

T. SCHIRMER & M. C. STERN.
 AUTOGRAPHIC REGISTER.
 APPLICATION FILED FEB. 4, 1907.

1,057,175.

Patented Mar. 25, 1913.

2 SHEETS—SHEET 1.

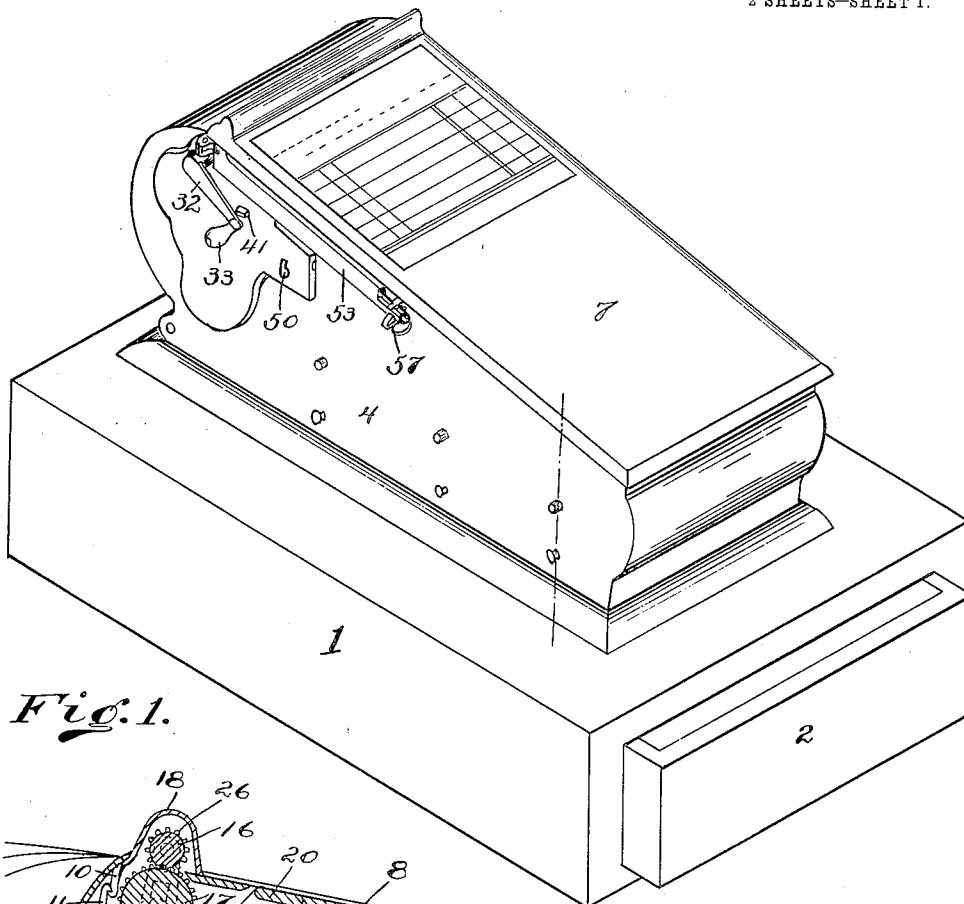


Fig. 1.

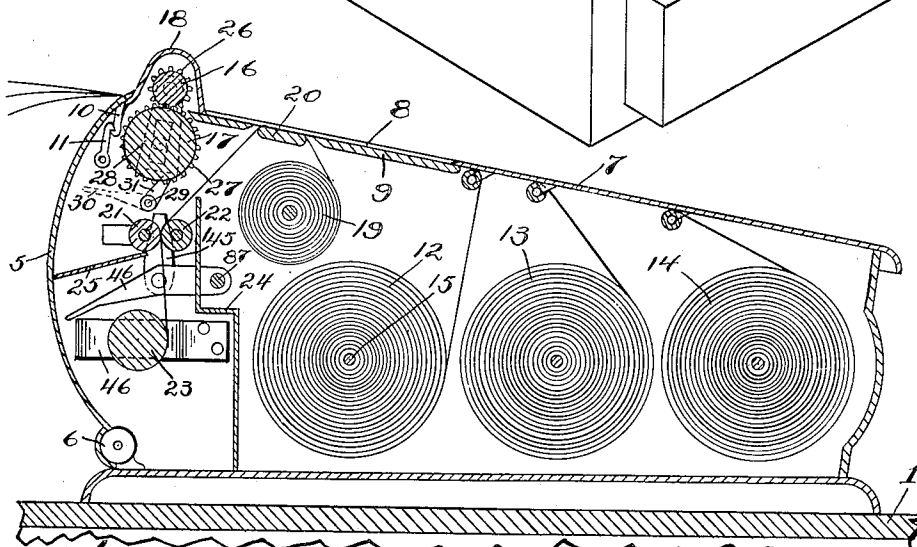


Fig. 2

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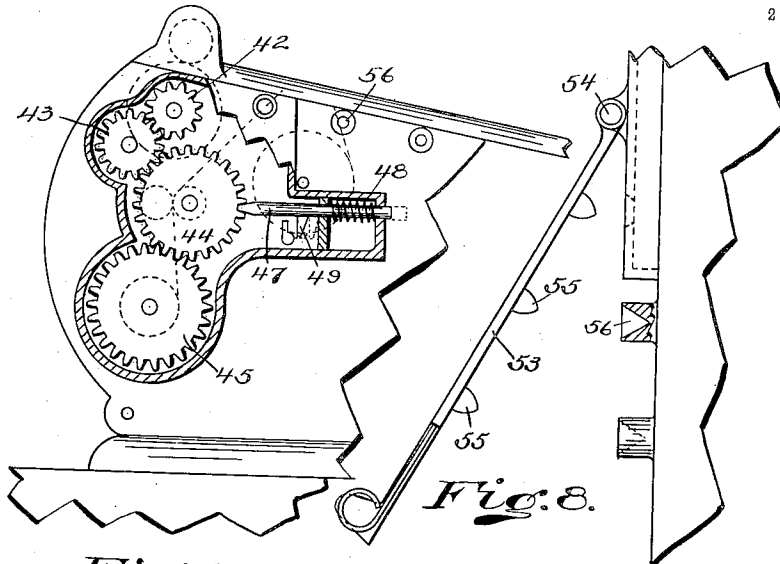


Fig. 3.

Fig. 8.

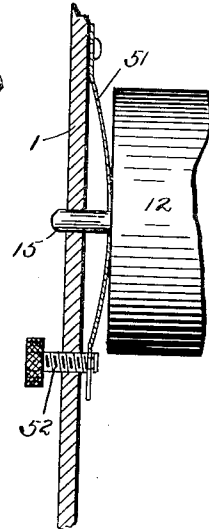


Fig. 7.

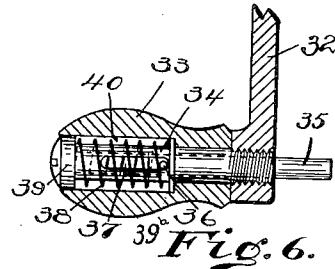


Fig. 6.

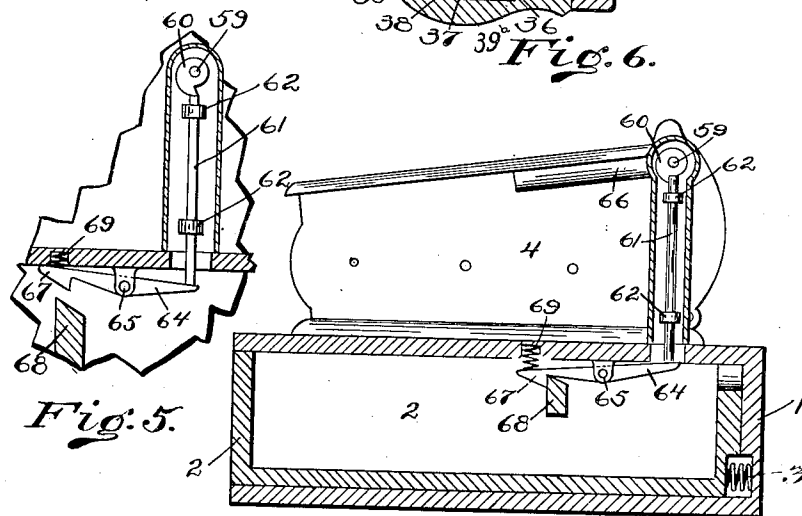


Fig. 5.

Fig. 4.

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AUTOGRAPHIC REGISTER.

1,057,175.

Specification of Letters Patent.

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Application filed February 4, 1907. Serial No. 355,653.

To all whom it may concern:

Be it known that we, THEODOR SCHIRMER and MILTON C. STERN, citizens of the United States, residing in Dayton, county of Montgomery, and State of Ohio, have invented certain new and useful Improvements in Autographic Registers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

Our invention relates to improvements in autographic registers for making duplicate copies of bills sales checks and the like, in which a money till or cash drawer compartment is employed with connecting mechanism intermediate the drawer and register mechanism, so that the operation of the registry feeding devices to feed the strips over the writing tablet shall release the drawer and permit it to be opened or propelled from the case.

The invention consists of that certain novel construction and arrangement of parts to be hereinafter particularly pointed out and claimed.

In the drawings, Figure 1 is a perspective view of our improved register and cash drawer. Fig. 2 is a central vertical section taken through the autographic register. Fig. 3 is a detail sectional elevation showing the feeding mechanism for the register. Fig. 4 is a vertical section through the cash drawer and locking mechanism, the parts being reduced in size. Fig. 5 is a detail vertical section of the locking mechanism for the cash drawer. Fig. 6 is a detail sectional view of the operating handle for the register. Fig. 7 is a detail view showing the tension device for the paper rolls. Fig. 8 is a detail plan view showing the device for clamping the manifolding material.

1 is a rectangular case provided with a drawer 2 sliding in one end thereof, and when the drawer is released by the lock to be hereinafter described, the drawer is propelled from the case by a spring 3 mounted between the drawer and the case.

4 is the autographic register casing mounted upon and secured to the casing 1 in any suitable way. 5 is the front wall of this casing hinged at 6, so that it may be let

down to get at the operating mechanism, and 7 is the top cover for the register provided with an opening 8 over the writing tablet 9, and the front wall 5 is locked to the top cover 7 by hooks 10 and 11, the hook 11 being mounted on the rod pivoted in the side walls of the casing, so that the hook can be turned to let down the front wall when desired.

12, 13 and 14 are rolls of paper mounted on suitable spindles 15 journaled in the case, and the strips from these rolls are passed over the writing tablet 9 with manifolding material interposed between the several strips, and the strips are then passed out between the feed rollers 16, 17 journaled in the forward portion of the case. The top cover 7 is curved upward around the uppermost feed roller, as shown at 18 to inclose and cover the feed rollers. 19 is a roll of paper also journaled on suitable spindle in the side walls of the casing, and a strip from this roll is passed over the forward part of the writing tablet 20 through slots in the tablet, and thence down between feed rollers 21, 22 for this strip, and on to the storage roll 23, mounted in the lower portion of the front of the casing, and inclosed in a separate compartment formed by the partition walls 24 and 25. A narrow strip of manifolding material is interposed between the strip from this roll 19, and the other paper strips on the writing tablet, and the purpose of the construction is to provide a narrow strip upon which the total of the sales may be transferred, the web from this roll being only fed a short distance with each operation as will be hereinafter described.

The spindles of the feed rollers 16 and 17 are provided with intermeshing gears 26, 27, and the upper roll 16 is spring-pressed toward the roll underneath, and is mounted in slotted plates indicated by dotted lines 28 in Fig. 2, the spindle of the lower feed roller being mounted in the slot in these plates, while 29 is a rod operated by the handle 30 outside the case, and on each end of this rod within the case are the arms 31, which bear against the lower edge of the slotted plates 28, so that by depressing the handle 30 the upper feeding roller 26 may

be raised to permit the paper strips to be readily passed between the feed rollers in loading the machine. The spindle of the lower feed roller 27 carries the crank 32, and 33 is the handle of this crank. The details of this handle are illustrated in Fig. 6. The handle is loosely mounted on the hollow sleeve 34 which is screw-threaded and secured to the outer end of the crank 32. 35 is a pin which passes down through this hollow sleeve 34, and which in turn carries the pin 36, which extends through the slot 37 in the sleeve. 38 is a coiled spring which bears between this pin 36 and the head 39 of the sleeve. These parts are mounted in the bore 40 in the handle, so that by pulling on the handle the pin 35 will be drawn back flush with the inner surface of the crank 32 and allowed to pass the lug 41 on the casing to permit the crank to be turned when the spring 38 will again return the pin to its normal position against the washer 39^a, so that one complete rotation of the lower feed roller is insured for each operation.

As illustrated in Fig. 3 the lower feed roller spindle carries the pinion 42, which meshes with the idler 43, which in turn engages the gear 44 on the feed roller shaft 22 for the total sales slip. This idler is interposed in order to change the direction of rotation of the feed roll 22 in winding up the total sales strip. The companion feed roller 21 is held in contact with the feed roller 22 by spring pressure in the usual way. 145 is a wedge mounted on the lever 46 pivoted at 47 in the case, and this wedge plate is interposed between the spindles of the feed rollers 21—22, so that by raising the lever 46 the feed rollers may be spread apart for convenience in loading the device. The spindle of the storage roll 23 carries the gear 45 loosely mounted thereon and meshing with the gear 44 on the feed roller 22, and frictional contact is maintained between this gear 45 and the storage roll 23 by means of the spring 46, so that this storage roll may slip as the roll increases in size with the accumulation of the sales slip strip. In order to prevent any operation of the register, except by the parties entitled to use the same, we provide the spring pressed bolt 47, which engages the teeth of the gear 44 under pressure of the spring 48. This bolt carries a lug 49, which is thrown by a key inserted through the key hole 50.

In order to maintain a proper tension on the rolls of paper mounted in the register, we provide the device illustrated in Fig. 7, in which 51 is a flat bow spring secured at one end to the side wall of the case, and provided with an opening to fit over the spindle 15 of the paper roll 12. This spring 51 carries the set screw 52, which is screw-threaded through the casing, so that the set

screw can be turned from the outside to regulate the tension of the spring 51 on the paper roll.

In Fig. 8, we illustrate a convenient device for holding the manifolding material, which is interposed between the paper strips. This consists of the bar 53 hinged at 54 along the upper edge of the side wall of the casing, and this bar carries cone-shaped lugs 55, which engage within sockets 56 at proper points on the casing. The carbon paper is mounted on a roll or rolls secured on the opposite side of casing in the cylindrical case 66, shown in Fig. 4. The free ends of the carbon paper are brought across the tablet, the bar 53 being swung out of the way, and the bar is then closed and held by the latch 57, the cone-shaped lugs 55 piercing the paper, and holding it securely in position. The bottom edge of the bar will also serve as a tearing edge to tear off the frayed and uneven edge of the paper. Upon the spindle 59 of the feed roller 17 is mounted the cam 60 shown in Figs. 4 and 5. This cam engages under the rod 61 guided by the lugs so as to permit free vertical movement of the rod. The lower end of the rod 61 engages the end of the lever 64, pivoted at 65 to the under side of the drawer casing, and the opposite end of this lever 64 carries the beveled catch 67 which engages behind the lug 68 on the drawer when the drawer is closed, while 69 is a coiled spring bearing on the end of the lever 64 to hold the latch normally down and the rod 61 up. The cam 60 is so arranged on the spindle 59, that the high part of the cam engages with the rod 61 immediately before the crank 32 completes its stroke, and at the completion of the stroke of the crank 32, with the pin 35 in contact with the lug 41, the cam stands as shown in Fig. 4, with the latch 67 depressed by the spring 69, so as to engage the lug 68 on the drawer when the drawer is pushed back to place. When the rod 61 is depressed by the cam 59 the drawer is released and propelled out of the case by the spring bearing thereon. Then when the drawer is pushed back into the case, the beveled surfaces of the latch 67 and lug 68 permit the latch to yield to allow the drawer to be pushed into the case. With this construction it will be evident that with every actuation of the register to feed forward the paper strips the drawer will be released.

Having thus described our invention, what we claim as new and desire to secure by Letters Patent is:

In an autographic register, the combination with a casing, with a plurality of rolls of paper mounted in the upper part thereof, and a cash drawer sliding in the lower part thereof directly underneath the rolls of paper, with a spring to propel the same from the case, of a writing tablet over which the

several strips of paper are disposed, and
feed rollers for feeding the strips over the
tablet, with a hand crank for operating said
feed rollers, and a rock lever pivoted on the
5 casing to swing in a vertical plane, and pro-
vided with a catch to engage the cash
drawer, a cam connected with said hand
crank, and a rod intermediate the cam and

the rock lever whereby the actuation of the
hand crank will rock the lever to release the 10
drawer.

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