No. 815,101. PATENTED MAR. 13, 1906.

E. F. KUNATH.

TYPE WRITING MACHINE.

APPLICATION FILED MAY 20, 1904.

2 SHEETS—SHEET 1.

Fig. 1.

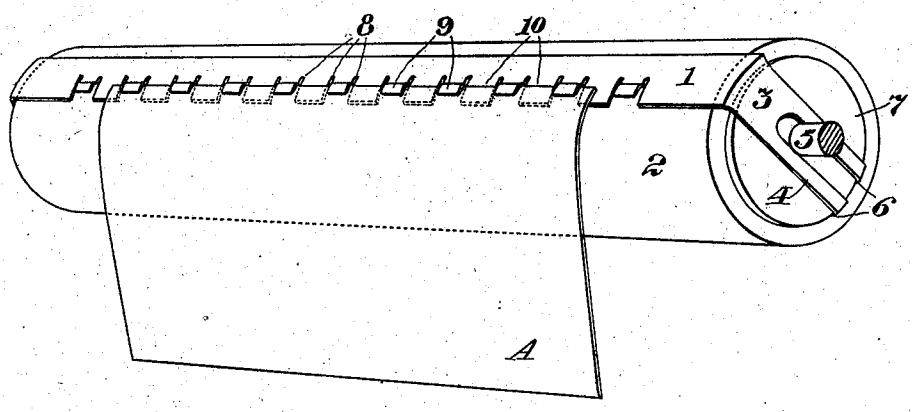


Fig. 2.

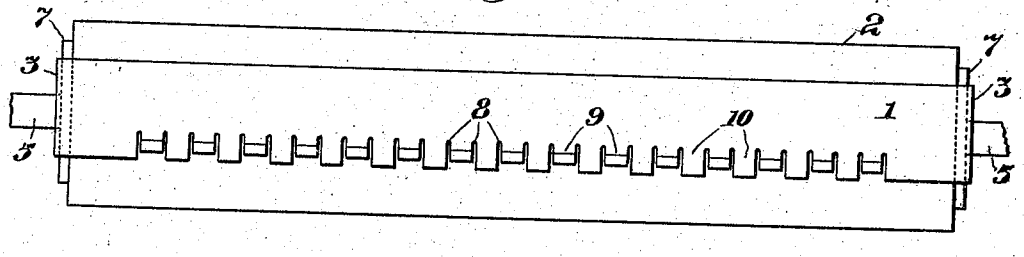


Fig. 3.

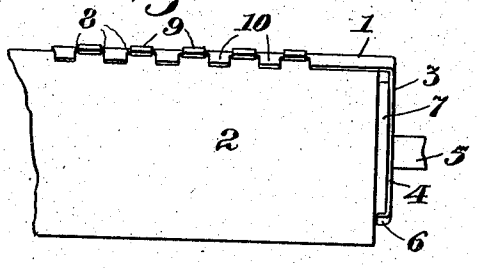
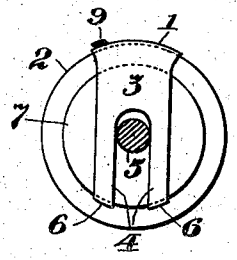


Fig. 4.



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TYPE WRITING MACHINE.

APPLICATION FILED MAY 20, 1904.

2 SHEETS—SHEET 2.

Fig. 5.

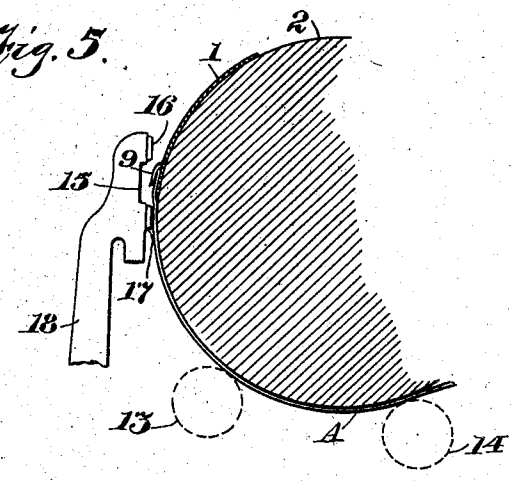


Fig. 6.

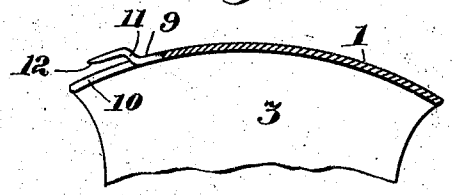
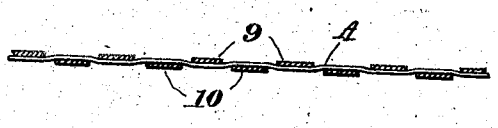


Fig. 7.



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TYPE-WRITING MACHINE.

No. 815,101. Specification of Letters Patent. Patented March 13, 1906.

Application filed May 20, 1904. Serial No. 208,935.

To all whom it may concern:

Be it known that I, EDWARD F. KUNATH, a citizen of the United States, residing in Jersey City, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Type-Writing Machines, of which the following is a specification.

This invention relates to means for holding cards and stiff paper upon the cylindrical platens of writing-machines, and particularly to card-holders of the kind that may be attached directly to the platen and rotated therewith. An objection to card-holders of this kind is that some portions thereof stick out too far from the surface of the platen, so as to be liable to be struck by the types, and also to interfere with the proper operation of the usual pressure-rollers which run in contact with the platen to feed the paper around the same. Because of the liability of the types to strike the projecting portions of the card-holder, especially in machines of the usual makes, in which double-case types are used, it is found necessary in using such card-holders to write the first line thereon at considerable distance below its leading edge, which in many instances is a great objection, owing to the waste of space upon the card. The principal objects of my invention are to overcome these objections and to produce a card-holder which will lie closer to the platen than prior devices of this sort and which, moreover, will enable a line to be written near the top edge of the card.

In the accompanying drawings, Figure 1 is a perspective view of a type-writer platen, showing my improved card-holder attached thereto and a card with its leading edge caught in the card-holder or clip and bent partly around the platen. Fig. 2 is a front elevation of the parts seen at Fig. 1. Fig. 3 is a fragmentary view giving an edge view of the teeth of the card-holder. Fig. 4 is an end elevation of the parts seen at Fig. 2. Fig. 5 is a sectional view, on a larger scale, illustrating the writing of a line close to the leading edge of a card. Fig. 6 is an enlarged cross-section of the main portion of the card-holder. Fig. 7 illustrates the tendency of the card-holding teeth to crimp the edge of the card, whereby a firm hold is secured upon the card, the teeth being shown in section.

In the several views like parts are identified by like signs.

In the form of the invention illustrated the card-holder is in the form of a sheet-metal strip 1, preferably of spring metal, and being very thin and curved to fit very closely to the platen 2 and extending longitudinally thereof. At its ends the metal of the strip is bent down to form clasps 3 for engaging the ends of the platen, each clasp comprising a forked portion 4 to bestride the platen axle or hub 5, and the forks having lips 6 to catch over the edges of the platen-heads or disks 7. Other provision, however, may be made for retaining the card-holder upon the platen, so that it may rotate therewith.

Along one edge of the strip 1 is formed a row of incisions 8, which divide said edge into teeth, preferably having a yielding quality. Said teeth are alternately long and short, as at 9 and 10, the long teeth following the curvature of the strip, as seen best at Fig. 6, so as to lie snugly against the platen, and the short teeth being slightly set or bent out, so as to catch over the edge of the card, as at Fig. 1. The card A is thus caught between the short teeth and the long teeth, the latter occupying the intervals between the short teeth and the edge portion of the card lying directly upon said long teeth, as clearly seen at Fig. 1, and preferably the teeth are so related as to crimp the edge of the card slightly, as at Fig. 7, thereby getting a secure hold upon the card. Of course the crimping is not permanent, disappearing when the card is removed from the holder.

Near their tips the teeth 8 are bent up to form jogs 11, Fig. 6, against which the inserted edge of the card may abut, thereby correctly positioning the card in the machine, and from said jogs the teeth are bent forwardly to catch over the card, their under sides being beveled, as at 12, to enlarge the mouth of the crevice into which the edge of the card is inserted, thereby facilitating the introduction of the card. The metal may be very thin, and the teeth 9 may set very slightly away from the platen, so that the pressure-rollers 13 14 (commonly used upon the Underwood type-writing machine) may run easily over the same. Moreover, the projecting portions of the teeth 9 are sufficiently short to enter the recesses 15, usually

formed between the upper and lower case types 16 and 17, carried by the type-bars 18 of the Underwood machine, so that the lower-case types may write close up to said teeth, as at Fig. 5, without liability of the latter being struck by the upper-case types 16, which in printing position stand above lower-case types. Capital letters may also be written upon the same line, since when the platen is raised for printing capitals the teeth 9 range above the capital types, while when the platen is rotated a line-space to enable the second line to be written said teeth 9, which of course move with the platen, are carried not only upwardly, but also back, so as to escape the capital types 16, and hence at no time is there danger of the latter striking the card-holder, while the first line may be written very close to the top edge of the card.

It is not essential in all cases that the teeth or portions 10 be longer than the teeth 9; but it is preferable to make them longer, so that the edge of the card may first be laid thereon and then slipped back beneath the teeth 9. The leading edge of the card does not lie directly upon the platen, but is supported by the portions 10. It will be noted that the strip 1 lies longitudinally upon the platen, the curvature being transversely of the strip.

The construction of the card-holder may be varied considerably within the scope of my invention.

Having thus described my invention, I claim—

1. A card-holder consisting of a strip to extend longitudinally upon the platen and curved transversely to conform to the curvature of the platen, and a row of teeth extending along one edge of the strip, alternate teeth in the row being slightly set out, so that the edge of an inserted card may be caught under the set-out teeth and rest upon the remaining teeth.

2. A card-holder comprising a strip to extend longitudinally upon the platen and curved transversely to conform to the curvature of the platen, and a row of teeth extending along one edge of the strip, said teeth being alternately long and short, and the short teeth being slightly set out from the long teeth.

3. A card-holder comprising a metal strip curved to fit the platen and having along one edge long and short teeth, the short teeth being slightly set out from the long teeth and having beveled tips.

4. A card-holder comprising a thin sheet-metal member which fits upon the platen, and a row of punched-up teeth which are set out slightly therefrom, so that the edge of a card may be caught between said teeth and the remaining portion of said sheet-metal member, said teeth overlying the openings made in the metal where they are punched up.

5. A card-holder comprising a thin sheet-metal member formed to fit upon a platen, and having a longitudinal row of teeth punched up at intervals and set out slightly, so that the edge of a card may be inserted beneath said teeth and rest upon the portions of the member between said teeth, the latter being formed with jogs against which the edge of the card may abut and overlying the openings made in the metal where they are punched up.

6. A card-holder comprising a member formed to fit upon a cylindrical platen, and having a row of teeth punched up at intervals, said teeth being slightly set out so that the leading edge of a card may be caught thereunder and rest upon the portions of said member between said teeth, and said member being provided with jogs against which said edge of the card may abut said teeth overlying the openings made in the metal where they are punched up.

7. A card-holder comprising a sheet-metal member formed to fit upon a platen, and having a row of teeth punched up at intervals, portions of said member intervening between said teeth to coöperate therewith to hold the edge of the card; said teeth being bent up from said member to form jogs, and then bent forwardly to catch upon said edge and overlying the openings made in the metal where they are punched up.

8. A card-holder comprising a sheet-metal strip curved to fit upon a platen and having at its ends clasps for engaging the ends of the platen, each clasp comprising a forked portion to bestride the platen-axle, the forks having lips to catch over the platen-heads, and said strip having along one edge a row of incisions which divide said edge into teeth, said teeth being alternately long and short, the long teeth following the curvature of the strip, and the short teeth near their tips being bent up to form jogs and then forwardly to catch over the edge of the card, the tips of said short teeth being beveled upon their under sides.

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Witnesses:
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