A. F. McCULLEY.

PAPER ROLL ATTACHMENT FOR TYPE WRITERS.

APPLICATION FILED AUG. 13, 1907.

938,885.

Patented Nov. 2, 1909.

2 SHEETS—SHEET 1.

FIG. 1.

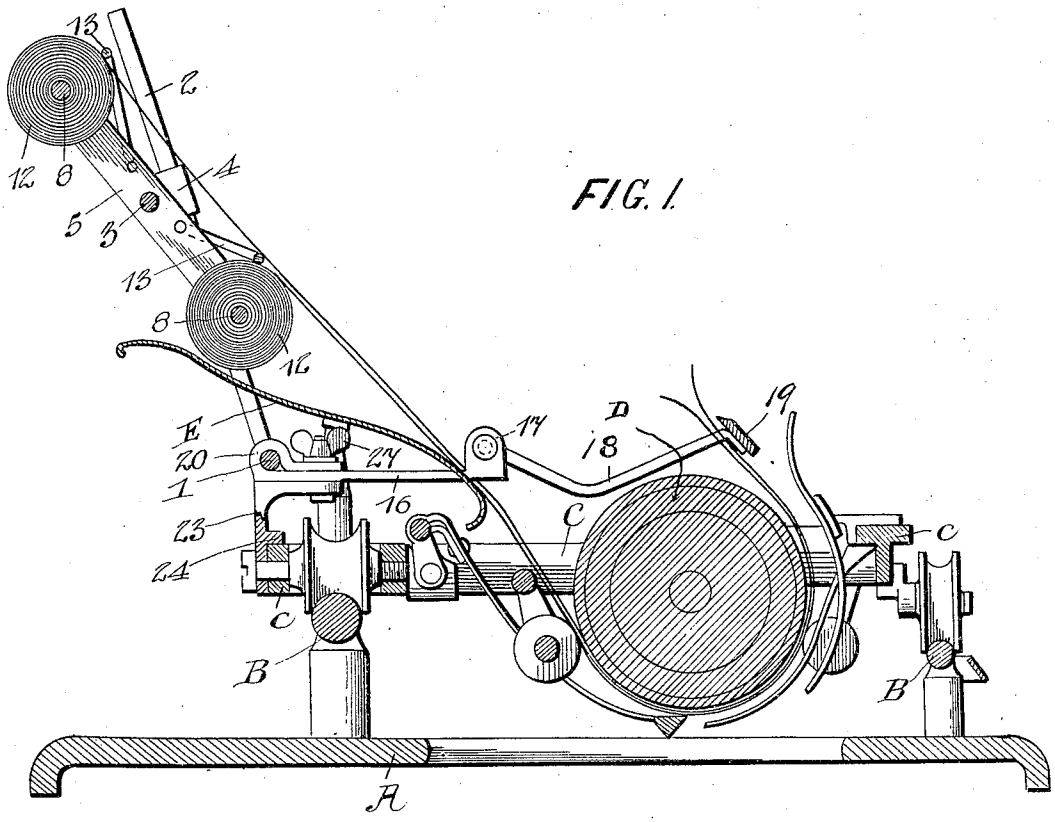


FIG. 2.

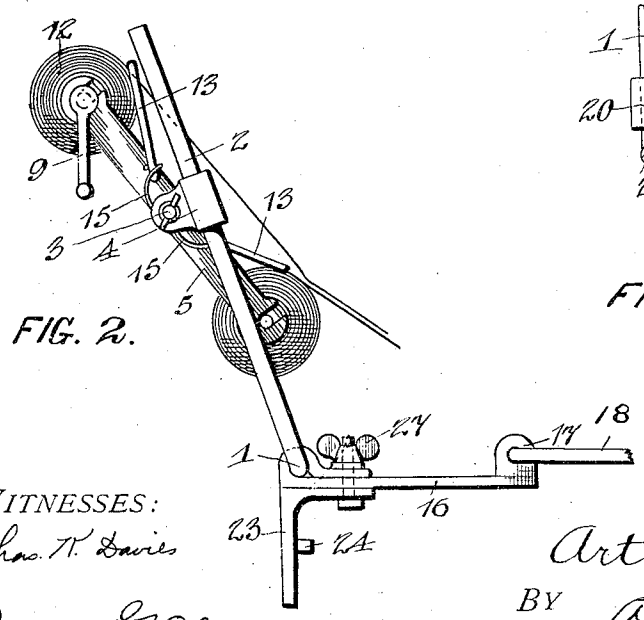


FIG. 3.

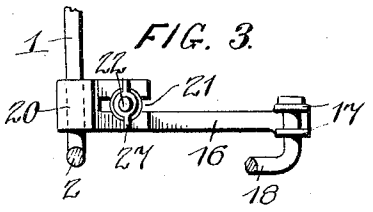
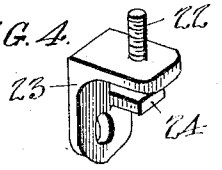


FIG. 4.



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2 SHEETS—SHEET 2.

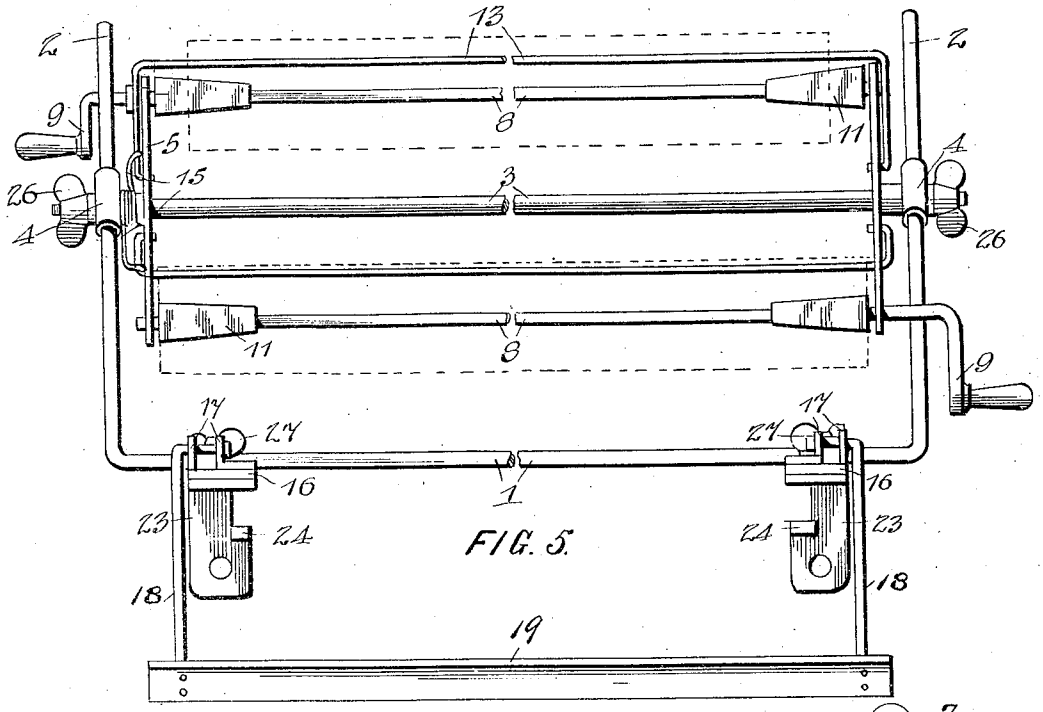


FIG. 5.

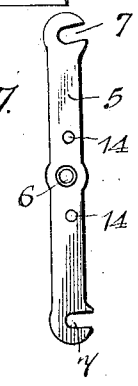


FIG. 7.

FIG. 6.

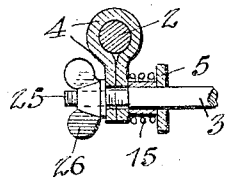
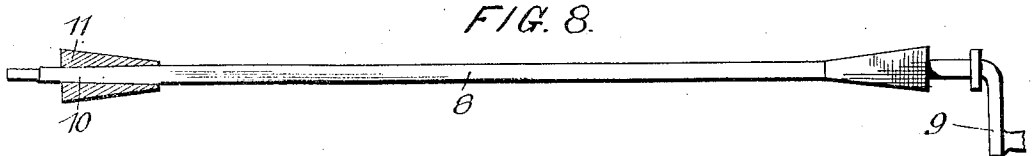


FIG. 8.



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UNITED STATES PATENT OFFICE.

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PAPER-ROLL ATTACHMENT FOR TYPE-WRITERS.

938,885. Specification of Letters Patent. Patented Nov. 2, 1909.

Application filed August 13, 1907. Serial No. 388,381.

To all whom it may concern:

Be it known that I, ARTHUR F. McCULLEY, a citizen of the United States, residing at Frisco, in the county of Beaver and State of Utah, have invented certain new and useful Improvements in Paper-Roll Attachments for Type-Writers, of which the following is a specification.

My invention relates to typewriter attachments and particularly contemplates the provision of a paper roll carrying and operating mechanism, for feeding forward both the first sheet and carbon sheet to the platen, together with suitable means for quickly cutting the paper.

Further my invention resides in the following features of construction, arrangement and operation as will be hereinafter described with reference to the accompanying drawing, in which like characters are used to indicate like products throughout the several figures, and in which—

Figure 1 is a vertical sectional view through the upper portion of the typewriter showing my improvements attached thereto. Fig. 2 is an end elevation of my improved mechanism. Fig. 3 is a fragmentary plan view of a connection to be hereinafter described. Fig. 4 is a perspective view of one of the brackets for attaching my improved mechanism to the typewriter carriage. Fig. 5 is a front elevation of my improved mechanism. Fig. 6 is a detail sectional view of parts to be hereinafter specifically refered to. Fig. 7 is an elevation of one of the paper roll brackets, and Fig. 8 is an elevation, part in section of one of the roll holding shafts.

Referring to the accompanying drawing A represents the top frame of a typewriter provided with the usual carriage rolls B on which is mounted the carriage C. The carriage C as usual, comprises a frame composed of suitable bars *c* supporting within themselves the platen D.

In the practical embodiment of my invention I employ a U shaped supporting frame 1 having arranged between the upstanding legs 2 thereof, a central shaft 3 in adjustable bearings 4. The paper roll brackets 5 are pivotally mounted by means of single apertures 6 upon the shaft 3 adjacent each leg 2 of the supporting frame and having recesses 7 at each end thereof for the reception of the paper roll shafts 8 removably therein, each of said paper roll shafts 8 having a handle 9 on one end thereof on a tapered end 10 adapted to receive thereon a tapering conical sleeve 11 for securely holding the paper roll 12. The paper rolls 12 are preferably provided with U shaped rod frames 13 extending from openings 14 in the roll brackets 5 adjacent their central openings 6 and pressed tightly against said paper rolls 12 to prevent the paper from unrolling, by means of springs 15 extending from and coiled about the central shaft 3 at one end thereof between the bracket 5 and its bearing 4.

The rolls 12, as shown are arranged to feed the paper therefrom in superposed layers, between which a carbon may be inserted, over the rear end shield of the typewriter and beneath and around the platen D, the supporting frame 1 being adjustably held within the ends of horizontally extending frames 16 between which the paper is fed from rolls 12. The frames 16 carry at their forward ends in bearings 17, the outwardly extending curved supporting rods 18 having the cutter bar 19 secured at the ends thereof and adapted to lay above the platen D in position to readily sever the paper when the same has been projected upwardly by the rotative movement of said platen to present the desired point to be cut against said cutter bar 19 as clearly shown in Fig. 1. The frames 16 are further formed at their rear ends with a widened portion bent back upon itself to form a clipped heading for the reception of the supporting frame 1, said widened portion being provided with alined rests 21 offset from its frame 16 and adapted to receive therein a threaded stud 22 upstanding from brackets 23 designed to be attached to a rear member 1 of the carriage C of the typewriter, and provided that the outstanding legs 24 are adapted to rest upon said member C as shown, to steady the entire mechanism.

I do not wish to limit myself with the specific manner of attaching my improvements to a typewriter as herein shown and described, for the reason that the same may be attached to other typewriters by a slight change well within the spirit of this invention, inasmuch as the several elements are readily adjustable, particularly the main supporting frame 1 within the clips 20 and the roll holding brackets and their central shafts 3 upon the legs 2 of the supporting frame by means of the bearings 4, mounted

about said legs 2 and through which the threaded ends 25 of said shaft project and receive the adjusting thumb screws 26. Similar thumb screws 27 are adapted to be screwed upon the upstanding studs 22 within the recesses 21 when the frames 16 are secured by means of the brackets 23 to the typewriter carriage.

Having thus fully described my invention, I claim:

1. In a device of the character described, a supporting frame consisting of a single U-shaped rod adapted to be detachably secured to the carriage of a typewriter and entirely supported by said carriage, of a shaft detachably secured to said supporting frame and carrying brackets swingingly mounted thereon, said brackets carrying paper rolls, substantially as and for the purpose described.

2. In a device of the character described, a supporting frame consisting of a rod having upstanding portions, said rod being adapted to be secured to the carriage of a typewriter and entirely supported by said carriage, and means arranged on said supporting frame for carrying paper rolls, substantially as and for the purpose described.

3. In a device of the character described, a supporting frame consisting of a single U-shaped rod adapted to be detachably and adjustably secured to the carriage of a typewriter and entirely supported by said carriage, of a shaft detachably and adjustably secured to said supporting frame and carrying brackets swingingly mounted thereon, said brackets carrying paper rolls detachably secured thereto, substantially as and for the purpose described.

4. In a device of the character described, a supporting frame consisting of a single U-shaped rod adapted to be detachably secured to the carriage of a typewriter and solely supported by said carriage, of a shaft detachably secured to said supporting frame and carrying brackets swingingly mounted thereon, said brackets carrying paper rolls, and substantially U-shaped rods arranged to engage said paper rolls, and means carried by said shaft for pressing said U-shaped rods against said paper rolls, substantially as and for the purpose described.

5. In a device of the character described, a supporting frame consisting of a single U-shaped rod adapted to be detachably secured to the carriage of a typewriter and entirely supported by said carriage, of a shaft detachably secured to said supporting frame and carrying brackets swingingly mounted thereon, said brackets carrying paper rolls, means for connecting said supporting frame to said carriage, said means consisting of L-shaped members, each of said L-shaped members having the lower portion of the vertical portion thereof provided with a shoulder and an aperture, the horizontal portion of each of said L-shaped members being provided with an adjustable clamp at one extremity thereof, said clamp being adapted to engage said supporting frame, pivotally connected at the other extremity thereof to a supporting means carrying a knife, substantially as and for the purpose described.

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

ARTHUR F. McCULLEY.

Witnesses:

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GEORGE T. SMITH.