(No Model.) 2 Sheets—Sheet 1.

# J. N. ABBOTT.

## AUTOGRAPHIC REGISTER.

No. 567,778. Patented Sept. 15, 1896.

Fig. 1

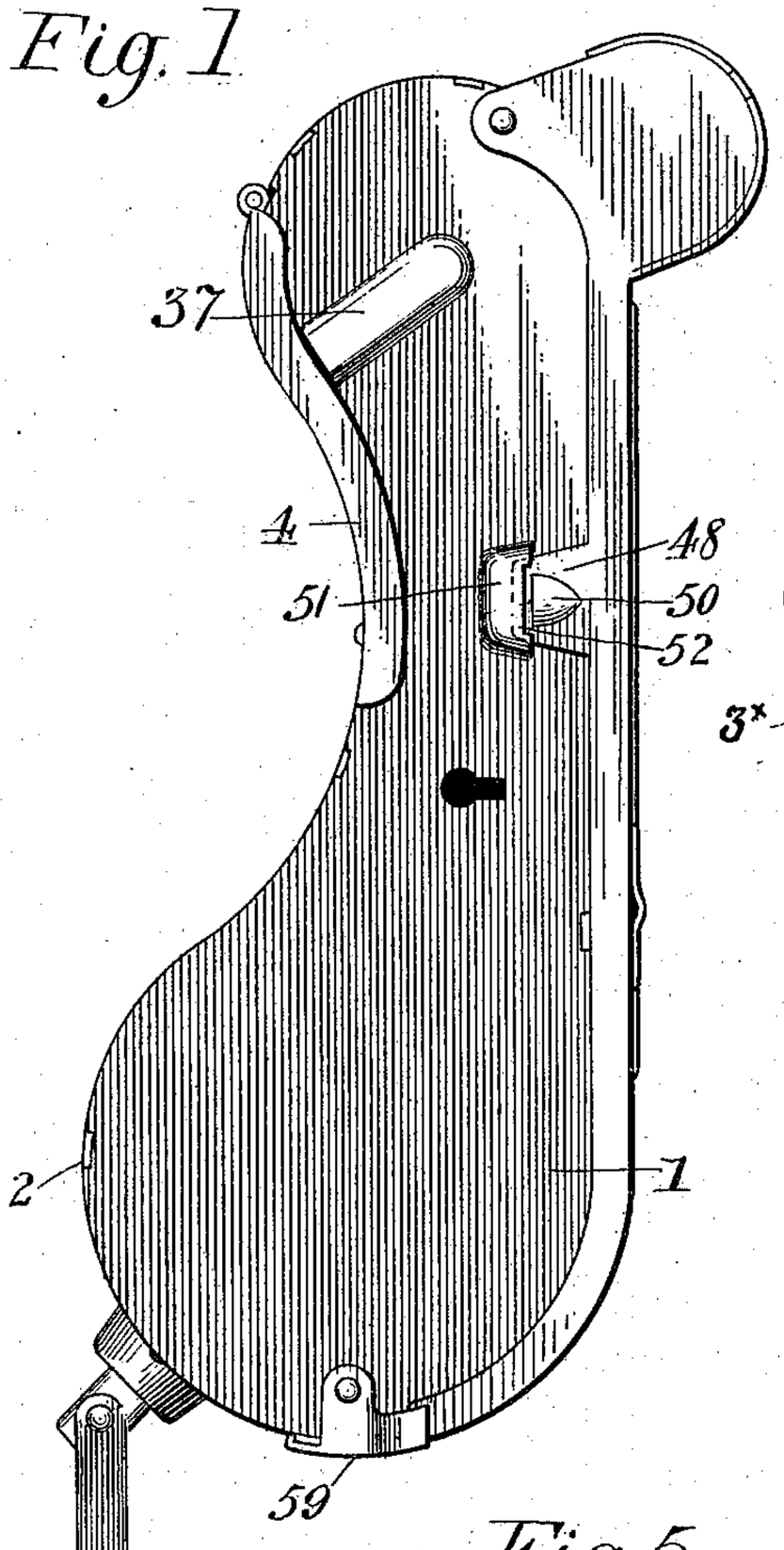



Fig. 2.

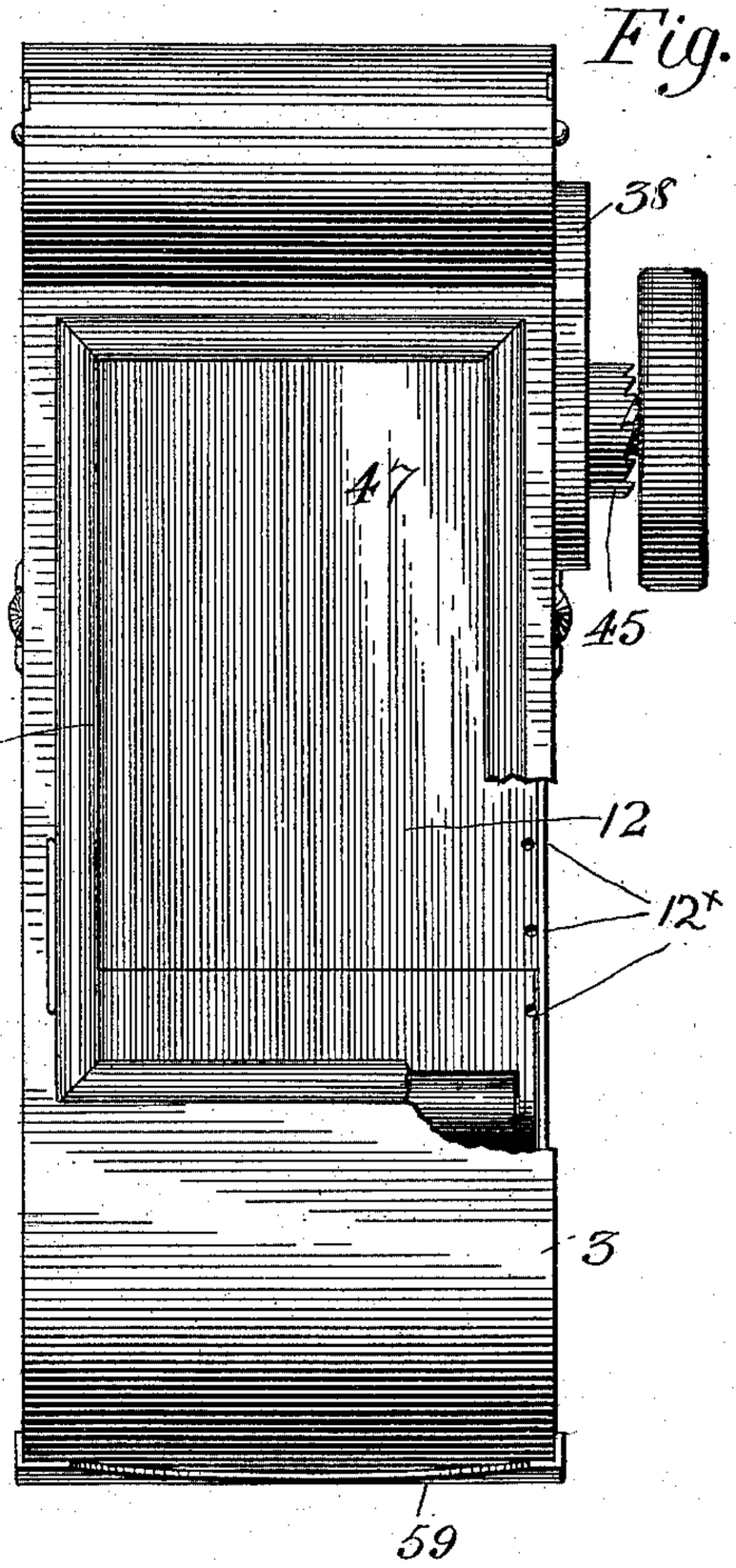



Fig. 5.

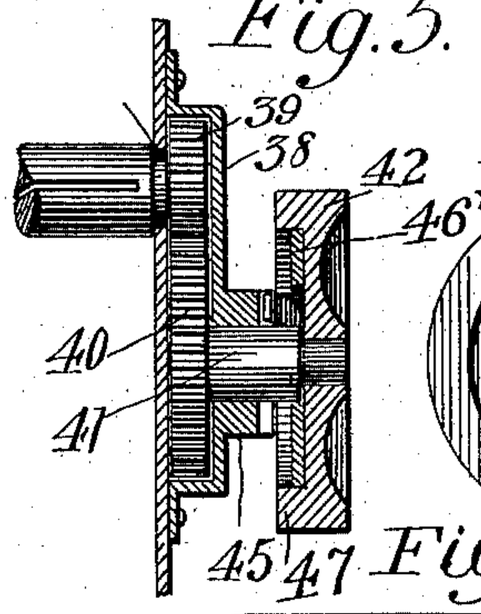



Fig. 6

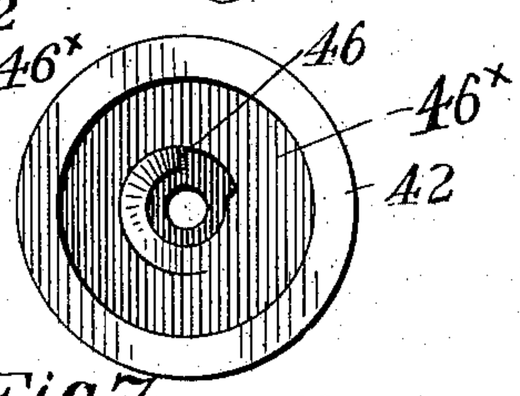
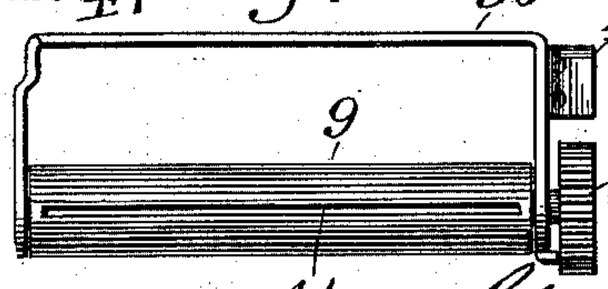



Fig. 7.

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(No Model.) 2 Sheets—Sheet 2.

# J. N. ABBOTT.

## AUTOGRAPHIC REGISTER.

No. 567,778. Patented Sept. 15, 1896.

Fig. 3.

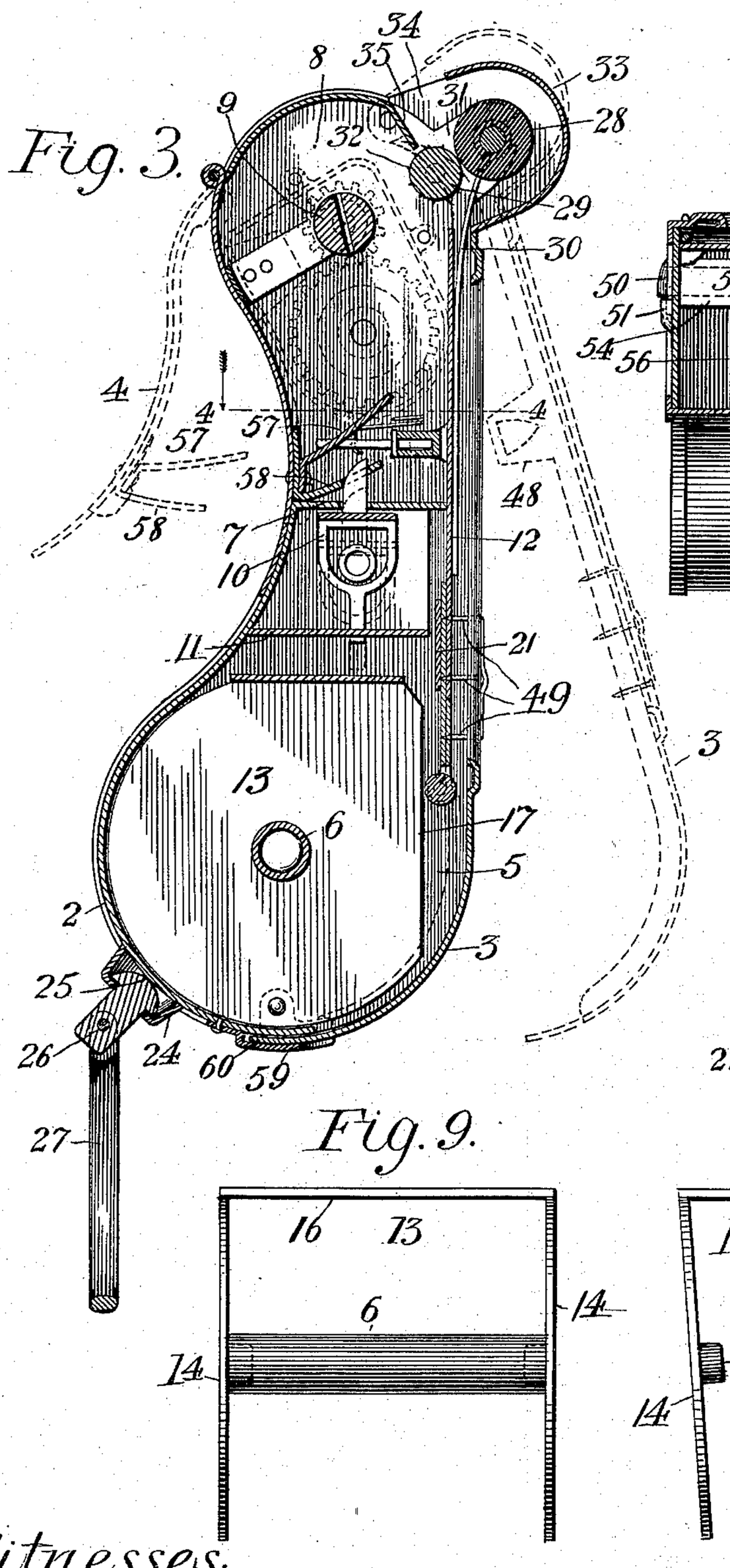



Fig. 4.

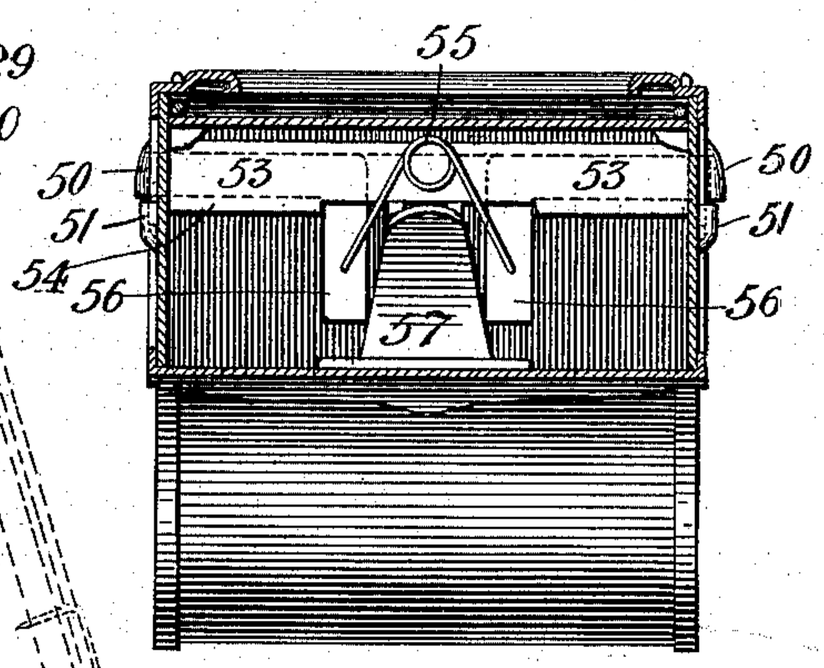



Fig. 8.

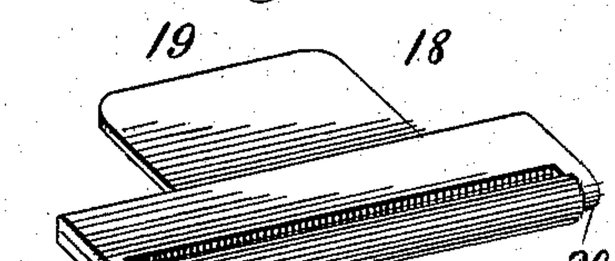
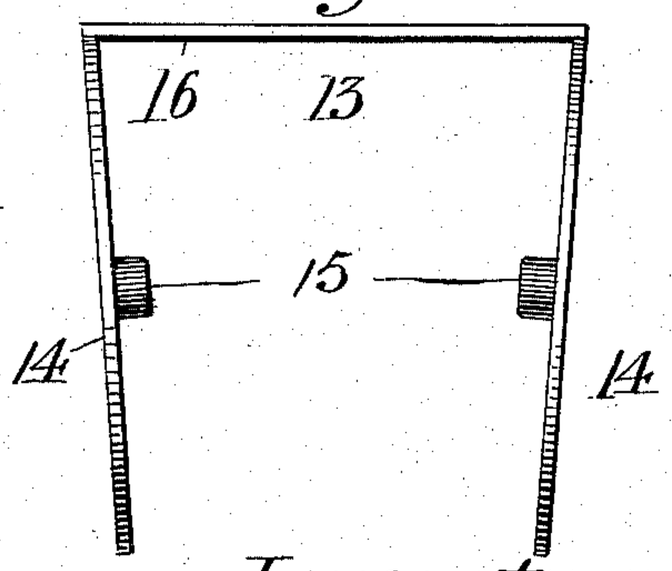



Fig. 9.




Fig. 10.

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# UNITED STATES PATENT OFFICE.

JOHN NIEL ABBOTT, OF NEW YORK, N. Y., ASSIGNOR TO THE RAILWAY TRIPLEX TICKET COMPANY, OF SAME PLACE.

## AUTOGRAPHIC REGISTER.

SPECIFICATION forming part of Letters Patent No. 567,778, dated September 15, 1896.

Application filed March 11, 1896. Serial No. 582,754. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN NIEL ABBOTT, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Autographic Registers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to that class of registers which are adapted to furnish a written entry or receipt for cash paid and retain and conceal within the register an autographic copy of such entry or receipt.

The objects of the invention are to effectually provide against the unauthorized opening of the register, to facilitate the feeding and delivery of the record-strips, to provide a register which may be handled with ease and convenience, and generally to improve the details of construction of devices of this character and increase their efficiency and reliability.

The features of novelty in my improved register will be fully described hereinafter, and are illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of the register; Fig. 2, a plan view thereof; Fig. 3, a longitudinal section; Fig. 4, a transverse section on the line 4 4 of Fig. 3, and Figs. 5, 6, 7, 8, 9, and 10 illustrate parts in detail.

The casing of the register comprises the sides 1, rear wall 2, hinged front cover 3, and rear hinged cover 4.

The lower portion of the casing constitutes a compartment 5 to receive the supply-roll 6, upon which are wound the paper strips.

The upper end of the rear wall of the casing is bent forward to form a partition 7, which divides the interior of the casing transversely. The compartment 8 above this partition contains the copy-receiving roll 9 and a part of the locking devices for the covers. The lock-bolt 10, which is released by a suitable key, extends through an opening in the partition 7, and also through an opening in a partition 11, arranged below the partition 7 and parallel to the latter.

12 indicates the table or paper-support secured between the sides of the casing, slightly below the upper edges thereof, and provided on each side with a series of perforations $12^{\times}$, for a purpose hereinafter explained.

The roll 6, upon which the strips of paper are adapted to be rolled, is preferably a hollow cylinder, and it is supported by a bracket or frame 13, comprising resilient side pieces 14, provided with oppositely-projecting gudgeons 15, and connected by a cross-strip 16, preferably formed integral with the sides 14. As illustrated in Fig. 10, the resiliency of these side supports 14 normally inclines them inwardly, but they are separated by the insertion of the roll 6 and serve to support the latter, so that it may freely revolve as the roll of paper thereon is unwound.

The contour of the sides of the bracket 13 conforms to that of the compartment 5, but they are cut away at their upper edges 17 to rest in a plane parallel to that of the table 12.

To secure the bracket 13 in position within the compartment 5 of the casing, I employ a slide 18, of the form shown in Fig. 8, comprising a strip of metal bent upon itself and cut away to form a tongue 19 and bearings 20. The tongue 19 is adapted to fit within a pocket formed below the table 12 by securing a transverse strip 21 thereto, and the loop-bearings 20 receive the reduced ends or journals 22 of a roller 23, over which the paper passes from the roll 6 to the delivery end of the casing. The slide 18, as clearly shown in Figs. 2 and 3, constitutes an end extension of the table in addition to its functions as a securing device for the paper-holder and a support for the roller 23.

The rear wall 2 of the casing, near its lower end, is provided with a socket-bearing 24, which receives and secures the head 25 of a swivel-pin 26. A ring 27 is pivotally secured to the projecting end of the pin 26 and serves as a convenient finger-piece by which the register is held or suspended. The rear face of the casing is hollowed out, as seen in Figs. 1 and 3, forming in connection with the enlarged rear end a convenient hand-grip, and by slipping the ring 27 over the little finger of the left hand and grasping the casing with the remaining fingers and thumb of that

hand the register may be readily turned to any position found most convenient for writing, the swivel connection of the ring permitting such movement without cramping the finger which extends through the ring. The swiveling of the ring also permits the hold on the casing to be released, so as to allow it to be suspended from the finger by the ring and resumed again without taking the finger out of the ring, the universal joint permitting it to be turned freely in any direction.

At the upper end of the casing are arranged a pair of delivery-rolls, (indicated by the numerals 28 and 29.) The outer roll 28 is preferably of rubber and is mounted in the free ends of two yielding arms 30, the lower ends of which are soldered or otherwise secured to the inner sides of the casing and above the table 12. The upper ends of these arms are bent around the journals of the roll 28 to afford a yielding support therefor, and said journals extend laterally beyond the arms 30 and are seated in slotted brackets 31, projecting from the sides of the casing.

The lower roll 29, which is of less diameter than the roll 28, is mounted in bearings formed in the sides of the casing and is provided with peripheral pins 32, arranged in annular rows and adapted to enter the strips and aid in their delivery. As shown in Fig. 3, these rolls 28 and 29 are arranged parallel to each other, and the resiliency of the arms 30 tends to hold the outer roll 28 against the roll 29.

The upper end 33 of the cover 3 is arched to accommodate the roll 28.

The delivery-mouth 34 of the register is provided with a transverse guard 35, formed by deflecting the upper end of the casing toward the roller 29. The office of this guard-plate is to direct the outer strips of paper through the mouth 34 and prevent them from passing into the compartment 8, in which the copy-receiving roll 9 is located.

Referring now to Fig. 7, 9 indicates the roll upon which is wound the check-strip or copy of the entries which are contained on the outer strips, which pass out through the mouth of the register and are torn off. This roll 9 is mounted upon a frame 36, consisting of a strip of metal, bent at its ends and adapted to fit at one end within a way or groove 37 struck up from the casing, and at its opposite end within a housing 38, secured to the opposite side of the casing. The roll 9 is provided at one end, outside of the frame 36, with a gear-pinion 39, adapted to mesh with a gear-wheel 40, mounted in the housing 38 upon the inner end of an arbor 41, carrying at its outer end a thumb-nut 42.

To close the outer end of the opening in the housing 38, through which the end of the frame 36 is inserted, I provide a block or plug 43, secured to the frame 36 above the pinion 39 and conforming in size and shape to the opening to be closed. The roll 9 is longitudinally slotted, as shown at 44, to receive the end of the record-slip. In lieu of the longitudinal slot any suitable device may be employed for engaging the end of the strip.

It will be apparent that the roll 9 and its supporting-frame 36 may be readily removed to permit of the unwinding of the record-strip or for other purposes. The housing 38 is provided with a projecting collar 45, through which the arbor 41 extends. The outer peripheral face of this collar 45 is provided with ratchet-teeth adapted to engage a spirally-disposed pawl 46, formed by slitting a disk $46^{\times}$, secured to the nut 42 by means of an annular rim $47^{\times}$ and bending up the metal, as shown in Fig. 6.

The revolution of the thumb-nut operates to revolve the arbor 41, and, through the gearing 39 and 40, the roll 9, backward movement being prevented by the pawl-and-ratchet mechanism, as will be readily understood. The upper lid or cover 3 is formed with a rectangular opening $3^{\times}$ to expose the outer strip of paper, and the inner side edges of the cover are provided at opposite points with downwardly-projecting pins 47, adapted to enter the perforations $12^{\times}$ of the table after puncturing and passing through a carbon-ribbon (not shown) stretched across the table.

I will now describe the mechanism for securing the front and rear lids or covers.

The front cover 3 is provided at opposite points with depending lugs 48, each of which is pressed outwardly to form sockets 50. The lower ends of these lugs 48 project into pockets formed by guard-plates 51 on the outer sides of the casing. These guard-plates 51 are bent outwardly and their upper edges are provided with slots 52 to receive the lower ends of the sockets 50. The sides 1 of the casing are formed with slots at points registering with the sockets 50 when the cover 3 is closed, and through these slots project the respective outer ends of cross-bolts 53, arranged within the casing in suitable ways 54, and normally drawn toward each other by a connecting-spring 55, secured to depending arms 56 of said bolts 53. After the front cover 3 is closed the rear cover 4 is turned to closed position. On the inner side of said cover 4 are arranged two projecting catches 57 and 58. The catch 57 is of tapering form and enters the space between the arms 56 of the cross-bolts to force the bolts apart and project their ends through the slots in the casing and into engagement with the sockets 50 of the front cover. The other catch, 58, strikes against the beveled end of the lock-bolt 10, causing said bolt to recede and then project upwardly through the slot in the catch 58, thus firmly securing both covers in closed position.

It will be observed that the guard-plates 51 conceal and protect the depending ends of the lugs 48 and effectually prevent the in-

sertion of a knife-blade or other implement with the view of surreptitiously raising the covers. In addition to thus guarding the side fastenings of the cover 3, I provide the lower end of the casing with a transverse guard-plate 59, which is secured to the casing to form a pocket to receive the depending curved lower end 60 of the cover 3. The function of the guard-plate 59 is to prevent the insertion of an instrument under the end of the cover for the purpose of raising the same. Any preferred form of lock may be employed in connection with the register, the form of lock shown in the drawings being only one of many which would serve the purpose.

The operation of the device has been incidentally explained above, and it is only necessary to state further that it is designed to employ three independent strips of paper. These are wound upon the roll 6. The strips are passed together over the roller 23 and table 12, and thence between the delivery-rolls 28 and 29. The innermost strip is then passed under the deflected guard 35, and into the compartment 8, where it is engaged by the roll 9. A strip of carbon-ribbon is interposed between the strips and held by the pins 47. An entry made on the outer strip will be transferred to the other two strips. The thumb-nut 42 is then turned to wind the innermost strip upon the roll 9, and the outer and intermediate strips are at the same time projected through the mouth of the register in position to be torn off together, one strip being handed to the passenger or customer while the other is retained by the operator to enable him to keep track of his receipts, which, as is obvious, must tally with the check-strip within the register.

Having thus described my invention, what I claim is—

1. In an autographic register, the combination with a casing the rear portion of which is shaped to form a hand-grip, of a swiveled ring connected to the casing at the rear end in position to receive the finger of the user.

2. In an autographic register, a support or holder for the ticket-roll, comprising a body portion having resilient side pieces provided with gudgeons, and a tubular journal upon which the roll is wound, the hollow ends of the journal adapted to receive said gudgeons and be thus held in the holder and be readily detached therefrom.

3. In an autographic register, the combination of the supply-roll, feed-table, yielding delivery-roll, an auxiliary roll having annular rows of teeth, and a mouthpiece deflected so that its edge is in close proximity to the toothed roll to serve as a guard to prevent the outer strip or strips from passing into the casing.

4. In an autographic register, the combination with the casing, of a cover, provided with locking projections at the sides, transversely-arranged bolts within the casing extending through the sides thereof to engage said locking projections, and guards or cap-plates on the casing into which the ends of the projections fit and are held.

5. In an autographic register, the combination with the casing, of a cover provided with locking projections at the sides, transversely-arranged bolts within the casing adapted to project through openings in the sides of the casing to engage said locking projections, guards or cap-plates on the casing into which the ends of the projections fit, and a guard or cap-plate on the end of the casing to receive a projection of the cover.

6. In an autographic register, the combination with the casing provided with suitable ways in the sides, of a winding-roll, means for securing the end of one of the paper strips thereto, and a frame within which said roll is mounted, the ends of said frame fitting into the ways in the casing, and serving as a means for the ready insertion and removal of the roll.

7. In an autographic register, the combination with the winding-roll, of a gear meshing with the pinion of said roll, a thumb-nut on the axle of the gear, antibacking-ratchets on the housing inclosing the gears, and a spring-pawl on the nut engaging the ratchets, said pawl being struck up out of a disk secured in the hollow of the nut.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN NIEL ABBOTT.

Witnesses:
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R. H. TEN BROECK.