J. A. HAGERSTROM.

RIBBON ATTACHING MEANS FOR TYPE WRITERS.

APPLICATION FILED SEPT. 9, 1918.

1,311,689.

Patented July 29, 1919.

Fig. 1.

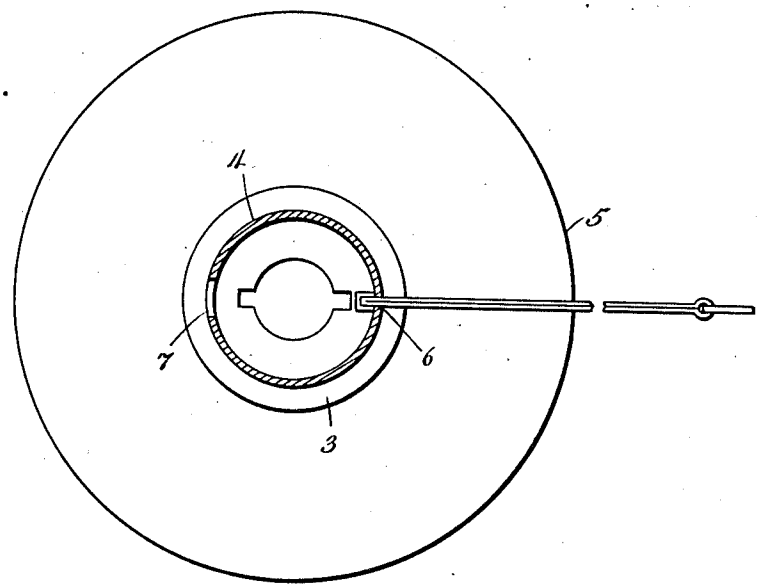


Fig. 2.

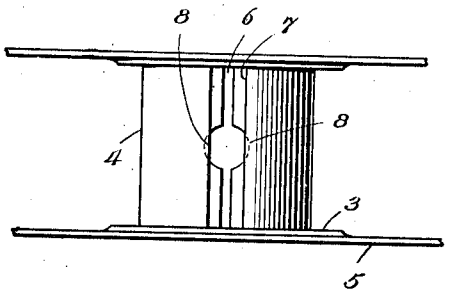


Fig. 3.

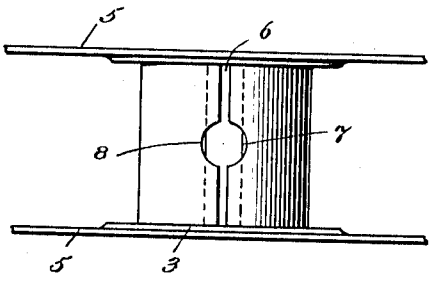
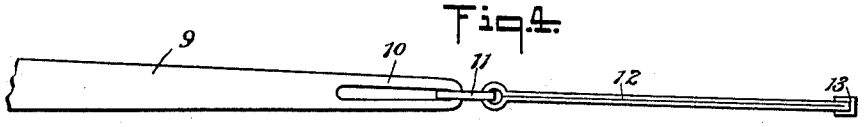


Fig. 4.



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UNITED STATES PATENT OFFICE.

JOHN A. HAGERSTROM, OF SCRANTON, PENNSYLVANIA, ASSIGNOR TO VICTOR TYPE-WRITER COMPANY, OF SCRANTON, PENNSYLVANIA, A CORPORATION OF NEW YORK.

RIBBON-ATTACHING MEANS FOR TYPE-WRITERS.

1,311,689. Specification of Letters Patent. Patented July 29, 1919.

Original application filed July 10, 1917, Serial No. 179,665. Divided and this application filed September 9, 1918. Serial No. 253,254.

To all whom it may concern:

Be it known that I, JOHN A. HAGERSTROM, a citizen of the United States, and resident of Scranton, in the county of Lackawanna and State of Pennsylvania, have invented certain new and useful Improvements in Ribbon-Attaching Means for Type-Writers, of which the following is a specification.

This invention relates more especially to ribbon spools for typewriters and has for its principal object to provide improved means of simple and effective construction for detachably connecting the end of a typewriter ribbon to the spool upon which it is wound. The present invention constitutes a division of my copending application serially numbered 179,665, filed July 10, 1917. According to the preferred embodiment of my invention shown in the drawings in which—

Figure 1 is a transverse section of a spool constructed according to the present invention;

Fig. 2 is a side elevation of the same from one side;

Fig. 3 is a side elevation of the same from the opposite side, parts being broken away.

Fig. 4 is a side elevation of a bodkin which may be employed in connection with my improved ribbon attaching means.

Referring more particularly to the drawing, a ribbon spool spindle 1 is provided with an annular shoulder 2 which is adapted to support the hub portion 3 of a ribbon spool which has a cylindrical drum 4 arranged between the spaced circular flanges 5. The drum 4 is provided with a relatively narrow slot 6 and a relatively wide slot 7, said slots being preferably arranged on opposite sides of the axis of the spool and substantially parallel to the axis thereof. The edges of the relatively narrow slot 6 are provided with arcuate recesses 8 to permit a bodkin 9 such as that shown in Fig. 4. Said bodkin 9 is adapted to be inserted between the arcuate recesses 8 until it protrudes through the relatively wide slot 7 and beyond the outer wall of the drum 4. The bodkin in this position is now ready to receive between its jaws 10, a buckle 11 secured to the end of a tape 12. Said tape is provided on its other end with an anchor or enlargement 13 which is of a size to pass readily through the relatively wide slot 7 but is too large to be drawn through the smaller slot 6. After the tape 12 has thus become anchored on the edges of the smaller slot, it is ready to have the typewriter ribbon attached thereto by means of the buckle 11.

I claim:

1. In a typewriter, a ribbon spool comprising axially spaced flanges, a hollow drum uniting said flanges and provided with a slot or opening, a ribbon adapted to be threaded through said slot or opening, and means attached to the end of said ribbon for anchoring it within said drum on the edges of said slot or opening.

2. A typewriter spool comprising a cylindrical drum provided with an axial slot in the wall of said drum, and a ribbon attaching tape extending through said slot and having an enlargement on its inner end to prevent its retraction from within said drum, said drum being provided with recesses along the edges of said slot for permitting the introduction of a bodkin for drawing said tape through the slot.

3. A typewriter spool, comprising a cylindrical drum provided with an axial slot in the wall of said drum, flanges at either end of said drum, and a ribbon attaching tape extending through said slot and having an enlargement on its inner end to prevent its retraction from within said drum, said drum being provided with another axial slot of greater width for permitting such enlargement to be drawn into said drum.

4. A ribbon spool provided with flanges and a drum extending between said flanges, said drum being provided with oppositely arranged axial slots of different widths, and a ribbon-attaching tape provided with an enlargement on one end adapted to pass through one of said slots and to engage with the walls of said drum adjacent the other slot.

5. A typewriter spool comprising axially spaced flanges, one of said flanges being provided with a central aperture, a hollow drum concentric with said aperture and extending between said flanges, said drum being provided with an axially extending slot, and a ribbon attaching tape, having means on one end for anchoring it to the edges of said slot.

JOHN A. HAGERSTROM.