UNITED STATES PATENT OFFICE.

VYVIAN EDWIN GOODMAN, OF FINSBURY, LONDON, ENGLAND, ASSIGNOR OF TWO-THIRDS TO WATERLOW AND SONS, LIMITED, OF LONDON, ENGLAND.

MEANS FOR RENDERING THE ALTERATION OF DOCUMENTS CAPABLE OF DETECTION.

1,417,820. Specification of Letters Patent. **Patented May 30, 1922.**

No Drawing. Application filed August 27, 1921. Serial No. 496,146.

(GRANTED UNDER THE PROVISIONS OF THE ACT OF MARCH 3, 1921, 41 STAT. L., 1313.)

To all whom it may concern:

Be it known that I, VYVIAN EDWIN GOODMAN, a subject of the King of Great Britain and Ireland, residing at 68 and 70 Worship Street, Finsbury, in the county of London, England, have invented new and useful Improved Means for Rendering the Alteration of Documents Capable of Detection, for which I have filed application for patent in Great Britain, January 23rd 1920, No. 159740, and of which the following is a specification.

This invention relates to improved means for rendering the alteration of printed or written documents readily apparent; thereby rendering the making of such alterations, for fraudulent purposes, without detection impossible or very difficult.

According to the present practice of affording security to cheques, bills of exchange and the like, otherwise than by punching the paper on which they are printed or written, a sensitized paper is sometimes employed, and is perhaps the most easily dealt with. In other cases, where the printing is in aniline ink and fugitive, the colour can be discharged by the use of a chemical eradicator. According to a third method, intaglio printing is used in which the aniline ink contains a chemical which gives a dark stain when treated with ordinary eradicators.

According to my improved method of protecting documents against fraudulent alteration in such a manner as to escape detection, I employ black or darkly coloured paper; the black or colouring matter employed being of a permanent character, and, if necessary, permeating the paper. One side, or if preferred both sides, of the paper is or are then coated with an opaque, but light coloured, composition containing manganous ferrocyanide or other agent, such as commonly employed in rendering documents proof against forgery; such composition concealing the black or dark colour before referred to. Upon the said composition being destroyed by chemical or mechanical means, the black or dark colour ground thereupon becomes exposed to view.

It will be obvious that the opaque coating above referred to may be overprinted with a fugitive aniline or other ink, whether containing or not containing agents of the character hereinbefore mentioned as commonly employed in the preparation of security papers.

Assuming, for example, that the surface of the paper foundation was originally black, that it had been coated with an opaque grey sensitive composition, and that this surface had been written upon with black ink, on removing this writing by chemical or mechanical means, the grey coating is at the same time destroyed, and a reproduction of the original writing appears in black by reason of the surface of the foundation paper becoming exposed.

I claim:—

1. The herein described method of rendering the alteration of documents capable of detection, consisting in coating a black or dark-surfaced paper with an opaque but light-coloured composition sensitive to a chemical eradicator.

2. Black or dark-surfaced paper coated with an opaque but light-coloured composition sensitive to a chemical eradicator or susceptible to removal on the erasure of the ink writing being attempted.

VYVIAN EDWIN GOODMAN.