Apr. 24, 1923. 1,452,822

J. H. ANANSON

ATTACHMENT FOR TYPEWRITING MACHINES

Filed Jan. 21, 1922

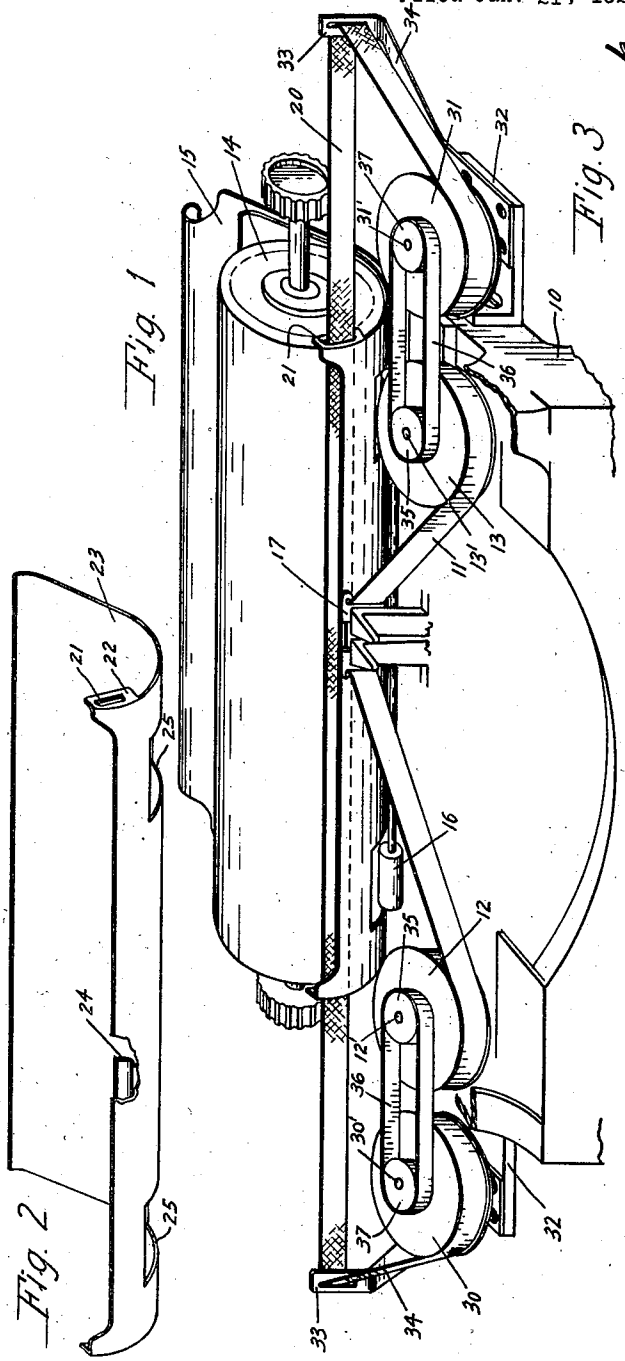


Fig. 1

Fig. 2

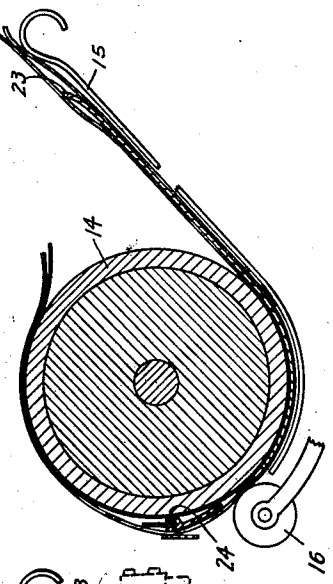


Fig. 3

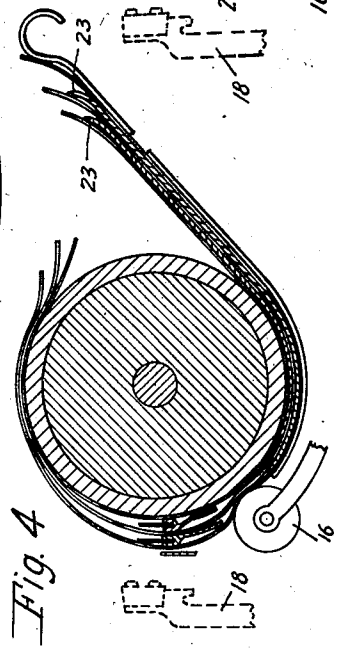


Fig. 4

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UNITED STATES PATENT OFFICE.

JOHN H. ANANSON, OF STIRLING, NEW JERSEY.

ATTACHMENT FOR TYPEWRITING MACHINES.

Application filed January 21, 1922. Serial No. 530,766.

To all whom it may concern:

Be it known that I, JOHN H. ANANSON, a citizen of the United States, and a resident of Stirling, county of Morris, and State of New Jersey, have invented certain new and useful Improvements in Attachments for Typewriting Machines, of which the following is a specification.

This invention relates to typewriting machines and particularly to an attachment for such machines.

One of the objects of the invention is to provide simple, practical and effective means for simultaneously making a plurality of original typewritten copies.

Another object of the invention is to provide a device for making a plurality of typewritten copies adapted to be attached to any of the standard typewriting machines.

Another object of the invention is to provide an auxiliary ink ribbon attachment for typewriting machines whereby a plurality of original typewritten copies may be made simultaneously and to provide means for guiding the additional sheets of paper to their proper positions with respect to the auxiliary or supplemental ribbons.

Further objects of the invention will appear from the following specification taken in connection with the drawings which form a part of this application and in which—

Fig. 1 is a perspective view of a portion of a typewriting machine having my auxiliary ribbon attachment mounted thereon.

Fig. 2 is a perspective view of the paper guiding and auxiliary ink ribbon guiding plate or member.

Fig. 3 is a transverse sectional elevation taken through the paper feed roll and paper guiding members, and

Fig. 4 is a sectional elevation similar to Fig. 3 but illustrating a plurality of auxiliary ink ribbon supporting and guiding members.

The invention, briefly described, comprises a member adapted to be supported on the feed carriage of a standard typewriter and having means for supporting an auxiliary ink ribbon adjacent the usual ink ribbon and in proper operative position with respect to the type bars and further having means for guiding an additional sheet of paper to the proper position in the rear of the auxiliary ribbon.

Referring to the drawings, I have shown a portion 10 of the frame of a typewriter of standard make having the usual ink ribbon 11 mounted thereon and carried by spools 12 and 13 also supported on the frame 10.

Upon the frame 10 is mounted the usual paper feed carriage upon which is supported the paper feed roll or platen 14, paper shelf or guiding member 15 and pressure rollers 16 for pressing the paper against the feed roll.

The ink ribbon 11 is guided through an intermediate vibrator 17 in front of the platen or feed roll and is adapted to be engaged by the selected type bar 18 in the usual manner. The ribbon 11 is fed from one spool to the other by any desired feeding mechanism as the carriage moves across the frame of the machine.

In order to obtain an additional original copy an auxiliary ink ribbon 20 is supported in the rear of the ink ribbon 11 and the auxiliary ribbon is mounted in slots 21 formed in lugs 22 secured to or formed integral with a thin paper and ribbon guiding plate or member 23. A longitudinal strip 24 is formed on or secured to the plate 23 along the front edge thereof and extends throughout the length of the plate to support the auxiliary ribbon 20 and prevent the sheet of paper in the rear thereof from engaging the ribbon. The plate 23 has formed therein openings 25 to permit the passage of the pressure rolls 16 therethrough, thereby insuring the proper feeding of the paper by the feed roll. From the showing in Fig. 1, it will be noted that the auxiliary ink ribbon 20 is supported slightly above the normal or inoperative position of the ink ribbon 11 but in the type of machine described it will be understood that the ink ribbon 11 is raised upon each actuation of a type bar so that when the type bar engages the ribbon 11, this ribbon is disposed substantially in front of and in registration with the operative portion of the auxiliary ribbon 20.

The auxiliary ribbon 20 is carried by spools 30 and 31 supported on brackets 32 attached by screws or other suitable securing means to the frame 10 of the machine. From the spools 30 and 31 the ribbon is guided through slots 33 in stationary guide arms 34 carried by the brackets 32. As clearly shown in Fig. 1 this method of guiding the ribbon 20 provides a sufficient length of ribbon between the slots 33 and

the brackets 34 to permit the usual reciprocation of the paper feed carriage and during each operation the straight portion of the ribbon 20 will pass through the slots 21 in the plate 23.

Any suitable form of drive for the auxiliary ribbon spools 30 and 31 may be provided and in the form of the invention illustrated the spools 12 and 13 have secured thereto or to their spindles 12′ and 13′ sheaves or pulleys 35 and these pulleys are connected by belts 36 to corresponding pulleys 37 mounted on the auxiliary spools 30 and 31 or on the spindles 30′ and 31′ thereof.

It will be understood that additional plates 23 for supporting and guiding additional sheets of paper and additional ink ribbons may be used if desired and in Fig. 4 a pair of these plates is illustrated.

It is believed that the operation of the auxiliary ink ribbon attachment will be clear from the above description but this operation may be briefly described as follows. The first sheet of paper or strip of paper is fed into the machine and around the feed roll 14 in the usual manner being guided by the shelf 15. In using the attachment, however, an additional sheet will at the same time be inserted upon the plate 23 and will be simultaneously fed to a position in the rear of the auxiliary ink ribbon 20. The plate 23 therefore positively assures the proper positioning of the additional sheet of paper with reference to the auxiliary ink ribbon. If desired, the auxiliary ribbon 20 may be inked on only one side to prevent the copy from being printed on the back side of the front sheet of paper or in order to prevent this an additional sheet may be inserted in back of the front sheet.

It will be understood from the above specification that the device may be readily and quickly attached to any of the standard typewriting machines and it will also be evident that very few additional parts are necessary to obtain the desired results.

Although one specific embodiment of the invention has been particularly shown and described, it will be understood that the invention is capable of modification and that changes in the construction and in the arrangement of the various cooperating parts may be made without departing from the spirit or scope of the invention as expressed in the following claims.

What I claim is:

1. In a typewriting machine having a frame, a paper feed carriage and feed roll thereon, ribbon spools supported on said frame and having an ink ribbon thereon, a second set of ribbon spools on said frame operatively connected to said first named spools and having an auxiliary ink ribbon thereon, means for supporting said auxiliary ribbon in the rear of said first ribbon, and means on said frame, disposed beyond the limits of travel of said carriage and in alinement with said auxiliary ribbon supporting means for supporting a length of auxiliary ribbon beyond the ends of the carriage.

2. In a typewriting machine having a frame, the combination with the paper feed carriage and usual feed roll, pressure rolls for pressing the paper thereagainst, an ink ribbon, of a duplicate ribbon attachment comprising a curved paper guiding and auxiliary ribbon supporting plate adapted to be positioned against the feed roll, and means for guiding the auxiliary ribbon to positions substantially in alinement with the supporting plate, said means being supported from the machine frame and located beyond the limits of travel of the carriage.

3. In a typewriting machine having a frame, the combination with the paper feed carriage and usual feed roll, pressure rolls for pressing the paper thereagainst, and ink ribbon, of a duplicate ribbon attachment comprising a curved paper guiding and auxiliary ribbon supporting plate adapted to be positioned adjacent the feed roll, and having openings to permit the passage of the pressure rolls, and means for guiding the auxiliary ribbon to positions substantially in alinement with the supporting plate, said means being supported from the machine frame and located beyond the limits of travel of the carriage.

In witness whereof, I have hereunto set my hand this 19th day of January, 1922.

JOHN H. ANANSON.