

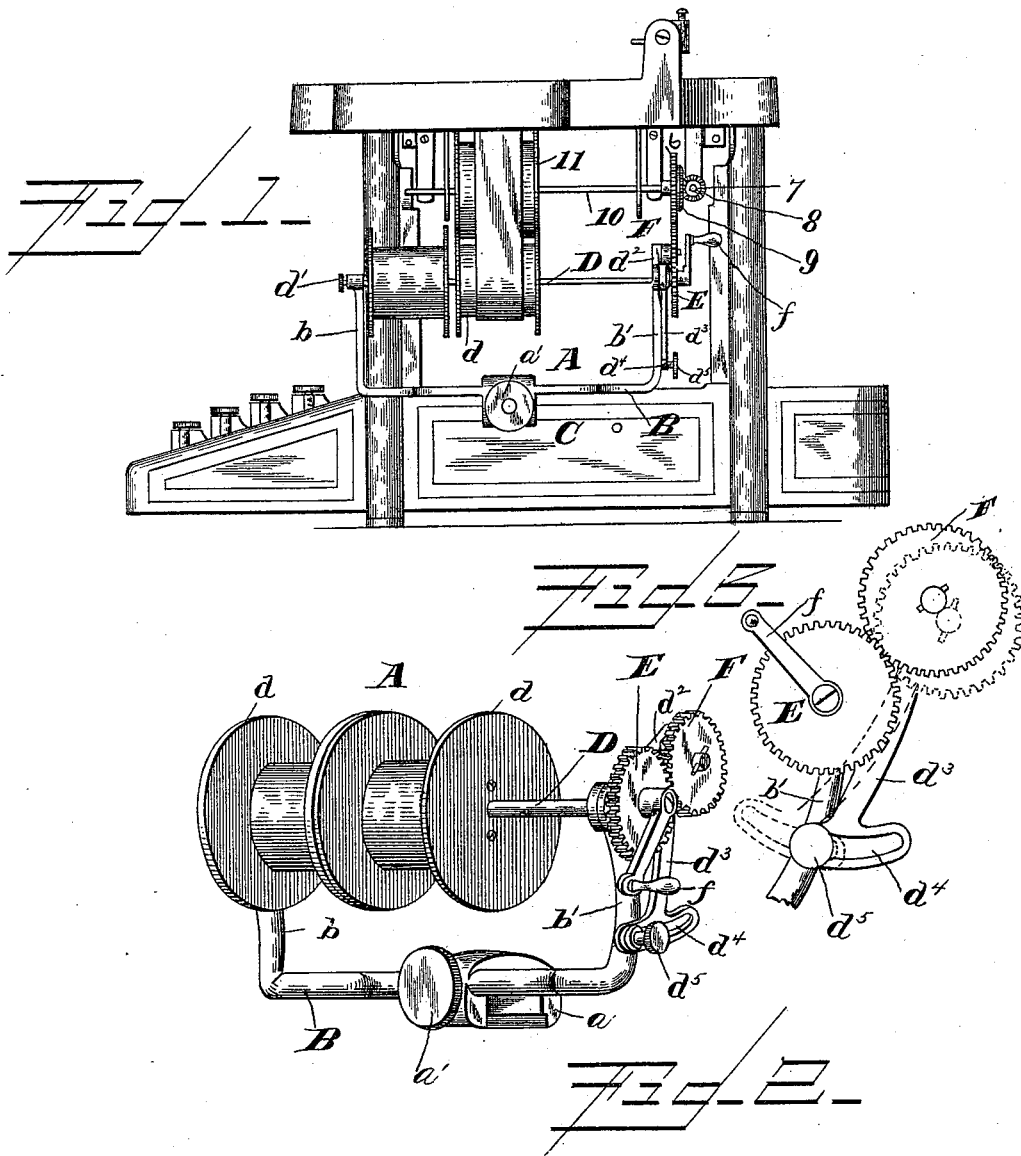
(No Model.)

A. E. WALKUP.

RIBBON ATTACHMENT FOR TYPE WRITING MACHINES.

No. 494,357.

Patented Mar. 28, 1893.



WITNESSES

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RIBBON ATTACHMENT FOR TYPE-WRITING MACHINES.

SPECIFICATION forming part of Letters Patent No. 494,357, dated March 28, 1893.

Application filed September 19, 1892. Serial No. 446,302. (No model.)

To all whom it may concern:

Be it known that I, ANDREW E. WALKUP, a citizen of the United States, residing at Omaha, in the county of Douglas and State of Nebraska, have invented certain new and useful Improvements in Ribbon Attachments for Type-Writing Machines; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention is a ribbon attachment for type writing machines and carries a number of spools and ribbons.

The attachment shown in the accompanying drawings is adjusted to fit on and work with a No. 5 Remington, but by slightly changing the construction of the attachment it may be made to co-operate with any Remington or any other typewriter constructed substantially like the Remington.

In the accompanying drawings: Figure 1 is a right hand end skeleton view of a Remington with my invention attached thereto. Fig. 2 is a perspective view of my invention and Fig. 3 is a detail view showing the gearing wheels and device for throwing them in and out of gear.

In order to fully understand my invention I deem it necessary to say that the Remington has a winding shaft 7, operated by a spring and carries on its right hand end a small cog wheel 8, which meshes with a small cog wheel 9, rigidly fixed on the end of the spool shaft 10. Near the other end of the said shaft 7, is fixed a cog wheel similar to cog wheel 8, and meshing with a cog wheel similar to the one, 9, on shaft 10, and rigidly fixed to the spool shaft at the other end of the typewriter. These small cog wheels are so situated on said shaft 7, that when the said shaft is pushed to the right, cog wheel 8, meshes with cog wheel 9, and turns the spool 11 in one direction, and when said shaft is slipped to the left the cog wheel on the other end of said shaft turns the spool on the opposite end of the machine in the opposite direction.

My spool attachment A, is constructed of a double elbow shaft B, provided with a clamp, *a*, and a thumb screw *a'*, by which it is secured to the base of the typewriter. Said shaft, B, has its ends *b*, and *b'*, turned up and constructed into bearings to carry the shaft, D. Said shaft bears two or more ribbon spools, *d*, that may slide from one end to the other of said shaft, and are provided with proper means to cause them to turn with said shaft. These spools carry different ribbons. Said shaft is provided at its left end with a thumb screw, *d'*. By unscrewing said thumb screw said shaft may be taken from its bearings the spools removed, and other spools placed thereon. On the right hand of said shaft, D, is pivoted a bearing plate, *d²*, to which is secured an arm, *d³*, having in its lower end a slot, *d⁴*, working in the shank of the thumb screw, *d⁵*. Said thumb screw works or screws into the righthand bearing, *b'*. On the right hand end of said shaft, D, is rigidly secured a cog-wheel, E, which meshes with the cog-wheel, F, pivoted in the bearing plate, *d²*; on the right hand end of the said shaft, D, is rigidly secured a crank handle, *f*.

The wheel, 9, of the Remington shown in Fig. 1, is single, but I construct the wheel double, that is so that it will mesh with wheel, 8, and also with wheel, F, by extending its margin and providing it with proper teeth, or I construct a wheel, 6, and rigidly secure it to said shaft, 10, immediately at the left of said wheel, 9, so that it will mesh with wheel, F.

The operation of my invention is as follows: The various ribbons are put on the spools, *d*, (I here remark that the shaft, B, may be made longer at its left end so that the invention may carry more spools than two,) and the ribbon intended to be immediately used is then carried over spool, 11, and secured to the spool at the other end of the typewriter. The lower end of the arm, *d³*, is then pushed forward which throws the wheel, F, up and brings it in contact with wheel, 6. Thus it will be seen as the main spring operates the shaft, 7, the wheel, 8, turns the wheels, 9 and 6, wheel, 6, turns wheel, F, wheel, F, turns wheel, E, shaft, D, and spools, *d*. When I desire to throw the attachment out of the

gear with the typewriter I pull the shaft d^3 , out as indicated by the dotted lines in Fig. 3. Thus it will be seen that the mechanism of the typewriter for operating its spools is made, 5 by means of said gearing 6, E and F, to operate the spools d, d , running then in the same direction and at the same speed that spool 11, is run. Thus either of the spools d , when in position under spool 11, answers the 10 same purpose that spool 11, fills when my attachment is not applied. When my attachment is applied, spool 11, is only useful as a bearing for the ribbon. When I wish to wind the ribbon off of the machine I throw my at- 15 tachment out of gear with the wheel 6, and then wind the ribbon off on to spool, d , remove the screw d' , and take off the spool and put on a fresh spool and ribbon. An additional purpose of this attachment is to enable 20 the said ribbons to be used alternately or interchangeably when for any reason the operator desires a change of printing. Thus one spool may carry a black ribbon and the other a red ribbon, and if the black ribbon is nor- 25 mally used the operator may at any time change to the red by throwing down the lever d^3 , winding the black ribbon back upon its spool d , by the handle f , sliding the red ribbon spool to operative position leading said 30 ribbon through the machine to the opposite spool 11 and again throwing the lever d^3 to position to bring the wheel F into mesh with the wheel 6.

Having described my invention, what I

claim as new, and desire to secure by Letters 3 Patent, is—

1. The combination of the shaft B, constructed to be secured to the base of a typewriter, shaft D, borne in the bearings b , and b' , of said shaft B; spools d , borne on the shaft D; 4 bearing d^2 , having a slotted arm d^3 , and pivoted to the bearing b' , wheel E, rigidly secured on the shaft D; wheel F, pivoted on the bearing d^2 and meshing with the wheel E, and wheel 6, rigidly secured on the shaft 10, 4 of the typewriter, all substantially as shown and described and for the purposes set forth.

2. The combination of the shaft B, constructed to be secured to the base of a typewriter, shaft D, borne in the bearings b , and b' , of said shaft B; spools d , borne on the shaft D; 5 bearing d^2 , having the slotted arm d^3 , pivoted to the bearing b' ; wheel E, rigidly secured on the shaft D; wheel F, pivoted on the bearing d^2 , and meshing with the wheel E; wheel 6, 55 rigidly secured on the shaft 10, of the typewriter, and thumb screw d^5 , working through slot d^4 , and adapted to hold wheel F, in or out of contact with wheel 6, substantially as shown and described and for purposes set 60 forth.

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

ANDREW E. WALKUP.

Witnesses:

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