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C. GABRIELSON

TYPEWRITER PLATEN FOR INDEX CARDS

Filed May 8, 1924

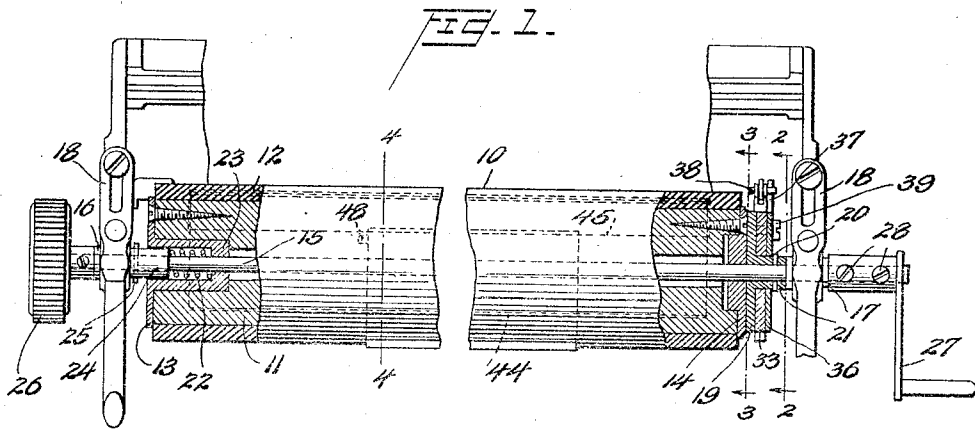
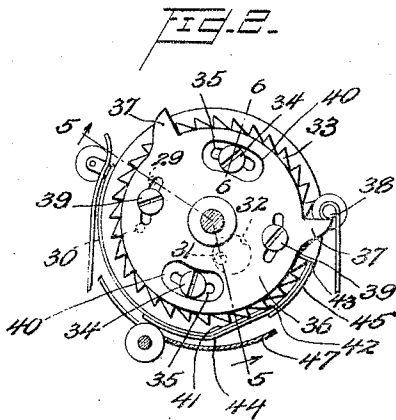
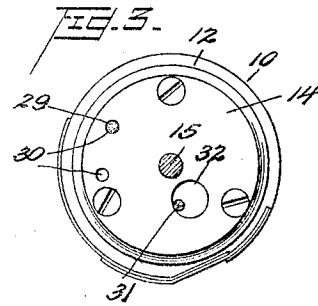
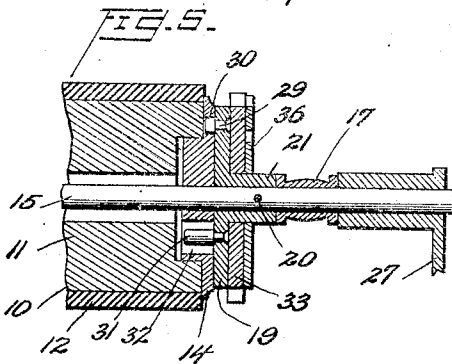
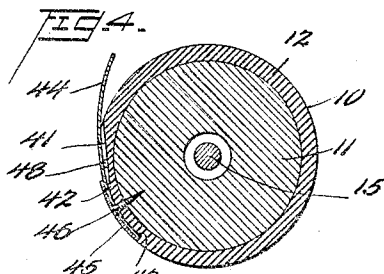


FIG. 6.

Inventor
Carl Gabrielson
By
Naton, Cort, Morse & Grindle
Attorney

UNITED STATES PATENT OFFICE.

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

TYPEWRITER PLATEN FOR INDEX CARDS.

Application filed May 8, 1924. Serial No. 711,893.

To all whom it may concern:

Be it known that I, CARL GABRIELSON, a citizen of the United States, and a resident of Syracuse, in the county of Onondaga and State of New York, have invented certain new and useful Improvements in Typewriter Platens for Index Cards, of which the following is a specification.

This invention relates generally to typewriters and more particularly to platens for use with typewriters to afford a ready means of conveniently handling small cards upon which it may be desired to typewrite information.

It is well known that the ordinary platen for use with typewriters requires that the paper be fed in from the rear, passed under the roll, and brought up in front to the position for writing. In the typewriting of small cards, particularly those used in card indexes and known as "index visible", this is very difficult, if not entirely impossible, owing to the cards being provided with punched-out flaps to retain them in position in the indexes, which flaps are apt to be caught by the paper feeding mechanism and prevent the proper feeding of the card around the platen. In order to overcome these difficulties, the present invention contemplates the provision of a special platen for use in writing on index cards.

It is an object of this invention to provide a platen for typewriting on index cards provided with means for feeding the card into writing position by a forward rotation of the platen.

Another object of this invention is to provide a platen for typewriting on index cards having an adjustable stop device to properly locate the platen for the feeding of cards and the typing of the first or top line.

A further object of this invention is to provide a special platen for typewriters for use in writing on index cards, in which there is provided a transparent shield attached to the platen in order to enable the cards to be fed into the machine with the top up in the normal position for writing.

Still another object of the invention consists in the provision of means for adjusting the platen with respect to the platen shaft in order that various size cards may be accommodated, and in the provision of an ad-

justable spacing ratchet in order that the location of the lines of type on a card may be adjusted to suit the size thereof.

For an understanding of this invention, reference should be had to the following specification taken in connection with the accompanying drawings, wherein:—

Figure 1 is a plan view of the platen in position in the carriage showing the end portions of the platen in longitudinal section,

Figure 2 is a section on the line 2—2 of Figure 1 showing the adjustable platen ratchet and platen stop,

Figure 3 is a section on line 3—3 of Figure 1,

Figure 4 is a section on line 4—4 of Figure 1,

Figure 5 is a longitudinal section of the right end of the platen taken on the line 5—5 of Figure 2, and

Figure 6 is a longitudinal section of a small part of the right end of the platen taken on the line 6—6 of Figure 2.

Referring to the drawings, the platen has the usual wooden core 11 and the rubber sheath 12 and is provided with the metal end plates 13 and 14 attached by wood screws and suitably drilled to form bearings for the platen shaft 15. The platen shaft is provided with bearings 16 and 17 which are adapted to be mounted for rotation in the carriage and retained therein in any well known manner, such as by the sliding springs 18 as shown.

The platen shaft passes through the ends 13 and 14 so that the platen is free to rotate in respect thereto. The disk 19 is attached to the shaft adjacent the end plate 14 and is secured thereto by means of a tapered dowel pin 20 passing through the hub integral with the disk 19. The platen is pressed and held against the disk 19 by means of a coil spring 22 housed in a tubular inwardly extending sleeve 23 forming a part of the end plate 13. The spring 22 bears against the bottom of this sleeve and its opposite end bears against the collar 24, which is permanently attached to the shaft by means of the tapered dowel pin 25 passing transversely through the collar and the shaft. The usual cylindrical, fluted knob 26 is attached to the left end of the shaft beyond the bearing 16

by means of a set screw, while the opposite end of the shaft is provided with a crank handle 27 rigidly attached to the shaft by means of a pair of set screws 28 bearing upon a flattened portion of the shaft (not shown).

In order that the disk 19 may be rigidly connected to the platen so that the platen shall rotate with its shaft, the disk 19 is provided with an axially extending pin 29 which is adapted to be received in either of a pair of holes 30 in the outer face of the end plate 14. In order that the relative rotation between the platen and its shaft may be limited, there is provided a second axially extending pin 31 on the disk 19 which is adapted to engage in an enlarged hole 32 in the end plate 14. This pin 31 is of substantially greater length than the pin 29, so that upon the plate being moved to the left on the shaft, which movement is limited by the engagement of the pin 25 with the end plate 13, the pin 29 is withdrawn from one of the holes 30 and the platen may then be rotated with respect to its shaft, its motion being limited by the engagement of the pin 31 with one or the other sides of the hole 32, the pin 31 being too long to be released by longitudinal movement of the platen with respect to the platen shaft.

The usual form of platen ratchet 33 is fixed against the outer face of the disk 19, surrounding the hub 21 of that disk and is maintained in position by means of a pair of screws 34 passing through arcuate slots 35 in the ratchet in order that its position may be altered with respect to the disk 19 and thus the platen. Engaging the outer face of the platen ratchet is a plate 36 provided with the extending lugs 37 adapted to cooperate with axle pin of the platen ratchet spring roller 38 and thus form stops limiting the rotational motion of the platen in each direction to an arc of less than 180°. This stop plate surrounds the hub 21 of the disk 19 and is attached to the platen ratchet by means of a pair of adjusting screws 39 passing through arcuate slots in the stop plate and threaded into the platen ratchet. Arcuate slots 40 are provided in the stop plate in order to clear the heads of the adjusting screws 34 which retain the platen ratchet against the disk 19 in order that the inner face of the stop plate may tightly abut the outer face of the platen ratchet.

The rubber sheath of the platen is milled as shown at 41 forming a flat tangential surface parallel to the platen shaft and a radial butment or shoulder 42. The platen sheath is further milled away as at 43 to provide accommodation for a thin sheet of celluloid 44 and a metal strip 45 which is attached by wood screws 46 to the core of the platen and serves to retain the celluloid in position as shown. The outer surface of

the metal plate 45 is substantially flush and forms a continuation of the arc of the platen sheath.

The celluloid flap or sheet 44 extends for a distance about equal to twice the length of the milled surface 41, and due to its inherent stiffness assumes a position somewhat tangential to the outer surface of the platen sheath and parallel to the surface 41.

As shown in Figure 2, this celluloid flap has sufficient resiliency so that when the platen is turned forward, it may bend and assume the curvature of the platen in order to pass between it and the paper guide trough 47.

A small pin 48 preferably formed of metal is driven into the platen and extends above the platen sheath at a point just above the abutment 42 and is of such a length as to engage the under surface of the celluloid flap 44, and its purpose is to form a stop for the index cards. They can be placed behind the celluloid flap and pressed down until they engage the abutment 42 and then slid to the left until stopped by the pin 48. In this manner all the cards can be exactly located upon the platen.

To use the platen for writing index cards, a card of the correct size is inserted between the celluloid flap and the platen, face up, as explained above, the crank 27 having been pushed upward and backward until the forward stop 37 has engaged the pin 38, thus stopping the platen with the celluloid flap in its rear or uppermost position. When the card is thus in position, the crank handle is pulled forward until the opposite stop 37 engages against the pin 38 when the card is in position for writing upon its top line. Slight adjustments to bring the typing at the desired position along the top edge of the card may be made by means of the adjustable feature for the stops 37, and at the same time the platen ratchet may be slightly shifted in order that the shifter pawl may properly engage one of the teeth thereof. In case it may be desired to write more than one line on the card, the platen can be line spaced in the usual way.

To accommodate cards of a different size, it is only necessary to move the platen to the left against the action of the spring 22 and rotate it until the pin 31 stops against one edge of the hole 32 and allow it to spring back with the pin 29 in one of the holes 30 which allows for adjustment for two sizes of cards without any change in the position of the stop arms 37.

From the above description, it will be seen that there is provided by this invention a material improvement in typewriter platens for use in writing upon index cards, for it may be noted that the transparent

flap formed of celluloid or other material adequately protects the lower cut portion of the index cards and prevents them from becoming entangled in the paper feed mechanism, while at the same time allowing any markings on the card to be observed. The method of feeding the cards in face forward and top up from the front results in a decided saving of time and labor, for the operator can remove a finished card and insert a new one with the left hand without any loss of time, and as the new card is inserted with the left hand the crank can be pulled forward with the right hand leaving the card in position to have its top line typed.

But one embodiment of this invention has been disclosed in the drawings, but it is to be understood that the invention is susceptible of various modifications, and it is not to be limited except by the scope of the appended claims.

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

1. In a typewriting machine, the combination of a carriage, a platen mounted therein, a longitudinal depressed surface on said platen having an abutment at one side thereof, and a flexible flap attached to said platen adjacent said abutment and extending over said depression for the purpose described.

2. In a typewriting machine, the combination of a carriage, a platen mounted therein, a longitudinal depressed surface on said platen having an abutment at one side thereof, and a transparent flexible flap attached to said platen adjacent said abutment and extending entirely over said depression for the purpose described.

3. In a typewriting machine, the combination of a carriage, a platen mounted therein, a longitudinal depressed surface on said platen having an abutment at one side thereof, a flexible flap attached to said platen adjacent said abutment and extending over said depression to retain a card on said platen, and means extending from said depressed surface beneath said flap forming a stop against longitudinal movement of said card in one direction.

4. In a typewriting machine, the combination of a carriage, a platen mounted therein, a one-piece resilient sheath covering said platen, a longitudinal groove in said platen sheath defined by a radial and a tangential plane, and a flexible flap attached to said platen and extending over said groove substantially parallel to the bottom thereof.

5. In a typewriting machine, the combination of a carriage, a platen mounted therein, a platen sheath having a longitudinal depression therein defined by a tangential plane forming the bottom thereof and a radial plane forming an abutment against which a card is adapted to be placed, a flexible flap

attached to said platen and extending over said depression substantially parallel to the bottom thereof to retain said card in position, and a stop pin extending from the bottom of said depression to the flap.

6. In a typewriting machine, the combination of a carriage, a platen shaft journaled therein, a platen ratchet fixed to said shaft, a platen rotatably and slidably mounted on said shaft, means biasing said platen against said platen ratchet, and means to adjustably connect said platen to said platen ratchet.

7. In a typewriting machine, the combination of a carriage, a platen shaft journaled for rotation in said carriage, a disc fixed to said shaft, a platen ratchet secured for rotational adjustment to said shaft, a platen freely mounted on said shaft, means biasing said platen against said disc, and means retained in position by said biasing means to adjustably connect said platen and shaft.

8. In a typewriting machine, the combination of a carriage, a platen shaft journaled for rotation in said carriage, a platen ratchet adjustably secured to said shaft, a platen mounted for rotation on said shaft, means limiting said rotation, and means to adjustably fix said platen to said shaft.

9. In a typewriting machine, the combination of a carriage, a platen shaft mounted for rotation therein, a platen ratchet adjustably secured to said shaft, a platen stop adjustably secured to said platen ratchet, a platen mounted for rotation on said shaft, a stop member limiting the amount of said rotation, and means to adjustably secure said platen to said platen shaft.

10. In a typewriting machine, the combination of a carriage, a platen shaft journaled for rotation therein, a disc fixed to said shaft, a platen ratchet adjustably mounted against said disc, a stop plate adjustably mounted against said platen ratchet, a platen slidably and rotatably mounted on said platen shaft, a spring normally maintaining said platen against said disc, a pin on said disc, a plurality of holes in said platen adapted to be selectively engaged by said pin to connect said platen and shaft.

11. In a typewriting machine, the combination of a carriage, a platen shaft mounted for rotation therein, a platen ratchet adjustably mounted on said shaft, a platen rotatably and slidably mounted on said shaft, a longitudinal groove in said shaft, an abutment at one side thereof, a flexible flap attached to said platen adjacent said abutment and extending over said groove, and means to adjustably connect said platen to said platen shaft.

12. In a typewriter, the combination of a carriage, a platen shaft mounted for rotation therein, a disc fixed to said shaft, a platen ratchet adjustably mounted against said disc, a stop plate adjustably mounted against

said platen ratchet, a platen rotatably and
slidably mounted on said shaft, a longitu-
dinal depression in said platen, an abutment
at one side thereof, a flexible, transparent
5 flap attached to said platen and extending
over said depression, a stop pin beneath said
flap, a spring biasing said platen against said

disc, a pin on said disc, and a plurality of
holes in the end of said platen adapted to be
selectively engaged by said pin.

In testimony whereof I hereunto affix my
signature.

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CARL GABRIELSON.