July 14, 1931. G. C. FRANTZ 1,814,142

TYPEWRITER ATTACHMENT

Filed March 14, 1928 2 Sheets-Sheet 1

Fig. 1.

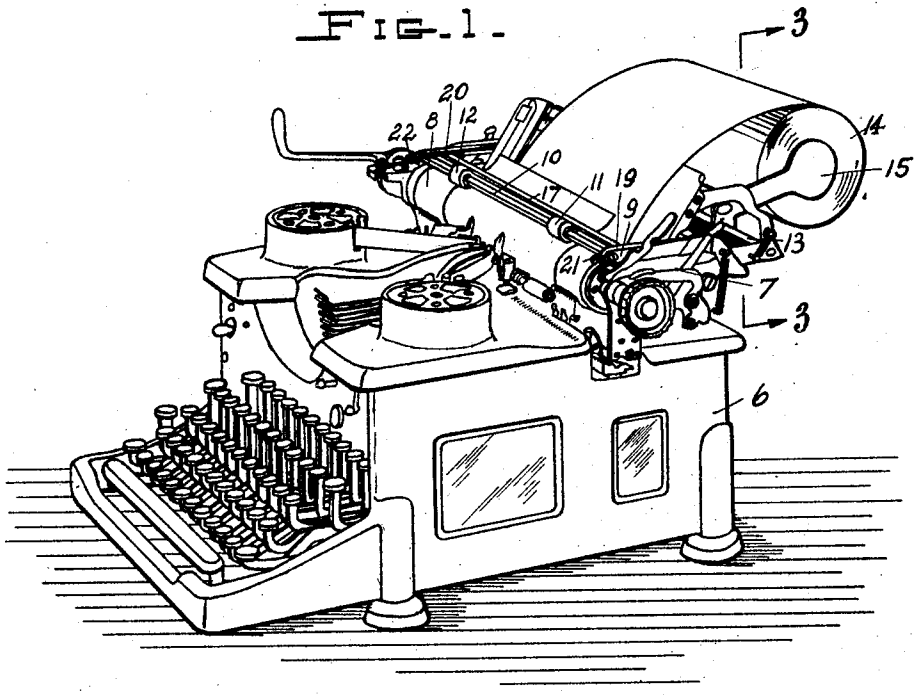
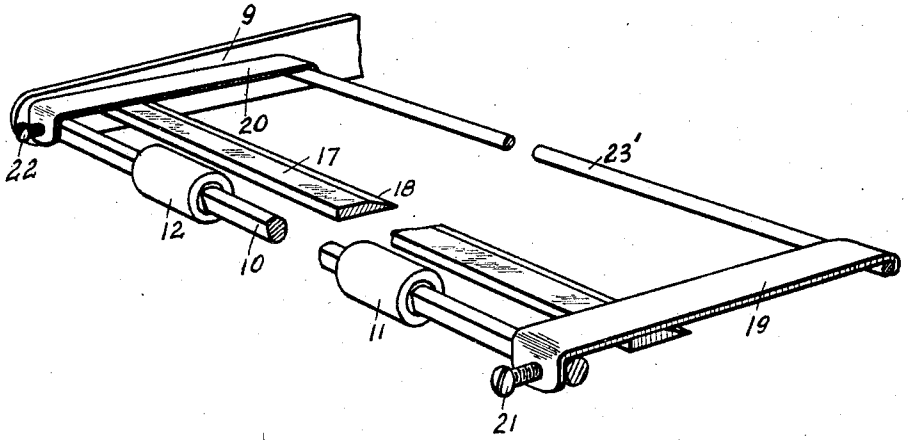


Fig. 2.



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TYPEWRITER ATTACHMENT

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FIG. 3.

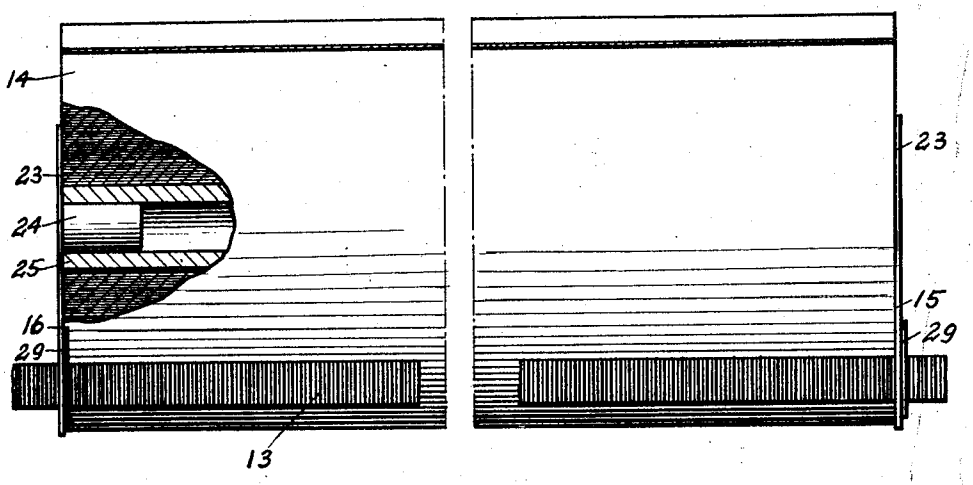


FIG. 4.

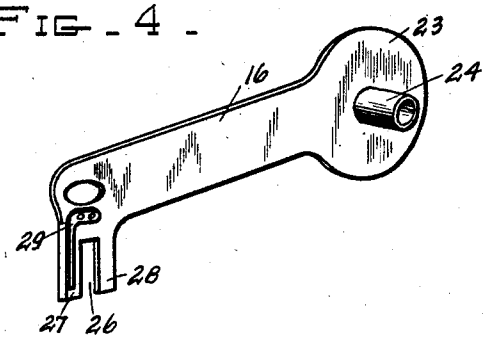
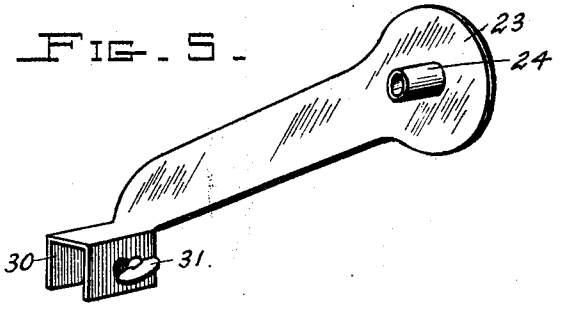


FIG. 5.



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UNITED STATES PATENT OFFICE

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TYPEWRITER ATTACHMENT

Application filed March 14, 1928. Serial No. 261,477.

My invention relates to typewriters, and more particularly to a paper roll holding and paper severing attachment for the same.

One object of my invention is to provide an attachment for typewriters adapted to hold a roll of paper in position for constant or intermittent use.

Another object is to provide an attachment which will sever the paper after it has been written on and at any desired length.

Another object is to provide a paper roll holding attachment which is adjustable, so as to hold rolls of varying widths.

Another feature is the provision of such an attachment which can be quickly and easily mounted on a typewriter without changing any of its parts, and which does not interfere with the normal operation of the same.

Still another object is to provide such an attachment which is simple in construction, and efficient in use.

The invention comprises a typewriter paper carriage, the combination with a platen and paper feeding means, together with means for rotatably supporting a roll of paper, and means for severing the paper at any desired point attached to the typewriter.

The invention comprises a pair of separate arms adjustable along a bar or other suitable support on a typewriter and having means for supporting a roll of paper together with means mountable on the typewriter for severing the paper in various convenient lengths after it has been typed upon. The supporting arms may be provided with a channeled portion adapted to snugly fit the bar in question and means associated therewith for clamping the arms in any position of adjustment.

The supporting means for the roll may be attached to the opposite end of the arms projecting toward each other and constituting pivots on which the roll may be rotatably mounted. The severing means of the paper may be in the nature of a knife extending transversely of the machine, rearwardly of the platen and slightly above the same. The knife may be supported by bars constructed so as to be supported and removably attached to certain structure of the machine as to the pressure roller rod and the connecting rod. These bars may have hooks at their ends taking over these rods and an adjusting screw for holding them securely to the bars.

Referring to the drawings,

Figure 1 is a perspective view of a typewriter having an embodiment of my invention applied thereto.

Figure 2 is a perspective view, partly broken away, of the part of the paper carriage which has the paper severing means of my invention mounted thereon.

Figure 3 is a fragmentary sectional view, partly broken away, and taken as indicated by the arrows on line 3—3 of Figure 1.

Figure 4 is a perspective view of a paper roll supporting arm.

Figure 5 is a perspective view of a modified form of paper roll supporting arm.

The typewriter 6 is of a conventional type, and has a paper carriage 7 having a platen roller 8, a swingable pressure roll frame 9, on whose front connecting rod 10 are rotatably mounted two rubber pressure rollers 11 and 12. At the rear of the paper carriage is a vertically grooved bar 13 to which the tabulating spacers or stops are secured.

The parts so far described are old and common to all modern typewriters, and form no part of my invention.

The embodiment of my invention illustrated, comprises a paper roll 14 mounted on the grooved bar 13 by means of supporting arms 15 and 16. A flat metallic bar 17 having a cutting edge 18 has two cross bars 19 and 20 secured to its ends. These bars are curved at one end and bent at right angles at the other end and have screws 21 and 22 threaded therethrough. The curved end of these bars takes over the cylindrical connecting rod 23′ at the rear of the pressure roll frame 9, and the front part takes over the front connecting rod 10, the screws 21 and 22 serving as a securing means. This places the bar 17 slightly above the platen.

The supporting arms 15 and 16 are formed of flat material and are alike in construction but of opposite hand. Each arm has an

enlarged circular part 23 which bears against the paper roll with sufficient pressure to prevent it from spinning when paper is being drawn therefrom. A short tubular part 24 is secured to the center of the circular part 23 and extends into the wooden core or roller 25 on which the paper is wound. The other end of each supporting arm is cut away at 26 to form two prongs 27 and 28, the inner edges of which fit into the grooves of the bar 13. A leaf spring 29 is secured to one side of the plate as shown, and presses against the bar 13 intermediate the grooves so as to steady the arm and hold it against displacement.

In the form shown in Figure 5, a U-shaped plate 30 integrally formed with the arm and having a set screw 31 threaded through one side, serves as a clamping means for securing the arm to the bar 13.

The supporting arms are mounted at the ends of the bar 13 and do not interfere with the tabulating spacers.

In use, the paper from the roll passes under and around the platen roller 8, then under the pressure rollers 11 and 12, and beneath the cutting bar 17. Of course if desired, one or more additional sheets of paper having carbons between them can be inserted at the same time. To cut the paper from the roll at any particular place, it is merely necessary to pull the free end which extends beyond the bar 17 into engagement with the cutting edge 18 and tear it off.

The paper rolls used may be the standard staple rolls which are of varying widths and which are used on ticker machines, adding machines and the like, or they may be of special make with vari-colored paper which is lined or otherwise marked or printed, to suit any special purpose for which it may be used.

The use of a roll of paper in the manner described is especially advantageous for general office work such as writing memoranda, notes, letters, making lists of material, etc., or for writers in preparing manuscripts, or for schools, and for practice work when teaching typewriting, and for many other purposes.

The attachment does not interfere with the normal operation of the machine. It is merely necessary to turn back the paper and let it hang over the roll when the machine is to be used for special work, such as addressing envelopes, etc.

The attachment shown and described may be changed and modified so to be adapted to other forms of typewriters without departing from the invention herein set forth and hereafter claimed.

I claim:—

1. The combination with a typewriter embodying a bar having spaced throughout its length pairs of grooves alined upon opposite sides, a pair of arms having each an angularly disposed offset at one end with a cut out providing prongs appropriately spaced and proportioned to fit slidably into any one pair of grooves and trunnions carried at the ends of the arms opposite said prongs.

2. The combination with a typewriter embodying a bar having spaced throughout its length pairs of grooves alined upon opposite sides, a pair of arms having each an angularly disposed offset at one end with a cut out providing prongs appropriately spaced and proportioned to fit slidably into any one pair of grooves, means to lock the prongs in said grooves and trunnions carried at the ends of the arm opposite said prongs.

3. The combination with a typewriter embodying a bar having spaced throughout its length pairs of grooves alined upon opposite sides, a pair of arms having each an angularly disposed offset at one end with a cut out providing prongs appropriately spaced and proportioned to fit slidably into any one pair of grooves, friction disks at the ends of the arms opposite the prongs and trunnions carried by the friction disks.

4. The combination with a typewriter embodying a bar having spaced throughout its length pairs of grooves alined upon opposite sides, a pair of arms having each an angularly disposed offset at one end with a cut out providing prongs appropriately spaced and proportioned to fit slidably into any one pair of grooves, friction disks at the ends of the arms opposite the prongs and trunnions carried by the disks in axial alinement.

5. The combination with a typewriter embodying a bar having spaced throughout its length pairs of grooves alined upon opposite sides, a pair of arms having each an angularly disposed offset at one end with a cut out providing prongs appropriately spaced and proportioned to fit slidably into any one pair of grooves, means to lock the prongs in said grooves, friction disks at the ends of the arms opposite the prongs and proximately directed trunnions carried by the disks.

In testimony whereof I have signed my name to this specification.

GROVER C. FRANTZ.