

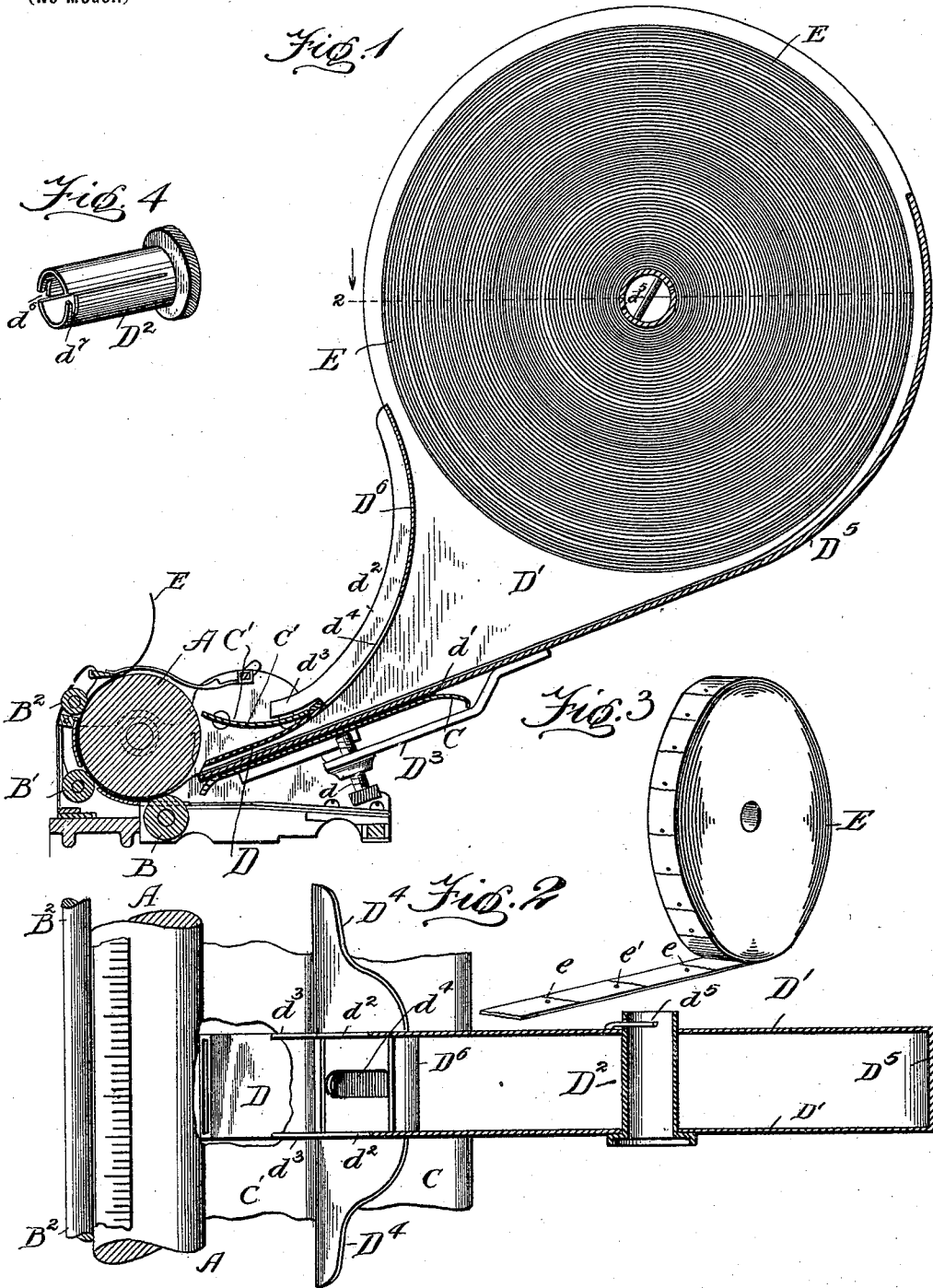
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T. OLIVER.
ATTACHMENT FOR TYPE WRITING MACHINES.

(Application filed Mar. 9, 1898.)

(No Model.)



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UNITED STATES PATENT OFFICE.

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ATTACHMENT FOR TYPE-WRITING MACHINES.

SPECIFICATION forming part of Letters Patent No. 617,350, dated January 10, 1899.

Application filed March 9, 1898. Serial No. 673,168. (No model.)

To all whom it may concern:

Be it known that I, THOMAS OLIVER, of Woodstock, in the county of Kane and State of Illinois, have invented certain new and useful Improvements in Attachments for Type-Writing Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to a novel device for supporting a roll of paper upon a type-writer which is adapted to be fed to the machine as it is unwound from the roll, and refers more specifically to a device of this character adapted to feed to the platen of the type-writing machine a narrow strip of paper which may or may not have been previously divided by weakened lines into a plurality of short sections at any desired point longitudinally of the platen.

The invention consists in the matters hereinafter set forth, and more particularly pointed out in the appended claims.

In the drawings, Figure 1 illustrates my novel device in vertical sectional view as attached to a type-writing machine, the parts of the machine shown being in transverse section. Fig. 2 is a plan section taken on the line 2 2 of Fig. 1. Fig. 3 illustrates a roll of paper used in the holder removed therefrom. Fig. 4 illustrates in perspective view the supporting-pin by means of which the roll of paper is supported in the device.

As shown in said drawings, A designates the platen of the machine, B B' B² presser-rollers by which the paper is maintained in proper position upon the platen, and C C' designate the usual paper-guides, which are attached to the machine in any preferred manner and by which the advance edge of the paper is properly guided between the platen and the first presser-roller B. This particular type of machine has been shown for the purpose of illustrating one practical adaptation of my device to a type-writing machine; but it will be understood that the same may be applied to machines having a platen and presser-rollers otherwise arranged.

My novel roll-support consists, essentially, of a guide D, which when upon the machine

fits closely adjacent to the entrance between the roller-platen A and presser-roller B and in position to accurately guide a strip of paper between the same. Said guide is provided with supporting-arms D', which extend to the rear of the type-writing machine and support, preferably above the level of the machine, a roll of paper E, said supporting-arms being laterally separated and provided with a transverse supporting-pin D², upon which the roll of paper E rests and turns as the paper is fed therefrom. Said device is provided with a clamp D³, by means of which it may be secured to a stationary part of the machine-carriage, and is provided also with transverse brace-arms D⁴D⁴, which are adapted to abut squarely against a part upon said carriage which extends longitudinally of the carriage and by means of which the device is prevented from oscillatory movement with respect to the carriage, and the roll is held with its axis accurately parallel with the platen, so that it will run smoothly from the roll to the platen.

The guide D is herein shown as of tubular form, consisting of connected side, bottom, and top walls. The essential feature of such guide, however, is the side and bottom walls, by means of which the strip of paper carried upon the same will be directed in a straight line under the platen transversely of the same. It is obvious, therefore, that except as a means for connecting the side walls of the guide the top wall may be dispensed with and the bottom wall need not extend uninterruptedly from one side wall to the other. Said guide D extends in a line tangential to the circumference of the platen A and lies closely adjacent at its forward end to the lower part of said platen, so that the course of the paper from said guide to the roller will be nearly in a straight line. The supporting-arms D' are herein shown as made integral with the metal plates forming the sides of the guide D and for convenience are made of circular form at their rear ends to approximate the form and size of the rolls of paper to be used therein, so that they form, in effect, a shield for the paper-roll as well as a support therefor. The lower edges of said supporting-plates are secured together by means of a curved connecting-wall D⁵, which prevents the paper from

dropping away from its support when the roll is for any reason rotated faster than it is being fed to the machine. Said wall D^4 also serves to connect the lower edges of the plates rigidly together and to form a more rigid structure as a whole. Said connecting-wall D^5 in the present instance is made integral with and constitutes a continuation of the bottom wall of the outlet or guide D.

In the present instance the device is clamped to the lower rearwardly-extending paper-guide C of the type-writing machine, said bottom wall of the guide resting on top of the paper-guide and the clamp being provided with a clamping-screw d , which impinges upon the lower surface of said paper-guide C, and thereby secures the device rigidly in place upon said guide. In order to prevent the bottom wall of said guide from marring the upper surface of said paper-guide C, a cushioning-pad d' , of felt or the like, will be interposed between the proximate faces of said parts. The strip of paper forming the roll E is of considerably less width than the length of the platen-roller A, so that said device may be clamped opposite to any portion of the roller desired or found most convenient with reference to the mechanism of the particular machine upon which the device is used. The stops which control the movement of the carriage will conveniently be set to correspond with the position of the device upon the machine in a familiar manner. By shifting the paper-holder longitudinally of the platen constant wear on one part of the said platen at one spot is prevented. As herein shown, the transverse brace-arms D^4 abut against the rear edge of the upper paper-guide C' to prevent oscillatory or lateral movement of the paper-supporting roll with respect to the paper-guide C. As above stated, however, said transverse brace-arms may coact with any longitudinally-arranged portion of the machine-carriage for the purpose described. Said brace-arms are made to extend some distance beyond the supporting-arms, so as to distribute the side strain of the device over a large portion of the guide C' or other part and to thereby hold the device more rigidly upon the carriage.

In order to provide means for guiding the paper strip after it has passed the platen and has received the impression of the type characters thereon, a curved wall D^6 is formed in the forward portion of the device between the guide D and that portion of the supporting-plate engaged by the roll-supporting pin D^2 . The supporting-plates on either side of said curved upper wall D^6 are extended a short distance beyond said wall to form guide-flanges d^2 , which project at their lower ends over the upper paper-guide C' , as herein shown, or other equivalent part of the machine in the form of guide-prongs d^3 . The free end of the strip E after it has received the impressions from the type characters will pass upwardly over the guide-surfaces formed

by said curved wall D^6 and flanges d^2 . In order to facilitate the feeding of the strip of paper E through the guide D in the first instance, said curved guide-wall D^6 will be provided with an oblong opening d^4 , through which a suitable instrument may be inserted to force through the guide the advance end of the strip.

As a further and separate improvement and to provide means for detachably holding the roll-supporting pin D^2 in place upon the supporting-plates D' said plates are provided with opposite circular apertures, through which the pin D^2 , which is of cylindrical form, passes, and across one of said apertures is placed a locking-pin d^5 , which is rigidly secured to the plate on opposite sides of said aperture by soldering or otherwise. The supporting-pin D^2 will preferably be made of tubular construction and is provided at diametrically opposite points in that end opposite its head with slots d^6 , extending parallel with the central axis of the pin. Said slots open at their inner ends into other slots d^7 , which extend circumferentially of the pin and in opposite directions with relation to each other. In order to lock the device, the pin is inserted into place with the recess d^6 engaging the locking-pin d^5 , after which the pin is rotated in the proper direction to carry the circumferential recesses d^7 into engagement with the pin. At this time that portion of the wall of the pin between said circumferential recesses and the outer end of the pin will prevent the same from being withdrawn endwise until it has been rotated in a reverse direction to carry the recesses d^8 opposite the locking-pin.

The device herein illustrated and described may be used wherever it is desired to print characters by the use of an ordinary type-writing machine upon a relatively narrow strip of paper. Said device, as it is capable of being adjusted or shifted to any convenient point along the length of the carriage or platen thereof, may be adapted to any machine without any change in the organization thereof. The roll of paper shown in Fig. 3 is provided at regular points in the length thereof with weakened lines e , at which point the sections bounded thereby are adapted to be torn from the strip and to be used in the form of small tags for any purpose desired. Each of the sections of said strip are shown as provided with a perforation e' , by which it may be conveniently supported upon a filing-pin or the like after it has been printed upon by the machine and has been detached from the main body of the strip E.

I claim as my invention—

1. An attachment for the purpose set forth comprising a guide for the paper strip, supporting arms or plates for a paper-roll, a clamp for affixing the attachment to a paper-carriage and transverse brace-arms adapted to engage a longitudinal part of said carriage.

2. An attachment for the purpose set forth

comprising a guide for the paper strip, supporting arms or plates for a paper-roll, a clamp on the lower surface of the paper-guide for affixing the attachment to the lower guide-plate of the machine and transverse brace-arms located above the paper-guide in position to engage the rear edge of the upper guide-plate of the machine.

3. An attachment for the purpose set forth comprising a guide for the paper strip, supporting arms or plates for a paper-roll, a clamp attached to the lower surface of the guide for affixing the attachment to the lower guide-plate of the machine and transverse brace-arms located above the paper-guide and adapted to engage the rear edge of the upper guide-plate of the machine, said supporting arms or plates being provided adjacent to the paper-guide with upwardly and rearwardly curved guide edges d^2 .

4. An attachment for the purpose set forth comprising a tubular guide for the paper strip, supporting arms or plates for a paper-roll made integral with and forming a rearward continuation of the side walls of the tubular guide, a clamp device attached to the bottom of the tubular guide, transverse brace-arms secured to and projecting over said supporting arms or plates and guide-arms d^3 extending from said supporting arms or plates forward of the brace-arms in position to pass over the guide-plate of the machine.

5. The combination with the platen of a type-writing machine and a rearwardly-ex-

tending paper-guide, of an attachment for the purpose set forth comprising a guide for a paper strip extending at its forward end to a point adjacent to said platen, supporting arms or plates extending rearwardly from said guide, a pin extending between the same for supporting a roll of paper, means for clamping the attachment to said rearwardly-extending paper-guide, and transverse brace-arms adapted to engage a longitudinally-extending part of the carriage.

6. An attachment for the purpose set forth comprising a guide for the paper strip and supporting arms or plates for a paper-roll provided with oppositely-arranged apertures, a tubular supporting-pin for the paper-roll mounted in said apertures, and a locking-pin affixed permanently to one of said plates and extending across the aperture therein, said supporting-pin being provided in its end adjacent to said last-mentioned aperture with oppositely-arranged inwardly-directed recesses which open at their inner ends into circumferentially-arranged and oppositely-extending recesses.

In testimony that I claim the foregoing as my invention I affix my signature, in presence of two witnesses, this 4th day of March, A. D. 1898.

THOMAS OLIVER.

Witnesses :

TAYLOR E. BROWN,
W. A. WHITEHEAD.