March 24, 1959 J. H. STIELOW 2,878,916

MEANS FOR PREPARING STENCIL CARDS FOR ADDRESSING MACHINES

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Fig. 1.

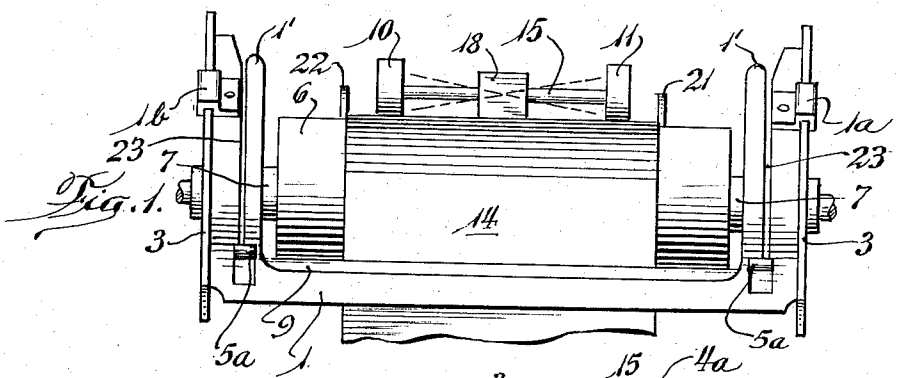


Fig. 2.

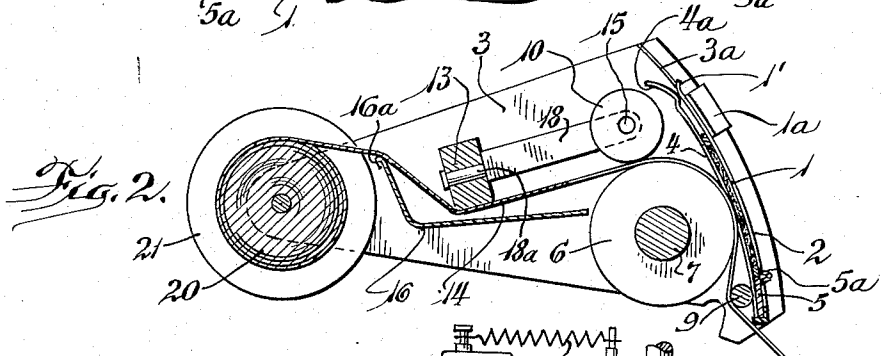
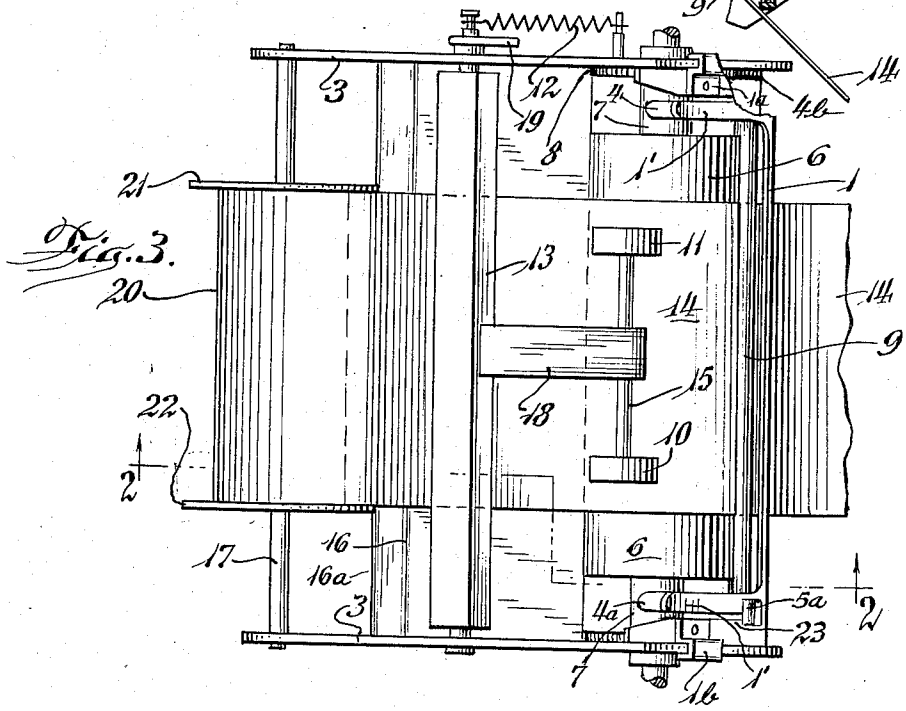


Fig. 3.



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MEANS FOR PREPARING STENCIL CARDS FOR ADDRESSING MACHINES

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Application September 9, 1957, Serial No. 682,704
Claims priority, application Germany September 21, 1956
1 Claim. (Cl. 197—135)

The invention relates to novel and improved means for preparing cards of the type used in addressing machines and the like. More particularly the invention relates to novel and improved means for holding and guiding stencil cards of the type indicated in a typewriter during the imprinting of the cards. Said imprinting may consist of both typing and stenciling.

As is well known, the stencil type cards used in addressing machines ordinarily comprise a fiber stencil inserted in a frame and provided, in addition to the stenciled matter, with a typed caption along an edge of the card to serve for identification, classification, filing or the like. In this description the word imprinting is considered to include both the typed and the stenciled matter, or either of them, as the case may be.

It has been common practice to provide a card of this type with the imprinting while said card is being held in a holder which forms part of an attachment on a typewriter. These known holders have several serious disadvantages which are apt to impair the quality of the product and to cause difficulties and limitations in the imprinting procedure. One of said disadvantages is that the card has been held plane in the holder so that it engages the cylindrical platen practically only along a line while forming air pockets between the card and the cylinder circumference immediately below and above said line of contact. Naturally, such an arrangement fails to provide the proper impact support for the types on the type bars and results in an imprint which is inaccurate and unclear and generally speaking of inferior quality. Another disadvantage is that the known holders are designed to hold cards of one size only so that it has been necessary to use more than one typewriter attachment in the imprinting of cards of varying sizes. The present invention eliminates the abovementioned and other disadvantages associated with known means of the type indicated.

Accordingly, it is an important object of the invention to provide a typewriter attachment of the kind indicated in which the cards are held in a curved condition during the imprinting thereof, the curvature of the card being such that, in conjunction with the yieldability of the card material, it provides for a solid impact support area for the types on the type bars against the cylinder. This makes for a clear and accurate imprint with sharp and even contours.

Another object of the invention is to provide novel and improved means of the character indicated for holding and guiding the cards in a curved condition during the imprinting and during the movement of the cards from one imprint line to another.

A further object of the invention is to provide in a mechanism of the character indicated novel and improved means for accommodating cards of varying size which are reliable and readily insertable and removable without disturbance of other parts of the mechanism.

Other objects and advantages of the invention will be

apparent from the following description in conjunction with the accompanying drawing in which:

Fig. 1 shows a front elevational view of an embodiment of the invention,

Fig. 2 shows a cross-sectional view taken along the line 2—2 in Fig. 3, and

Fig. 3 shows a plan view of the same embodiment as Fig. 1 with a portion broken away to show certain details.

On the cylinder shaft 7 of the typewriter (not shown) from which the regular cylinder has been removed a short cylinder 6 is mounted. At a distance from the ends of said cylinder 6 the shaft 7 carries two side plates 3 in which said shaft 7 is rotatably mounted. The side plates 3 are provided on their inner sides with identical curved grooves 3*a* for slidable accommodation of the end portions of a frame 1 which has secured thereto a pair of clips 1*a*, 1*b* slidably engaging the front edges of the side plates 3, said front edges being curved to extend parallel with the grooves 3*a*. Spacing rods 9 and 17 maintain the side plates 3 in proper parallel relation to each other and said rods 9, 17 also serve other purposes which will be explained below.

The frame 1 is substantially U-shaped with the web portion of the U disposed horizontally at the lower portion of the cylinder 6 and to each leg of the U-shaped frame a member 4 is secured which is substantially blade shaped and extends parallel with the frame 1 at a small distance from the side thereof facing the shaft 7. The distance between the frame 1 and the member 4 is approximately equal to the thickness of a fiber stencil card 2 except towards the upper end where the member 4 has an extension 4*a* in the form of a blade spring tending to engage a corresponding extension 1′ of the frame 1. The extensions 1′ and 4*a* are bent in a direction from each other, as shown. The outer edges of the members 4 are toothed as indicated at 4*b* in Fig. 3 and meshing with gear wheels 8 secured on the shaft 7.

In the side plates 3 a shaft 13 is rotatably mounted, said shaft 13 being polygonal in cross-section and provided at its center with a transverse arm 18 which is rotatably secured to the shaft 13 by means of a pin 18*a*. The arm 18 carries at its free end a transverse shaft 15 on which two rollers 10, 11 are rotatably mounted which are urged towards engagement with the cylinder 6 by means of a spring 12 one end of which is secured eccentrically to the shaft 13 while the other end is secured to the adjacent side plate 3. A lever 19 is secured to the shaft 13 to provide a handle by means of which the rollers 10, 11 may be lifted from the cylinder 6 against the action of the spring 12. A catch plate 16 is secured to the side plates 3 below the shaft 13 and provided with an upstanding rear portion having a smooth edge 16*a*. On the rod 17 a paper roll 20 is rotatably mounted between end plates 21, 22 and the paper strip 14 from said roll 20 extends over the smooth edge 16*a* of the catch plate 16, below the shaft 13, between the cylinder 6 and the rollers 10, 11 and below the rod 9 and the lower edge of the frame 1. The means (not shown) for removing and replacing the paper roll 20 may be of any known kind. Each leg of the U-shaped frame 1 is provided with a longitudinal slot 23 adapted to slidably accommodate the neck of a knob 5*a* on a distance piece 5 which through this means is insertable at the bottom of the space between the frame 1 and the member 4. Distance pieces 5 of varying height may be used in order to support cards 2 of varying height.

In operation, when a stencil card 2 is to be imprinted, said card is inserted between the members 1′ and 4*a* and pushed down until its lower edge engages the bottom of the space between members 1 and 4 or, if distance

pieces 5 are used, until said lower edge of the card 2 engages the upper edge of said distance pieces 5. This insertion of the card is preferably performed with the frame 1 in raised position. With the paper strip 14 in position as described above, the frame 1 is then lowered by proper turning of the cylinder knob (not shown) at either end of the shaft 7, said turning of the shaft 7 causing the lowering of the frame 1 in the grooves 3*a* by the meshing gear wheel 8 and teeth 4*a* on the member 4.

If a caption is to be typed at the top of the card 2, this typing is first performed and thereafter the frame 1 is raised a proper distance to bring the first stenciling line into proper place on the cylinder 6, and so on. The typewriter ribbon (not shown) may, of course, be brought into and out of function by customary well known means as required. The paper strip 14 serves to protect the cylinder surface and it is moved forward and torn off as required. The tiltable mounting of the arm 18 in the shaft 13 ensures that the rollers 10, 11 engage the paper strip 14 with equal pressure. The distance pieces 5, instead of being inserted from above through the slots 23, may be inserted from the vertical edge of members 1 and 4 which would dispense with the need of the slots 23. In this case the knob 5*a* may comprise a side extension on the distance piece 5 folded over the edge of the frame 1 to clamp against the front surface thereof.

While a preferred embodiment of the invention has been shown and described, many modifications thereof may be made by a person skilled in the art without departing from the spirit of the invention, and it is intended to protect by Letters Patent all forms of the invention falling within the scope of the following claim.

What I claim is:

Means for holding and guiding a stencil card in a typewriter during imprinting of said card, comprising a substitute cylinder secured to the cylinder shaft of the typewriter, stationary side plates carried by said cylinder shaft beyond the ends of said substitute cylinder and providing a rotatable mounting for said cylinder shaft, curved grooves in the inner surfaces of said side plates, a frame slidably mounted in said grooves and having a surface of the same curvature as said grooves, means for holding a stencil card against said curved surface of the frame and in engagement with said substitute cylinder, curved gear rack means secured to said frame, gear means secured to said cylinder shaft in meshing engagement with said curved gear rack means whereby rotation of said shaft causes sliding movement of said frame in said grooves to place different areas of said card in engagement with said substitute cylinder, shaft means extending between said side plates in parallel relationship with said cylinder shaft, a roll of paper strip rotatably mounted on said shaft means with the free end portion of the strip extending partly around said substitute cylinder between the circumference thereof and said stencil card, rod means rotatably mounted in said side plates in parallel relationship with said substitute cylinder, a transverse arm connected with said rod means to rotate about the longitudinal axis of said arm and extending towards said substitute cylinder, a roller shaft mounted in said arm transversely thereto, a roller rotatably mounted on each end of said roller shaft for engagement with the paper strip on the substitute cylinder, and spring means connected with said rod means and at least one of said side plates to yieldably urge said rollers against said paper strip on the substitute cylinder.

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