

(No Model.)

2 Sheets—Sheet 1.

H. F. MARSH.
CASH RECORDER.

No. 468,464.

Patented Feb. 9, 1892.

Fig. 1.

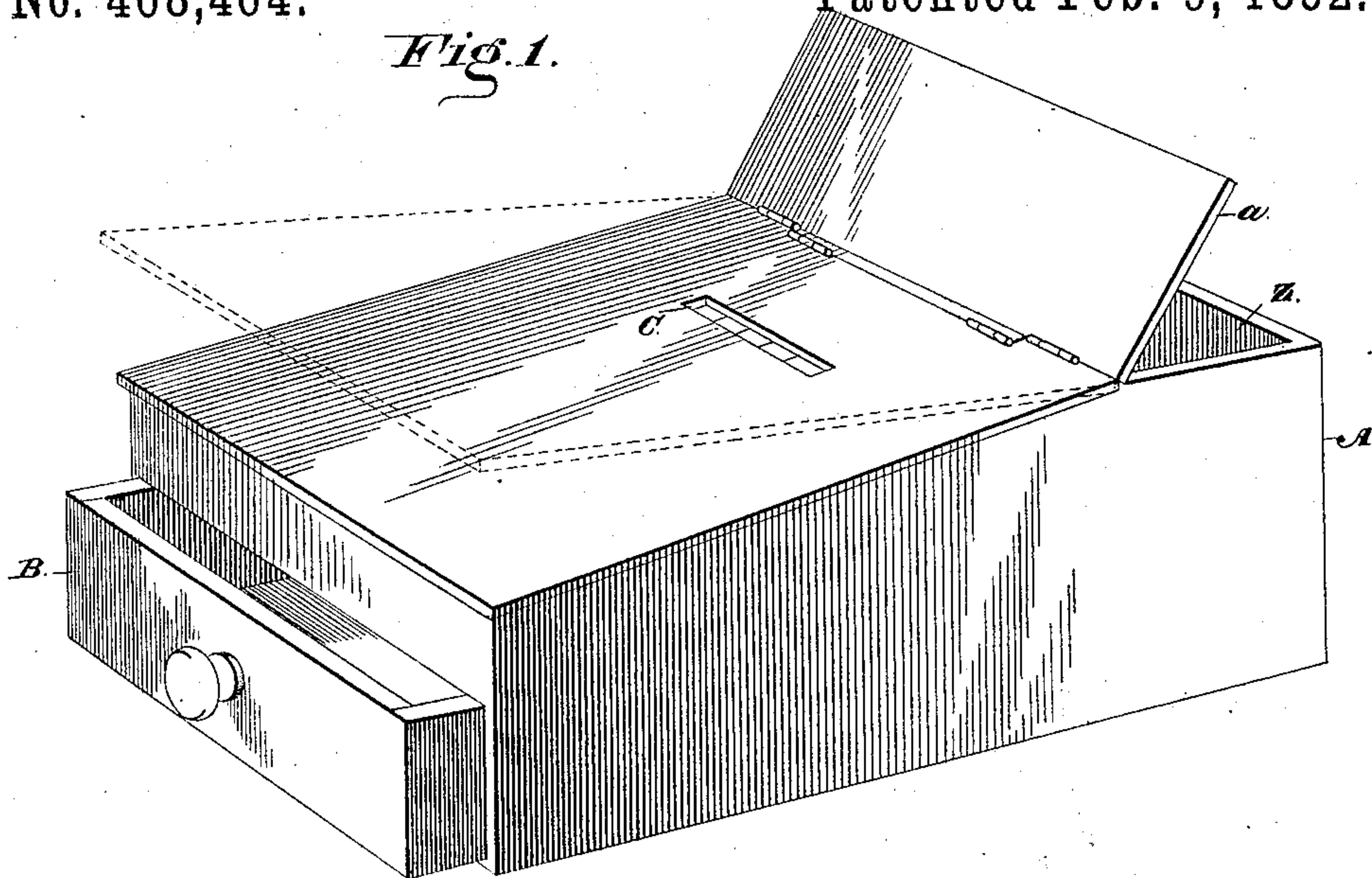
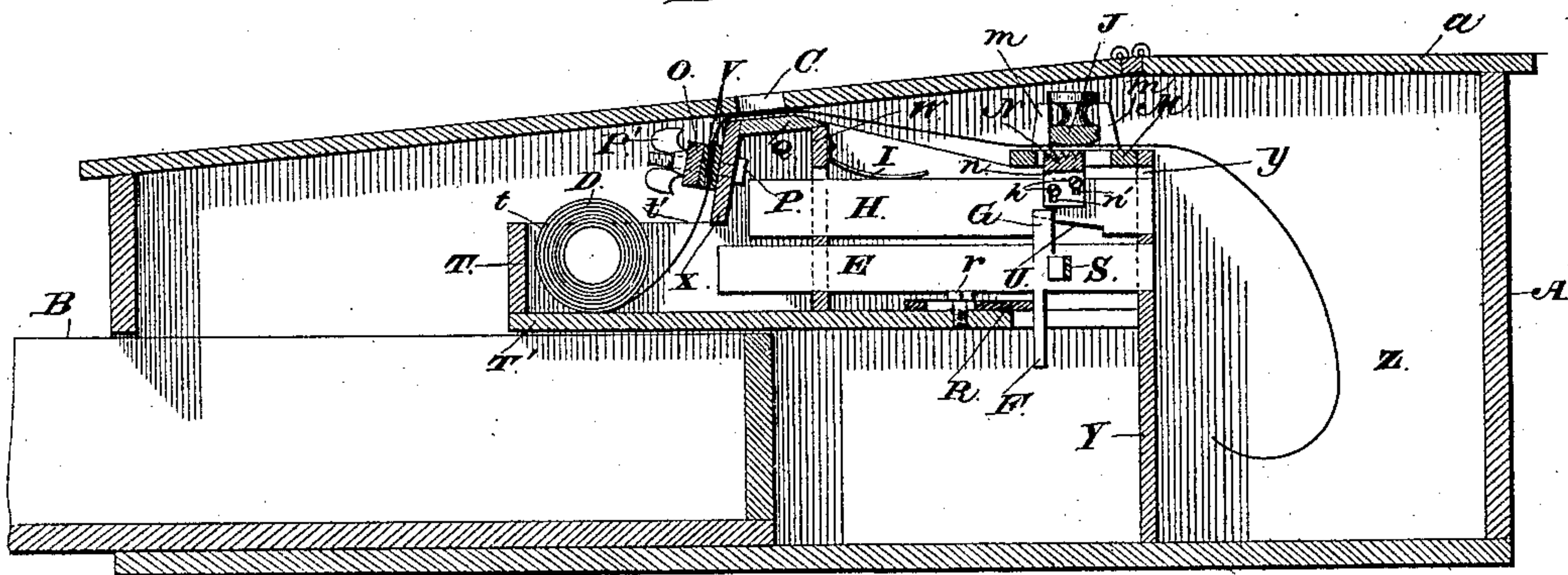


Fig. 2.



Witnesses

M. E. Fowler

N. D. Collamer

Inventor

Hiram F. Marsh

By his Attorneys,

C. A. Snow & Co.

(No Model.)

2 Sheets—Sheet 2.

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Fig. 3

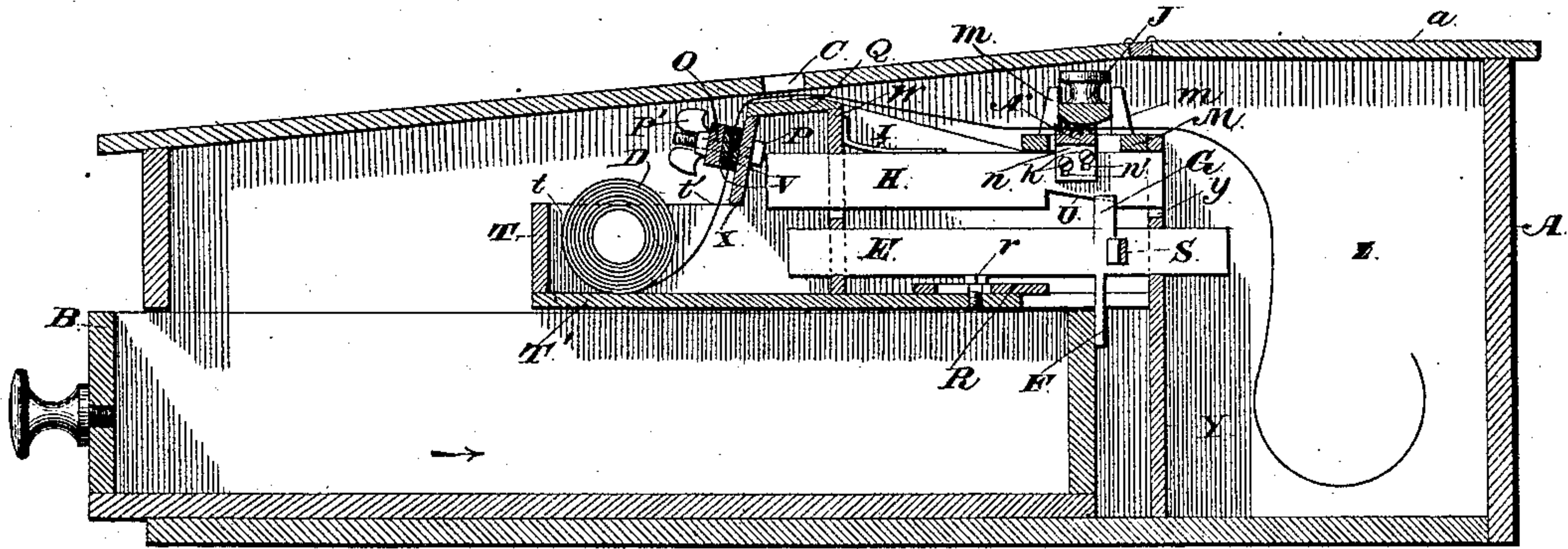


Fig. 4.

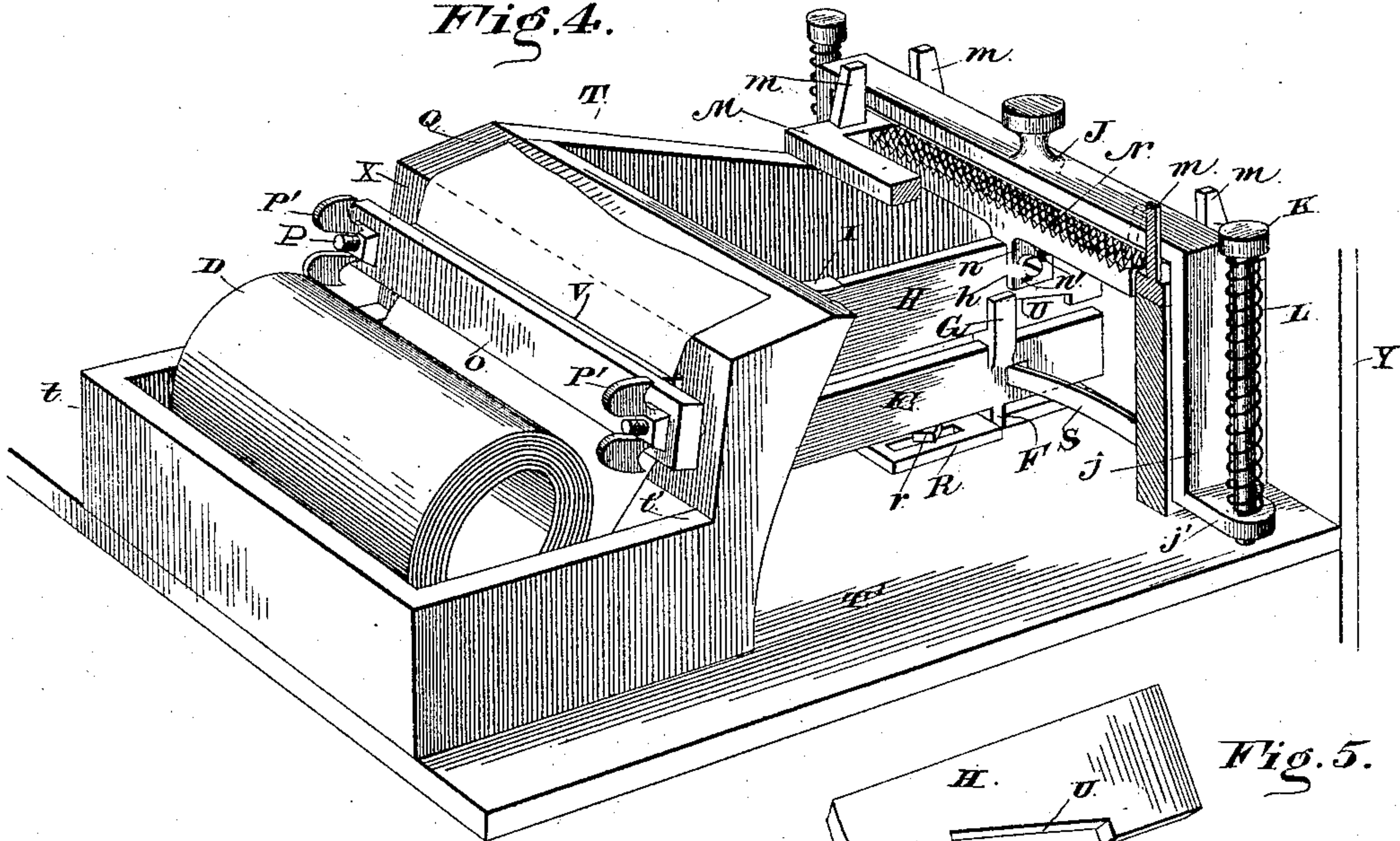
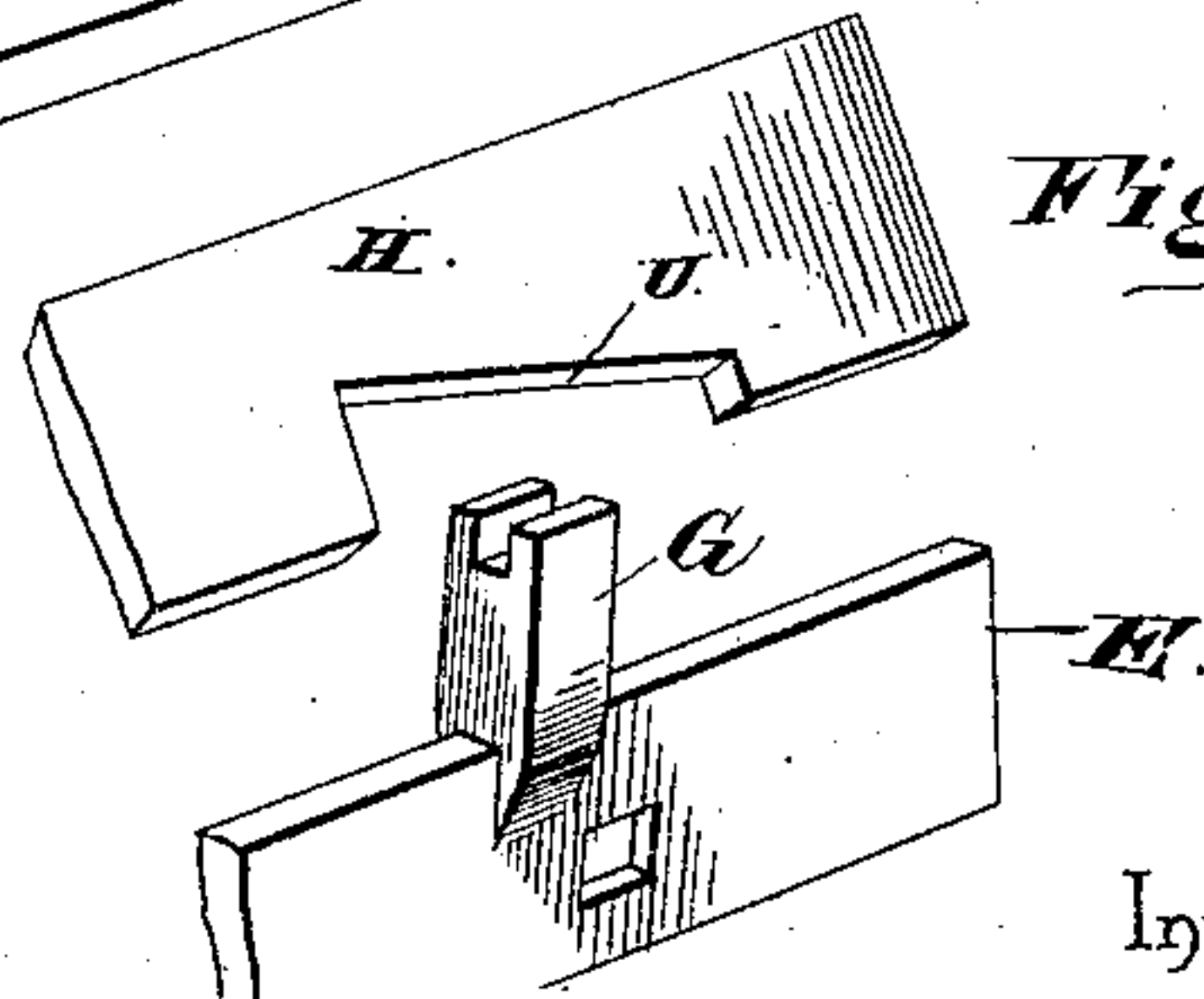


Fig. 5.



Witnesses

M. Fowler

A. Collamer

By his Attorneys,

C. A. Snow & Co.

Inventor

Hiram F. Marsh

UNITED STATES PATENT OFFICE.

HIRAM F. MARSH, OF GOUVERNEUR, NEW YORK.

CASH-RECORDER.

SPECIFICATION forming part of Letters Patent No. 468,464, dated February 9, 1892.

Application filed October 7, 1891. Serial No. 408,028. (No model.)

To all whom it may concern:

Be it known that I, HIRAM F. MARSH, a citizen of the United States, residing at Gouverneur, in the county of St. Lawrence and State of New York, have invented a new and useful Cash-Recorder, of which the following is a specification.

This invention relates to measuring-instruments, and more especially to that class thereof known as "cash-recorders;" and one of the objects of the same is to produce an improved feed for moving the paper through a recorder of this character.

To this end the invention consists in a cash-register constructed substantially as hereinafter more fully described and claimed, and as illustrated on the two sheets of drawings, wherein—

Figure 1 is a general perspective view showing the casing of a money drawer or till with the latter partly withdrawn and with the top raised at the rear. Fig. 2 is an enlarged central longitudinal section thereof with the drawer drawn out. Fig. 3 is a similar section showing the drawer as being pushed in. Fig. 4 is a perspective view of the recorder with part of its case broken away. Fig. 5 is a detail view.

Referring to the said drawings, the letter A designates a casing wherein is located near its lower part a money drawer or till B, which may or may not have the usual lock, as desired. The casing is somewhat deeper and somewhat longer than the till, and above the latter, within the casing, is a transverse shelf T', supporting a suitable box or case T, within which is located my improved cash-register. The front portion of the top of the casing is preferably slightly inclined, so as to form a desk on which writing can be done, and this portion may be removable from or hinged to the remainder of the casing, so that it can be raised, as shown in dotted lines, to have access to the mechanism within. The rear portion *a* of this top is also hinged and covers a box or receptacle Z within the body of the casing in rear of the drawer and separated therefrom by a vertical transverse partition Y, rising nearly to the top and forming the rear end of the case T. At the front end of said case is a trough *t*, in which is located a roll of paper D. Just in rear of

this trough is a transverse partition W, supporting at its upper end a table Q, that stands close under the top of the casing A, and the latter is provided with a transverse slot C, through which the paper is visible and through which a pen or pencil may be passed to write on the paper, the table Q permitting. The table extends from this partition forward and is then continued downward in an extension X, the upper edges of the case being cut away, as at *t'*, to permit.

O is a strap standing over the extension, and P are screws passing from the extension through holes in the ends of the strap and through thumb-nuts P', by which the tension of the strap against the extension can be adjusted. The inner end of the strap and, if desired, the outer face of the extension, are provided with a layer of felt or other fabric V, whereby they are slightly roughened. The paper D, passing from the roll in the trough, leads through this tension and thence over the table Q and to the rear under the slot in the casing-top, as will be understood, passing, finally, over the partition Y and loosely into the box Z, where it can be inspected by lifting the small hinged top *a*.

The means which I employ for automatically moving the paper through the course just described are as follows: E is a bar sliding at its ends through the partitions W and Y, and F is an ear depending from this bar through a slot in the bottom of the case and adapted to be struck by the rear end of the till B when it is pushed in to move the bar to the rear, while it is moved in the opposite direction by a spring S, and is limited in this movement by a stop-plate R, adjustably secured to the bottom of the case by a screw *r*. Above this sliding bar is another bar H, whose front end also moves in a slot in the partition W, and whose rear end moves in a vertically-elongated slot *y* in the partition Y, and in the lower edge of this bar H (which I will call the "rocking" bar) is an inclined notch U, which is engaged by a lug G, rising from the sliding bar E. A leaf-spring I, projecting to the rear from the partition W, bears the rocking bar H normally downward and prevents its longitudinal movement, except when the lug G engages one end of the notch U. Secured across the rear end of the case T is a

horizontal frame M, through which projects a serrated or roughened feed-bar N, having a depending plate *n* slotted as at *n'* and secured by screws *h* to the rocking bar H, so as to render it capable of adjustment. Stud *m* preferably rise from the ends of this frame to guide the paper across the frame and over the feed-bar and also to act as a guide for a yoke J, as shown. The ends of the yoke are turned down, as at *j*, and extend into perforated ears *j'*, sliding on vertical headed rods K, rising from the shelf T', and said ends are borne down thereon by expansive springs L on the rods under their heads.

With the above-described device as the till is drawn out the ear F follows it under the tension of the spring S and the lug G travels up the inclined notch U until it strikes the inner end thereof and then moves the rocking bar H forward until the ear F strikes the stop R. During such operation the rocking bar falls and the feed-bar of course descends and is moved forward in the frame M. The salesman makes his memorandum on the paper D through the slot C and closes the drawer. This motion moves the lug G in the other direction, and it therefore travels to the rear in the notch U, whereby the feed-bar is raised, and then moves the rocking bar and feed-bar bodily to the rear until the till B is pushed completely in. As the paper D passes from the table Q over the feed-bar and under the yoke, this movement of the feed-bar will draw the paper under said yoke, the distance it is moved being regulated by setting the stop. The strip of paper with the memoranda thereon passes over into the box Z.

This device is extremely simple in its construction and operation, and while it is true that it is not automatic and does not thus afford a check on the salesman it provides a simple and easy method for those who are so inclined to keep a record of the sales that are made. The state of accounts can be examined at any time by raising the rear portion *a* of the top of the casing and pulling the strip of paper out of the box Z, even tearing it off if it is to be carried away, and by raising the front portion of the casing the entire cash-recorder device is exposed to view for cleaning, repair, adjustment, or the insertion of a new roll of paper in the trough *t*. The tension is adjusted by the thumb-nuts P', the throw of the feed by the stop R, and the bite of the feed-bar by the screws *h*, each and all in a manner which will be clear.

I do not confine myself to the precise details of construction, as considerable change may be made therein without departing from the spirit of my invention.

What is claimed as new is—

1. A casing having a vertical partition across its body rising nearly to its top, a till sliding in said casing forward of the partition, and a hinged portion in the cover of the casing over the receptacle in rear of said par-

tion, the cover forward of such portion having a transverse slot, in combination with a transverse shelf within the casing, a case mounted thereon, a trough and feeding mechanism within said case, the former holding a roll of paper and the latter drawing it under said slot in the cover and feeding it into said receptacle, and connections, substantially as described, between said mechanism and till, as and for the purpose set forth.

2. A casing having a transversely-slotted cover, a transverse shelf within said casing, a case resting on said shelf and having its side walls cut away, a trough forward of said cut-away portion, and feeding mechanism, substantially as described, in rear thereof, in combination with a table connecting the side walls beneath said slot, an extension depending from the front edge of said table, screws projecting forwardly from the ends of said extension, a strap seated at its ends over said screws, thumb-nuts on the screws, and strips of felt on the adjacent faces of the extension and strap, as set forth.

3. A case having a transverse partition, a longitudinally-reciprocating bar moving through said partition and the rear end of the case, a lug on the upper edge of said bar, a rocking bar moving through said partition and in a vertical slot in said end, said bar having an inclined notch engaging said lug, and a spring bearing the rocking bar downward, in combination with a feed-bar supported by the rocking bar, a frame in which the feed-bar moves, a spring-actuated yoke over said frame, and paper-supply mechanism, as and for the purpose set forth.

4. A case having a transverse partition, a longitudinally-reciprocating bar moving through said partition and the rear end of the case, a lug on the upper edge of said bar, a rocking bar moving through said partition and in a vertical slot in said end, this bar having a notch in its lower edge with an inclined bottom and vertical ends and in which said lug moves, and a spring projecting from said partition and pressing the rocking bar downward, in combination with a transverse feed-bar adjustably secured to said rocking bar, a frame in which the feed-bar moves, a spring-actuated yoke over said frame, and paper-supply mechanism, as and for the purpose set forth.

5. A case having a transverse partition and a slot in its bottom, a stop adjustably secured to said bottom, a longitudinally-reciprocating bar moving through said partition and the rear end of the case, an ear on the lower edge of said bar moving in said slot and engaging the stop, a spring bearing this bar rearward, means for pressing said ear forward, a lug on the upper edge of said bar, a rocking bar moving through said partition and in a vertical slot in said end, this bar having a notch in its lower edge engaging said lug and provided with vertical ends and an inclined bot-

tom making the notch deeper at its inner end, and a spring bearing the rocking bar downward, in combination with a feed-bar supported by the rocking bar, a spring-actuated yoke over said feed-bar, and paper-supply mechanism, as and for the purpose set forth.

6. A case having a transverse partition and a longitudinal slot in its bottom, a stop adjustably secured to said bottom, a sliding bar moving through said partition and the rear end of the case, an ear on the lower edge of the bar moving in said slot and engaging the stop, a spring bearing this bar rearward, and means for pressing said ear forward, in combination with a rocking bar actuated by the movements of said sliding bar, a feed-bar carried by the rocking bar, a spring-actuated yoke over the feed-bar, and paper-supply mechanism, as and for the purpose set forth.

7. A casing having a transverse vertical partition rising nearly to its top, a case supported within the casing and of which said partition forms the rear end, said case having a transverse partition and a longitudinal slot in its bottom, a sliding bar moving through said partitions and having an ear projecting through said slot, a spring moving said bar forward, and a till in the casing whose rear end strikes said ear as the till is pushed in, in combination with a rocking bar actuated by the movements of said sliding bar, a feed-bar carried by the rocking bar adjacent the upper edge of said rear end, a spring-actuated

yoke over the feed-bar, and paper-supply mechanism, as and for the purpose set forth.

8. A case, a frame supported thereby and carrying four upright studs, a toothed feed-bar moving in said frame, and paper-supply mechanism directing a strip of paper across the frame between the studs at its ends, in combination with a yoke standing lengthwise of the frame between the studs at its sides, and springs bearing said yoke downwardly, as set forth.

9. A casing having a transverse shelf, a case supported thereby, a frame carried by the case and having upright studs at its four corners, a toothed feed-bar moving in said frame, and paper-supply mechanism directing a strip of paper across the frame between the studs at its ends, in combination with headed rods rising from said shelf, a yoke extending longitudinally of said frame between the studs at its sides, the ends of said yoke being turned down and then out into perforated ears sliding on said rods, and expansive springs between said ears and the heads of the rods, as and for the purpose hereinbefore set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

HIRAM F. MARSH.

Witnesses:

B. A. SMITH,
N. E. MARSH.