## UNITED STATES PATENT OFFICE.

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## IMPROVEMENT IN INKS FOR CANCELING.

Specification forming part of Letters Patent No. 198,090, dated December 11, 1877; application filed October 29, 1877.

To all whom it may concern:

Be it known that I, C. CALVERT EGERTON, of the city of Baltimore, State of Maryland, have invented certain new and useful Improvements in Canceling-Inks; and I hereby declare the same to be fully, clearly, and exactly described as follows:

This invention has for its object to furnish an ink for use in canceling postage and revenue stamps, which ink shall be practically indelible.

It is obvious that a coloring matter in a state of true solution is wholly inapplicable to this purpose, since excess of the solvent will entirely remove the coloring matter.

A pigment in a state of mechanical suspension, and applied to the surface of the stamp, is equally removable, since the solution of the suspending material will leave the coloring matter without attachment to the paper, and enable it to be washed or brushed away.

A theoretically perfect cancel would consist, then, in the liberation of a practically insoluble coloring matter—such as carbon—in the body of the paper of the stamp—such, for instance, as the decomposition of a hydrocarbon (turpentine) by chlorine in the paper itself. Such a process, for obvious reasons, is out of the question; but by the use of my ink equivalent results are secured by entirely different means.

I compose the ink of two or more coloring matters, one of which shall be practically insoluble, and mechanically bury it in the paper by having an abrading material as an ingredient of the ink.

To this end I compose my ink of the following ingredients: iodine, indigo, red and blue aniline, iron-rust, brick-dust, muriatic acid, and alcohol. These are taken, except the last

named, in about equal proportions, and mixed with the alcohol, being thoroughly incorporated by grinding, and brought to the consistency of printer's ink, when the composition is ready for use. It is applied by the usual handstamp, or in any other convenient manner.

Before the cancel-mark so formed can be eradicated the material of the stamp is reduced to pulp; in a word, the reuse of the stamp is rendered impossible.

With my ink the aniline furnishes a soluble coloring matter of great intensity, while the practically insoluble indigo is carried into the body of the paper by means of the gritty or abrading materials—viz., the iron-rust and brick-dust. Before the color can be dissolved, which is thereby practically pressed into the stamp-paper, the reagents necessary to effect such solution will inevitable destroy the stamp itself.

As a substitute for the indigo, printer's ink, or other matter containing carbon, may be used; and instead of the abrading agents named, powdered flint, or substances of similar nature, may be employed.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A canceling-ink consisting of two or more coloring materials, one of which is practically insoluble, and an abrading material, substantially as described.

2. The ink herein described, consisting of iodine, indigo, iron-rust, brick-dust, red and blue aniline, muriatic acid, and alcohol, substantially as set forth.

C. CALVERT EGERTON.

Witnesses:

R. D. WILLIAMS,

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