June 22, 1926. 1,590,039

A. G. F. KUROWSKI

TYPEWRITING MACHINE

Filed Oct. 3, 1922

Fig. 1.

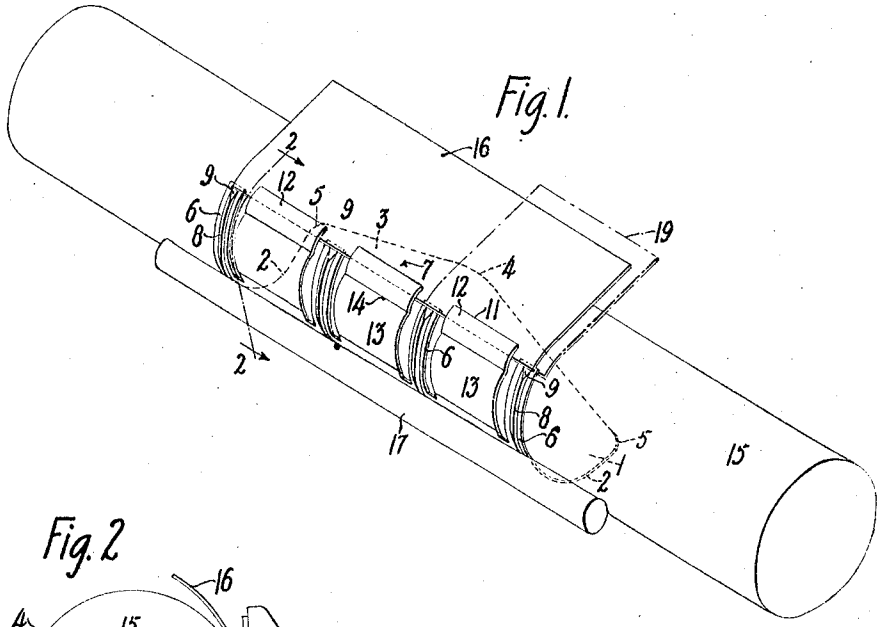


Fig. 2

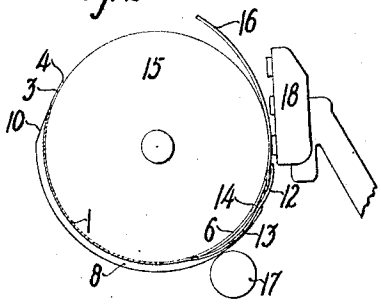


Fig. 4.

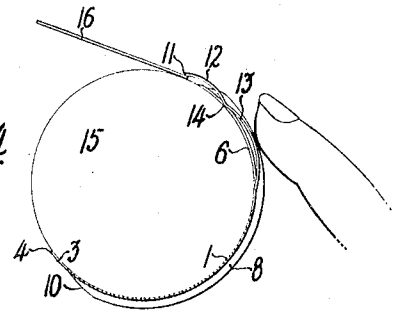


Fig. 3.

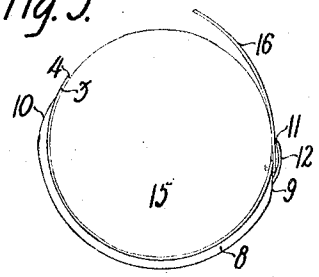
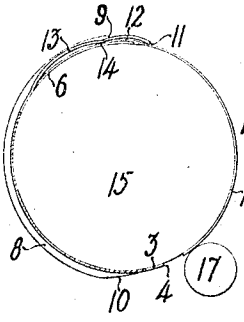


Fig. 5.



Inventor:
Alfred G F Kurowski
by B C Stickney
Attorney

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UNITED STATES PATENT OFFICE.

ALFRED G. F. KUROWSKI, OF BROOKLYN, NEW YORK, ASSIGNOR TO UNDERWOOD TYPEWRITER COMPANY, OF NEW YORK, N. Y., A CORPORATION OF DELAWARE.

TYPEWRITING MACHINE.

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This invention relates to a card-holder or label-holder of thin resilient sheet-material and of open curved form, so that it may be sprung upon the cylindrical platen of a typewriting machine to grasp or grip the platen for detachably holding it in position thereon by reason of its resiliency, and for gripping and pressing a card or label against the platen to hold it for typing.

Objects of the invention are to produce a simple and inexpensive device for effectively holding cards or labels, and for facilitating edgewise insertion of a card or label between card-gripping or label-gripping portions of the holder and the platen.

According to the present invention, the holder comprises a body-part provided at its forward margin with one or more longitudinally-ribbed platen-gripping fingers, the ribs of which extend back into the body-part, said finger or fingers being cooperative with the body-part to grip the platen for retaining the holder in place thereon, and the forward margin of the body-part being also provided with one or more card-gripping or label-gripping fingers forming gripping lips at their free ends. The card-gripping or label-gripping fingers each have an outwardly-bulged portion and a fulcrum-forming portion to fulcrum on the platen between said bulged portion and said gripping lip, so that pressure of a finger of the typist applied to the bulged portion will raise the gripping lip away from the platen to provide for the insertion and adjustment of the margin of a card or label beneath said lip, the depressible bulged portions projecting from the platen to a less extent than the ribs on the platen-gripping fingers, so that the projecting ribs will prevent a usual feed-roll, or other parts of the machine adjacent the platen, from depressing the bulged portions and thereby unintentionally releasing the card or label held by the gripping lips.

Other features and advantages will hereinafter appear.

In the accompanying drawings,

Figure 1 is a partly diagrammatic perspective front view of a cylindrical platen and a feed-roll, together with the card-holding or label-holding device of the present invention upon the platen, and holding a card or label thereon, and shows the card or label holder in a position convenient for inserting the card or label.

Figure 2 is a somewhat enlarged end view from the left in Figure 1, further showing an upraised type-bar, and showing the card or label holder in vertical section on a plane indicated by the bent line 2—2 of Figure 1, the card or label being shown as held in position for typing upon its lower margin.

Figure 3 is a similar view, with the type-bar and feed-roll omitted, and with the card or label holder shown in end elevation.

Figure 4 is a view similar to Figure 2 with parts omitted, and shows the platen and holder in position for conveniently inserting a card or label, and further shows the operation of inserting the card or label.

Figure 5 is a view similar to Figure 2 with parts omitted, and with the holder turned end for end or reversed upon the platen, for holding the card or label by its upper margin instead of by its lower margin, as in the preceding figures.

The illustrated embodiment of the card-holder or label-holder of the present invention comprises a platen-gripping body-part 1 having parallel side edges 2, and provided with an abruptly tapered rear end portion 3 having a rounded free end 4, the body-part 1 having rounded corners 5 at the base of its tapered end portion 3.

The forward margin of the body-part 1 is provided with a set or series of narrow platen-gripping fingers 6, shown as four in number, and it is also provided with a set or series of comparatively wide card-gripping or label-gripping fingers 7 arranged between and alternating with the platen-gripping fingers 6 and shown as three in number. Each of the platen-gripping fingers 6 is provided with an outwardly-projecting rib or ward 8 extending from a point near its free end longitudinally thereof into and substantially throughout the length of the body-part 1, to the exclusion of its tapered rear end portion 3. Each rib 8 has sloping or tapering front and rear ends 9 and 10, which are not liable to catch upon any adjacent part of the machine when the platen and holder are rotated together.

The card-gripping or label-gripping fingers 7 terminate in aligned straight gripping edges or lips 11, each gripping edge or lip 11 being carried by a comparatively

narrow transversely-extending outwardly rounded or bulged portion 12. A second or inner and wider transversely-extending outwardly-bulged portion 13 is provided, and between the outwardly-bulged portion 12 and 13 the card-gripping or label-gripping finger is sharply curved or bent inward at 14 to form a platen-engaging fulcrum, which is normally slightly out of contact with the platen 15, as shown in Figures 2, 3 and 5, so as to enable the utilization of the resiliency of the gripping fingers 7 throughout their full length, and causing the gripping lips 11 to grip and effectively hold the margin of a card or label 16 against the platen, as shown in Figures 1, 2, 3 and 5. Pressure of the fingers upon the inner bulged portions 13 will press the fulcra 14 against the platen and raise the gripping lips 11 away from the platen to provide for the insertion of the edge of the card or label 16 between the gripping lips 11 and the platen 15, as shown in Figure 4.

The platen-gripping fingers 6 are somewhat shorter than the card or label holding fingers 7, so as not to interfere with the passing of the edge of the card or label 16 beneath the gripping lips 11, preferably the outer corners at the ends of the platen-gripping fingers 6 being slightly rounded, as most clearly shown in Figure 4. It will be understood, however, that the thickness of the sheet-material forming the holder is somewhat exaggerated in the drawings for purposes of clear illustration. When the card or label 16 is fully inserted, it is preferably pushed beneath the released gripping lips 11 far enough so that its inserted edge will override or pass to the outside of the extreme end portions of the platen-gripping fingers 6, against which it will be pressed by the lips 11, and where it may be aligned in the angles formed between the outer lip-carrying bulged portions 12 of the card-holding or label-holding fingers 7 and by the forward sloping ends 9 of the ribs 8 on the platen-gripping fingers 6, as shown in Figures 1, 2, 3 and 5. The ribs 8 project farther from the platen than the lip-releasing bulged portions 13, so that, as the platen 15 is rotated, the ribs 8 will hold a usual feed-roll 17, or other parts of the machine adjacent the platen, such, for example, as the usual scale-plate, out of contact with the lip-releasing bulged portions 13, thereby to prevent the unintentional release of the card or label by the gripping lips 11.

In order to insert the lower margin of the card or label 16 beneath the gripping lips 11, the platen 15 should be turned to about the position shown in Figures 1 and 4. After the card or label 16 has been thus inserted, the platen 15 may be rotated backwardly, so that the holder will carry the card or label around with the platen and bring it down to the typing position, in which the upper margin of the card or label 16 will be above the printing-point, and, as the typing continues, the platen being rotated or line-spaced forwardly as usual, the lower margin of the card or label 16 held by the gripping lips 11 will be brought to a position just above the printing-point, as shown in Figure 2. In the typing position of the card or label shown in Figure 2, the printing-point is indicated by the lowermost of the three types appearing upon the raised type-head 18.

The resilient holder may be placed upon the platen with the fingers on its forward end directed upwardly, so that the gripping lips 11 will hold the card or label by its lower margin, as shown in Figures 1, 2, 3 and 4, or the holder may be placed upon the platen with the fingers thereon directed forwardly and downwardly towards the front of the platen, so that the gripping lips 11 may hold the card or label 16 by its upper margin, as shown in Figure 5. To insert the card or label 16 in the manner shown in Figure 5, the platen 15 is rotated to substantially the same position shown in Figure 4, which will be somewhat farther around in the forward direction than the position thereof shown in Figure 5. The upper margin of the card or label 16 may then be inserted beneath the gripping lips 11 in substantially the same manner that the lower margin thereof would be inserted, as shown in Figure 4 and hereinbefore described. After the card or label 16 has been thus inserted, the platen 15 may be rotated in a forward direction, so that the holder will carry the card or label around with the platen and bring it up to the typing position shown in Figure 5, in which the upper margin of the card or label will be held above the printing-point by the gripping lips 11, and at its lower margin the card or label may be further held and pressed against the platen by means of the usual front feed-roll 17, as shown in Figure 5.

The platen-gripping fingers 6 and the card-gripping or label-gripping fingers 7 are sufficiently spaced or separated, as shown in Figure 1, that they may act independently without interference or coming into contact with one another, so as to effectively perform their respective functions, as hereinbefore described. The narrow platen-gripping fingers 6 are stiffened by means of the ribs 8, so as to co-operate effectively with the body-part 1 in gripping the platen, and, by reason of their minimum width or narrowness, provide space for the much wider card-holding or label-holding fingers 7, thereby enabling the gripping lips 11 to be of maximum length for effectively gripping and holding the card or label 16.

While, in the form of the invention shown

in the drawings, the holder has three card-holding or label-holding fingers 7 and four platen-gripping fingers 6, obviously the number of these fingers could be either reduced or multiplied, the holder being made correspondingly longer or shorter, as may be desired or required for any particular class of work. However, the holder shown in the drawings has been found satisfactory for the various sizes of cards or labels which it commonly will be desired to type upon. It should be noted that the holder shown in the drawings is capable of effectively holding a card or label 19, shown in dot-and-dash lines in Figure 1, which is of much less width than the card or label 16. In Figure 1, the narrow card or label 19 is shown as inserted beneath the lip 11 of the right-hand card-holding or label-holding finger 7, and is aligned and further held by the two adjacent platen-gripping fingers 6, in a manner similar to that hereinbefore described for the wider card or label 16.

The holder is made of suitable thin resilient sheet-material, preferably spring-tempered steel, and, as a whole, including the fingers 6 and 7, is in the form of a curved shell or open sleeve of slightly greater circumferential length between its rear end 10 and its forward end 9, as determined by the ends of the platen-gripping fingers 6 and by the gripping edges or lips 11 of the card-holding or label-holding fingers 7, than half the circumference of the cylindrical platen 15, as shown in Figures 2 to 5, inclusive, so that, when the holder is sprung upon the platen, as shown in the drawings, it will clasp and grip the platen, so as to be held thereon to rotate therewith. It should be noted that the card-holding or label-holding fingers 7 co-operate with the platen-gripping fingers 6 in retaining the holder upon the platen. The platen-gripping fingers 6 are relied upon to be effective to prevent any displacement of the holder on the platen. The gripping lips 11 of the fingers are more particularly relied upon for effectively gripping the margin of the card or label to the platen, and also for pressing the margin of the card or label down upon the underlying ends of the platen-gripping fingers 6, as shown in the drawings and hereinbefore described.

After the typing operation is completed, the platen may be rotated in a forward direction from the Figure 2 position to the position shown in Figures 1 and 4, for conveniently replacing a typed card or label with a card or label to be typed, which may then be brought to the printing-position in the manner above described. When the card or label is gripped by its upper margin, shown in Figure 5, substantially the same operation may take place. When a card or label has its lower margin clipped to the platen by the lips 11, as shown in Figures 1, 2 and 3, any suitable means, such as the usual front paper-finger, not shown, may be provided for pressing its top margin against the platen, or, without additional holding means, a line may be typed on the card or label 16 near its lower edge and just above the gripping lips or edges 11, as shown in Figure 2. The resilient fingers 6 and 7, together with the tapered rear end portion 3 of the body-part 1, facilitate the placing of the resilient holder upon the platen 15 or its removal therefrom.

Variations may be resorted to within the scope of the invention, and portions of the improvements may be used without others.

Having thus described my invention, I claim:

1. To co-operate with a cylindrical platen of a typewriting machine, a card or label holder of thin resilient sheet-material to be sprung upon the platen to grip the platen, so as to be detachably held in position thereon by reason of its resiliency, said holding comprising a body-part, and a series or set of fingers, at least one of which is for gripping and pressing one of the margins of a card or label against the platen to hold it for typing, and at least another of which is for cooperating with the body-part to grip the platen for retaining said holder in place on the platen, said platen-gripping finger or fingers being provided longitudinally thereof with an outwardly-projecting stiffening rib extending back into said body-part, and said card or label gripping fingers or fingers having a gripping lip at the free end thereof, and back of said lip having a portion bulged away from the platen and also having a fulcrum-forming portion to be pressed against the platen between said gripping lip and said bulged portion, so that pressure upon said bulged portion will raise said lip away from the platen to facilitate the insertion and adjustment of the card or label, said bulged portion projection from the platen to a less extent than said stiffening rib, whereby said bulged portion will not be pressed upon by parts of the machine adjacent the platen when the platen is rotated.

2. To co-operate with a cylindrical platen of a typewriting machine, a card or label holder of thin resilient sheet-material to be sprung upon the platen to grip the platen, so as to be detachably held in position thereon by reason of its resiliency, said card or label holder comprising a body-part, and a set or series of alternately-arranged platen-gripping and card-gripping or label-gripping fingers projecting from the forward end margin of the body-part, said platen-gripping fingers each having an outwardly-projecting strengthening rib extending from adjacent its free end longitudinally thereof

into said body-part, and said card-gripping or label-gripping fingers each having at its free end an outwardly-bulged portion forming a gripping lip at the end of the finger to press one of the margins of a card or label against the platen for holding it for typing, and having a second outwardly-bulged portion inwardly from said lip-forming bulged portion, and further having between said bulged portions a transversely-extending inturned substantially angular portion to form a fulcrum on the platen, so that pressure of the fingers upon said second or inner bulged portions will raise said gripping lips away from the platen to provide for the insertion and adjustment of the margin of the card or label beneath said lip, said second outwardly-bulged portions projecting outwardly from the platen to a less extent than said strengthening ribs, whereby, when the platen is rotated, said strengthening ribs will hold a feed-roller or other parts of the machine adjacent the platen out of contact with the second bulged portions of said card-gripping or label-gripping fingers to prevent the unintentional release of the card or label by said gripping lips.

3. To co-operate with a cylindrical platen of a typewriting machine, a card or label holder of thin resilient sheet-material to be sprung upon the platen to grip the platen, so as to be detachably held in position thereon by reason of its resiliency, said card or label holder comprising a body-part, and a set or series of alternately-arranged platen-gripping and card-gripping or label-gripping fingers projecting from the forward end margin of the body-part, said platen-gripping fingers each having an outwardly-projecting strengthening rib extending from adjacent its free end longitudinally thereof into said body-part, and said card-gripping or label-gripping fingers each having at its free end an outwardly-bulged portion forming a gripping lip at the end of the finger to press one of the margins of a card or label against the platen for holding it for typing, and having a second outwardly-bulged portion inwardly from said lip-forming bulged portion, and further having between said bulged portions a transversely-extending inturned substantially angular portion to form a fulcrum on the platen, so that pressure of the fingers upon said second or inner bulged portions will raise said gripping lips away from the platen to provide for the insertion and adjustment of the margin of a card or label beneath said lip, said second outwardly-bulged portions projecting outwardly from the platen to a less extent than said strengthening ribs, whereby, when the platen is rotated, said strengthening ribs will hold a feed-roller or other parts of the machine adjacent the platen out of contact with the second bulged portions of said card-gripping or label-gripping fingers to prevent the unintentional release of the card or label by said gripping lips, said strengthening ribs terminating in sloping ends near the free ends of said platen-gripping fingers, said sloping ends forming angles with the inner convexly-curved surfaces of said lip-forming portions, so that the margin of the card or label may be inserted beneath said lips and over the ends of said platen-gripping fingers and aligned at its edge in said angles.

4. To co-operate with a cylindrical platen of a typewriting machine, a card or label holder of thin resilient sheet-material to be sprung upon the platen to grip the platen, so as to be detachably held in position thereon by reason of its resiliency, said card or label holder comprising a body-part, a set of more than two narrow platen-gripping fingers projecting from the forward end margin of the body-part to co-operate therewith to grip the platen, and a set of more than two comparatively wide card-gripping or label-gripping fingers projecting from the forward end margin of the body-part and arranged in alternate relation with and spaced from said narrow platen-gripping fingers, said platen-gripping fingers each having an outwardly-projecting stiffening or strengthening rib extending from adjacent its free end longitudinally thereof into and substantially throughout the body-part, and said card-gripping or label-gripping fingers each having at its free end a gripping lip forming a straight edge to press one of the margins of a card or label against the platen for holding it for typing, and also having an outwardly-bulged depressible portion and a fulcrum-forming portion to fulcrum on the platen between said bulged portion and said gripping lip, so that pressure applied to said bulged portions will raise said gripping lips away from the platen to provide for the insertion and adjustment of the margin of the card or label beneath said lips, said depressible portions projecting from the platen to a less extent than said ribs, whereby said bulged portions will not be depressed by a feed-roller or other parts of the machine adjacent the platen when the platen is rotated, thereby preventing the unintentional release of the card or label by said gripping lips, said platen-gripping fingers being of less length than said card-gripping or label-gripping fingers in order to facilitate the insertion of the edge of the card or label beneath said lips, and said ribs on the platen-gripping fingers and body-part having sloping ends to prevent their catching upon adjacent parts of the machine as the platen is rotated.

5. To co-operate with a cylindrical platen

of a typewriting machine, a card or label holder of thin resilient sheet-material curved to form an open sleeve to be sprung upon the platen to closely hug and grip the platen, so as to be detachably held in position thereon by reason of its resiliency, said card or label holder comprising a body-part, a plurality of narrow platen-gripping fingers projecting from the forward end margin of the body-part and co-operating with the body-part to grip the platen, said platen-gripping fingers each having an outwardly-projecting rib extending from adjacent its free end longitudinally thereof into said body-part, and a wide card-gripping or label-gripping finger projecting from the forward end margin of the body-part between and spaced from two of said platen-gripping fingers, said card or label gripping finger having a straight edge forming a gripping lip at its free end.

6. A device of the character described, comprising a thin sheet of resilient material arranged to be sprung around the platen of a typewriting machine and to maintain itself thereon, said device including means for clamping a card or label to the platen, said clamping means having a lip and a lip-releasing portion bulged away from the platen, and guards extending outwardly from the surface of the platen to hold a feed-roller or other parts of the machine out of contact with the lip-releasing bulged portion of the card-clamping means when the platen is rotated.

7. A device of the character described, comprising a thin sheet of resilient material and extending around more than half the circumference of the platen so as to retain itself thereon, sprung around the platen of a typewriting machine, said device including means for clamping a card or label to the platen, said clamping means having a lip and a lip-releasing portion bulged away from the platen, and clearance means carried by said device effective to cause a feed-roller or other parts of the machine to be moved out of contact with the lip-releasing bulged portion of the card-clamping means during a portion of the rotation of the platen.

8. A device of the character described having a thin cylindrical segment of resilient material sprung around the platen of a typewriting machine, said device including a plurality of circumferentially-extending ribs alternating with work-gripping fingers, the ribs projecting radially beyond the fingers to prevent a feed-roller from engaging with the fingers.

9. A device of the character described having a thin cylindrical segment of resilient material sprung around the platen of a typewriting machine, said device including a plurality of circumferentially-extending ribs alternating with work-gripping fingers, said fingers having lips projecting along the surface of the platen beyond the ribs to press a work-piece against the platen, said ribs projecting radially beyond the fingers to prevent a feed-roller from engaging with the fingers.

10. A device of the character described having a cylindrical segment of thin resilient material sprung around the platen of a typewriting machine, said device including a plurality of gripping fingers and circumferentially-extending ribs which project radially beyond the gripping fingers to ward off a feed-roller from the gripping fingers, the fingers alternating with the ribs and having work-engaging tips and depressible work-releasing portions.

ALFRED G. F. KUROWSKI.