

May 15, 1928.

1,669,765

L. W. LANGFORD
SALES RECORDING DEVICE

Filed Oct. 3, 1923

4 Sheets-Sheet 1

Fig. 1.

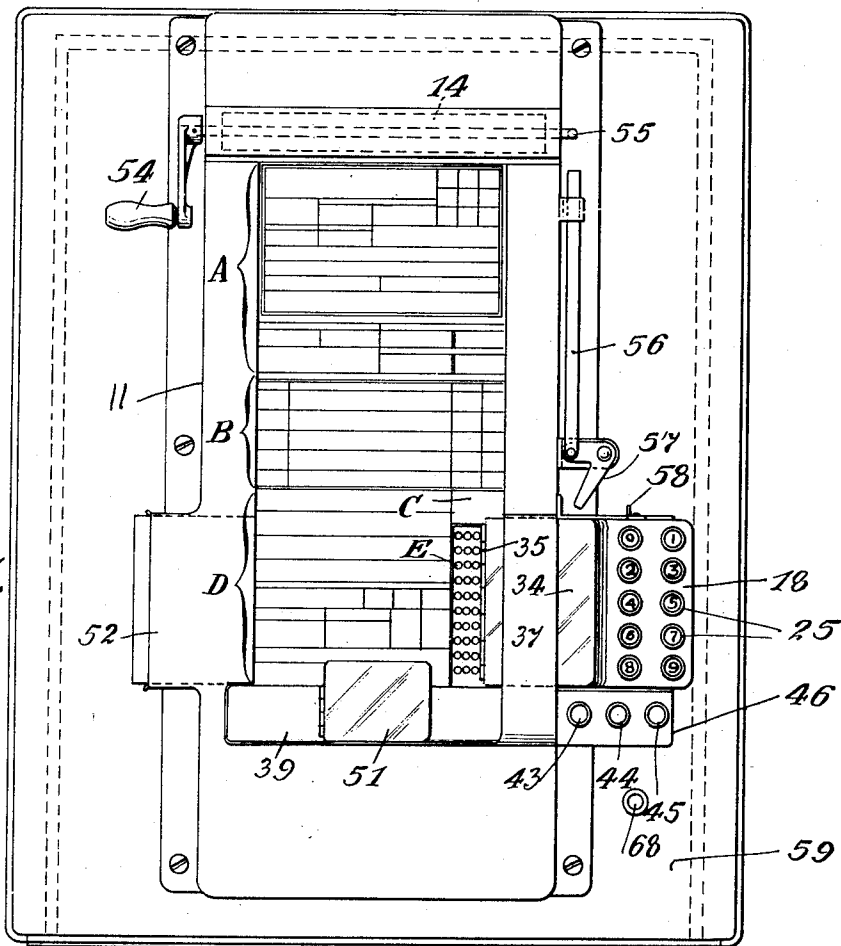
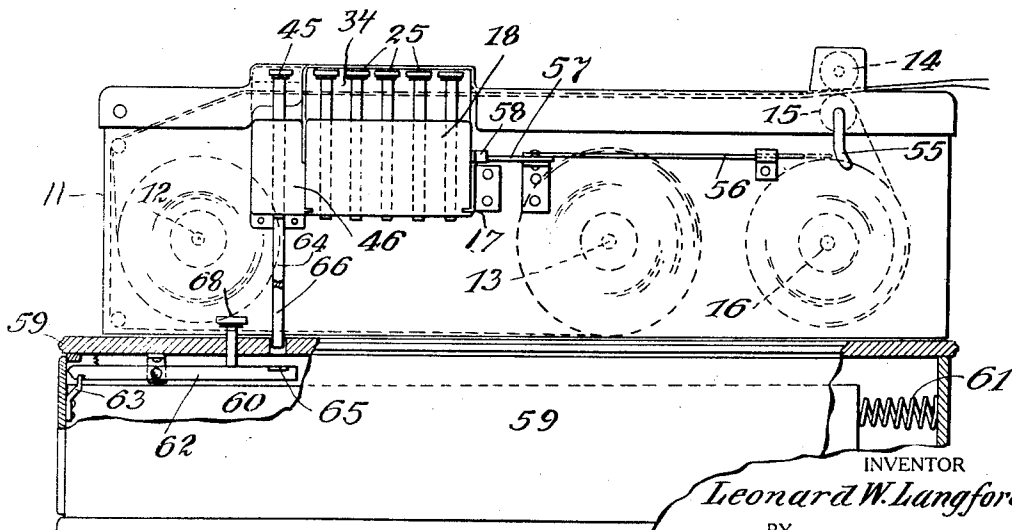


Fig. 2.

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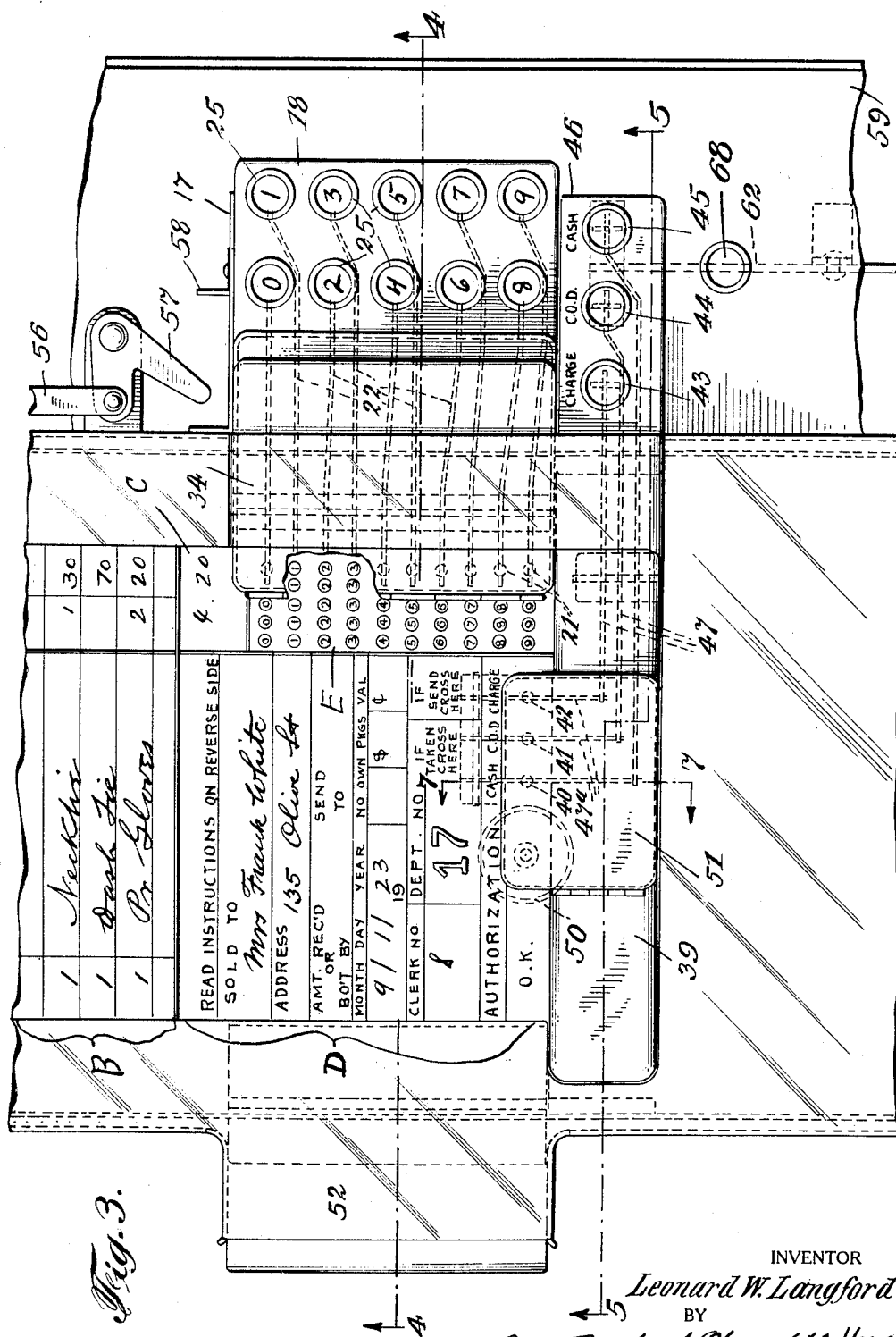
1,669,765

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SALES RECORDING DEVICE

Filed Oct. 3, 1923

4 Sheets-Sheet 2



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SALES RECORDING DEVICE

1,669,765

Filed Oct. 3, 1923

4 Sheets-Sheet 3

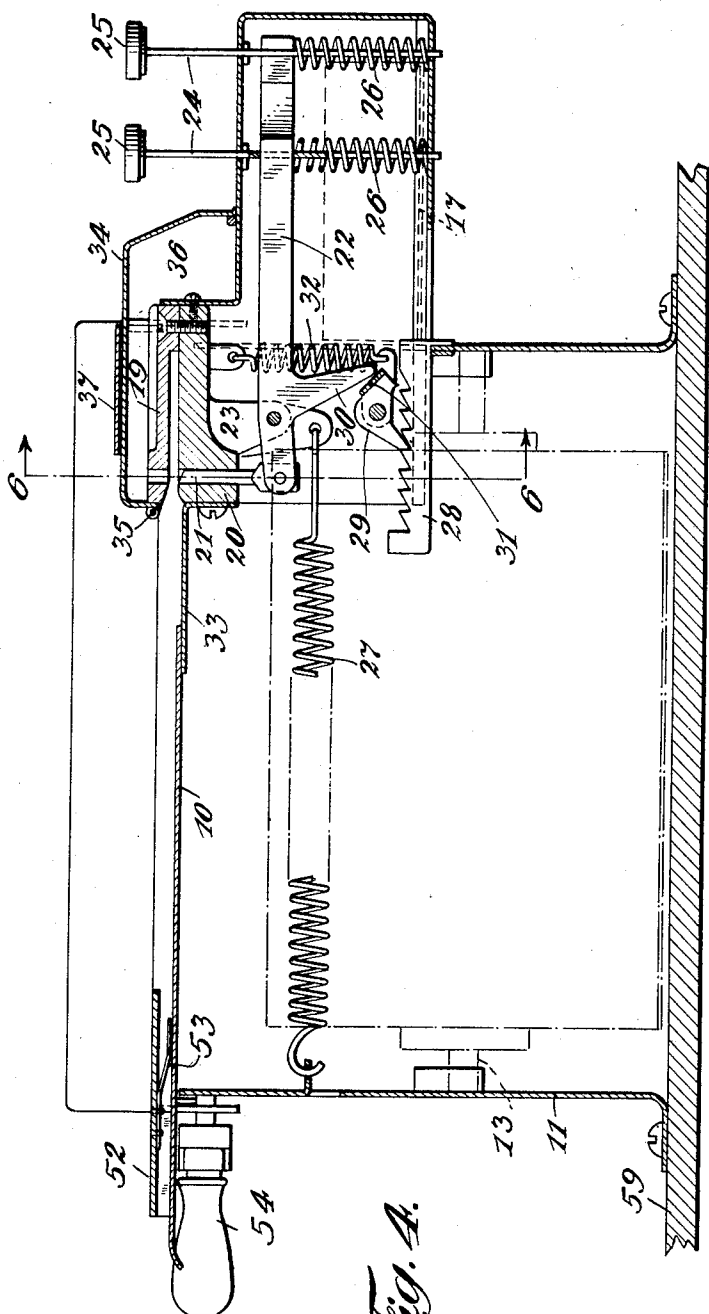


Fig. 4.

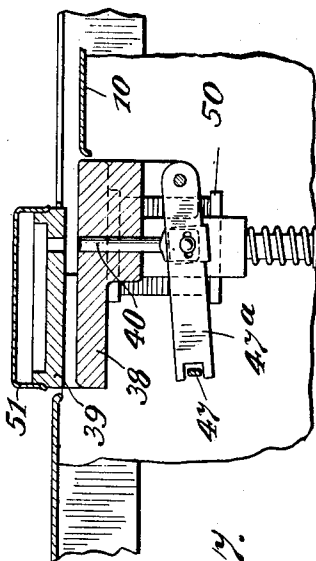


Fig. 5.

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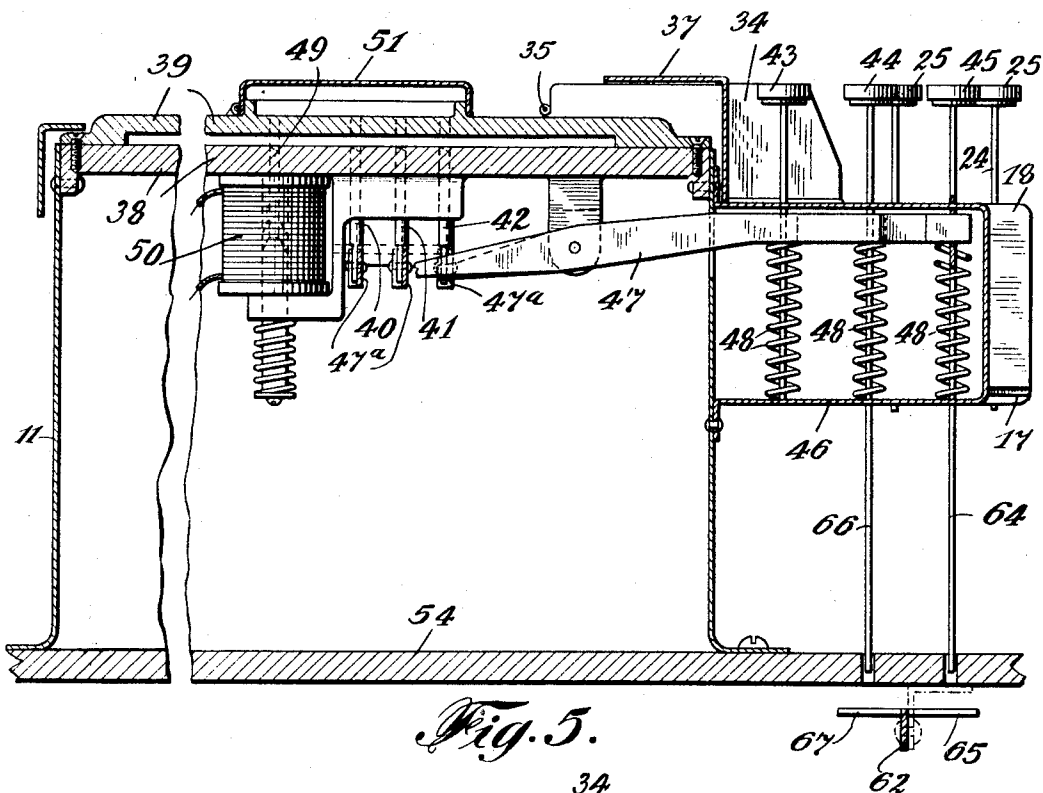
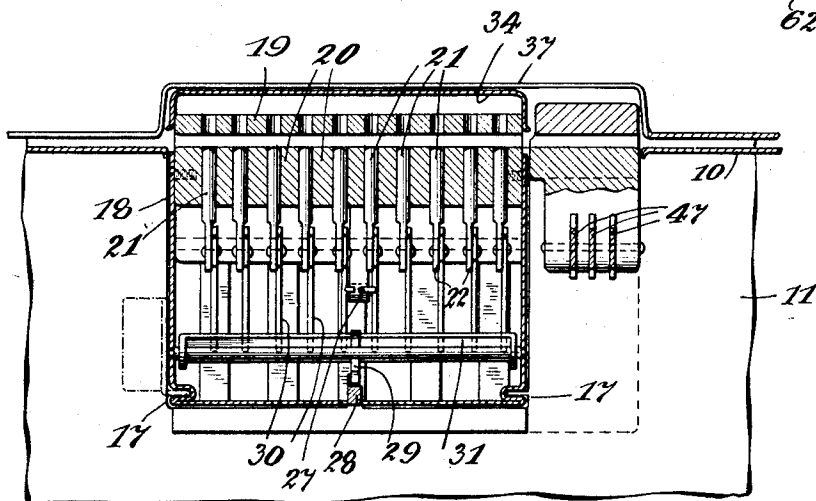
1,669,765

L. W. LANGFORD

SALES RECORDING DEVICE

Filed Oct. 3, 1923

4 Sheets-Sheet 4



Patented May 15, 1928.

1,669,765

UNITED STATES PATENT OFFICE.

LEONARD W. LANGFORD, OF SAN FRANCISCO, CALIFORNIA, ASSIGNOR TO LANGFORD SALES AUDIT MACHINE CORPORATION, A CORPORATION OF DELAWARE.

SALES-RECORDING DEVICE.

Application filed October 3, 1923. Serial No. 666,255.

In the recording of sales made in department and other retail stores, it is common practice for the clerk or other salesman to write out each order or sale on a separate sales slip which is of such a character or is so mounted or supported that one or more duplicate copies are made by suitable carbon inter-leaves or surfaces. One copy is generally delivered with the goods and another copy is retained by the salesman until such time as it is collected by or delivered to the auditing, bookkeeping or other department for use in tabulating the daily sales, making up the ledgers and the bills of the charge customers, or for other purposes. Of course the practice differs in different stores, depending upon the size of the store and the bookkeeping, auditing and billing system employed.

In order that the manager or proprietor may have an accurate record of each day's transactions, it is necessary for a staff of clerks to copy off the totals of all of the sales slips and tabulate them to show the information desired, as for instance, cash sales as handled by each cashier; total cash, C. O. D., and charge sales of each clerk, of each department, and of the entire store. In large stores it is not possible to obtain these fact figures for each day at the opening of business on the following morning unless a large staff is employed at night work, and even then such figures are often inaccurate, due to mistakes in copying. There is a double source of error in the system commonly employed wherein the clerk copies his several sales slip totals on a separate sheet in the back of his sales book and the auditing department copies them from these sheets. Faint, indistinct, or poorly formed figures are another source of error in securing the data as to the day's transactions. The expense of such tabulation by clerks working at night runs very high in large stores, and in any event forms a very considerable part of the overhead.

The main object of my invention is to secure greater accuracy and greatly reduce the time and expense involved in securing the desired figure facts regarding sales. This I accomplish by providing simple, easily operated and inexpensive mechanism for punching in the original and carbon copies of the sales slips certain data, as for instance the total of the items recorded on

the sales slip and the nature of the transaction, such as cash, C. O. D., or charge, so that the copies may be run through an electric tabulating and recording machine and the totals obtained for each clerk, each department, and the entire store.

No appreciable amount of time is required in punching the sales slips, as this is done by the salesman at the time the slip is written out. There can be no question of faintness or illegibility so far as the punching is concerned, and the accuracy of the punching is readily checked against the total of the items written on the sales slip. Furthermore the punching is done by the one who writes the figures and immediately after writing them.

The sales recording device of my invention herein relates to and is a part of an improved method of sales recording and accounting wherein all the desired records and data are secured with greater accuracy in a greatly reduced amount of time and with far less labor and expense than has been necessary heretofore. Through the use of the punched records one tabulating machine and one operator can obtain in a very short time the results which would otherwise require the services of a large staff of clerks or bookkeepers. It will of course be understood that the machine disclosed herein is capable of considerable variation, examples of other machines for this purpose being disclosed in my co-pending application, Serial No. 757,697, and in the co-pending application of Harry E. Baker, Serial No. 51,297.

In carrying out my invention I employ any suitable type of autographic register machine, preferably one having a casing in which are journaled a plurality of rolls of paper strips, the ends of which are brought together in superposed relation and carried over a suitable plate or platen with manifolding material therebetween. The plate or platen supports the strips so that the upper strip is accessible for writing thereon by pen or pencil, whereby the words or characters so written upon the upper and exposed sheet are transferred to the sheets underneath the same to make duplicate, triplicate or quadruplicate copies. The ends of these strips are then simultaneously advanced a predetermined distance and one or more of the upper strips are detached by

tearing off along a suitable straight edge, leaving the end portions of the strips in position for the next succeeding and corresponding operation. These paper strips are generally in the form of a series of printed blanks with spaces to be filled in by writing, and the mechanism is such that at least one of the strips does not emerge from the machine to be torn off, but passes to another record roll within the casing, and is wound thereon. This strip remains in the casing, and is a copy of all of the separate sections of the one or more other strips which have been written upon, delivered from the casing, and torn off in succession. In connection with this mechanism whereby automatically registered copies are produced, I employ mechanism which will punch holes through all of the strips, the location of the holes being such as to indicate or represent the total of the items written on the slip. The parts are so designed and combined that the punching operation takes place while the slips are in the position they occupy when written upon, and in proper registry, and before being delivered from the casing or wound up therein. In the operation of the device it is merely necessary that the clerk strike the proper keys after having written out the sales slip, and before operating the machine to deliver the one or more copies of the slip from the machine.

As another important feature of my invention, I provide means whereby the sales slip may also be punched to indicate whether the transaction was a charge, cash, or C. O. D. sale, so that in the tabulating machine the totals for each class of transaction may be separately recorded.

As a further important feature, I provide means whereby the operating of the strip-advancing mechanism which effects the delivery of the separate sales slips forming one strip and the winding up of another strip within the casing also operates to set the punching mechanism back to initial position.

As a further feature, I provide means whereby the credit department may O. K. or mark its approval upon the sales slip while still in the machine, in case the transaction is a charge and carry sale, and the clerk has telephoned to the credit department for the rating of the particular customer.

As a further important feature of my invention I provide means whereby the punching and autographic registering mechanism is combined with a cash drawer, and whereby such drawer is opened when the sales slip is punched to indicate that the sale was for cash.

As a further important feature I provide means whereby a separate card may be in-

serted in the device for each sales slip that is written out, the position of the card being such that it is punched at the same time that the sales slip is punched. These cards may be later punched to indicate the date of the sale, and may have the customer's name or number recorded thereon if the sale be a charge one, so that all of the cards for each charge customer may be brought together at the end of the month and used in a suitable automatic tabulating machine for making out the customer's non-itemized bills in accordance with the data recorded on the card by the punched holes therein. The same machine also makes out the ledger account at one and the same operation.

In the accompanying drawings I have shown merely one embodiment of my invention. It will be evident that the details illustrated are comparatively unimportant, and that a wide variety of changes may be made in the construction and arrangement of the parts without departing from the scope of my invention as defined in the accompanying claims. It will also be apparent that the details of certain features of the construction have not been illustrated as such details form no portion of my invention and various forms of such parts are well known in the art.

In the drawings:

Fig. 1 is a top plan view of an apparatus constructed in accordance with my invention.

Fig. 2 is a side elevation looking at the right hand side of Fig. 1, certain of the parts being broken away.

Fig. 3 is a partial top plan view on a very much larger scale.

Figs. 4 and 5 are sections on the lines 4—4 and 5—5 respectively of Fig. 3.

Fig. 6 is a section on the line 6—6 of Fig. 4, and

Fig. 7 is a sectional detail on the line 7—7 of Fig. 3.

In the specific machine illustrated there is provided means for supporting a plurality of superposed sheets or strips with manifold material therebetween, and in such a convenient position that the salesman may write on the upper sheet and fill in the data called for by the designations printed adjacent to the various blank spaces thereon. The supporting means is preferably a platen or plate 10 forming a part of the top wall or cover of a casing 11 which serves to enclose or support or is connected to various other parts of the apparatus. Within the casing there are supported two or more reels 12 and 13 for rolls of paper which may be unrolled and delivered over rollers or other guides and through a suitable slot to the upper surface of the platen 10. Suitable means such as rollers 14 and 15 are employed for simultaneously advancing the strips over

the platen and causing it to unroll from the reels 12 and 13. The top strip, and if desired one or more additional strips, emerge from the casing at the end of the platen and may be torn off into successive sections each of a length corresponding to a single sales slip. The bottom strip, and if desired, one or more additional strips, may pass to a reel 16 within the casing and be wound up thereon.

I do not claim any specific improvement so far as these features of the construction are concerned, and many details essential or important in a commercial apparatus have not been illustrated. For instance, the device will be provided with means whereby the several strips are fed at exactly the same rate so that the printed matter and blank spaces thereon are maintained in proper registry. Means will be provided for maintaining manifolded sheets between the portions of the several strips which are above the platen. The casing will be so designed as to facilitate the insertion and removal of the paper rolls, and the threading up of the machine, and preferably there will be means which will insure the stopping of the feed mechanism when the strip reaches successive predetermined points so that the sales slips will be accurately positioned on the platen for each operation, and the tearing off of the delivery ends will be along accurately predetermined lines. Various means well known in the prior art may be employed for accomplishing these various results. To illustrate the details of such mechanisms might cause confusion in the drawings and interfere with the clear understanding of the construction and operation of the novel features of my invention.

The specific character and arrangement of the printed matter on the sales slips will vary with the needs of the particular store in which the device is used.

Merely as an example I have indicated a sales slip in Fig. 1 and a portion thereof in Fig. 3, the slip having an upper section A with various blank spaces which may be properly designated and filled in to form a label which may be torn from the balance of the sales slip and attached to the package in case the package is to be delivered. These spaces may receive such data as the name and address of the person to whom the package is to be sent, the amount of the sale, etc. Below this is a section B in which may be listed the articles purchased and the price of each. In a space C may be written the total amount of the sale. A further space D may be properly designated to receive the name and address of the purchaser, date of the sale, clerk number, department number, and other data.

As an important feature the sales slip adapted for use with my improved device

has a section E within which may be punched holes in such positions and of the proper number to indicate or correspond to the total entered in the space C. It is not essential that the location of each punch space in this section be printed or otherwise designated on the sales slip, as such designations are not used as a guide for the location of the holes when the construction hereinafter described is employed. However, if all of the possible hole locations be designated by printing or other means, it facilitates the checking of the amount indicated by the punch holes to see whether or not it corresponds with the amount entered in the space C. The space E is marked to indicate a series of columns, there being ten spaces in each column, and marked in succession from 0 to 9. The right hand column of these punch spaces may indicate cents, the next column dimes, the third column dollars, the fourth tens of dollars, and the fifth hundreds of dollars. Additional columns may be provided for special departments where single sales may run to a thousand dollars or over. In punching the total in this space E, the amount \$143.27 would be indicated by punching the "1" in the left hand column, the "4" in the next column, the "3" in the middle column, the "2" in the next to the right hand column, and the "7" in the right hand column. The sales slip may also have special spaces for punching to indicate whether the sale be a charge, C. O. D. or cash, and whether or not the credit department approves of a charge and carry or "take-with" sale.

In the specific mechanism illustrated for punching the sales slips, the casing 11 is provided with suitable guides 17 in which there may slide a carriage 18 in a direction at right angles to the column in the space E. The carriage or auxiliary and movable casing section includes a pair of spaced plates 19 and 20 adapted to receive therebetween the superposed edge portions of the several sales slip strips. The two plates have a row of registering apertures, the apertures in one plate serving as guides for punches 21, and those in the other plate serving to receive the ends of the punches, whereby the last mentioned plate cooperates with the punches to form dies. So far as the operation of punching is concerned, it is immaterial whether the punches operate downwardly through the upper plate into the lower one, or upwardly from the lower plate into the upper one, but preferably the punches operate from beneath in order that these parts will project above the plane of the sales slip to the minimum extent, and thus will not interfere with the act of writing on the sales slip. I do not wish to be limited to any particular mechanism for operating the punches. A simple form of

mechanism includes a series of levers 22 pivoted between successive pairs of a series of depending lugs 23 on the plate 20. Each lever at one end is pivoted to the lower end of a corresponding punch 21, and at the outer end engages with a vertical plunger 24 having a key or finger piece 25 on the upper end, and a spring 26 normally holding the plunger in upper limiting position, and the punch 21 below the upper surface of the plate 20. By depressing any finger piece 25 the corresponding punch will be raised and forced through the paper.

As previously noted the carriage 18 together with the punches, keys and connected parts, are bodily movable in respect to the main casing. The normal position of this carriage is with the punches in registry with the several punch spaces in the right hand or cents column of the space E. The carriage may be moved by a step by step movement to bring the punches into registry with the punch spaces in each of the successive columns. A simple mechanism for accomplishing this result is a spring and escapement. As shown, the main casing 11 has a spring 27 tending to pull the carriage toward the left hand column in the space E. The main casing carries a ratchet bar 28 and the carriage has a double toothed pawl or escapement 29 pivoted thereto and movable along the ratchet bar 28. Each lever 22 has a depending lug or arm 30 adapted to engage with a transversely extending bar 31 connected to the escapement 29. A spring 32 holds the escapement in one limiting position, as shown in Fig. 4. Upon depressing any key 25 the arm 30 of the corresponding lever 22 will engage the bar 31 and tilt the escapement against action of the spring 32. This will lift one end of the escapement out of engagement with the ratchet bar but lock the ratchet bar with the other end of the escapement. As soon as the key is permitted to rise the return movement of the escapement under the action of the spring 32 will permit the spring 27 to move the entire carriage through a distance equal to one tooth on the ratchet bar. The spacing of these teeth is obviously the same as the spacing between the punch columns on the sales slip. Thus in punching the amount \$143.27 the clerk will first depress the "7" key which will punch a hole in the seven space of the cents column, and upon releasing this key the carriage will automatically move to bring the punches in registry with the dimes column. The clerk will then depress the keys "2", "3", "4" and "1" in succession, and there will be a movement of the carriage after each punching operation. It will be very simple to operate the keys to punch the number beginning at the right hand digit, as the number has already been written on the sales slip in the space C. Although the

mechanism illustrated includes a bodily movable carriage and only ten keys with ten corresponding punches, a more complicated mechanism for accomplishing the same result might include a stationary carriage with ten punches for each of the columns and a corresponding number of keys. In the mechanism illustrated the force required to accomplish the actual punching of the paper is that exerted in depressing the key. It will be obvious that mechanism might be employed or designed in which the keys would act merely as selecting means for the punches to be operated, and the actual movement of the keys through the paper be done by a separate lever or crank handle whereby greater force may be brought to bear. Such mechanism is shown in corresponding applications Serial No. 639,988 and Serial No. 757,697. The mechanism illustrated is easily operated if the strips of paper be the ordinary thin sheets employed for sales slips and there be the minimum number of sheets to be punched.

In order that there may be a continuous support for the sheets and still permit of the bodily movement of the carriage, the latter is provided with a plate section or extension 33 which may be mounted directly beneath the main plate or platen 10 and slide therebeneath during the movement of the carriage, as indicated in Fig. 4. For receiving the punchings the casing may be provided with a cover section 34 which may be secured to the carriage by a hinge 35 and extend over the apertures in the upper plate 19. This cover may cooperate with the plate 19 and adjacent portions of the carriage to form a compartment 36. The top wall of the main casing 11 may have a plate 37 secured thereto at opposite sides of the carriage and beneath which the cover 34 may slide. This plate may serve as a hand rest in writing on the sales slip and relieve the carriage from the weight or pressure of the salesman's hand during the filling in of the data on the sales slip.

My improved device is provided with means whereby the salesman may punch the sales slip to indicate whether the sale be cash, C. O. D. or charge. At the lower end of the platen the main casing has a pair of transversely extending plates 38 and 39 corresponding in a general way to the plates 19 and 20, that is, one serves as a guide for punches and the other as a die to cooperate with the punches. As illustrated, there are three of these punches 40, 41 and 42 connected by separate levers to corresponding keys or finger pieces 43, 44 and 45. These keys may be labelled "Charge", "C. O. D." and "Cash" and the punches may be so positioned as to perforate the sales slips in spaces correspondingly labelled. As these designated spaces on the sales slip have a

definite location, it is not necessary that any of the operating parts for these punches be secured to or carried by the movable carriage 18. Preferably the main casing 11 has an extension 46 at one side of the movable carriage, and serving as a support therefor, and serving also to support the keys 43, 44 and 45. One side of this extension may serve as or carry one of the guides or tracks 17 for the movable carriage. These keys may be connected to the punches by levers 47 pivoted intermediate of their ends, and the keys be held up by springs 48 similar in general construction and operation to the means for operating the punches 21 from the keys 25. Instead of having levers 47 directly connected to the punches, they may be connected to auxiliary levers 47*, as shown in Fig. 7, and these may be connected intermediate of their ends to the punches.

As a further important feature, I provide means whereby the credit department may apply its O. K. to the sales slip in case the transaction is what is known as a charge and carry. The plate 38 may carry an additional punch 49 which may be operated by an electro-magnet 50 instead of directly by a key. This punch may be located so as to form an aperture in the sales slip in a space designated "Authorization" or by other appropriate term. In case the customer wishes to charge the purchase and carry away the goods, the salesman may telephone to the credit department as to the rating of the particular customer in question, and if the employee of the credit department finds the rating satisfactory he may press a button corresponding to the device of the salesman who has made the telephone inquiry, and this will close an electric circuit to operate the electro-magnet 50 and punch the hole in the sales slip to indicate this authorization. If the salesman charges and delivers goods without being able to show this O. K. punch on the sales slip, he may be properly charged for the goods in case the customer fails to pay for them. Although I have shown a punch operated by the electro-magnet 50, it will be apparent that if the operating mechanism be above the sales slips rather than below them, the electro-magnet may operate type or other suitable means for printing on the upper surface of the top sales slip and causing it to be duplicated on the underlying strips by the manifold material therebetween. When operating from below it is evident that the type may also be applied which will cause the printing or impression to be made on all of the underlying strips but not necessarily on the upper one. A strip of carbon paper may be mounted in a portion of the casing directly above the authorization space on the sales slip so that in applying a printing member to the under surface of the series of sales slips instead of

using a punch a proper authorization mark will be made on all of the sheets. The main casing may have a small cover section 51 which may be hinged in place and form a compartment for the punchings from the punches 40, 41, 42, and 49. This cover section, as well as the cover section 34, may be opened from time to time to remove these punchings.

In some store systems it may be desirable to punch separate cards at the same time that the sales slips are punched. One advantage of this is that the cards for charge customers may have the customer's name written thereon, or the customer's number punched thereon, and the date of all of the cards used in a single day may be punched at the end of the day by a separate gang punch. All of the cards made in a given month for each charge customer may be brought together and used in the control of an automatic typing machine for making out the customer's bill. My improved machine is provided with means whereby such cards may be punched if desired. As shown, the main casing has an extension 52 at the side thereof opposite to the movable carriage, and serving as a guide whereby a card may be inserted transversely and in superposed relationship in respect to the sales slip. This card will be held by the guide so that it will properly enter the space between the plates 19 and 20, and the plates 38 and 39 and can be punched simultaneously with the punching of the sales slip. The card may be inserted either above or below the sales slip, but as shown, the guiding extension 52 has a spring 53, the inner end of which lies beneath the sales slip. In inserting the card, it will pass beneath this spring and thus come beneath all of the sales slips. This card need not be inserted until after all of the written data have been applied to the sales slip, or it may be inserted with a carbon sheet so as to receive the name of the customer at the time that the information is written on the sales slip. These cards may be used in connection with every sales slip, or only in connection with those for charge transactions.

The mechanism hereinbefore described provides for the automatic feeding of the carriage with a step by step movement upon the operation of the keys thereof. The return movement may be accomplished in the same way as the return movement of an ordinary typewriter carriage, that is by the operator grasping a handle and pushing the carriage back to initial position. In order that there may be no possibility of any failure on the part of the salesman to return the carriage to initial position after the punching of each sales slip, I preferably provide means for the automatic return of the carriage. A simple form of such a mechanism is illustrated, but various other forms might

be designed. As shown, the paper feed roller 15 which is operated by the handle 54 is provided with a cam lever 55 operating upon a slide 56 connected to a bell crank lever 57. The carriage 18 is provided with a lug or stop 58 in the path of one arm of this bell crank lever. Upon rotating the roller 15 to feed out one or more copies of the sales slip and wind up another, the cam 55 will engage with the end of the slide 56 and move it toward the left, as viewed in Fig. 2. This will swing the bell crank lever and cause the free arm of the latter to swing toward the right as viewed in Fig. 1, and this will carry the carriage out to the extreme limiting position. The cam 55 is so designed that it may move on past the slide 56 and the roller 15 may be rotated as many times as necessary to feed out the desired length of strip. The carriage will be moved back during the initial rotation of the roller 15.

Although my improved device may be made as a unit, I may and preferably do combine it with a casing part having a cash drawer. The casing 11 may be mounted directly upon the top wall 59 of a second casing which may be of appropriate size to receive a cash drawer 60.

Although I have shown the casing 11 secured to the top wall, all casing parts are preferably of stamped sheet metal and are made in as few parts and of as simple construction as possible. Automatic drawer opening mechanism is preferably provided. A simple form of such mechanism includes a spring 61 normally tending to force the drawer open. A pivoted lever 62 is carried by the cover and has a catch portion for engaging a lug 63 on the drawer to hold the drawer closed. The plunger 64 of the cash key 45 may extend downwardly to such a point that it will engage with a flange 65 on the lever 62 and thus raise the catch portion of this lever out of engagement with the lug 63 each time the cash key is depressed. If desired, mechanism may be provided for opening the drawer upon the pressing of the C. O. D. key. This key is shown as having a plunger 66 which engages with a lug 67 also on the lever 62. There may be provided an additional key 68 or other means whereby the catch may be released and the drawer opened without operating any of the punches, as for instance when it is desired to merely make change.

By the use of my improved apparatus the complete transactions made by each salesman will be recorded on the rolled strip retained within the device of that particular salesman. At the close of business all of these rolls may be collected and new ones inserted and each of the rolls thus removed from the devices may be run through an electric tabulating machine. It is not necessary to here describe such a machine in de-

tail, as such machines are well known in the art. The machine may be so designed as to feed the strip intermittently through successive distances corresponding to the length of a sales slip, and after each advance electric circuits may be closed through the strip, the particular circuits thus closed being determined by the location of the holes in the strip. Each circuit may operate a counter or indicator, so that upon the completion of the run of the strip through the machine the indicators will show the total of the sales recorded by the strip. By suitable relays or branch circuits and three sets of total indicators the machine may indicate the separate totals for the cash, C. O. D. and charge transactions, as well as the total for all three. The operator may run through the machine the strips of all of the salesmen in a comparatively short time and record the totals for each clerk, each department, and for the entire store. This is done with accuracy and speed, and at small expense. The device insures accuracy, prevents any misreading of the figures entered on the sales slip by the salesman and the punching of the sales slips does not take any more time on the part of the salesman than is ordinarily required when the salesman uses a sales book, and after each sale must turn to the back of the book and enter the total of the sale in the proper space on a total sheet. The means whereby the credit department may apply the proper authorization for a charge and carry purchase is simple, inexpensive and absolute accuracy of operation is insured. The punching on separate cards at the time charge sales are made will effect an enormous saving in the cost and time required in making out monthly bills for such customers.

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

1. In an autographic-punching register, a base and a writing platen thereon for supporting a sales record strip movable thereover, a punch-press comprising a plurality of punches supported by a carriage, means movably mounting the carriage on the base in a manner permitting the punches to be brought into registry with different portions of the face of the record strip, and means cooperating with the punch press to perform a punching operation and move the carriage to a new punching position.

2. In an autographic-punching register, a base and a writing platen thereon for supporting a sales record strip movable thereover, a punch-press comprising a plurality of punches, a carriage supporting certain of such punches and movably mounted on the base in a manner permitting the punches thereon to be brought into registry with different portions of the face of the record

strip, means for operating the carriage punches to perforate the record strip, the location of other of the first said punches being fixed relative to the platen and in a position to punch the record strip, and means adjacent the last mentioned means for operating the fixed punches.

3. In an autographic-punching register, a base and a writing platen thereon for supporting a sales record strip movable thereover, a punch-press comprising a plurality of punches supported by a carriage, means movably mounting the carriage on the base in a manner projecting a portion of the carriage and the punches therein over one edge of the strip, means for operating the punches to perforate the strip, and means automatically operated by the last mentioned means for moving the carriage a predetermined amount transversely of the strip after each punching operation.

4. In an autographic-punching register, a casing including a platen for supporting a plurality of paper strips in superposed relation with the upper strip exposed and accessible for writing thereon, a plurality of punches for forming apertures through all of said strips while they are in position on said platen, a movable carriage supporting said punches, means for advancing the strips over said platen and past said punches, and means cooperating with said advancing means for automatically returning said carriage to its initial position.

5. In an autographic-punching register, a casing including a platen for supporting a plurality of paper strips in superposed relation with the upper strip exposed and accessible for writing thereon, a plurality of punches for forming apertures through all of said strips while they are in position on said platen, means for operating the punches, means controlled by the last mentioned means for automatically moving said punches in a direction parallel to the plane of the strips to bring them into registry with different portions of the face of the strip, means for advancing the paper endwise over said platen, and means cooperating with said advancing means for returning said punches to initial position.

6. In an autographic-punching register,

a platen for supporting a plurality of superposed strips in manifold relationship with the upper sheet exposed for the writing thereon of a series of items of sale and the price of each, a series of punches arranged in a row lengthwise of said strips, means for advancing said punches step by step transversely of the sheet, and means for operating any one of said punches between such successive advancements and automatically controlling the said advancing means.

7. In an autographic-punching sales register, means for supporting a plurality of sheets in superposed relationship with the upper sheet exposed for writing thereon, means for advancing the sheets over said means, sheet punching mechanism, a carriage movable to bring said punching mechanism into registry with different portions of the superposed sheets whereby to punch the same in a manner indicating the amount of the sale, punching mechanism for recording the character of the transaction, and means for returning the carriage to initial position upon the operation of said sheet advancing means.

8. In an autographic-punching register, a chambered base for housing a record strip supply and a platen thereon for supporting said record strip which strip is movable thereover, one portion of said platen providing a plane writing support, a carriage supported by the register adjacent one edge of the platen and having a pair of punch and die plates relatively spaced in a manner permitting one longitudinal edge portion of the strip to pass therebetween, punches in said punch plate in alignment with punch holes in said die plate, means for causing a relative movement between the punches and die plate to perforate the edge portion of the record strip therebetween, and means movably mounting the carriage in a manner permitting the punches to be brought into registry with different portions of the face of the record strip.

Signed at New York, in the county of New York and State of New York, this 25th day of September A. D. 1923.

LEONARD W. LANGFORD.