

C. V. OLIVER.
TYPE WRITING MACHINE.

APPLICATION FILED OCT. 8, 1909. RENEWED JUNE 16, 1911.

1,019,077.

Patented Mar. 5, 1912

FIG. 1.

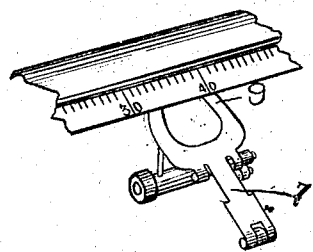


FIG. 2.

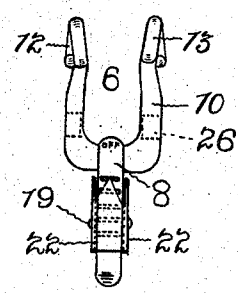


FIG. 3.

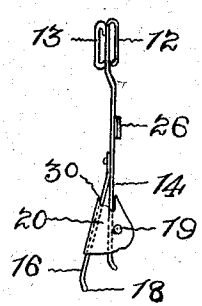


FIG. 4.

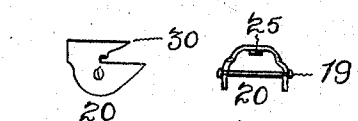


FIG. 4^a.

FIG. 7.

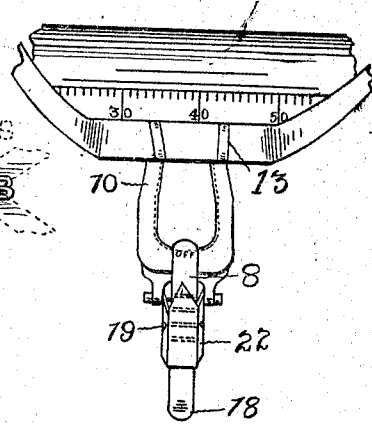
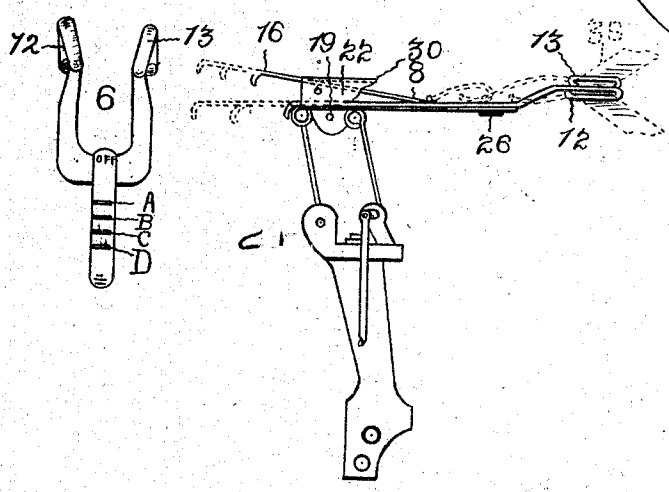


FIG. 5. FIG. 6.



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TYPE-WRITING MACHINE.

1,019,077.

Specification of Letters Patent.

Patented Mar. 5, 1912.

Application filed October 8, 1909, Serial No. 521,774. Renewed June 16, 1911. Serial No. 633,591.

To All whom it may concern:

Be it known that I, CHARLES V. OLIVER, citizen of the United States, residing at West Union, in the county of Fayette and State of Iowa, have invented certain new and useful Improvements in Type-Writing Machines, of which the following is a specification.

My invention is an attachment to the ribbon throw of a typewriter, with special reference to the machine known on the market as the Oliver typewriter, and has for one of its objects to protect the ribbon from direct contact with the type and thus prevent the type from becoming soiled or gummed by direct action on the ribbon.

Another object is to provide means to enable the operator to instantly change the point of contact of the type with the ribbon surface, whereby the entire ribbon surface may be used or a change to different colored ribbons may be instantly made and thereby largely extend the usefulness of the ribbon.

Still another object is to enable the operator to instantly remove the ribbon from any engagement with the type and thereby provide means for the operator to cut stencils without the use of any ribbon and with the clean, bare type.

A further object is to provide an indicator which points out the exact point of contact of the type with the ribbon and at the same time permanently fixes the point of contact on the ribbon at the place as indicated by the pointer or indicator without further adjusting or without changing the original adjustment of the ribbon throw, and also to provide a construction whereby the ribbon may be entirely removed from the printing field by a further adjustment of the ribbon throw.

My invention consists essentially in first removing the arms or ribbon carriers of the usual ribbon throw and then adjustably attaching to this ribbon throw a substitutional ribbon throw or member which grasps the ribbon and ribbon protector, and which by its adjustment may shift the ribbon and ribbon protector to any position desired where they or either of them may be operated upon by the type or removed entirely so that the type cannot be brought in contact either directly or indirectly with either of them.

The following specification when consid-

ered in connection with the accompanying drawings, forming a part hereof will describe and show the manner of construction and mode of operation. Figure 1 is a perspective view of the ribbon throw with the ribbon carriers or loops removed. Fig. 2 is a plan view of the substitutional ribbon throw or member. Fig. 3 is a side view of Fig. 2. Fig. 4 is an end view of the ferrule for adjustably attaching the substitutional ribbon throw to the ribbon throw of the machine. Fig. 4^a is a side elevation of the ferrule shown in Fig. 4. Fig. 5 is a plan view of the substitutional ribbon throw and spring. Fig. 6 is a side view of the substitutional ribbon throw showing some of the different positions in dotted lines attached to the regular ribbon throw. Fig. 7 is a top view of the substitutional ribbon throw attached to the throw of a machine and part of machine when attached.

Like characters of reference denote corresponding parts in each of the figures.

Referring to the drawings the attachment or substitutional ribbon throw 6 consists of a body 8 having the arms 10 and each arm terminating in one or more hooks or loops 12 and 13. Where only the ribbon is used then there will be only loop 12 but where the ribbon protector is used with the ribbon then both the loops 12 and 13 are used. This member 6 has also a handle 14 and on the top of the handle 14 near the arms 10 is securely fastened a spring 16 extending upwardly a short distance beyond the handle 14 and supplied with a thumb piece 18. It is further provided with a number of slots or openings A, B, C, and D, which serve not only to determine the adjustment of the substitutional throw but indicate the position of the adjustment of the ribbon in the line of the stroke of the type. This substitutional ribbon throw 6 is secured to the upper surface of the stubs 9. This attachment is made by attaching a ferrule 20, shown in Figs. 4 and 4^a, around the body of the stubs 9 and fastening it by a bolt 19 to the under side of the body. The throw 6 is further removably and adjustably secured to the stubs 9 by clasps 26 which engage the arms 10 and the stubs 9. The sides 22 of the ferrule 20 are united together at the top or the ferrule is made integral and supplied with a point or indicator 30, which indicates the line of stroke of the type and thus the operator can always know

on what part of the ribbon the type is to strike.

The ferrule is supplied with a pin or wedge 25 projecting down from the under side of the top of the ferrule, and said pin is adapted to engage one of the slots or openings A, B, C, D in the spring 16 and hold the substitutional throw and the ribbon in adjustment. Through this ferrule is inserted the body 8 of the substitutional throw 6 and also the spring 16 bringing one of the holes A, B, C, or D in the spring 16 into engagement with the pin 25 in the ferrule and thus hold the throw 6 from longitudinal movement.

The protective ribbon 36 consists of uninked ribbon preferably made of tissue or fine silk prepared in any convenient manner so that when it contacts with the inked ribbon it will not stain through.

The substitutional ribbon throw is securely fastened to the ribbon throw 2 of the machine and travels with it and is operated by it.

The manner of operating my device is substantially as follows: As hereinbefore stated the loops 4 of the regular ribbon throw are removed leaving the stubs 9 and the body 7. The ferrule 20 is clasped around the body 7 of the ribbon throw 2 and secured by the bolt 19 beneath the body 7, and then the body and the spring of the substitutional ribbon throw 6 are inserted through the upper portion of the ferrule 20 and the pin 25 is brought into engagement with one of the holes A, B, C or D. Then the ribbon is inserted through the loop 12 and the protective tissue 36 is inserted through the loop 13 over the loop 12 and the clasp 26 further secures the arms 10 of the substitutional throw 6 to the stubs 9. Then the operator if he desires to write upon one edge of the ribbon 5 presses down the spring 16 and disengages the pin or wedge 25 from one of the holes A, B, C, or D and moves the member 6 backward or forward as he desires to have the type strike at one or the other edges of the ribbon or at any point on the ribbon or remove it therefrom, and when he has placed it in the position desired he lets go of the spring 16 and the pin 25 engages one of the holes A, B, C, or D and holds the member 6 within the ferrule 20, with the ribbon and protective ribbon in the loops 12 and 13 ready to be thrown to a position where they can be struck by the type at the predetermined part thereof. In this manner the operator can adjust the position where the type is to strike on the ribbon at any place and if he wishes he can entirely remove the ribbon from under the stroke of the type whereby he is enabled to cut stencils. This is done by pressing on the thumb piece 18 of the spring 16, and pulling the member 6 out until the ribbon is entirely removed from under

the position where the type strikes, and the pointer 30 is positioned at the inner end of the spring where it is marked "Off". This is all done without the operator soiling his hands in the least by handling the ribbon to remove it and without changing any adjustment of the original action of the machine. It will be seen that the operator can always tell by the pointer 30 what part of the ribbon the stroke of the type shall be, and also can readily determine when the ribbon is entirely removed from the line of stroke of the type. When the operator desires to prevent the type from striking directly upon the ribbon so that the type will not become gummed or soiled by the ribbon, he inserts in the loops 13 the protective tissue ribbon 36 and attaches it to the ribbon spools of the machine, then this tissue 36 will always be over the ribbon and the type will always strike upon it first, and it will always travel and be operated with the inked ribbon.

It will be seen that this attachment is adapted to be adjusted so that the type may strike anywhere on the ribbon from one side to the other and also protect the ribbon from direct contact with the type and the type from becoming dirty from contact with the ribbon. If it is desired to have the type-writing in different colors then the ribbon may be of different colors longitudinally or ribbons of different colors may be inserted side by side in the loops 12, and one of the letters may be in one color and other letters of the same word in other colors under the tissue in loop 13 which would prevent the type from carrying one color over to the other by direct contact.

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

1. In a device of the character described, and in combination with the ribbon throw of a typewriting machine, a substitutional ribbon throw adjustably secured to the ribbon throw of the machine, and adapted to carry the ribbon and position it upon the line of the stroke of the type, and means secured upon the substitutional ribbon throw to carry a ribbon protector and position it over the ribbon at each throw.

2. In a device of the character described, and in combination with the ribbon throw of a typewriting machine, a substitutional ribbon throw consisting of a body provided with arms and means for grasping and carrying the ribbon, and means engaging the ribbon throw of the machine for adjustably securing the substitutional ribbon throw to the throw of the machine to cause the substitutional throw to travel with the throw of the machine.

3. In a device of the character described, and in combination with the ribbon throw of a typewriting machine, a substitutional

ribbon throw consisting of a body provided with arms, a ribbon guide upon each arm, a spring secured to the body, and means engaging the ribbon throw of the machine and the spring on the body of the substitutional ribbon throw to adjustably secure the substitutional ribbon throw to the throw of the machine.

4. In a device of the character described, and in combination with the ribbon throw of a typewriting machine, a substitutional ribbon throw consisting of a body provided with loops for carrying the ribbon, means for attaching it to the throw of the machine to cause it to travel therewith and be operated thereby, and means for adjusting the substitutional throw on the throw of the machine to place any part of the ribbon in position to be struck by the type or to remove the ribbon from the line of the stroke of the type.

5. In a device of the character described, and in combination with the ribbon throw of a typewriting machine, a substitutional ribbon throw provided with means for carrying the ribbon, a ferrule engaging the throw of the machine and the substitutional throw for securing the substitutional throw to the throw of the machine, and a spring secured to the substitutional throw and adapted to engage the ferrule to adjust the substitutional ribbon throw to position any part of the ribbon to be struck by the type and to remove the ribbon from the line of the stroke of the type.

6. In a device of the character described, and in combination with the ribbon throw of a typewriting machine, a substitutional ribbon throw, means for adjustably securing the substitutional throw to the throw of the machine to cause it to travel with the throw of the machine, a loop carried by the substitutional throw for carrying the ribbon, a ribbon protector, a loop secured to the substitutional throw for carrying the ribbon protector, and means for adjusting the substitutional throw to carry any part of the ribbon with the ribbon protector over the ribbon to a position to be struck by the type and to remove the ribbon and ribbon protector from the line of the stroke of the type.

7. In a device of the character described, and in combination with the ribbon throw of a typewriting machine, a substitutional ribbon throw provided with a body and arms each provided with a loop for carrying the ribbon, a spring secured to the body and provided with openings therethrough, a ferrule for removably securing the substitutional ribbon throw to the throw of the machine, a pointer on said ferrule to designate the position that the type will strike the ribbon at any adjustment and when the ribbon is removed, and means for adjusting the substitutional ribbon throw on the ribbon throw of the machine to cause any part of the ribbon to be positioned in the line of the stroke of the type consisting of a pin in the ferrule adapted to engage an opening in the spring.

8. In a device of the character described and in combination with the ribbon throw of a machine, a ribbon protector, a substitutional ribbon throw removably secured to the throw of the machine to cause it to travel with the throw of the machine, means attached to the substitutional ribbon throw to carry the ribbon and to carry the ribbon protector over the ribbon, means for adjusting the substitutional throw to place the ribbon and ribbon protector in a given position in the line of the stroke from the type or remove them both from contact with the type, and an indicator adapted to travel with the substitutional ribbon throw to designate the position of the ribbon and ribbon protector over the line of the writing.

9. An attachment for typewriting machines comprising a substitutional ribbon throw, adjustable means for attaching said substitutional ribbon throw to the ordinary ribbon throw, said substitutional ribbon throw comprising a body portion, a spring member, arms provided upon said body portion, and multiple ribbon guides carried by each of said arms, substantially as described.

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

CHARLES V. OLIVER.

Witnesses:

C. W. TYKINS,
THOS. LOFTUS.