

H. JOHNSON.
FARE-BOX.

No. 173,960.

Patented Feb. 22, 1876.

Fig 1

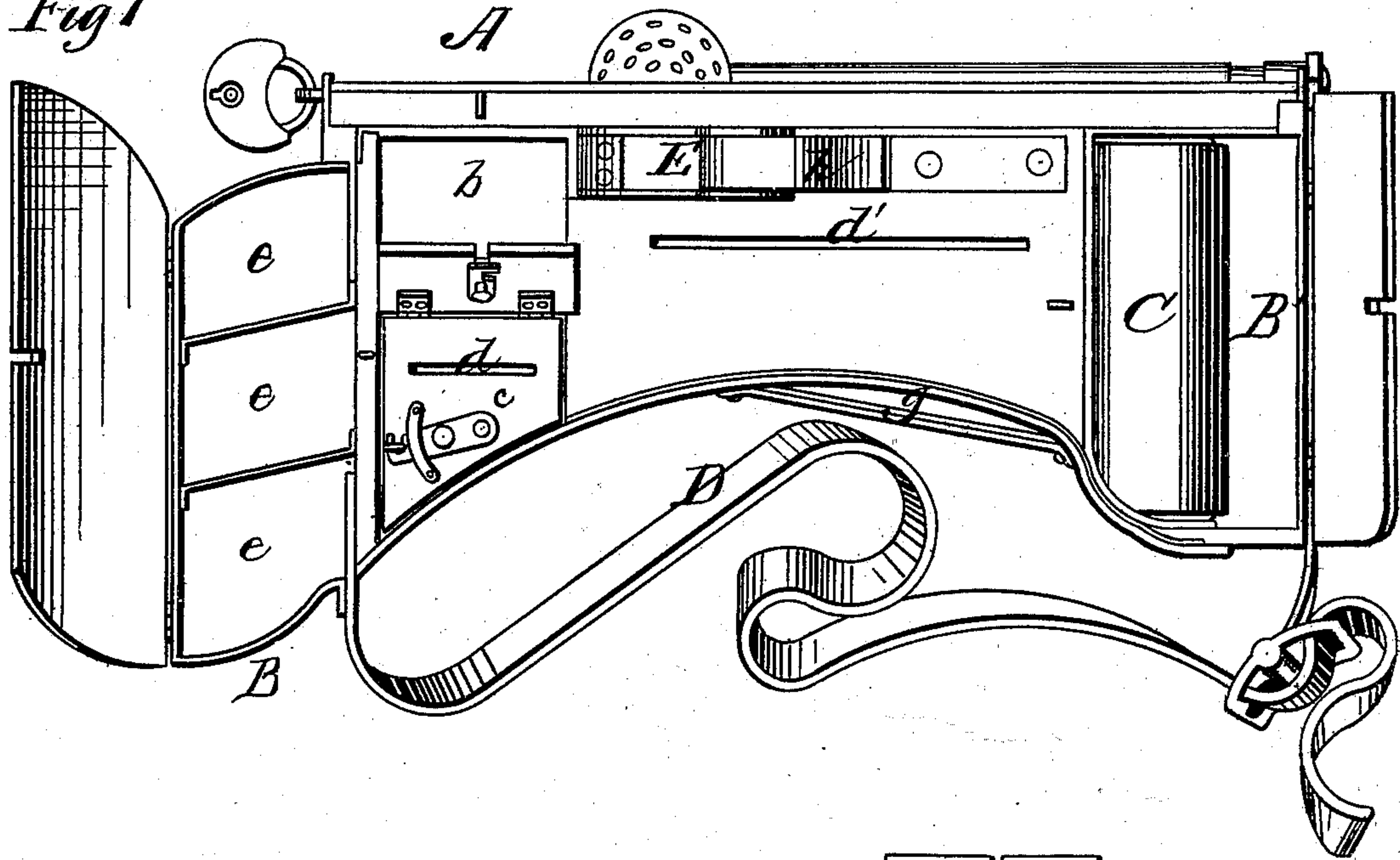
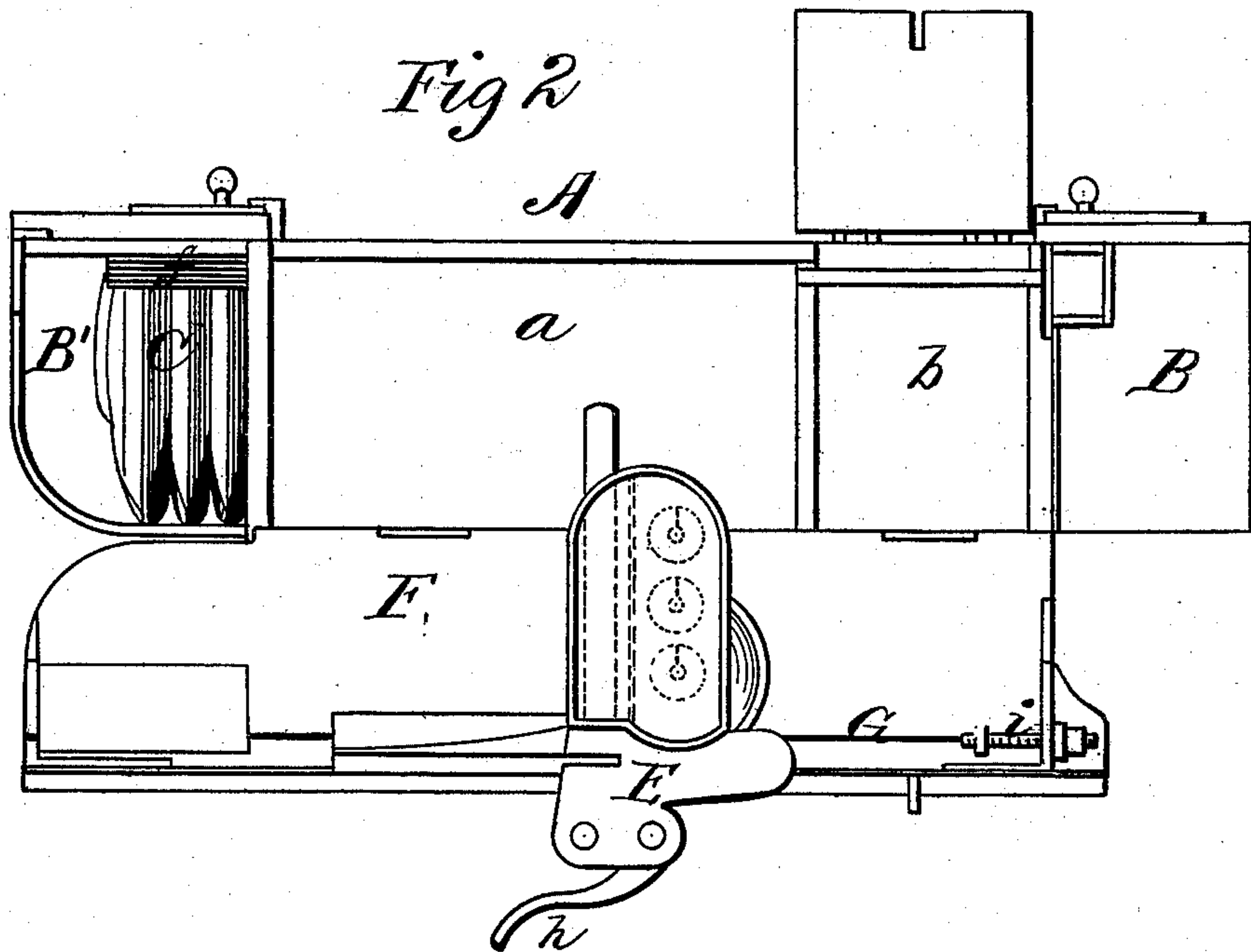


Fig 2



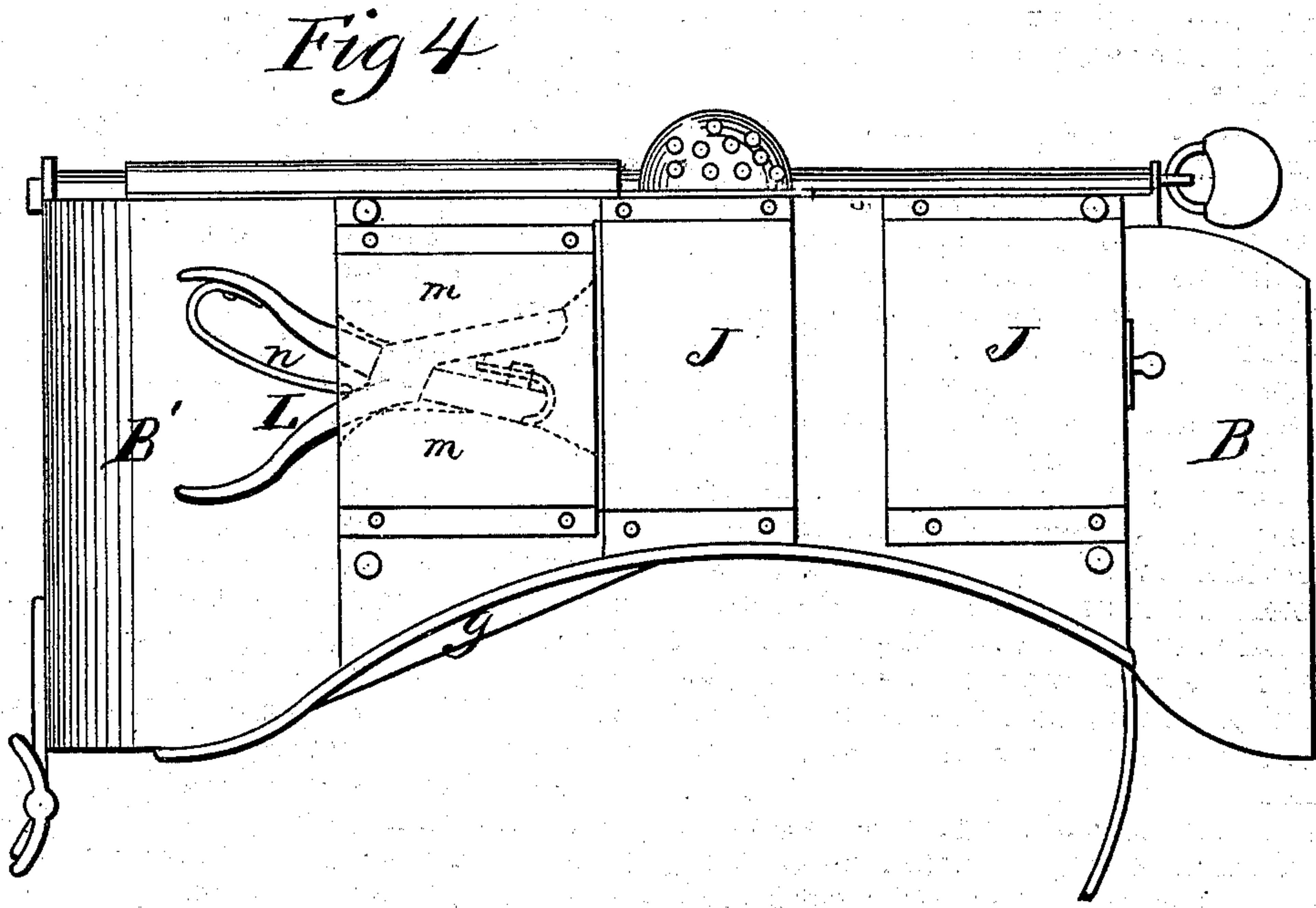
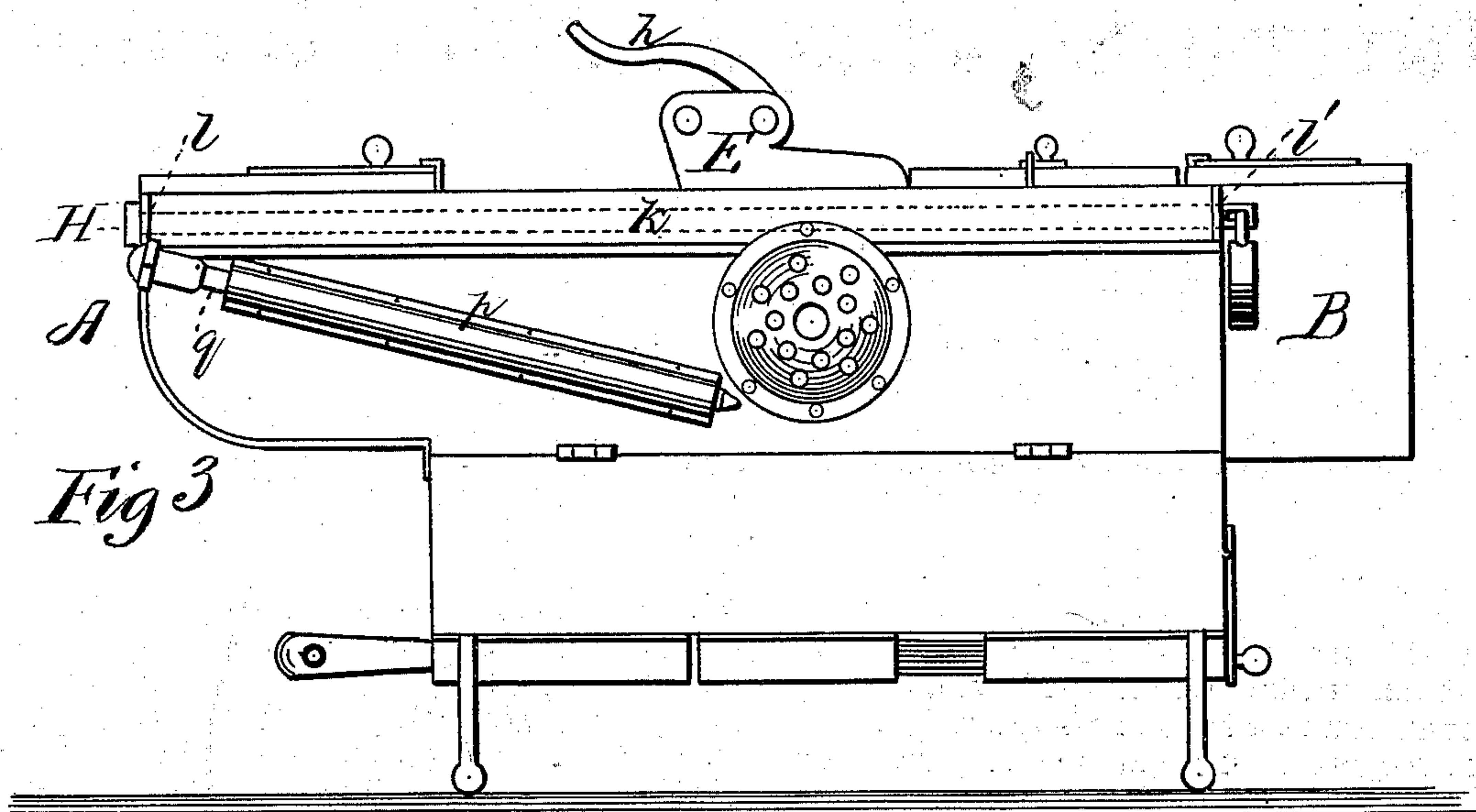
WITNESSES
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Francis J. Davis

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Henry Johnson
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UNITED STATES PATENT OFFICE.

HENRY JOHNSON, OF WASHINGTON, DISTRICT OF COLUMBIA.

IMPROVEMENT IN FARE-BOXES.

Specification forming part of Letters Patent No. **173,960**, dated February 22, 1876; application filed November 20, 1875.

To all whom it may concern:

Be it known that I, HENRY JOHNSON, of Washington, in the District of Columbia, have invented a new and valuable Improvement in Finance-Desks; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation a top-plan view of my finance-desk; and Fig. 2 is a rear view of the same opened; Fig. 3 is a rear view of the same closed; and Fig. 4 is an under-plan view thereof.

This invention has relation to improvements in fare-boxes, whether stationary or portable, for financial and other purposes. The object of the invention is to prevent or detect frauds in receiving or disbursing moneys, pertaining to each and almost every kind of business, occupation, employment, or pursuit.

In the illustration of my invention I shall use a desk, A, as shown in the drawings, but the same principles and construction are equally applicable to any other object, such as a trunk, box, satchel, and the like; hence I do not wish to be understood as confining myself to the desk alone.

Desk A may be made either stationary or portable, large or small, ornamented or plain. It may be made of any suitable material, and of any shape; and it may have as many departments as the necessities of the business may require. The body of the desk is divided by vertical partitions into a ticket-receiver, *a*, a department, *b*, from which tickets will be issued, and a cash-box, *c*, into which the receipts will be dropped through a slot, *d*, cut in its lid. The ticket-receiver is provided upon its fixed top with a slot, *d'*, for a similar purpose. B B' represent additional departments, the first of which is divided by partitions into several subdivisions, *e*, and is denominated the "ticket-in bundle department." Department B', at the other end of the body of the desk, is provided with a pocket-book, C, in which change will be deposited, and it is consequently called the "change department." This pocket-book opens freely from below, but

its upper edges are held closely and snugly together by means of an elastic strap, *f*, secured to the back of the book, passing around the pockets of the same, and then attached to its front. By this means the currency deposited therein will be prevented from blowing out, and only a single pocket of the book can be opened at a time. The remainder of the change-box not occupied by book C will be utilized for holding coppers, and its bottom and side will be made of metal, or will be metal-lined, to prevent undue wear. In practice the bank-department C and the ticket-receiving department will be locked, and the key will remain in possession of the proprietor or other responsible officer, but to the remaining departments the person using the desk will have free access for issuing tickets or giving change. When the desk is portable it will be provided with a strap, D, to be buckled about the waist, for the purpose of securing it to the person, and the side next the body will be provided with a pouch or pocket, *g*, for the reception of a watch. This arrangement will be particularly necessary in transportation companies using time-schedules, the officers of which are by regulation strictly forbidden to wear garments with pockets, as is now becoming the general practice. E represents a recording bell-punch, which is arranged preferably at the rear of the desk, with its operating lever *h* projecting above it, as shown in Fig. 3. This punch has already been the subject of Letters Patent granted to me: a further description is therefore deemed unnecessary.

Punch E is secured to the rear side of the desk, and the said side being hinged at its lower edge thereto, it is capable of being thrown outward into the position shown in Fig. 2, for the purpose of giving access to the interior of ticket-receiver *a*, and reading off the register of the punch. The bell, also, by means of which the alarm is sounded, is also secured to the hinged side F of the desk, but upon the outside thereof. It is well known to those skilled in the art how exceedingly difficult it is to construct a large number of bells having exactly the same sound or note when struck, and yet this result must be obtained, else the detection of dishonest officials

will be rendered impossible, since any description of "beater" might be used, whatever be the sound produced. In order to do away with the necessity of tuning the bells, I produce an alarm of a very peculiar sound, which is changeable at pleasure, and is utterly incapable of being imitated, in the following manner, to wit: A tunable gut or wire-string, G, sounded by the bell-hammer is arranged on the inner side of the back of the desk in a deep groove cut therein. This string is rigidly secured at one end of the groove to the desk-back, and at the other to a tension-screw, i, arranged in suitable bearings at the other end thereof; consequently, by turning the said screw, the sound of the string may be varied at pleasure. When the lever h is actuated, the bell-hammer will strike the bell and the string simultaneously, producing, along with the sound of the bell, a peculiar twanging musical note, which, combining with the note of the bell, will produce a union of sounds of such a nature as to be incapable of imitation, except by the means above stated, and this string being tunable, and its note variable at pleasure, the fraudulent practice called "beating" is effectually prevented; first, because of the impossibility of carrying, on any part of the person, a string of sufficient length to produce a sound sufficiently distinct; and, secondly, because the contact of the clothing and string would stop the vibrations of the latter and prevent any sound whatever. The back of the desk is secured into position so as to close the ticket-receiver a by means of a locking-rod, H, passing through a lug, l, on one end of the desk, then through a metallic tube, K, on the hinged back into and through a lug, l', on the other end of the said desk. This rod will be secured against withdrawal by unauthorized persons by means of a commutation-lock, I, the key to which will be in the hands of the proper settling officer. Upon the under side of the desk, when portable, an ordinary canceling-punch, L, will be arranged in a holder formed by two angular pieces of wood, m, (shown in dotted lines, Fig. 4,) and a preferably metallic plate connecting the same.

To insert the punch, compress the handles, and insert its cutting end between angular blocks m. The punch having been inserted, the reaction of spring n will open the cutting-jaws and secure it in position. I also make a receptacle, J, on the under side of the said desk, and at its other end, for such accounts as are in daily requisition. These accounts will be filed away in properly-endorsed envelopes, daily, monthly, or yearly, as I may elect. The practical operation of my improved finance-desk in relation to the sale of merchandise is as follows: A clerk having sold a bill of goods to the amount of \$96.28, takes a properly-prepared blank from the "ticket-issue department," writes down the amount, and signs his name upon a duplicate of the said blank, which he hands to the buyer. The blank is delivered to the cashier, who fills up

the ticket proper, receives the money, and, having receipted the ticket proper, returns it to the purchaser. The duplicate he first cancels, thus recording the transaction, and then deposits it in the "ticket-receiving department," the cash being dropped into the "bank" c. The day's business being transacted, the proprietor, or his authorized agent, examines the register, and notes down the number of purchases; he then counts the number of cash-tickets in the "ticket-receiving department." If the number of purchases made, as recorded in the register of the punch, and the number of tickets, agree or correspond, he then adds together the amounts entered on the said ticket. The total of these amounts must correspond with the total of the cash in the bank, or money-department. If there should be a difference it would indicate that the cashier has committed an error in counting, for which he is of course responsible. If there should be a discrepancy in the register—that is, between the number of transactions recorded by the register and the number of cash-tickets in the receiver a—it would be *prima facie* evidence of error on the part of the cashier, either voluntary or involuntary, which would be detected by reference to memorandum sales-books kept by the salesmen.

In order to perpetrate a fraud it would be requisite to have collusion between a casual unknown purchaser, the salesman, and the cashier. The two latter, not being acquainted with the former, would not dare, however much they might be inclined to do so, to propose a fraud to the former, nor would the purchaser to propose such a transaction to the cashier and salesman. The variety of transactions to which my invention is applicable is so numerous as to render any further exemplifications thereof futile. I shall therefore confine myself to the one above stated.

In case the desk is portable, I shall place a socket, p, upon the rear of the desk for the reception of a lead-pencil, q, so that in the absence of pockets a suitable receptacle for a medium of writing may be provided.

It will be understood that all transactions of whatever nature will be recorded. For instance, if a buyer pays on his bill of \$96.28 the sum of fifty dollars only, the duplicate will be punched as before, thus recording the transaction, and the money be deposited in "cash-box" c. The duplicate will, however, not be deposited in the ticket-receiver department a, but will be put on file until the balance, \$46.28, is paid, when it will be canceled with the punch L, and then be put in the said receiver.

In the case last stated, the number of transactions recorded in the recording-punch will not agree with the number of blanks in receiver a, nor will the total of the sums on the blanks with the cash in the bank; but this discrepancy will be readily accounted for by reference to the file, where it will be discovered that a blank, which would have been deposited in the receiver, had the transaction

been complete, has been placed. The clipping taken out of this blank, when it is deposited in the receiver after the payment of the balance due, will be of different form from that cut out by the recording-punch E, and will indicate a completed transaction. On examination of the recorder, and of the blanks in the receiver *a* after the payment of this balance, it will be found that the number of blanks will exceed the number of transactions by one; but the amounts on the blanks added up will agree with the cash in bank.

The envelope-receptacle on the under side of the desk will also contain an account-book, wherein such memoranda as may occur during the day will be entered.

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

1. In an apparatus for preventing or detecting fraud, the combination of a recording alarm-punch, a striker, and a tunable string, substantially as described.

2. In an apparatus for preventing or detecting fraud, the combination of a desk or receptacle having compartments, a recording alarm-punch, a striker, and a tunable string, substantially as described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

HENRY JOHNSON.

Witnesses:

WALTER C. MASI,
BRYAN H. MORSE.