

(No Model.)

A. T. BROWN.  
TYPE WRITER INKING RIBBON.

No. 528,142.

Patented Oct. 30, 1894.

Fig. 1

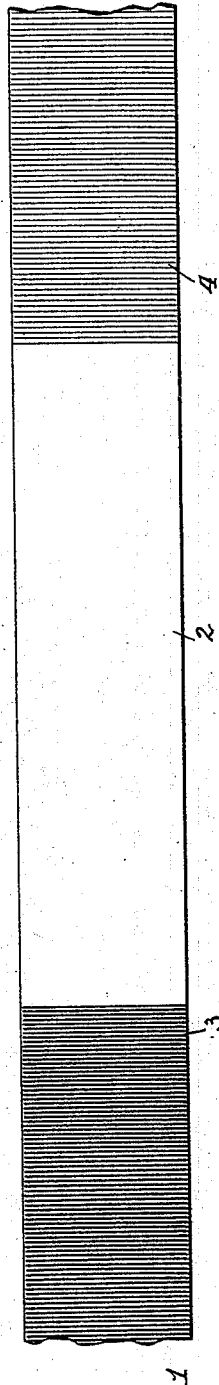
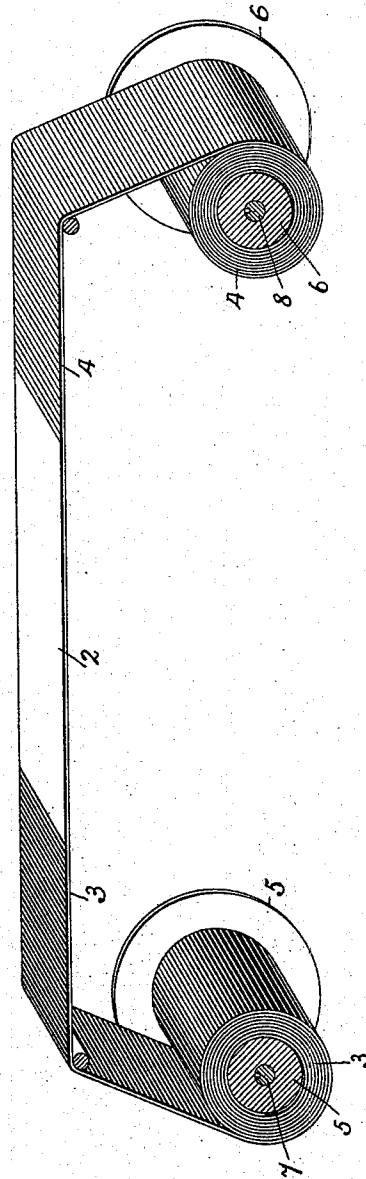


Fig. 2



Witnesses  
J. C. Massonelle  
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Inventor  
Alex. T. Brown,  
By his Attorney Jacob Falbel

# UNITED STATES PATENT OFFICE.

ALEXANDER T. BROWN, OF SYRACUSE, ASSIGNOR TO THE UNION TYPE-  
WRITER COMPANY, OF NEW YORK, N. Y.

## TYPE-WRITER INKING-RIBBON.

SPECIFICATION forming part of Letters Patent No. 528,142, dated October 30, 1894.

Application filed July 7, 1894. Serial No. 516,798. (No model.)

*To all whom it may concern:*

Be it known that I, ALEXANDER T. BROWN, a citizen of the United States, and a resident of Syracuse, in the county of Onondaga and State of New York, have invented certain new and useful Improvements in Type-Writer Inking-Ribbons, of which the following is a specification.

In the use of type writing machines it is quite common for operators to have in position upon the spools two different inking-ribbons, that is, one ribbon charged with one kind or color of ink, and the other with another, so that either ribbon may be readily brought into use according to the desire of the operator or the necessity of the work to be done.

For some kinds of writing a "record" or non-copying ribbon is employed, while for other kinds a copying or transfer ribbon is used. Again, some ribbons are provided with delible and others with indelible ink, and in these various kinds or descriptions of ribbons various colors are used, such as black, blue, purple, green, &c.

Heretofore it has been the custom to pin, sew, or otherwise fasten together the inner ends of the two different kinds or colors of ribbons and attach their opposite, outer ends one to each spool. To this mode or plan of providing for the use of two different ribbons the serious objection exists that the operator during the use of the machine is extremely liable to go from one kind or color of ribbon to the other and not discover the fact until a number of impressions have been obtained from the wrong ribbon, and frequently when this happens the entire sheet or sheets must be destroyed, thereby incurring a loss of time in the re-writing.

An operator absorbed in her writing is so apt to fail to notice that the working ribbon needs reversing, that the passage to the wrong or non-working ribbon is of frequent occurrence and a source of great annoyance.

My object is to overcome this difficulty or objection, and in carrying out my invention, I interpose between the two different kinds or colors of ribbon a blank or uninked ribbon or portion, which if struck by the types will fail to yield impressions upon the paper; all

as will be hereinafter more fully described and particularly pointed out in the appended claims.

In the accompanying drawings, Figure 1 is a plan fragmentary view of a duplex inking ribbon embodying my invention; and Fig. 2 is a perspective view of the improved inking ribbon upon two spools and running over the usual inking ribbon supports of a type writer.

The same part will be found designated by the same numeral of reference in both views.

1 designates the duplex inking ribbon, preferably made of a continuous piece.

At the middle of the length of the ribbon is a white, or blank, or uninked portion 2, at one side of which is a portion, 3, charged or impregnated with one kind or color of ink, and on the other side a portion, 4, charged with ink of another kind or color. The inked portions 3 and 4 extend from the blank portion 2, preferably to the free ends of the fabric. The free end of the portion 3 is connected to the spool 5, and the free end of the portion 4 is connected to the spool 6. The spool 5 is adapted to rotate on a shaft 7 in the type writer, and the spool 6 on a shaft 8 therein. The section 3 bears for example black, record ink or color, while the section 4 bears blue copying ink or coloring matter. The section 3 is in effect one inking ribbon, and the section 4 another, and these sections are connected together but separated from each other by the uninked middle section 2.

I prefer to make the three sections integral or of a single piece, as shown, but they may be made separate and united if desired, the main feature of my invention consisting in placing between the two ribbons or differently-inked portions an uninked section or portion.

It is not essential that the inked sections 3 and 4 be of equal length, though I prefer to have them so.

The uninked portion 2 may be several inches in length, more or less, according to the desire of the maker and the character or construction of the type writer upon which the ribbon is to be used.

In a machine in which the ribbon is fed crosswise during the writing, a shorter length of uninked section will be required than in a

machine in which the ribbon moves only longitudinally during type impressions.

In the use of the improved ribbon it will be seen that when the blank or uninked section is brought in coincidence with the printing point, no impression will be made upon the paper and hence that the liability of running unawares from one ribbon to another is reduced to the minimum, for by the interposition of the blank section sufficient time is afforded the operator to discover the necessity for reversing before the wrong or undesired ribbon is operated upon. The length of this blank section may be such as to cover the printing point for several lines, more or less, and if the operation of the keys be continued at this time no impression will be yielded of course, and the operator is thus enabled to readily discover the fact that the working ribbon has entirely passed by the printing point and needs reversing, after which the paper may be returned to the place where the impressions ceased and the writing re-commenced. Moreover, if the interposed uninked portion of the ribbon be white or of a strongly contrasting color, the operator may also readily observe its approach toward the

printing point and thus be visually informed of the necessity for changing the direction of travel of the ribbon.

It will of course be understood that various kinds or colors of ink may be used on the sections 3 and 4, so long as the intermediate blank section 2 is employed.

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

1. A typewriter inking-ribbon having two kinds or colors of ink and an intermediate blank or uninked portion; substantially as and for the purpose set forth.

2. A typewriter inking-ribbon made of a continuous piece impregnated at one portion with ink of one kind or color, at another portion with ink of another kind or color, and between said portions left blank or provided with an uninked portion; substantially as and for the purpose set forth.

Signed at Syracuse, in the county of Onondaga and State of New York, this 30th day of June, A. D. 1894.

ALEXANDER T. BROWN.

Witnesses:

H. BARRY,

M. C. SMITH.