C. GABRIELSON.

CARD HOLDER FOR TYPE WRITING MACHINES.

APPLICATION FILED MAY 19, 1913.

1,303,879.

Patented May 20, 1919.

2 SHEETS—SHEET 1.

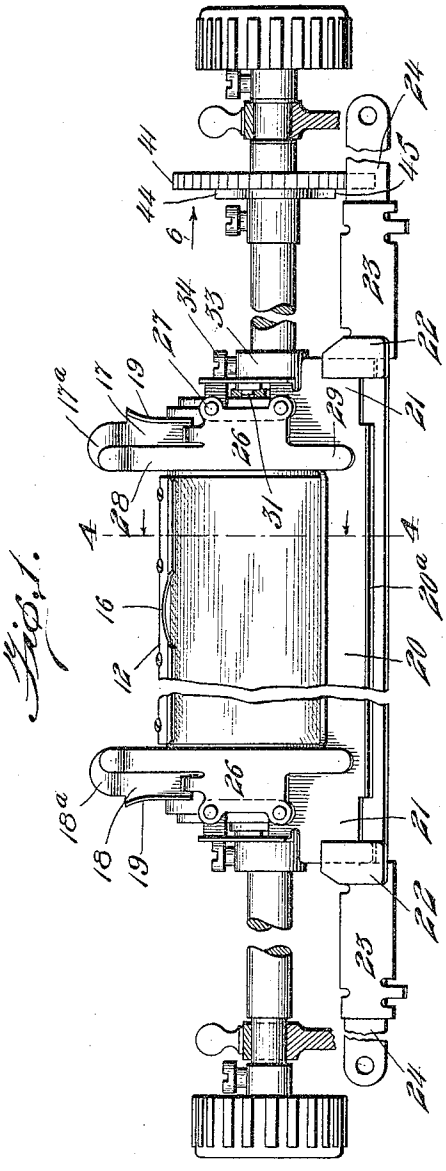


Fig. 1.

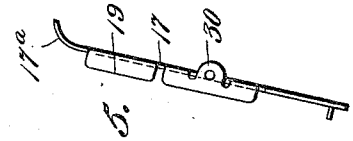


Fig. 5.

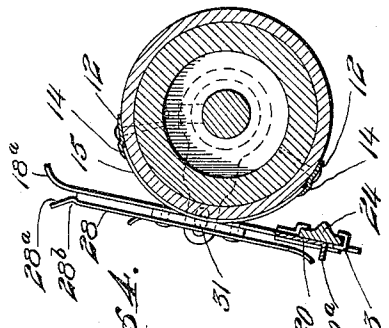


Fig. 4.

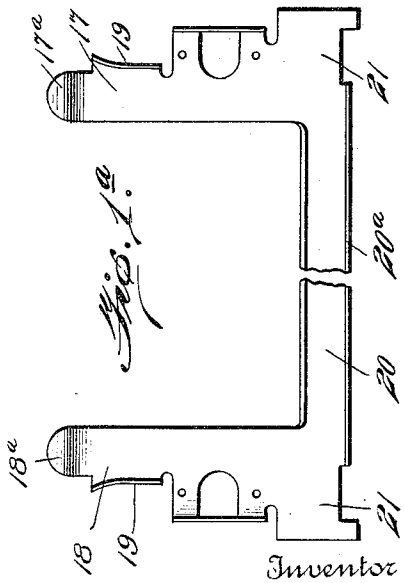


Fig. 1a.

Witnesses

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2 SHEETS—SHEET 2.

Fig. 2.

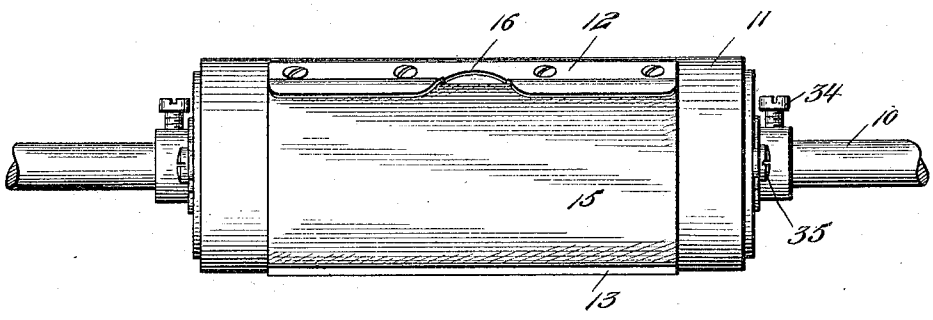


Fig. 3.

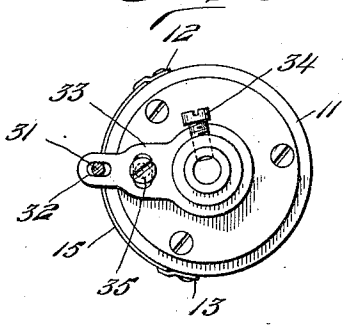


Fig. 6.

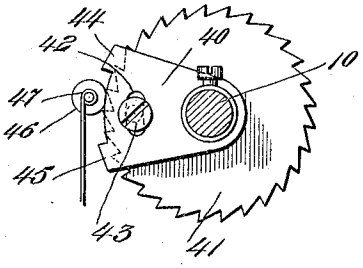


Fig. 7.

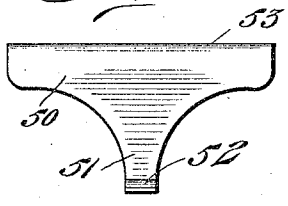
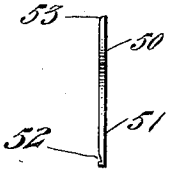


Fig. 8.



Witnesses

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UNITED STATES PATENT OFFICE.

CARL GABRIELSON, OF SYRACUSE, NEW YORK, ASSIGNOR TO L. C. SMITH & BROS. TYPEWRITER COMPANY, OF SYRACUSE, NEW YORK, A CORPORATION OF NEW YORK.

CARD-HOLDER FOR TYPE-WRITING MACHINES.

1,303,879. Specification of Letters Patent. Patented May 20, 1919.

Application filed May 19, 1913. Serial No. 768,652.

To all whom it may concern:

Be it known that I, CARL GABRIELSON, a citizen of the United States, and resident of Syracuse, county of Onondaga, State of New York, have invented certain new and useful Improvements in Card-Holders for Type-Writing Machines, of which the following is a specification.

This invention relates to improvements in card holding and feeding devices for typewriting machines, and is especially designed for the making of stencil cards. The object of the invention is to provide means for securely holding the card and feeding the same tangentially to the platen of the typewriter without bending or mutilating the card. The various novel features of the invention will be described in the following specification, taken in connection with the accompanying drawing, in which:

Figure 1 is a front view of a tppewriter carriage with the card holding and feeding devices attached, parts being broken away and parts omitted which do not pertain to the present invention.

Fig. 1ª is an enlarged front view of a part of the card holder, a part at the center thereof being broken away.

Fig. 2 is a view of the platen detached from the carriage, partly broken away.

Fig. 3 is a right end view of the platen as shown in Fig. 2.

Fig. 4 is a section on the line 4—4 of Fig. 1.

Fig. 5 is an end view of the card holder proper, the front plate being omitted.

Fig. 6 is a side view of the platen ratchet with special stops applied, looking in the direction of the arrow 6, Fig. 1.

Fig. 7 is a face view of a tool for applying and removing the celluloid facing of the platen; and

Fig. 8 is an edge view of the same.

Referring to the drawing, 10 indicates the usual platen shaft and 11 a platen thereon. The platen is shorter than is customary for ordinary writing and is preferably but slightly longer than the cards to be written upon. It may have a hard rubber or composition surface and be cylindrical, as usual, although a segmental platen would suffice, as only a portion of its surface is necessarily utilized. To insure a perfect cutting of stencils, and for the purpose of providing a writing surface for the platen which may be renewed when worn, I attach to the platen two longitudinally arranged clips 12, 13 by screws or other suitable fastenings. The forward edges of these clips are undercut to provide recesses at 14 into which the edges of a plate 15 of celluloid or other suitable resilient and yieldable material may be sprung. This plate 15 will fit snugly to the platen and provide a suitable surface upon which to cut stencils by means of the usual typewriter type. I provide a tool, which will be described herein, by means of which the surface plate 15 may be quickly removed when worn and replaced by a new one. The upper clip 12 is provided with a recess 16 which exposes the edge of the plate 15 to permit of removing the plate readily by means of the tool mentioned.

The card holder comprises a U-shaped plate having two upright portions 17, 18 with the edges 19 bent up to form card guides and a portion 20 connecting their lower ends. The portion 20 has a flange 20ª at its lower edge upon which the card rests when inserted in the holder. The plate is also provided with lugs 21 which slide in guides 22, which guides may be mounted on slides 23 similar to those which carry the marginal pressure rollers of the ordinary typewriter. The present invention will be described as applied to a front strike typewriting machine such as the L. C. Smith & Bros. typewriter. The slides 23 are mounted on a bar 24 which is fixed on the paper carriage. The card holder also comprises two light metal plates 26 situated in front of and parallel with the arms 17 and 18 and secured to the latter by rivets or other devices 27. The plates 26 are suitably spaced from the arms 17 and 18 to provide room for the cards between them, arms 17, 18 and plates 26 constituting inner and outer guides, respectively, and they have fingers 28 ex-

tending upwardly and fingers 29 extending downwardly, whereby the ends of the cards are held against the arms 17 and 18. The upward ends of the arms 17 and 18 preferably flare rearwardly as shown at 17^a, 18^a, and the upper ends of the fingers 28 are flared forwardly as at 28^a to facilitate inserting the cards. The fingers 28 may have shoulders 28^b to yieldingly hold the cards in position for printing.

On the arms 17, 18 of the card holder are lugs 30 which are provided with pins 31 engaging radial slots 32 in radially arranged rigid arms 33 suitably secured to the platen shaft, as by screws 34. The arms 33 are also adjustably secured to the ends of the platen by screws 35.

In writing stencil cards it is only necessary to write a few lines and I therefore provide a stop for quickly locating the card at the proper position to write the upper line. I also preferably provide a stop for preventing the writing of a line too low on the card. The preferred form of stops is shown in Figs. 1 and 6, in which 40 indicates a segmental plate arranged upon the platen shaft adjacent to the usual line feed ratchet wheel 41. The plate 40 is provided with a slot 42 and is adjustably connected to the ratchet wheel by a screw 43 passing through the slot. The segmental plate 40 is also provided with upper and lower lugs 44 and 45. The holding pawl or detent 46 for the ratchet wheel engages the teeth between these stops and the stops are arranged to contact with the bearing 47 of the friction wheel which forms the holding pawl or detent 46.

It will be apparent that in operation the cards may be quickly inserted between the fingers 28 and the arms 17, 18 of the holder and as easily removed. The cards should be pressed into the holder until they rest against the ledge 20^a at the lower edge thereof. Before writing the platen shaft is turned by means of the usual knob to bring the card holder to its lower position, which is determined by the stop lug 44 striking the bearing 47 (Fig. 6). The card is fed upward for writing successive lines in the usual manner of operating a typewriter. As soon as the writing is finished the card may be removed by simply pulling it upward out of the holder. The position of the first line on the card may be regulated by adjusting the stop plate 40 on the platen ratchet 41.

Among the advantages of my invention it will be noted that the cards are not bent or distorted in any way while being written. They lie against and tangent to the celluloid plate on the platen, being tangent to the platen at the printing point so that they are firmly backed when struck by the type. In order that the cards may come in contact with the platen surface the celluloid plate is slightly shorter than the distance between the arms 17, 18 of the holder so that the arms can lie against the platen surface. The celluloid plate and arms 17, 18 are preferably of about the same thickness so that the arms will not hold the card away from the celluloid surface.

Among other advantages, it will be seen that the cards are fed positively, and hence the lines on the cards will always be in the same relative positions. The tangential movement of the card is in an upward and downward direction across the front face of the platen and is controlled by the fixed guides 22. The slots 32 in the rigid arms 33 provide for the slight relative movement of the arms and the card holder due to the fact that the arms move in a circular path while the card holder moves in a plane.

The tool for removing and replacing the celluloid plates is shown in Fig. 7. This tool comprises a plate 50 which has at one side a tongue 51 having a hook 52. This hook can be inserted in the opening 16 in the upper clip 12 so as to engage the upper edge of the celluloid plate. On pulling the hook downward the plate will be buckled and its upper edge drawn out from under the clip, which permits the plate to be removed. The upper edge 53 of the tool 50 is straight and of nearly or quite the length of the celluloid plate. When it is desired to insert a new plate this edge of the tool is held in front of the lower edge of the upper clip 12 with the plane of the tool extending about radial to the platen. A celluloid plate, which is flexible, is pressed into the recess in the lower clip. The plate is bent or bowed and its upper edge pressed down into the angle between the tool 50 and the platen. The tool is then tipped forward and withdrawn, the upper edge of the celluloid plate springing into a recess in the upper clip. If the celluloid plates are cut just wide enough to fit between the clips, they will spring into close contact with the platen and furnish a solid writing surface.

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

1. In a typewriting machine, the combination with a platen, a card holder having inner and outer guides to receive and retain the ends of the card, and end and bottom guides to properly locate the card in the holder, and means for moving said guides tangentially to the platen.

2. In a front strike typewriting machine, the combination with a platen shaft, of a platen mounted on said shaft, arms at the ends of the platen, a card guide carried by said arms, fixed guides for sustaining the card guide in a plane tangentially to the front face of the platen, and means for mov-

ing the platen and card guide to space between lines.

3. In a front strike typewriting machine, the combination with a platen and a card holder movable tangentially across the front face of the platen to space between lines, of radial arms carrying said holder, and a stop for limiting the movement of the card holder whereby the card holder may be quickly set to write the first line.

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

CARL GABRIELSON.

Witnesses:

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G. RAYMOND REED.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."