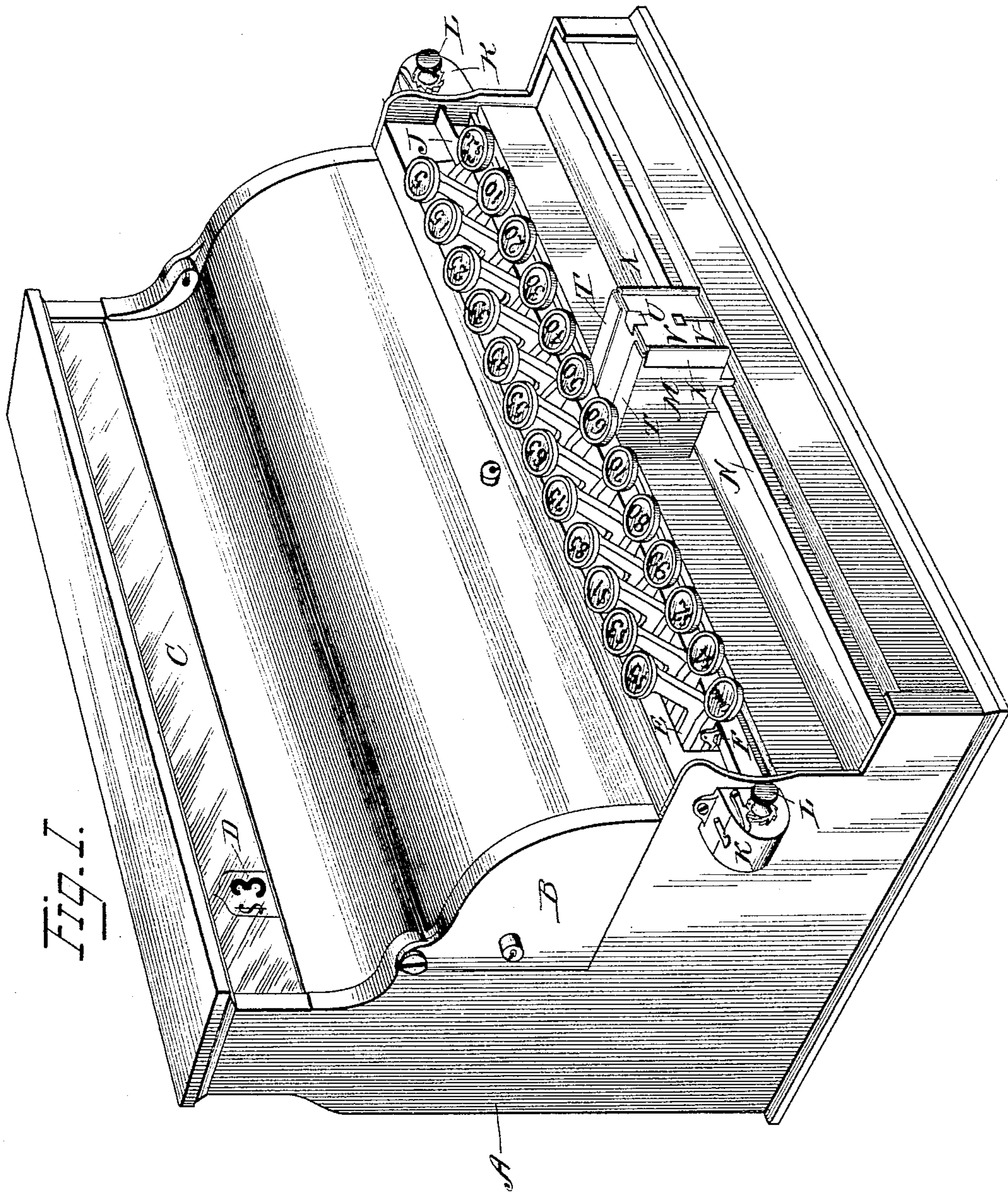


2. Sheets—Sheet 1.

No. 492,982.

Patented Mar. 7, 1893.



Witnesses
John L. Tunison.
Martin H. Olsen.

Inventor
Robert J. Hawk
by Edward Rector
his attorney

(No Model.)

2 Sheets—Sheet 2.

R. T. HOUK.
CASH REGISTER.

No. 492,982.

Patented Mar. 7, 1893.

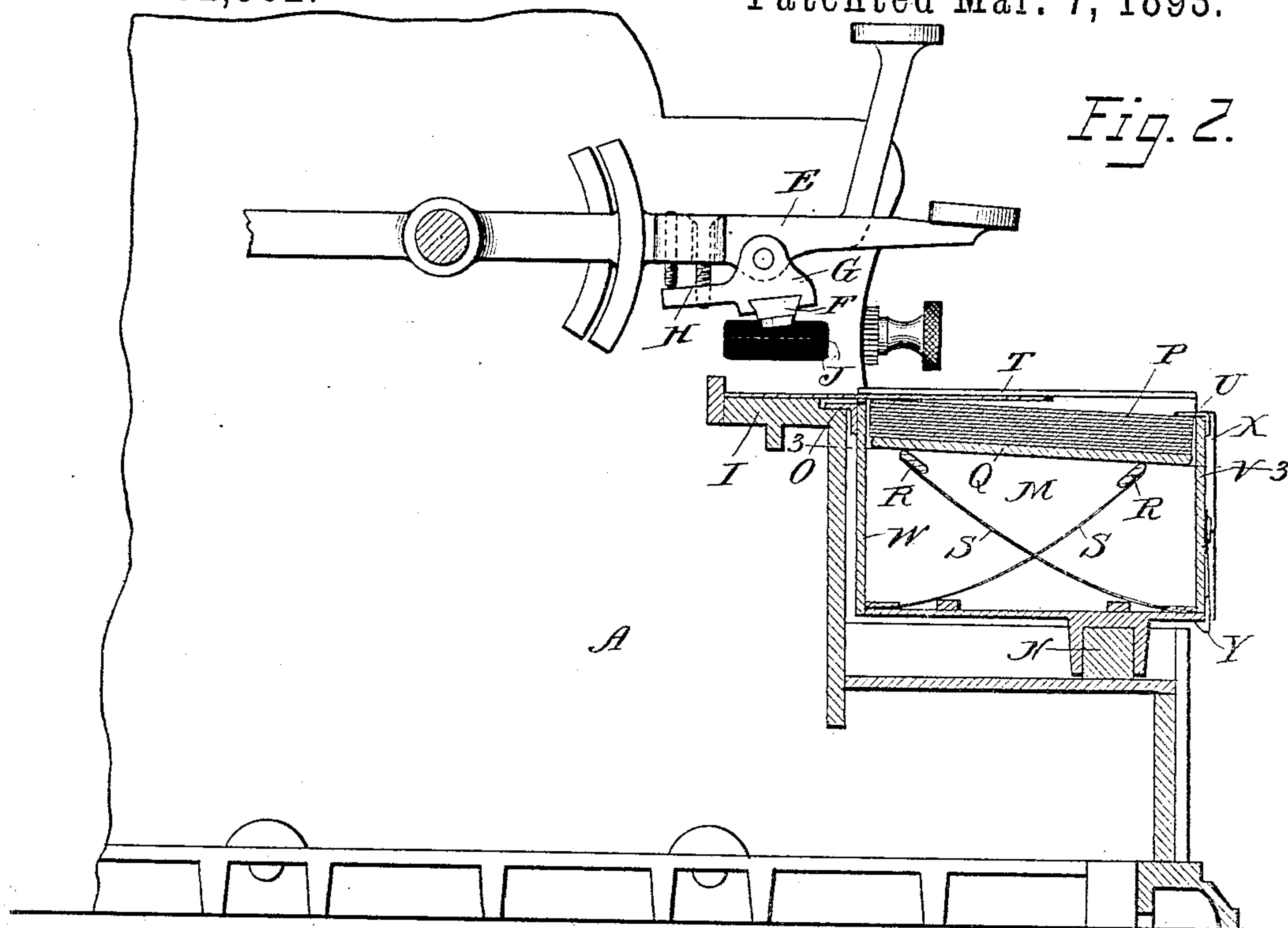
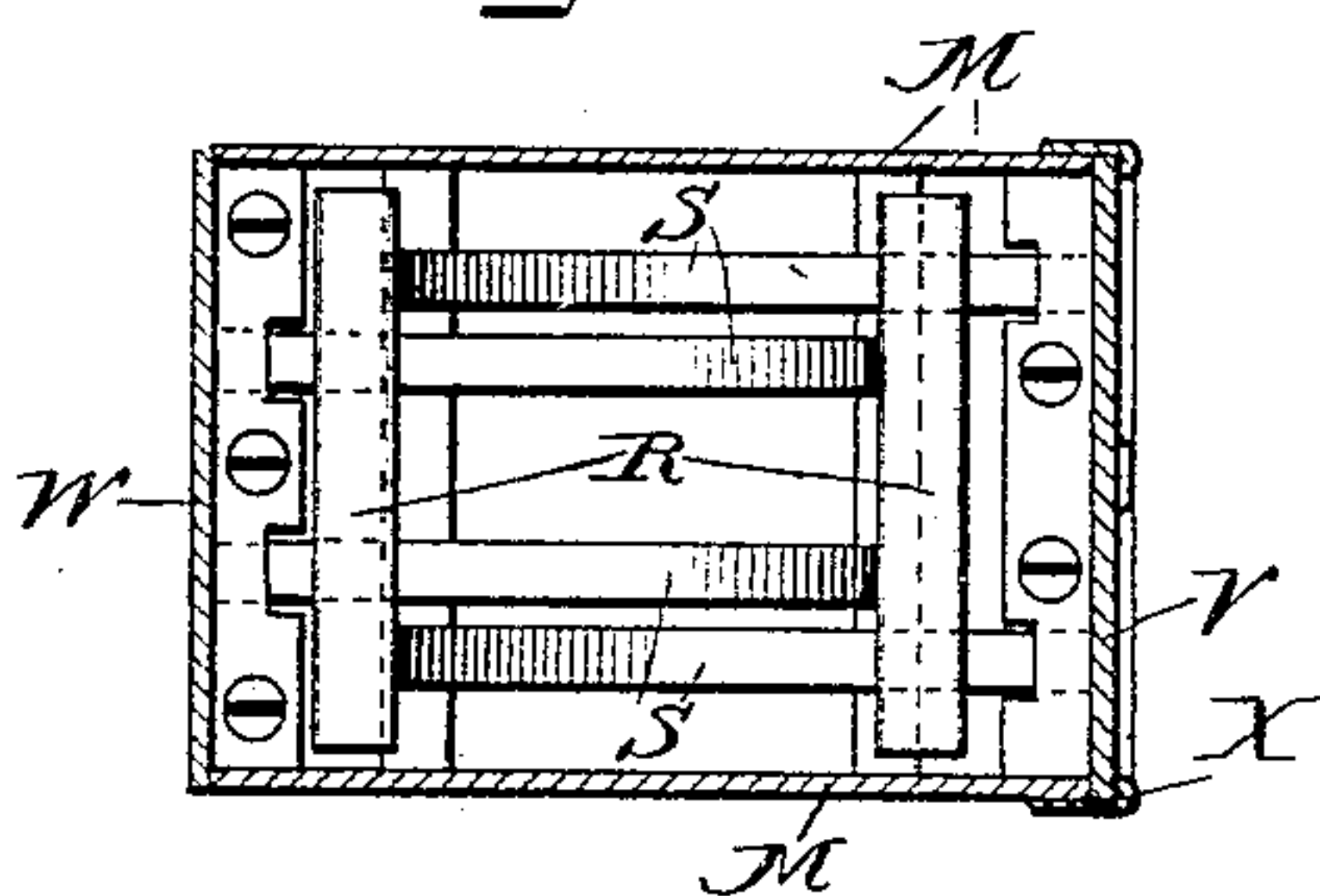


Fig. 3.



Witnesses
John L. Timmon.
Martin A. Olsen.

Inventor
Robert T. Houk
by Edward Reider
his attorney

UNITED STATES PATENT OFFICE.

ROBERT T. HOUK, OF DAYTON, OHIO, ASSIGNOR TO THE NATIONAL CASH REGISTER COMPANY, OF SAME PLACE.

CASH-REGISTER.

SPECIFICATION forming part of Letters Patent No. 492,982, dated March 7, 1893.

Application filed November 8, 1892. Serial No. 451,369. (No model.)

To all whom it may concern:

Be it known that I, ROBERT T. HOUK, 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 the series of operating keys representing different values are provided or combined with a series of types representing corresponding values, said types being arranged to print their respective numbers upon checks or tickets placed beneath them whenever their corresponding keys are actuated for the purpose of indicating and registering their values.

Heretofore the supply of checks or tickets has generally been carried in loose form, the tickets being either entirely separated from each other or else detachably held together in the form of a pad or block, and when a sale was made and a ticket was to be printed the clerk would take a loose ticket with his one hand and insert it beneath the type of the proper key and with his other hand depress the key to effect the printing. I propose to place a supply of tickets in a receptacle or holder arranged in convenient relation to the keys and movable transversely across the machine to bring it in line with any key desired, the ticket holder being of such construction that when it has been brought into proper position its uppermost ticket may be readily projected beneath the key, the latter depressed to print its value upon the ticket, and the ticket be then easily withdrawn and given to the customer or otherwise disposed of; and the novelty of my invention consists in the combination, with the operating keys and types of such a cash register, of a ticket holder movable transversely across the machine adjacent to the row or rows of keys and adapted to have its tickets projected beneath the keys, or the types actuated thereby, and be readily withdrawn after the printing is effected; all as will be hereinafter set forth and specifically pointed out in the claims.

In the accompanying drawings Figure 1 is

a perspective view of a familiar form of cash register and indicator, having my invention applied thereto; Fig. 2 a vertical section through the ticket holder and so much of the machine as is necessary to illustrate my invention; and Fig. 3 a sectional plan view of the ticket holder.

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

The working parts of the machine are inclosed in the usual casing or cabinet A, having the locked lid B which may be opened to obtain access to the registering mechanism.

The upper rear portion of the machine is provided with a glass covered window or sight opening C through which the indicators D are exposed when their corresponding keys are operated, and in its lower forward portion is provided with a transverse opening through which project the front ends of the series of operating keys E bearing the usual numbered finger buttons representing the various values which may be registered and indicated by the machine. In this instance the types F are carried directly upon the keys, being mounted in plates or hangers G pivoted to the keys and capable of being adjusted to different positions, to cause them to squarely strike the platen, hereinafter described, by means of set screws H passed through the keys, as seen in Fig. 2. The types co-operate with a transverse plate or platen I extending transversely between them, from side to side of the machine, and in this instance forming part of the framework of the casing.

An inking ribbon J is carried upon spools located in housings K at each side of the machine, the spindles of the spools projecting outside the housings and having upon them thumb nuts L by which they may be turned to wind the ribbon from one spool onto the other.

The ticket holder before referred to consists of a box M mounted to slide from side to side of the machine upon a guide rib N and provided at its upper rear edge with an angle plate or flange O which rests upon a cross plate of the framework or casing at the forward edge of the platen I, so that the box is free to be slid laterally in either direction. The supply of tickets P rests upon a plate Q

loosely fitting within the box M and supported near its front and rear ends by cross pieces R fastened upon the upper ends of curved springs S secured to the bottom of the box.

5 The tickets are confined within the box by overlapping flanges T at its upper side and an angle plate or clip U secured to the upper edge of the front wall V of the box and projecting rearward a short distance from the

10 front ends of the tickets. The front wall V of the box does not extend quite to the top of the box, leaving an open space between its upper edge and the front ends of the type flanges T, and causing the clip U to hold down

15 the front end of the supply of tickets, so that the latter do not rest in exactly horizontal position. At the rear end of the box there is a space between the upper edge of the rear wall W and the rear ends of the top

20 flanges T of sufficient width to permit the uppermost ticket to be slid rearward partially out of the box and projected across the platen I beneath the types F, as seen in Fig. 2, the longitudinal space between the top flanges T

25 permitting the clerk to place his finger upon the uppermost ticket and slide it rearward. When the ticket is again drawn forward, after the printing has been effected, its front end will pass above the clip U and upper

30 edge of the wall V, and the ticket may be readily withdrawn from the box. The front wall V of the box is made removable, to permit the insertion of the supply of tickets, and to that end the front ends of the side walls of

35 the box are provided with vertical guides X in which fit the edges of the wall V, and the latter has secured to it a spring catch Y which engages the bottom of the box and holds the wall in position. By disengaging this catch

40 Y the wall V may be lifted vertically out of its guides and the plate Q be depressed against the resistance of the springs S and a fresh supply of tickets placed in the box.

While the particular form of the ticket

45 holder illustrated in the drawings and above described is a suitable and convenient one for the purposes of my invention, and is believed to be of novel construction and I desire to claim it specifically, yet the particular form or construction of the ticket holder

50 is immaterial to the broader scope of my invention, which consists in the broad combination, irrespective of form or arrangement, of the series of operating keys of different values, the types of corresponding values either

55 carried by or actuated by the keys, some suitable platen or impression device co-operating with the types, and a ticket holder movable transversely across the machine and

60 adapted to have its tickets projected beneath the different types and withdrawn from the holder.

I have shown and described an inking ribbon interposed between the types and impression plate or platen, and while this forms

65 an operative part of the combination it is not

of the essence of my invention, for the types might be provided with sharp faces adapted to cut or indent the type numbers in the paper tickets, as has been done in some cash

70 recording machines heretofore. Nor is my invention restricted, in its broader scope, to the employment of a supply of previously cut and separated tickets carried within the ticket holder, for in a modified form of my

75 invention, to be specifically covered by another application, I have employed a continuous ribbon or strip of paper carried within a holder or receptacle movable transversely

80 across the machine adjacent to the front ends of the keys and the series of types, and adapted to be drawn from its supply roll within the holder, over the platen, and be torn off into separate checks or tickets after the printing has been effected.

85

Under the embodiment of my invention which has been shown and described in this application it will be understood that when a sale is made the clerk slides the ticket holder

90 along its guide way until it is brought opposite the key representing the value of the sale, and then with his finger resting upon the uppermost ticket slides said ticket rearward beneath the type of said key, then depresses said key to print the value of the sale upon

95 the ticket, and to indicate it and register it within the machine, and then draws the printed ticket forward out of the holder in the manner described. This operation may be readily and conveniently carried out with one

100 hand, leaving the other hand free.

The machine illustrated in the drawings is not provided with any cash drawer, since where printed checks or tickets are employed they are often delivered to the customer who

105 in turn delivers them to the cashier of the establishment with his money, so that the clerk operating the machine has no occasion to handle the money, but in other cases cash drawers are employed in such machines, in

110 which event they may be of the usual or any suitable construction and arrangement.

Having thus fully described my invention, I claim—

1. In a cash register, the combination, with

115 the series of operating keys representing different values, the type numbers representing corresponding values actuated by the respective keys, and the impression plate or platen co-operating with the type numbers, of a

120 ticket holder mounted to move transversely across the machine adjacent to the front ends of the keys and adapted to have the tickets carried by it projected from it beneath the types of the respective keys, substantially as

125 and for the purpose described.

2. In a cash register, the combination, with the series of operating keys representing different values, the type numbers carried thereby and representing corresponding values, the

130 impression plate or platen co-operating with the type numbers, of the ticket holder mount-

ed upon guides to slide transversely across the machine adjacent to the front ends of the operating keys and adapted to have its contained tickets projected rearward from it beneath the types of the different keys and then withdrawn from it after the printing has been effected, substantially as described.

3. The combination, with the operating keys, types and platen, of the herein described ticket holder mounted to move transversely across the machine adjacent to the front ends of the keys and consisting of the box M containing the spring-supported plate Q upon which the supply of tickets rests and having the top flanges T overlapping the edges of the tickets and the clip U holding down their front ends, and provided with transverse openings between the upper edges of its front and rear walls and the top flanges T, to permit the projection of the tickets from the rear end of the box into position to be printed and their

subsequent withdrawal from the front end of the box, substantially as described.

4. The combination, with the operating keys E, types F, inking ribbon J, and platen I, of the ticket holder M mounted upon the guide rib N and provided with the flange O resting upon the frame plate at the forward edge of the platen I, the springs S S secured within the holder, the plate Q supported by said springs, the top flanges T overlapping the edges of the tickets, and the removable front wall V supported in the guides X and provided with the clip U for holding down the front ends of the tickets and the spring catch Y for maintaining it in position, substantially as described.

ROBERT T. HOUK. [L. s.]

Witnesses:

THOMAS CORWIN,
F. A. L. SNECKNER.