G. A. SEIB.

TYPE WRITING MACHINE.

APPLICATION FILED MAY 6, 1910.

1,027,776.

Patented May 28, 1912.

2 SHEETS—SHEET 1.

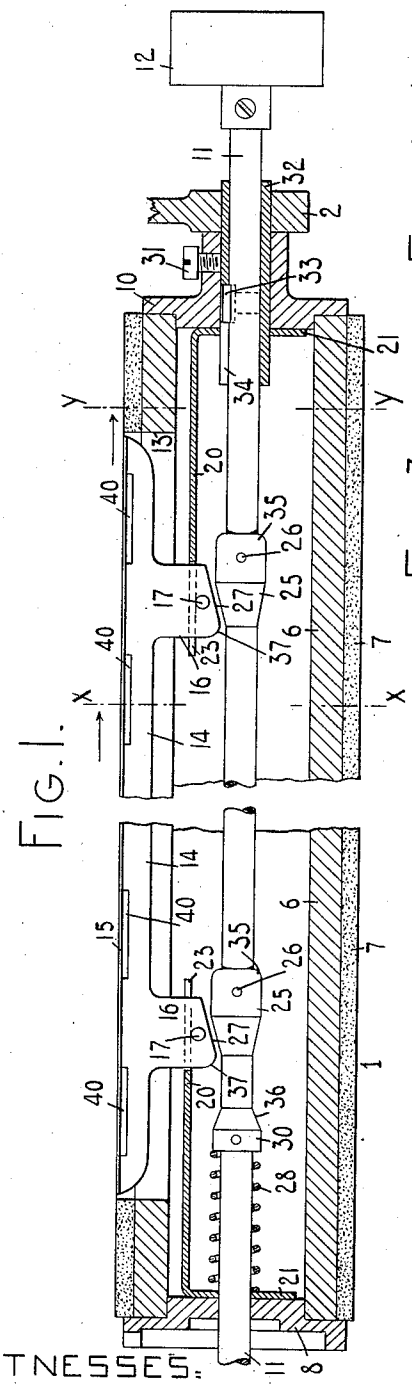

FIG. 1.

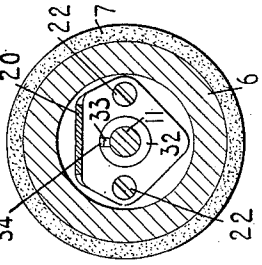

FIG. 4.

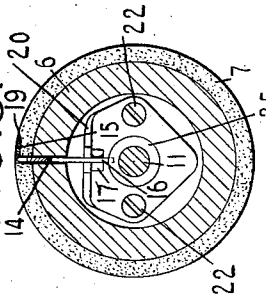

FIG. 3.

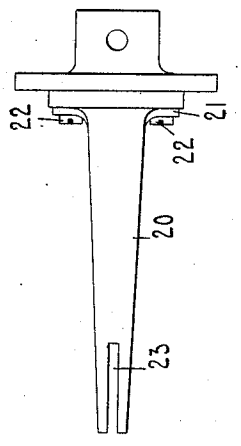

FIG. 2.

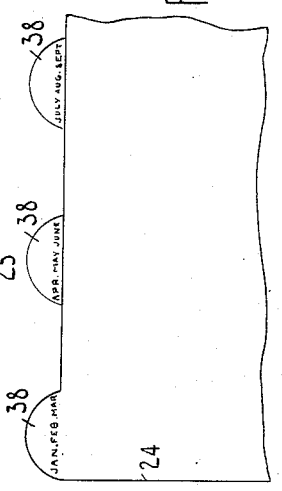

FIG. 6.

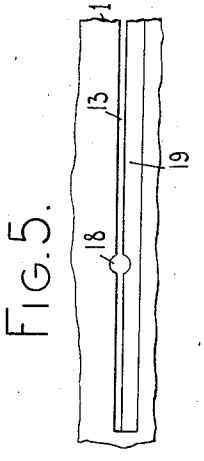

FIG. 5.

WITNESSES:

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R. H. Strother.

INVENTOR

George A. Seib

By Jacob Felbel

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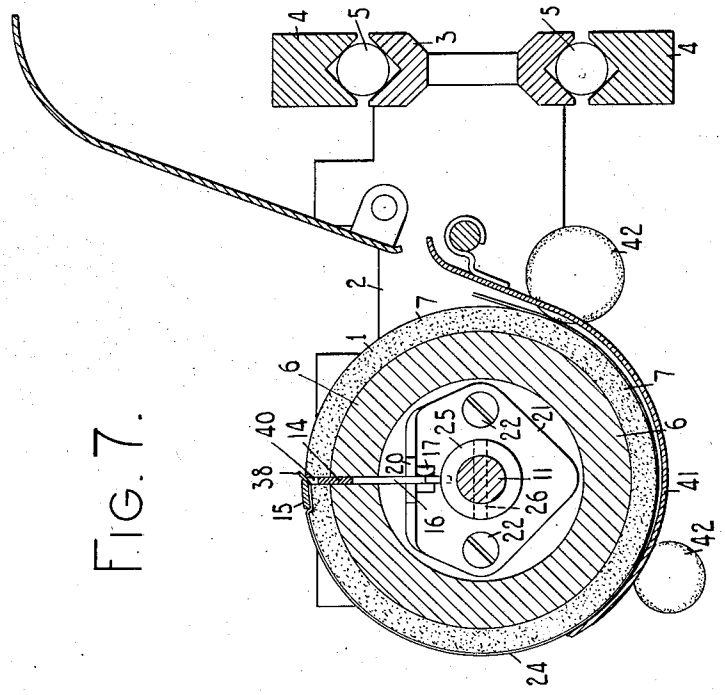

FIG. 7.

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UNITED STATES PATENT OFFICE.

GEORGE A. SEIB, OF ILION, NEW YORK, ASSIGNOR TO THE MONARCH TYPEWRITER COMPANY, OF SYRACUSE, NEW YORK, A CORPORATION OF NEW YORK.

TYPE-WRITING MACHINE.

1,027,776. Specification of Letters Patent. Patented May 28, 1912.

Application filed May 6, 1910. Serial No. 559,820.

To all whom it may concern:

Be it known that I, GEORGE A. SEIB, citizen of the United States, and resident of Ilion, in the county of Herkimer and State of New York, have invented certain new and useful Improvements in Type-Writing Machines, of which the following is a specification.

My invention relates to typewriting machines.

The principal object of the invention is to provide an improved card holder for roller platen machines, to grip the edges of cards, stiff paper, etc.

One of the improvements consists in making better provision than has usually been made for handling the tabs that are frequently put on the edges of cards.

Other improvements will be understood from the detailed description of the device.

My invention consists in certain features of construction and combinations and arrangements of parts all of which will be fully set forth herein and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a longitudinal sectional view of a platen and some of the associated parts and showing my invention. Fig. 2 illustrates one of the platen heads with a certain plate spring attached thereto. Fig. 3 is a cross section through the platen on the line *x*—*x* of Fig. 1 and looking toward the right in said figure. Fig. 4 is a cross section through the platen on the line *y*—*y* of Fig. 1 and looking toward the right. Fig. 5 is a fragmentary face view of the platen showing part of the slot for the card clamp. Fig. 6 is a fragmentary view of a set of tab cards. Fig. 7 is an enlarged fore and aft vertical section through the typewriter carriage on the line *x*—*x* of Fig. 1 and looking toward the left.

My invention is here shown applied to a Monarch typewriter. This machine has a roller platen 1 mounted in end brackets 2 of a carriage 3 which runs on upper and lower stationary rails 4, being supported thereon by means of rollers 5. The platen has the usual hollow wooden core 6 with a rubber sheath 7, and said core is supported at its ends by means of platen heads 8 and 10, the left hand head 8 having crown ratchet teeth which constitute it a line space wheel. A shaft 11 having finger wheels 12 thereon, passes through the platen heads 8 and 10, and in the standard Monarch construction this shaft is journaled in sleeves fixed in the brackets 2 of the carriage.

A longitudinal slot 13 is cut through the sheath 7 and wooden core 6 of the platen and, preferably, of a length less than that of the platen; and a gripper made of a sheet metal bar or plate 14, lies in said slot with sufficient looseness to enable the bar to be moved in and out. Said bar 14 has a flange 15 bent off therefrom which flange is adapted to be pressed against the edge of the card or paper. The bar 14 has two inwardly projecting arms or extensions 16 each of which has a cross pin 17 therein and projecting therefrom on both sides of the arm. The slot 13 is formed with two enlargements 18, one of which is shown in Fig. 5, the construction being such as to admit of the plate 14 and pins 17 being inserted into the slot 13 from the outside of the platen, the pins being admitted by the enlargements 18. A slight depression 19 in front of the slot 13, allows the flange 15 to have its outer surface about flush with that of the platen. On each of the platen heads 8 and 10 there is mounted a plate spring 20, said springs being each bent at right angles to form a securing portion 21 that lies against the platen head, to which it is fastened by means of screws 22. Each spring 20 consists of an arm extending longitudinally of the platen and formed near its end with an open slot 23, which receives the projection 16; and the two branches of the spring rest on the pin 17. The springs are under tension to draw the gripper inward to press the flange 15 of said gripper into the depression 19 or against the card 24, Fig. 7.

It will be seen that the parts can be assembled by first inserting the plate 14 and then putting in the platen heads, taking care to position the springs properly on the projections 16, the platen heads then being secured in position by means of the usual screws.

In order to move the gripper to release it, the shaft 11 is made movable endwise and provided with cams 25 consisting of tapered collars secured to the shaft by pins 26 and arranged to press against the lower inclined edges 27 of the projections 16, when the shaft is pushed toward the left in Fig. 1. A spring 28, coiled about the shaft 11, is

compressed between the left-hand platen head and a collar 30 which is secured on the shaft 11, and this spring normally holds the shaft in the position shown in Fig. 1 where the cams 25 are free of the card holder.

In the ordinary construction of the machine the platen head 10 is bored out to fit the shaft 11 and said shaft is secured to said platen head by a set screw 31 and the shaft is journaled in a collar or sleeve fixed in the bracket 2. In the present construction this platen head is bored out to a larger size and a sleeve 32, surrounding the shaft 11, passes through both the platen head 10 and the right-hand carriage bracket 2, this sleeve having an external diameter equal to that of the fixed sleeve ordinarily employed. This sleeve 32 is secured in the platen head 10 by the set screw 31 so that the sleeve and platen are constrained to turn together. The platen shaft is formed with a feather 33 which plays in a longitudinal slot 34 in the sleeve 32 (Fig. 4) so that the shaft and sleeve are constrained to turn together but the shaft can slide in the sleeve, this motion of the shaft toward the right being limited by the feather 33 striking the end of the slot 34. The sleeve 32 turns with the platen and has a bearing in the bracket 2.

It will be seen that the card holding platen is a special platen and provision is made for readily removing this platen and substituting in the same machine a standard platen. This is done by removing the left-hand finger wheel 12 and loosening the set screw 31, when the shaft can be pulled out of the platen toward the right, bringing the sleeve 32 with it. The collars 25 and 30 are of such diameter that they can be withdrawn after the sleeve 32, and the spring 28 can also. When this platen is removed the fixed sleeve can be inserted in the right-hand bracket 2 and the standard platen mounted in place in the usual manner. It will be seen that the substitution of this special platen for a standard platen, and vice versa, is effected without modifying any of the ordinary features of the machine. In order to facilitate the withdrawal of the shaft 11 the collars 25 are rounded off at their right-hand ends as shown at 35 and the collar 30 is beveled at 36 to facilitate the drawing of the shaft and collars past the projections 16, which projections are also rounded off at 37 for the same purpose.

In writing an ordinary card the shaft 11 is moved to the left to raise the flange 15, the leading edge of the card is inserted under said flange and the shaft is allowed to resume its normal position under the impulse of the spring 28. The springs 20 then draw the flange 15 down into clamping engagement with the card. It will be noted that there are two of these springs, one near each end of the clamp, and the two ends of the clamp are thus drawn down independently, which gives a more perfect engagement of said clamp on the card.

Some index cards have tabs 38 along their upper edges and these tabs are distributed along the upper edges of the different cards at different points. Fig. 6 indicates a set of cards having tabs at four different positions, one card having a tab at its left-hand end, another card having a tab at its right-hand end, and other cards have tabs in intermediate positions. In order to facilitate the handling of this sort of cards the bar 14 is formed with several cut-outs or slots 40 so that the tab can be inserted through one of these slots and the straight part of the upper edge of the card can still be inserted under the flange 15. I have shown four of these slots but of course any suitable number can be provided. The four here shown are designed to fit tabs like those shown in Fig. 6. If the tabs come at other positions, however, these slots will still ordinarily be enough for the purpose, because the card can be moved a suitable distance to the right or to the left so as to bring the tab into one or the other of these slots, the bar 15 being made longer than the cards to allow of such adjustment of the card in a right or left-hand direction. When a card is placed in the clamp, the solid parts of the bar 16, between the cut-outs 40, serve to position and square the card on the platen, and this is true whether or not said card has a tab. When a card is inserted, it is pushed under the flange 15 until its straight upper edge is arrested by said intermediate solid parts of the bar 16, thus insuring that the upper edge of the card is parallel with the axis of the platen.

The machine shown has the usual paper apron 41 and feed rolls 42. The card or paper is secured in the gripper or clamp when the latter is in any convenient position, and the platen is then turned, drawing the card through over the paper apron and feed rolls until the writing line is at the printing point of the machine.

Various changes can be made in the details of construction and arrangement without departing from my invention.

What I claim as new and desire to secure by Letters Patent, is:—

1. In a typewriting machine, the combination of a platen having a slot therein, a plate or bar in said slot and having a flange bent off therefrom to come over the edge of a card, and said plate having a series of cut-outs or slots therethrough under said flange for the insertion of the tabs of tab cards, said slots separated by solid parts of said plate connected to said flange, and means for pressing said flange toward said platen.

2. In a typewriting machine, the combination of a hollow platen having a slot therein

and having platen heads, a gripper in said slot, and springs secured to said platen heads and acting on said gripper to press the card against the platen, said springs arranged to be connected with said gripper by the act of inserting the heads in the platen.

3. In a typewriting machine, the combination of a hollow platen having a slot therein and having platen heads, a gripper in said slot, and two plate springs, each secured to one of said platen heads and having an arm bent off to extend longitudinally of the platen, said spring arms acting on said gripper.

4. In a typewriting machine, the combination of a hollow platen having a slot therein and having a platen head, a gripper in said slot, and a spring mounted on said platen head and slotted at its inner end to embrace a part of said gripper.

5. In a typewriting machine, the combination of a platen having a slot therein, a gripper in said slot, springs acting on said gripper to hold it in gripping position, a platen shaft mounted so that it can be slid lengthwise and having tapering collars thereon for camming said gripper to releasing position, and means for causing said platen and platen shaft to turn together.

6. In a typewriting machine, the combination of a platen frame, a roller platen mounted in said frame and having a slot therein, a gripper in said slot, a platen shaft having devices thereon for controlling said gripper, a sleeve surrounding said shaft and removably secured to said platen and journaled in said platen frame, and a connection between said sleeve and shaft for causing them to turn together but affording an independent longitudinal motion to said shaft, said sleeve and said gripper-controlling devices being of such dimensions that by loosening the sleeve, the shaft and said devices can be withdrawn lengthwise from the platen and platen frame.

7. In a typewriting machine, the combination of a platen having a slot therein, a gripper in said slot, springs acting on said gripper to hold it in gripping position, a platen shaft mounted so that it can be slid lengthwise and having round tapering collars thereon for camming said gripper to releasing position, and a spring pressing said shaft toward normal position.

8. In a typewriting machine, the combination of a platen having a slot therein, a gripper in said slot having arms projecting into the platen, springs acting on said arms to hold the gripper in gripping position, a platen shaft mounted so that it can be slid lengthwise and having collars thereon arranged to act on said arms to cam the gripper to releasing position, said arms and certain of said collars being also formed to allow the collars to pass the arms when the shaft is withdrawn entirely from the platen.

Signed at Ilion, in the county of Herkimer and State of New York, this 4th day of May A. D. 1910.

GEORGE A. SEIB.

Witnesses:
MARY GLEASON,
GEO. E. NEALE.