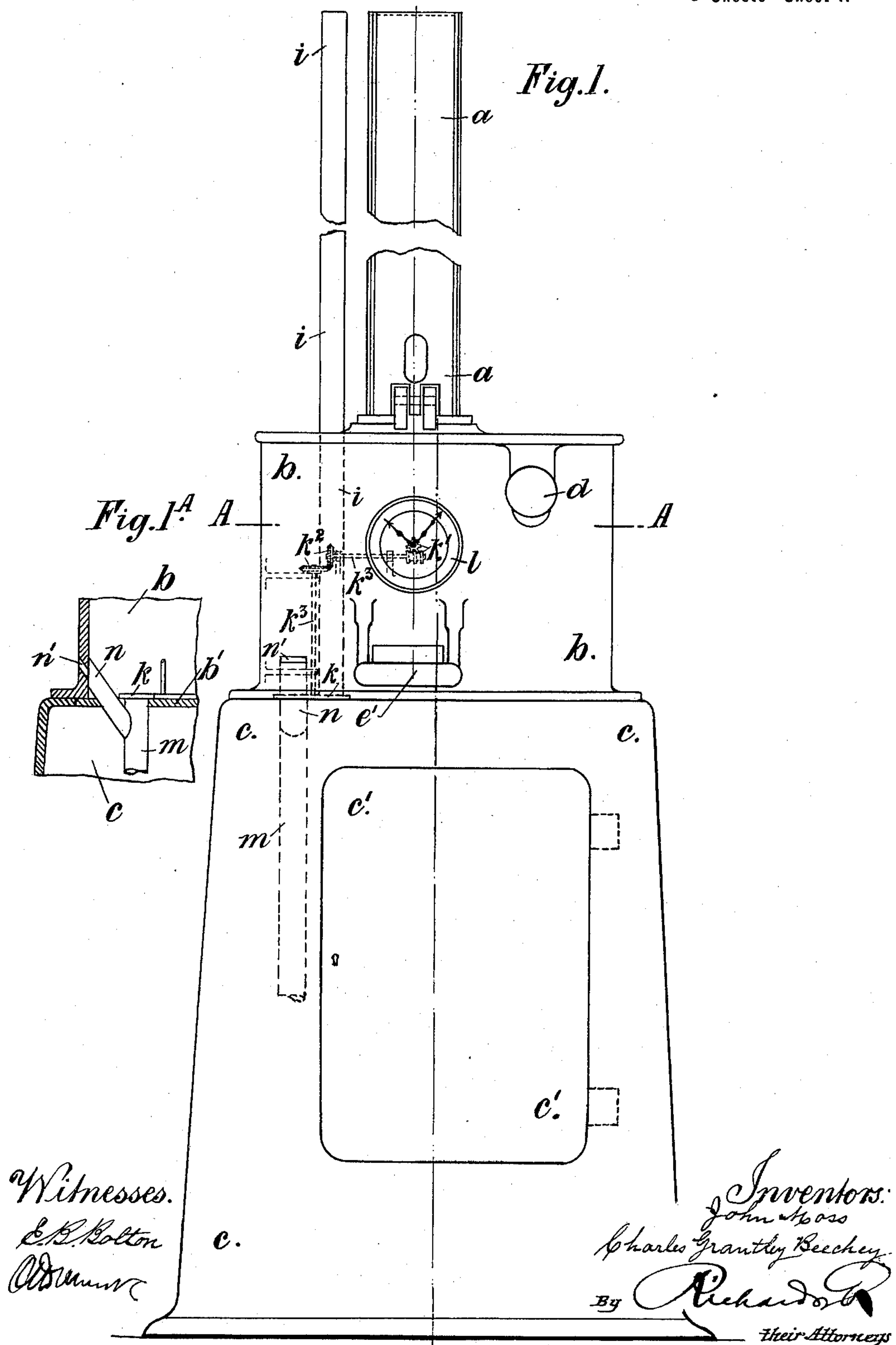
Patented Oct. 18, 1898.

J. MOSS & C. G. BEECHEY.
COIN FREED ASSURANCE APPARATUS.

(Application filed Apr. 12, 1898.)

(No Model.)

3 Sheets—Sheet 1.



No. 612,784.

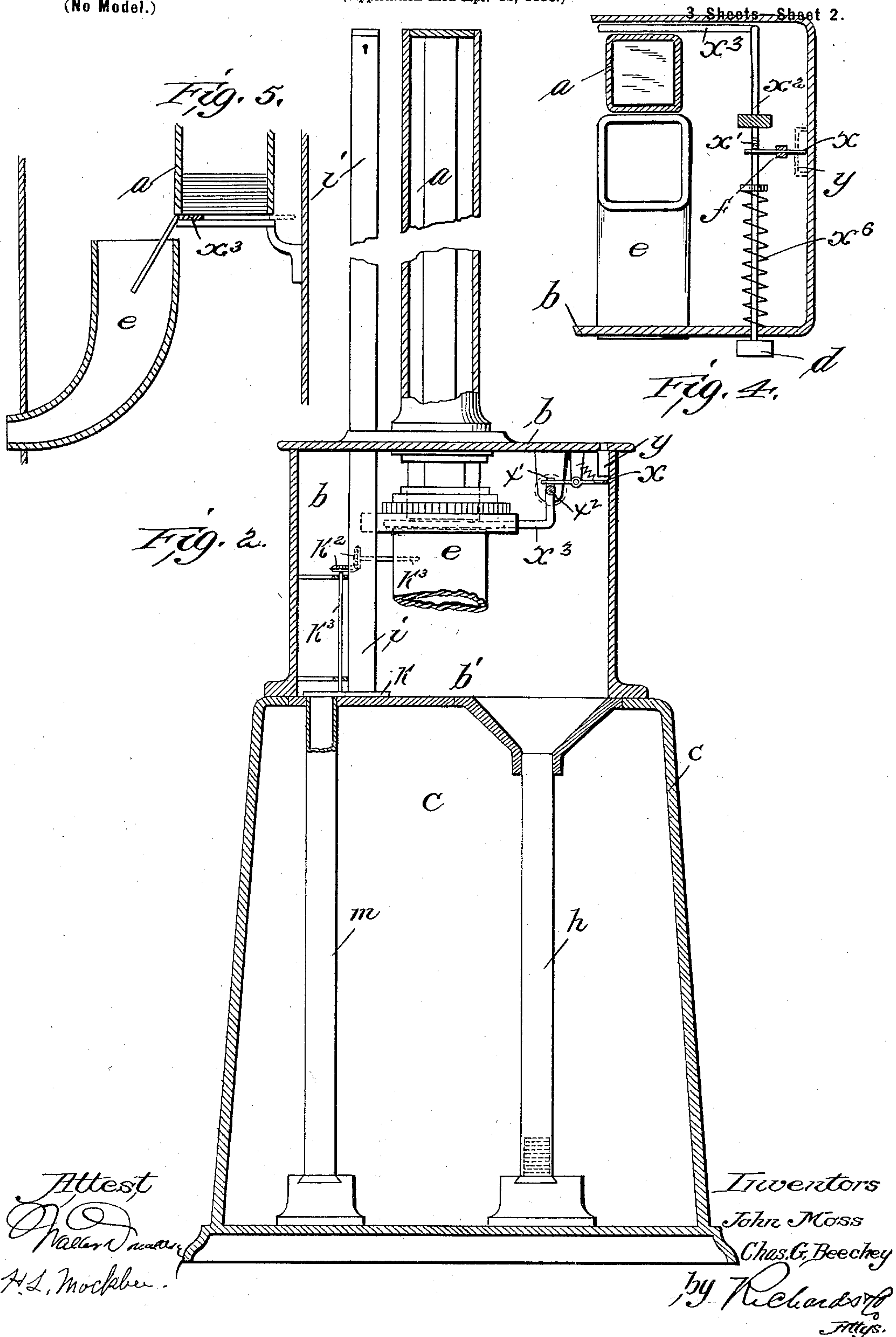
Patented Oct. 18, 1898.

J. MOSS & C. G. BEECHEY.
COIN FREED ASSURANCE APPARATUS.

(No Model.)

(Application filed Apr. 12, 1898.)

3 Sheets, Sheet 2.



No. 612,784.

Patented Oct. 18, 1898.

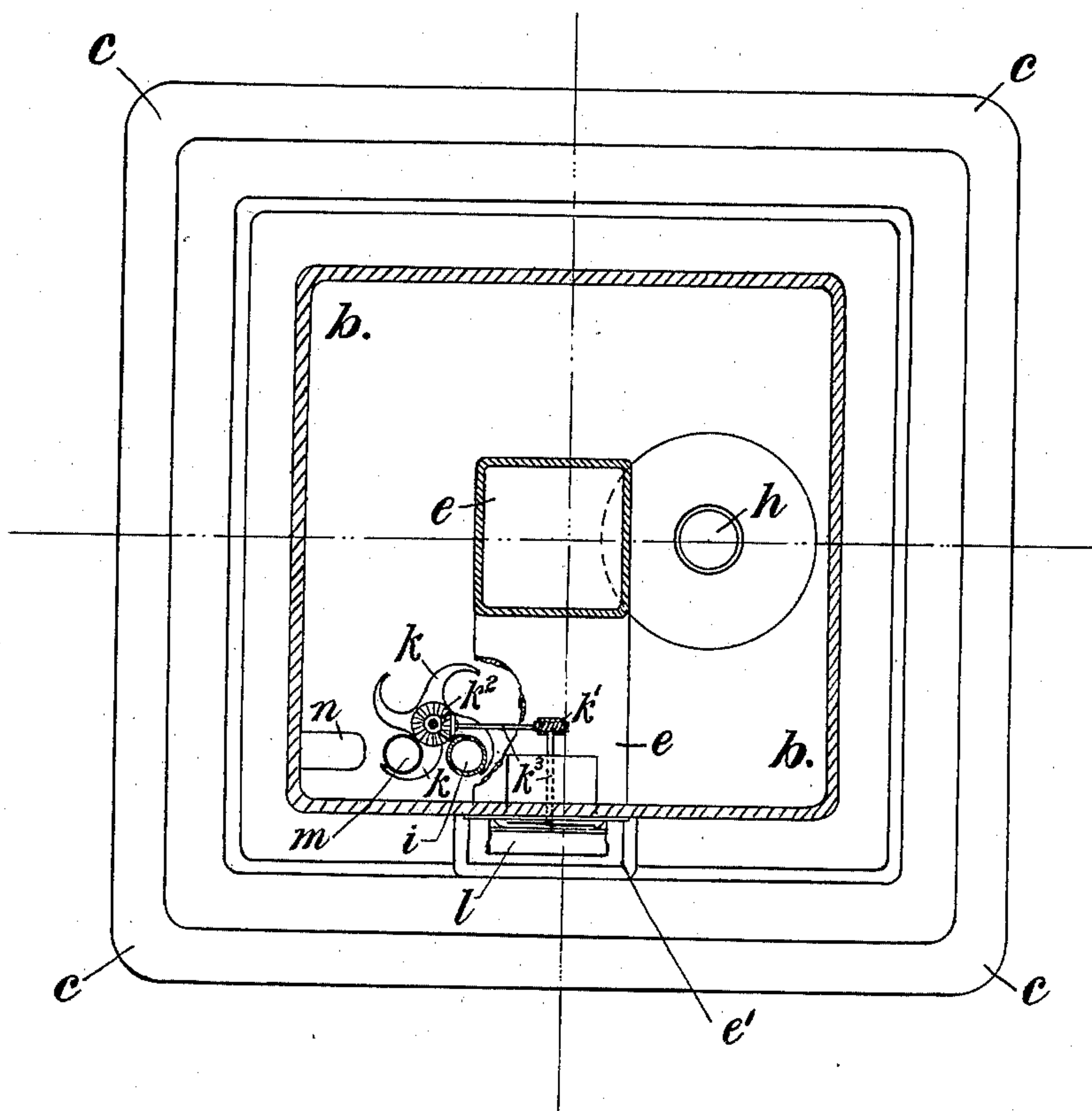
J. MOSS & C. G. BEECHY.
COIN FREED ASSURANCE APPARATUS.

(No Model.)

(Application filed Apr. 12, 1898.)

3 Sheets—Sheet 3.

Fig. 3.



Witnesses.
E. B. Bolton
O. D. Mumuk

Inventors
John Moss
Charles Grantley Beechey
By *Richard R.*
their Attorneys.

UNITED STATES PATENT OFFICE.

JOHN MOSS AND CHARLES GRANTLEY BEECHEY, OF LIVERPOOL, ENGLAND.

COIN-FREED ASSURANCE APPARATUS.

SPECIFICATION forming part of Letters Patent No. 612,784, dated October 18, 1898.

Application filed April 12, 1898. Serial No. 677,360. (No model.)

To all whom it may concern:

Be it known that we, JOHN MOSS and CHARLES GRANTLEY BEECHEY, subjects of the Queen of Great Britain, and residents of Liverpool, in the county of Lancaster, England, have invented certain new and useful Improvements in Coin-Freed Assurance Apparatus, of which the following is a specification.

This invention has reference to apparatus by which by and upon the insertion of a coin or token of a certain value or order, and which is the premium paid for the assurance, a ticket constituting an assurance policy is issued or may be withdrawn from the apparatus, under which a certain sum of money is claimable in case of injury through accident, illness, or death.

The chief object of apparatus of this kind is to enable workmen or artisans to effect weekly or other short periodic assurances for small premiums; and one object of the invention, among others, is to provide improvements, hereinafter described, by which frauds upon the assurance company or firm shall be readily detected or obviated.

The invention will be described by the aid of the accompanying drawings, which illustrate an apparatus for effecting assurances or insurances provided with our present improvements.

In the drawings, Figure 1 is a front elevation. Fig. 1^a is a sectional detail illustrating chute *n'*. Fig. 2 is a side sectional elevation; and Fig. 3 is a sectional plan taken at the line A A, Fig. 1. Fig. 4 is a detail sectional plan view showing the coin-freed pusher device. Fig. 5 is a detail with the pusher advanced.

Referring to the drawings, *a* is a bin in which the policy-tickets are stored. *b* is a box or case on which the actuating coin-controlled mechanisms and ticket-delivery mechanism are located, and *c* is a box-stand having a lockup-door *c'*, on which the upper structure is supported and in which the coins and time-indicating devices are collected, as hereinafter described. *d* is the actuating-handle, by which the ticket-delivering mechanism is operated, and *e* is the tube within the box *b*, adjacent to the mouth of the bin *a*, which receives the tickets as they are delivered from

this bin and by which they are conducted to a tray *e'* outside the box *b*. All these parts—ticket-bin, coin-controlled mechanism, ticket-delivery mechanism, and conduit—are well known and may be of any of these known which are suitable to the purpose.

The coin-controlled mechanism, of whatever known kind may be employed, is, as shown, placed in the upper right-hand corner of the box *b* and is generally designated *f*, and the coins introduced into it fall from it into the tube *h* below, where they are collected in order of deposit, they being withdrawn at the bottom end in any known suitable way.

We have shown in Figs. 2 and 4 a coin-controlled lever *x*, pivotally supported and having one end in line with a coin-chute *y*. The lever engages a projection *x'* on the stem *x*² of the handle *d*, and when the coin-lever is operated by introducing the coin the handle *d* is free to be pulled out, and when so pulled it will draw the pusher-bar *x*³, to which it is attached, toward the front, and as this bar moves across the lower end of the bin *a* it will engage the lowermost ticket therein and push it to the front, so that it will fall into the discharge-tube *e*, as in Fig. 5. The arrangement is such that the pusher in its forward movement holds up the pile of tickets until it returns to normal position under the action of the spring *x*⁶, when the whole pile is allowed to drop, thus bringing the lowermost ticket into line with the front edge of the pusher. Of course the ticket-bin *a* and the other checking-device store-tube hereinafter described are normally closed and locked.

If the tickets be numbered in numerical order and arranged in this order in the bin *a* and the numbers be taken and checked by a checker or collector when the coins are withdrawn from the tube *h*—say every evening or other suitable period of time—the coins, which are collected in order of deposit in the tube *h* and practically simultaneously with the delivery of a policy-ticket, can be identified with each of such tickets or policies so delivered, and so should any bad coin or counterfeit device be introduced the person thus fraudulently using the apparatus can be detected, as the coin or disk introduced can be identi-

fied by the number of the ticket he holds. This mode of checking and detecting fraudulent use of an assurance apparatus is known and forms no part of the present invention, *per se*. It is, however, not sufficient to entirely prevent wrongful or fraudulent use of the apparatus, as it would not prevent assurances or insurances being effected by a person in another's name after an accident has taken place and in such a manner that the proprietors of the apparatus could not find out whether the insurance had been taken out or effected before or after the accident or injury.

Now, according to this invention, to provide detection generally of wrongful use of the apparatus and checking and identification of assurers there is combined and used in connection with the apparatus a means of storing, automatically supplying, and delivering from a point of storage to a point of delivery and collection within the apparatus itself checking devices or tallies in conjunction with portions of policy-tickets to be returned to and collected in the apparatus by the assurer, and the mode of operating this checking means and of its use as a means of detection and fraud prevention is as follows: In the upper part of the apparatus there is a tube *i*, serving as a store-tube for holding one above the other in a pile disks of any suitable material—as bone, zylonite, or the like and, say, about the thickness of a coin—while at the bottom of this tube and resting and supported on the floor *b'* of the box *b* is a star device *k*, having bent arms, as shown clearly in Fig. 3, the lower edge of the tube *i* being about on a level with the upper surface of the arm device *k*. This device *k* is revolved and controlled by a clock-motor and timekeeper *l*, mounted on the front plate of the box *b*, part of its works or gear being connected with the disk *k* through gear-wheels *k'* *k''* and shafts *k'''*. As the clock works, therefore, the disk *k* will be gradually revolved, and the arms of it will sweep a check-disk from under the tube *i*, which will have fallen in between these arms from the tube onto the bed-plate *b* and will carry it around, and as each arm is arranged to pass under the tube *i* at certain intervals of time—say once in every quarter-hour, half-hour, or other period—one disk will be removed in each of said periods. Then in connection with these parts there is used a receiving-tube *m* in the lower box *c*, opening up through the plate *b'* under *k* and over the mouth of which the star-arms *k* sweep, and as the checking-disks being moved by the arms pass over this mouth they will fit into and are collected in order one upon the other. In connection with this tube there is a branch tube *n*, communicating between a slot *n'* in the side of the box *b* and the tube *m* below *k*, and through this tube *n* the portions of the policy-tickets to be returned by the user of the machine are conveyed to the tube *m*. Thus these tickets will be sandwiched be-

tween disks, automatically delivered into the tube *m* from the tube *i*, and thus the time at which any of the tickets between any checking-disks are introduced can be ascertained by the number of the disks above the bottom of the tube *m*, as after the tube *m* is cleared and the time of clearance taken every disk or check moved into the tube *m* will represent a period of time from the starting-point—that is, in the case of an accident taking place and the time of the accident being known no policy-ticket presented to the insurers for payment for such accident and found by the checking-disk in the tube *m* and the corresponding returned tickets in it to have been issued after the accident, (which, as stated, can be ascertained by the number of disks in the tube,) will be paid for in spite of any false marking upon them as to the time they were taken from the machine. As a modification of this, in lieu of these checking-disks being delivered in the separate tube *m* they may be delivered in the coin-receiving tube *h*, and as the number of disks from the bottom represent so much time or periods within which any coin has been introduced and as the number of coins from the bottom of the tube will correspond with the numerical number borne by a ticket the time at which any ticket has been issued by the machine can be ascertained; but the separate means of collecting the time-checking disks and the return-tickets is very much preferable to the other.

What is claimed in respect of the herein-described invention is—

1. In apparatus for effecting assurances or insurances, the combination of a policy-ticket storage-bin; a coin-freed ticket-delivering mechanism for discharging said tickets *seriatim* from the bin to the assurer; a storage-tube for containing checking devices; a moving device below same for removing said checking devices *seriatim* from said tube; a motor for operating said removing device at a certain rate; and a receiving-tube, into which the checking-disks removed from the storage-tube, are received and collected in order, and in conjunction with an article introduced by the assurer or insurer, by which said article is sandwiched between said checking devices; substantially as and for the purposes set forth.

2. In an assurance or insurance apparatus, the combination with a ticket-storage bin *a*, ticket-delivery conduit *e*, and coin-freed mechanism for discharging said tickets *seriatim*; of a checking-device storage-tube *i*; revolving check-feeding device *k*; a clock-motor *l* for operating said device *k*; a receiving-tube *m* under said device *k*, for receiving said checking devices; and a tube *n* communicating between the outside of the apparatus and the tube *m* for receiving returned tickets; substantially as and for the purposes set forth.

3. In apparatus for effecting assurances and insurances, the combination with a policy-ticket storage and coin-freed delivery means,

of the vertical checking-device store-tube *i*;
horizontal revolving bent-arm star device *k*,
supported and revolving on the plate *b'*, un-
der the lower end of tube *i*; the receiving-
5 tube *m* under the star *k*; and return-ticket
tube *n* connecting the box *b* outside with *m*
below *k*; as set forth.

In witness whereof we have hereunto set
our hands in presence of two witnesses.

JOHN MOSS.

CHARLES GRANTLEY BEECHY.

Witnesses:

JOHN H. WALKER,

WILLIAM E. WHITTINGTON.