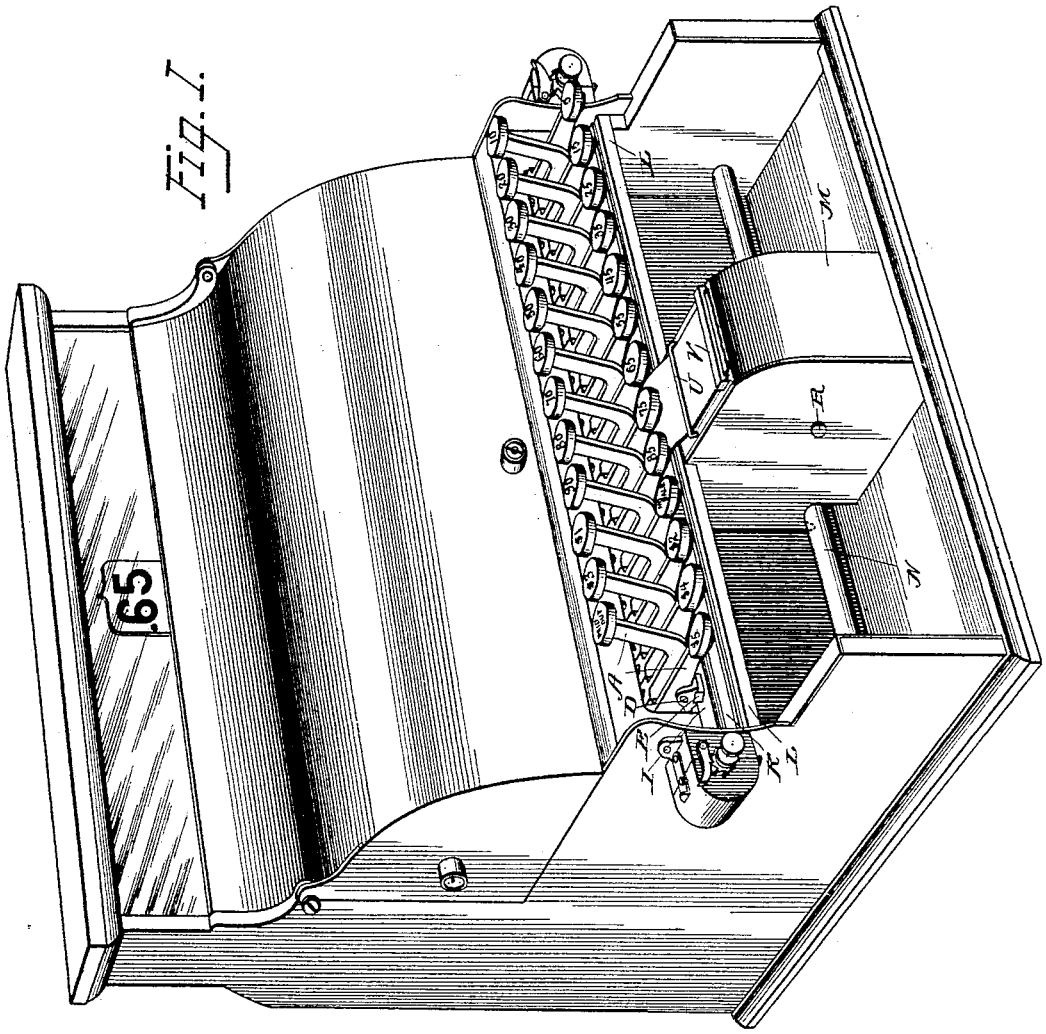
(No Model.) 2 Sheets—Sheet 1.

F. A. L. SNECKNER.

CASH REGISTER.

No. 492,974. Patented Mar. 7, 1893.

Fig. 1.



Witnesses:
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Ruben B. Caffray.

Inventor
Frank A. L. Sneckner
by Edward Rector
his atty.

(No Model.)

2 Sheets—Sheet 2.

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No. 492,974. Patented Mar. 7, 1893.

Fig. 3.

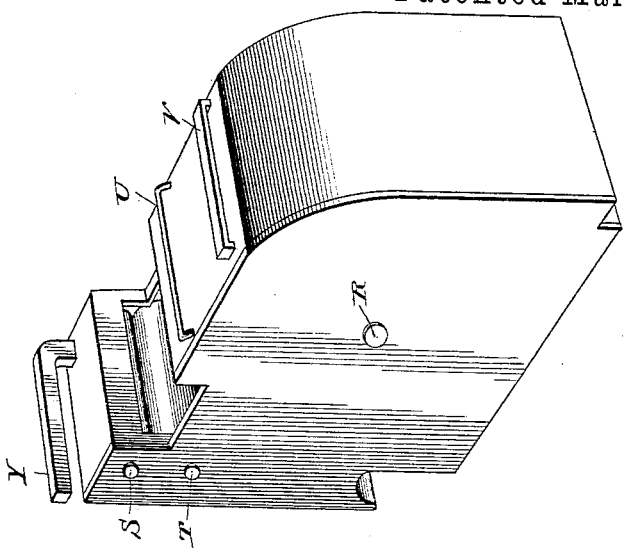
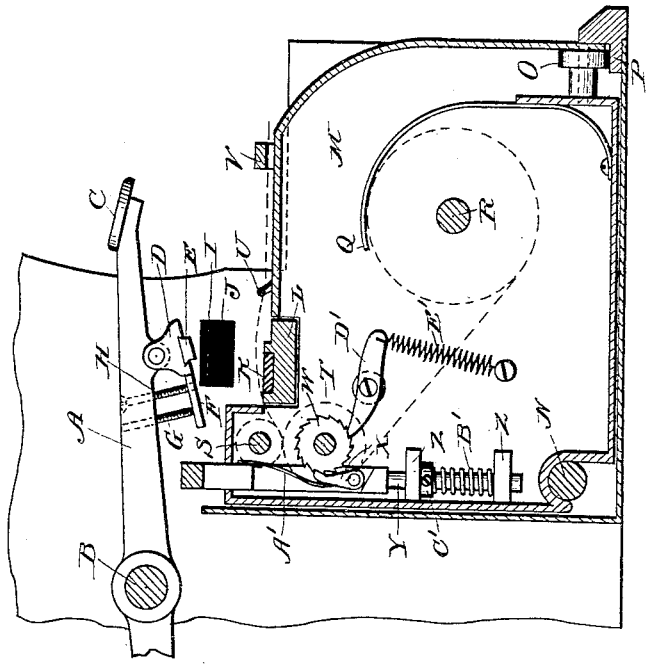


Fig. 2.



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UNITED STATES PATENT OFFICE.

FRANK A. L. SNECKNER, OF DAYTON, OHIO, ASSIGNOR TO THE NATIONAL CASH REGISTER COMPANY, OF SAME PLACE.

CASH-REGISTER.

SPECIFICATION forming part of Letters Patent No. 492,974, dated March 7, 1893.

Application filed November 26, 1892. Serial No. 453,234. (No model.)

To all whom it may concern:

Be it known that I, FRANK A. L. SNECKNER, a citizen of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented a certain new and useful Improvement in Cash-Registers, of which the following is a description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to that class of cash registers in which is employed a series of operating keys representing different amounts, a series of type-numbers actuated by said keys and representing corresponding amounts, a suitable impression platen co-operating with the type-numbers, and a ticket-holder arranged to be moved transversely of the row of keys adjacent to the printing line and carrying a roll of paper strip adapted to be led between the types and impression platen and torn off into separate tickets. Heretofore where the paper strip was torn off against the usual tearing edge the end of the strip was left immediately beneath said edge and it was difficult to catch hold of it to pull the strip forward at the next operation. To enable the end of the strip to be grasped the tearing edge was either located some distance above the surface upon which the paper strip normally rested, or said surface was provided with an opening for the insertion of the thumb or finger of the operator beneath the end of the strip. In either case the end of the strip could not be readily grasped, and where the tearing edge was located some distance above the surface upon which the strip rested considerable care had to be exercised in tearing the strip to prevent it being severed upon an irregular or diagonal line instead of a straight transverse one.

The principal feature of my invention consists in providing means actuated by the operating keys for automatically advancing the paper strip after each printing operation, to carry its forward end from beneath the tearing edge, into position where it may be readily grasped by the clerk, all as will be hereinafter set forth.

In the accompanying drawings Figure 1 is a perspective view of a cash register and indicator embodying my invention; Fig. 2 a vertical section of the lower forward portion of the machine and ticket-holder, showing so much of the machine as is necessary to an explanation of my invention; and Fig. 3 a perspective view of the ticket-holder removed from the machine.

The same letters of reference are used to indicate identical parts in all the figures.

The operating keys A are fulcrumed on a horizontal shaft B, Fig. 2, and carry at their front ends the usual numbered finger buttons C. Pivoted to the under side of each key, between its fulcrum and front end, is a hanger D which carries a type-number E corresponding to the value of the key. Each hanger D has projecting rearwardly from it a plate F with which co-operate two screws G H passed through the key, by which screws the position of the hanger upon the keys may be adjusted to cause the type E to squarely strike the impression platen hereinafter described. The inking ribbon I is carried upon spools located in housings J at each side of the machine and is led thence across the machine beneath the types E. An impression platen K, of rubber or other suitable material, is embedded in a cross-piece L of the framework and extends transversely across the machine beneath the row of types E.

The ticket-holder consists of a box or casing M, of suitable shape, arranged to move transversely of the machine in an open space between its sides, beneath and in front of the rows of operating keys, Fig. 1. This holder is mounted upon a guide-rod N at its lower rear corner, Fig. 2, and at its lower forward corner carries a roller O which travels upon a cross-piece P of the framework or main casing. The supply of paper strip is carried in a roll Q upon a shaft or spindle R mounted in the sides of the holder M, from which roll the strip is led rearward and upward between a pair of feed-rollers S T journaled in the sides of the holder, thence forward over a platen K beneath a guide U upon the upper side of the holder M and thence beneath a cross bar or tearing edge V. The roller T has fast upon it a ratchet W with which co-operates a pawl X pivoted to a rod Y guided vertically in guides Z Z upon the rear wall of the holder M and projecting at its upper end

through the top of the holder, and having its upper end bent transversely as shown in Fig. 3, to adapt it to be struck by the operating keys when the latter are depressed. A spring A′ presses the pawl X against the ratchet W, and a spring B′ surrounding the lower end of the rod Y between the lower guide Z and a collar C′ fast upon the rod presses the holder upward and yieldingly holds it in normal position. A holding pawl D′ held by a spring E′ in engagement with the ratchet W prevents backward movement of the ratchet and feed-rollers.

The operation of the parts under the above construction is as follows: The holder M is slid laterally upon its guides until it is brought in line with the key to be operated. The key is then depressed and its type E presses the inking-ribbon I against the paper strip passed over the platen K and prints the value of the key upon said strip. At the same time the depression of the key has forced down the rod Y and caused the pawl X to slip backward over one or more teeth of the ratchet W. When the key is released the spring B′ throws the rod Y upward again and the pawl X turns the ratchet and feed-rollers forward a short distance, thereby advancing the paper strip and carrying its free end in front of the tearing edge V, as seen in Fig. 2, where it may be assumed that a key has just been operated to indicate and register its value, and print it upon the paper strip, and that the latter is ready to be drawn forward by the clerk and torn off. When the ticket is torn off the end of the strip is left immediately beneath the cross bar V, but when another key is depressed and released, at the next operation of the machine, the strip will be slightly advanced again to bring its end into position to be grasped.

So far as I am aware I am the first in the art to combine with the operating keys and printing types of a cash register, a ticket-holder movable laterally across the machine adjacent to the printing line and containing a roll of paper strip led between the types and impression platen, and means of any sort actuated by the operating keys to automatically advance the paper strip for the purpose described, and my invention is therefore not restricted to the details of construction and arrangement of the parts which I have illustrated in the drawings, except so far as may be indicated by the terms of my respective claims.

Having thus fully described my invention, I claim—

1. In a cash register, the combination, with a series of operating keys representing different values, type numbers representing corresponding values actuated by the respective keys, and an impression platen co-operating with the type numbers, of a ticket-holder mounted to move transversely across the machine adjacent to the printing line and containing a roll of paper strip adapted, to be led from the holder between the impression platen and types and severed into detached tickets, and means actuated by the operating keys for automatically advancing the paper strip, substantially as and for the purpose described.

2. In a cash register, the combination, with a series of operating keys representing different values, type-numbers representing corresponding values actuated by the respective keys, and an impression platen co-operating with the type-numbers, of a ticket-holder mounted to move transversely across the machine adjacent to the printing line and containing a roll of paper strip adapted to be led from the holder between the types and platen and severed into detached tickets, a pair of feed-rollers mounted in the holder and between which the paper strip is passed, and a pawl and ratchet mechanism intermediate said rollers and the operating keys, for turning said rollers to advance the paper strip, substantially as and for the purpose described.

3. In a cash register, the combination, with a series of operating keys representing different values, type-numbers representing corresponding values actuated by the respective keys, and an impression platen co-operating with the type-numbers, of a ticket-holder mounted to move transversely across the machine adjacent to the printing line and containing a roll of paper strip adapted to be led from the holder between the types and platen and severed into detached tickets, a pair of feed-rollers journaled in the holder and between which the paper strip is passed, a ratchet fast upon one of said rollers, a vertically-guided rod mounted in the holder and adapted to be depressed by the operations of the keys, a resetting spring for said rod, and a pawl carried by the rod and co-operating with the ratchet upon the feed-roller, substantially as and for the purpose described.

4. In a cash register, the combination, with the operating keys A, the types E carried thereby, the inking ribbon I, and platen K, of the laterally-movable ticket-holder M provided with the tearing edge V, the feed-rollers S T journaled in the holder, the ratchet W fast upon the roller T, the vertically-sliding rod Y mounted in the holder and provided with a horizontally-extended upper end adapted to be engaged by the keys A when the latter are depressed, the resetting spring B′ for the rod, the pawl X carried by the rod and co-operating with the ratchet W, and the holding pawl D′ for said ratchet, the holder containing the roll of paper strip Q mounted upon the shaft R and led between the rollers S T, over the platen K and beneath the tearing edge V, substantially as and for the purpose described.

FRANK A. L. SNECKNER.

Witnesses:
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