

# UNITED STATES PATENT OFFICE.

LEONARD BAILEY, OF HARTFORD, CONNECTICUT.

## PRINTING-INK.

SPECIFICATION forming part of Letters Patent No. 375,720, dated January 3, 1888.

Application filed January 15, 1887. Serial No. 224,477. (No specimens.)

*To all whom it may concern:*

Be it known that I, LEONARD BAILEY, of Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Printing-Ink and Inkers, of which the following is a full, clear, and exact description, whereby any one skilled in the art can make and use the same.

My improvement relates to the class of printing inks and also to devices permeated with said inks for inking-surfaces, such as type-writer ribbons.

The object of my improvement is to provide an ink that will flow to the same extent under all conditions of the humidity and temperature of the atmosphere, and also an ink that will not spread and blur the printed figure on paper or the like substance, and thus affect the legibility and beauty of the figure when copied by the ordinary letter-press process; and my improvement consists in a printing-ink made of a vegetable oil—namely, palm-oil—as a vehicle incorporated with an aniline color, as a pigment; and it further consists in a flexible textile fabric treated with the above-described ink, as more particularly hereinafter described, and pointed out in the claims.

My improvement relates more particularly to the class of printing-inks which are commonly termed “copying-inks,” and my ink is especially adapted to be applied to inking ribbons for type-writers or fabrics used to cover inking-pads or rollers.

It has been found that the condition of prior inks of this class varies greatly with the humidity of the atmosphere—that is, will flow more readily or will be more moist in damp or wet weather than in dry; consequently too much ink will be applied to the surface which it is intended to print from when there is much moisture in the atmosphere, and, on the contrary, in dry seasons not enough ink is ap-

plied to the type to make it print distinctly or copy clearly. It is also true that when it is desired to take what are called “press-copies” of a page printed with the inks now in use, if but a small amount of ink is applied, but one copy can be taken, while, on the other hand, if considerable ink is transferred to the page, unless great care is exercised, the ink will spread and blur the page, and it is almost impossible to take several copies of a page printed from the inks now in use without the spreading of such inks, which destroys the beauty of the characters, if it does not totally obscure their legibility. By the use of my improved ink all of these objections and difficulties are overcome.

I have found that by using palm oil as a vehicle and an aniline color for the pigment the ink will not dry up in warm weather, nor be too moist when the atmosphere is damp; also, that palm-oil holds just the desired amount of pigment in suspension to allow a page printed with the composition to be copied many times, a certain amount of color being transferred each time to enable the copy to be read clearly without any blurring or soiling of the page which is copied.

I claim as my improvement—

1. The within-described ink, which consists of palm-oil as a vehicle incorporated with an aniline color as a pigment, all substantially as described, and for the purpose set forth.

2. A ribbon for type-writers, consisting of a textile fabric thoroughly saturated with a combination made of palm-oil and aniline color, all substantially as described, and for the purpose set forth.

LEONARD BAILEY.

Witnesses:

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FRED E. BAILEY.