Patented Aug. 25, 1936

2,051,942

UNITED STATES PATENT OFFICE

2,051,942

TYPEWRITER RIBBON REHABILITATING

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No Drawing. Application September 9, 1933, Serial No. 688,860

5 Claims. (Cl. 91—70)

My invention relates generally to means for rejuvenating ink bearing printing devices, and includes a method and substance for rehabilitating particularly typewriter ribbons, and an important object of my invention is to provide for rehabilitating typewriter ribbons and the like at the lowest possible cost and without having recourse to the complicated and not easily managed processes which have sometimes been applied for this purpose.

It is also an important object of my invention to provide a substance for application to typewriter ribbons and the like to rejuvenate and rehabilitate the same, which substance consists principally of only one material, the said one material being entirely effective for the purpose without any additions thereto.

Other objects and advantages of my invention will be apparent from a reading of the following description and explanations, wherein for purposes of illustration I set forth an example of a preferred embodiment of my invention.

Rejuvenation and rehabilitation of typewriter ribbons has before been attempted both during the period of use of the typewriter ribbon and subsequent to the discarding of the ribbon as worn out or incapable of printing satisfactorily due to the drying or dissipation of the ink thereon. Hence I do not claim broadly the rejuvenation of typewriter ribbons and the like, but I claim to be the first person to discover and employ a single material for rehabilitating typewriter ribbons which is entirely effective for this purpose, without recourse to the relatively complicated and expensive compositions and compounds which have been and are now being used for this purpose.

The single material which I utilize is cocoanut oil, and I do not find it necessary to add anything to the cocoanut oil to render the same entirely effective for the purpose, although in rehabilitating ribbons I add other materials as described below.

I treat discarded typewriter ribbons which have been cast aside as inadequate to produce a clear and full printing, by applying to that face of the ribbon which is struck by the type, a coating of my cocoanut oil substance.

When the cocoanut oil substance has had time to enter the pores of the typewriter ribbon material, I scrape or otherwise remove from the said face of the ribbon the surplus cocoanut oil.

I then either permit the ribbon to stand a considerable time to effect a certain amount of drying of the cocoanut oil substance and a complete permeation of the ink bearing material of the ribbon, or I accelerate this conditioning of the ribbon by pressing the ribbon lightly with a suitable form of pressing iron giving an even temperate heat.

These steps can be carried on while the ribbon is being spooled from one reel to the other, or the entire process may be carried out with the ribbon in an unwound condition and when the process is completed, it may be rewound upon the reel and is ready for application to a typewriter. I find that as a result of the process described, if the ribbon has not been too greatly mutilated, that substantially all of its original capability of printing clear and full typed impressions is restored to it, so that its original usefulness is restored to it. Because of the small cost of operating the process of the invention and applying the necessary cocoanut oil substance, the cost of rejuvenating typewriter ribbons and the like is so low as to put an end to the practice of discarding typewriter ribbons as soon as they begin to print faintly or with reduced sharpness.

It will be observed that the process of the invention contemplates the application of the cocoanut oil or of said substance not only subsequent to the removal of the typewriter ribbon from the machine, but the cocoanut oil or said substance is equally adapted to be applied by devices mounted on the typewriter for applying rejuvenating fluid to the ribbon as it is being used in the machine. While the most spectacular and satisfactory results are obtained with the ribbon removed from the typewriting machine, rejuvenating of the ribbon and preserving the condition thereof can be carried out by any suitable means, several types of which are in existence, for rejuvenating the ribbon as it passes through the machine without the removal of the ribbon therefrom.

The cocoanut oil substance referred to is composed substantially of the following ingredients and proportions:—

	Grams
Sulphuric acid	7.5
Cocoanut oil	200
Lamp black	20
Gum arabic	0.10
	227.60

After these ingredients have been thoroughly mixed together for a period of from one half hour to an hour, heat is applied thereto to bring the same to a boil, after which it is permitted to

cool but not become cold. The ribbons are soaked in the hot substance. When the ribbons have been adequately saturated in that manner they are removed and pressed with a hot iron between flannel cloths.

I find that my rehabilitated ribbons last as long and in many instances much longer, than fresh typewriter ribbons.

Although I have shown and described herein a preferred embodiment of my invention, it is to be definitely understood that I do not desire to limit the application of the invention thereto, and any change or changes may be made in material and ingredients and in the sequence and duration of steps and operations within the spirit of the invention and the scope of the subjoined claims.

What is claimed is:—

1. A substance for treating used typewriter ribbons to rejuvenate the same, said substance containing approximately 200 grams of cocoanut oil, 7.5 grams of sulphuric acid, 20 grams lamp black, and 0.10 gram of gum arabic.

2. A substance of the character described comprising the resultant obtained by boiling the product of a mixture of 200 grams of cocoanut oil, 20 grams of lamp black, 0.10 gram of gum arabic, and 7.5 grams of sulphuric acid.

3. A process of rejuvenating a used typewriter ribbon, said process consisting of applying a quantity of the reaction product of a boiled mixture of approximately 200 grams of cocoanut oil, 7.5 grams of sulphuric acid, 20 grams of lamp black, and 0.10 gram of gum arabic while warm to the used ribbon so as to saturate the same, then removing excess product and fixing the remainder of the product in the ribbon by pressing the ribbon with heat between absorbent pressing members.

4. A method of making a typewriter ribbon rehabilitating substance, said method comprising forming a mixture of approximately 7.5 grams of sulphuric acid, 200 grams of cocoanut oil, 20 grams of lamp black, and 0.10 gram of gum arabic, then permitting the mixture to stand for a period of about one-half hour to one hour, then heating the mixture to a boil, then permitting the mixture to cool.

5. A typewriter ribbon rehabilitating substance comprising the reaction product of a boiled mixture of 7.5 grams of sulphuric acid, 200 grams of cocoanut oil, 20 grams of lamp black, and 0.10 gram of gum arabic.

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