

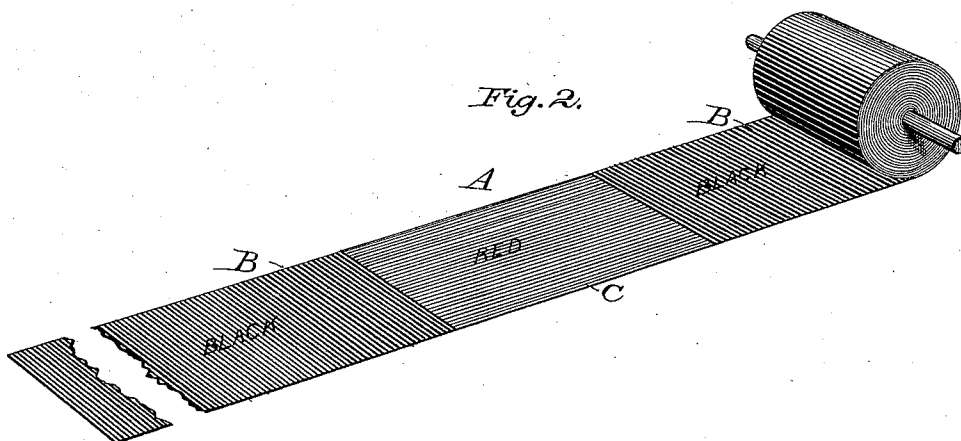
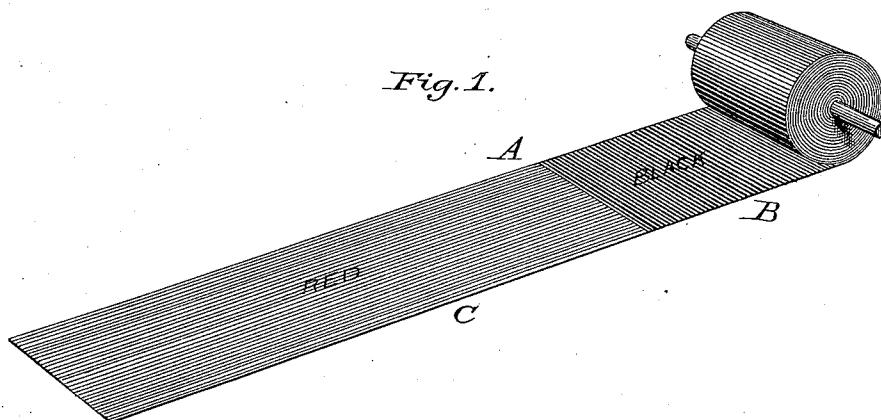
(No Model.)

G. K. ANDERSON.

INKING RIBBON FOR TYPE WRITING MACHINES.

No. 349,026.

Patented Sept. 14, 1886.



Witnesses:

Jas. F. Duffamil
Walter A. Dodge

Inventor:

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UNITED STATES PATENT OFFICE.

GEORGE KERR ANDERSON, OF MEMPHIS, TENNESSEE.

INKING-RIBBON FOR TYPE-WRITING MACHINES.

SPECIFICATION forming part of Letters Patent No. 349,026, dated September 14, 1886.

Application filed December 27, 1884. Renewed February 15, 1886. Serial No. 192,046. (No model.)

To all whom it may concern:

Be it known that I, GEORGE KERR ANDERSON, of Memphis, in the county of Shelby and State of Tennessee, have invented certain new and useful Improvements in Type-Writer Ribbons, of which the following is a specification.

My invention consists in an ink-ribbon for type-writing or printing machines, having a portion at or near its end or ends charged with ink of a different color or shade from that of the body of the ribbon, for the purpose of notifying the operator of the near approach of the end of the ribbon and the necessity of reversing its feed.

In the drawings, Figure 1 is a perspective view of a ribbon having its end charged with a color in contrast with its body; Fig. 2, a similar view showing such contrasting color applied to a portion of the ribbon near one end, but followed again by the body-color.

In type-writing or printing machines it often happens that the end of the traveling ink-ribbon is reached unexpectedly, and a number of type-strike at the same point thereon, the machine being finally stopped by the tightening of the ribbon. In machines designed for stenographic work this same difficulty arises, and, owing to the necessity of rapid operation of the machine and the impracticability of stopping the work at a given instant, it is of great importance that notice be given reasonably in advance of reaching the end. This notice I am enabled to give with ease and certainty by charging the body of the ribbon with ink of the required color and a portion at or near the end with ink of contrasting color, as illustrated in the drawings, in which A indicates the ribbon as a whole; B, the body of the ribbon, charged with ink of the required color for printing, and C the portion of the ribbon charged with a contrasting color.

In Fig. 1 the portion C is shown as forming the end of the ribbon, and in practice this will commonly be from one or two inches to a

foot or foot and a half in length; but this is a matter subject to any extent of variation that circumstances may suggest.

In Fig. 2 the portion C, charged with ink of contrasting color, is shown as of short length, advisably an inch or thereabout, and at some distance a foot or thereabout, from the end. The object of this latter arrangement is to give notice of the approaching end without printing any considerable portion of the page in the contrasting color. The portion between the contrasting color and the end of the ribbon permits the printing to continue in the original color after printing a small number of letters in the contrasting color, and gives the operator time to finish out a line, paragraph, or page, as the case may be, before stopping to change the direction of feed or movement of the ribbon. The length of this end portion may be calculated so as to bring the portion of the sheet bearing the letter or letters printed in the contrasting color above the cylinder, or in position to be conveniently seen shortly before the end is reached. The ribbon can be made of one continuous web or of separate pieces sewed or otherwise joined together. It is immaterial what colors be used on the ribbon, provided only that they shall be such as to make a decided contrast one with the other.

Having thus described my invention, what I claim is—

1. An ink-charged ribbon having its main body charged with ink of one color and the remaining portion charged with ink of contrasting color, substantially as and for the purpose set forth.

2. A ribbon for type-writing or printing machines, having a small portion near its end or ends charged with ink of one color and the body of the ribbon each side of said portion charged with ink of a different color.

GEORGE KERR ANDERSON.

Witnesses:

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