

UNITED STATES PATENT OFFICE.

SEYMOUR CRANE, OF DALTON, MASSACHUSETTS, ASSIGNOR TO SAMUEL W. HOFFMAN, OF NEW YORK CITY.

IMPROVEMENT IN MODES OF PREVENTING AND DETECTING THE ALTERATION OF BANK-CHECKS, &c.

Specification forming part of Letters Patent No. 118,204, dated August 22, 1871.

To all whom it may concern:

Be it known that I, SEYMOUR CRANE, of Dalton, in the county of Berkshire and State of Massachusetts, have invented a new and improved Mode of Preventing and Detecting the Alteration of Bank-Checks, Drafts, Bills of Exchange, and other papers representing money or values, and of other documents or manuscripts; and I do hereby declare that the following is a full, clear, and exact description of the same.

The object of this invention is more especially to prevent, by insuring the detection of, the alteration of the manuscript portions of bank-checks, drafts, bills of exchange, and other papers representing money or values; and it consists in subjecting all such, or any other papers, after the amounts have been written in, or after the manuscript portions have been inscribed, to a perforating, embossing, or indenting process by which the fiber or texture of the paper is so cut, broken up, or affected as to make it difficult to write upon, and that the ink employed in any writing afterward performed upon one surface of it may penetrate through or be visible upon the other surface.

To illustrate more clearly the nature, character, and effect of the invention, I will describe the most simple way of applying it to bank-checks and drafts, to prevent the alteration of which it is more particularly the object.

The check or draft, having been filled up and signed in the usual way, is placed between two pieces of wire-cloth or wire-gauze, and with them introduced between two metal pressure-rollers and rolled between them by turning the said rollers. When the check or draft is removed from between the pieces of wire-cloth or wire-gauze it will be found to be minutely embossed all over, and also full of very fine perforations. This embossing and perforation will not materially impair the clearness and perspicuity of the manuscript with which it had been previously inscribed, and which will only be visible on the surface on which it was written; but any subse-

quent writing upon it can only be performed with much difficulty, and the ink with which it is performed will penetrate through or be visible on the other side.

Though it will be more convenient thus to subject the whole of the check or draft to the embossing and perforating process, the embossing and perforating may, if desired, be limited to the written portions of it by making the pieces of wire-gauze or wire-cloth of such size or form as only to cover the written portions of it.

While it is preferable to use the wire-gauze or wire-cloth on both sides of the paper, it may be employed on the written side only.

The rollers employed for this purpose must have their journals arranged in boxes in a frame or stand, and set-screws should be provided to adjust their pressure, and one of them should be provided with a crank or handle by which to turn it, the whole resembling the presses employed for some printing purposes, for rolling metals, and other operations common in the arts. Such a roller-press can be made at small cost, and within dimensions which will enable it to stand and be conveniently used upon a desk or office table.

Instead of the embossing and perforation being performed between rollers, it may be performed in a screw or lever-press with suitable dies or embossing and perforating-surfaces, and if performed between rollers it may be done by a proper formation of the surfaces of the rollers instead of by the use of wire-gauze or other material in sheets or plates.

What I claim as my invention, and desire to secure by Letters Patent, is—

The embossing, indentation, or perforation of bank-checks, drafts, bills of exchange, or other papers, in a manner substantially as herein described, after the manuscript portions have been inscribed.

Witnesses: SEYMOUR CRANE.
HENRY T. BROWN,
FRED. HAYNES.