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G. T. HUDSPETH
CARBON TRANSFER RIBBON

2,066,687

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FIG. 1.

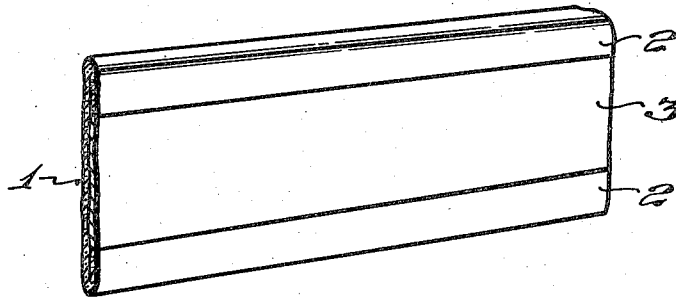


FIG. 2.

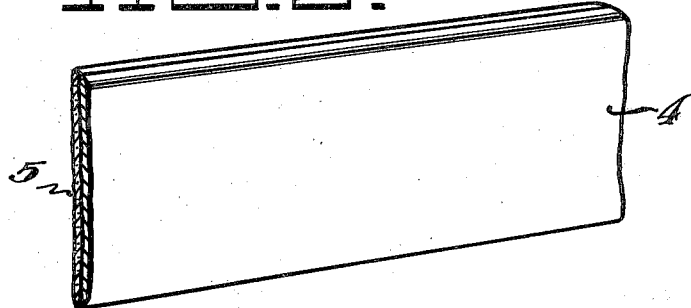


FIG. 3.

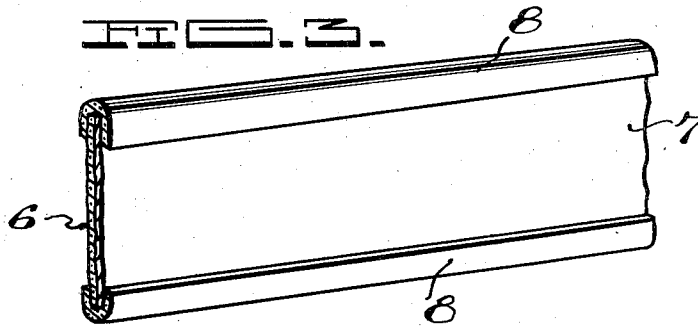


FIG. 4.

This type

FIG. 5.

This type

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CARBON TRANSFER RIBBON

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Application October 13, 1934, Serial No. 748,172

2 Claims. (Cl. 197—172)

This invention relates to typewriters and supplies therefor and it has particular reference to improvements in typewriter ribbons.

The principal object of the invention is to provide a typewriter ribbon whose construction is such that the characters are at all times sharply outlined and without the irregularities produced by the ordinary fabric ribbon. Moreover, the present invention insures absolute uniformity in color density of the impressions.

The present invention aims to overcome the lessening of color density which is the case when an ordinary woven fabric ribbon is used continuously and instead of being continuously used, the ribbon embodying the present invention will be dispensed with when used once. This may be done for the reason that the invention may be produced very economically.

Another object of the invention is to provide a transfer medium of the character specified which will enable photostatic operators and lithographic or planographic printers to obtain sharper reproductions and a far more uniform copy than is possible to obtain when woven fabric ribbons are employed. This condition is more thoroughly appreciated when enlargements are made in copy which is necessary in many cases.

With the foregoing objects as paramount, the invention has particular reference to its salient features of construction and arrangement of parts which will become manifest as the description proceeds, taken in connection with the accompanying drawing, wherein:—

Figure 1 is an example of one form of the invention.

Figure 2 is a modified form of the invention.

Figure 3 is a further modified form of the invention.

Figure 4 is an example, enlarged, of the character of the impression made by the ordinary woven fabric typewriter ribbon, and

Figure 5 is a view enlarged, of the character of impression made by a ribbon constructed according to the present invention.

Continuing with a more detailed description of the drawing, it may be first mentioned that the invention makes use of a cellulose material or other composition of rubber, paper, balsam, gelatin or the like, as a foundation for the ribbon. The cellulose which is preferred, is in common use and is known to the trade by the trade-marked name "Cellophane." This material is designated in Figure 1 by the character 1 and the web or ribbon formed thereof as its edges 2 are turned upon the body and the space between the edges is

coated with carbon, waxed pigment or the like 3 of any desirable color.

The reason for the preference that a cellulose material be employed is that this material is found to be absolutely impervious to the carbon or other substances with which it is coated and consequently the ribbon has a distinctive separate printing element, the ribbon being only the vehicle by which the impression material is transported through a typewriter. After being once used, the ribbon is deposited in a suitable receptacle either connected to or separate from the typewriting machine. It will be understood that when the character impinges the uncoated side of the ribbon, practically all if not all of the coating making up the character is transferred from the ribbon to the paper, leaving a distinctively sharp outline. The fact that the character borne by the type bar of the machine does not come into contact with the coating prevents the type from becoming clogged and illegible by accumulations of the ink or other material making up the coating.

It is therefore apparent from the foregoing that a machine employing a ribbon such as embodied in the invention may be used an indefinite period of time before it becomes necessary to remove from the type the deposits of ink or other material accumulating therein by continuously striking a ribbon of ordinary construction.

In Figure 2 is shown substantially the same principal illustrated in Figure 1 but instead of the coating being applied between the inwardly turned edges of the ribbon, the coating 4 is applied to the ribbon 5 from one extreme edge to the other and completely covering one side of the ribbon.

The modification shown in Figure 3 illustrates the ribbon 6 with the coating 7 extending from one edge to the other and a reinforcing binding 8 applied to the edges of the ribbon. These bindings may be substituted by gluing or varnishing the edges as an insurance against ready tearing. Since the material of which the ribbon is composed is extremely thin, more yardage may be wound upon a spool than the ordinary style of ribbon of fabric web, yet the material comprising the base or foundation for the ribbon herein described has considerable strength and will withstand a great deal of tension without breaking or stretching.

In Figure 4 is shown an enlarged example of the appearance of the character when printed through the ordinary woven fabric ribbon. It will be observed that the edges of the type are ragged and irregular while the characters shown

in Figure 5 have sharp, clean cut edges. The latter characters exemplify the characters printed through a ribbon constructed according to the present invention. The characters shown in Figures 4 and 5 were faithfully reproduced from an actual photograph. It will accordingly be seen that since the type will not become clogged and that the ribbon is used once and dispensed with, the impressions will always be sharp and clean cut.

Manifestly, the construction shown is capable of some modification and such modification as is considered within the scope and meaning of the appended claims is also considered within the spirit and intent of the invention.

What is claimed is:

1. As a new article of manufacture, a transfer medium, the combination of a backing web whose

width is a fraction of its length and having the characteristics of "Cellophane" and also having its edges turned inwardly and spaced apart to define an area longitudinally of said medium intermediate said edges, a coating of transfer composition disposed in said area intermediate the confronting edges and of a thickness equalling the thickness of said transfer medium.

2. As a new article of manufacture, a transfer medium whose width is a fraction of its length and having the characteristics of "Cellophane", a coating of transfer composition disposed on said medium along its major axis and spaced from its edges, said transfer medium further having its edges turned inwardly to embrace said transfer composition.

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