UNITED STATES PATENT OFFICE.

GERHARD SCHREIBER, OF CHEMNITZ, SAXONY, GERMANY, ASSIGNOR TO DIE DIRECTION DER PATENTPAPIERFABRIK ZU PENIG, OF PENIG, SAXONY.

PROCESS OF MANUFACTURING SAFETY-PAPER FOR CHECKS, &c.

SPECIFICATION forming part of Letters Patent No. 322,130, dated July 14, 1885.

Application filed March 16, 1885. (No specimens.)

To all whom it may concern:

Be it known that I, GERHARD SCHREIBER, doctor of philosophy and chemist, a resident of the city of Chemnitz, in the Kingdom of Saxony, and German Empire, have invented a certain new and useful Improvement in the Process of Manufacturing Safety-Paper for Checks, &c., of which the following is a specification.

This invention relates to the manufacture of paper that shall at once indicate any alteration effected by chemical means of writing or other marks made thereon. The known methods for the production of such safety-paper either do not offer perfect security for the purpose required, on account of the chemical reagents employed therein, or they are of such a complicated nature as not to be practically available. According to the present invention the purpose aimed at is attained by manufacturing a colored paper of such a nature that the chemicals employed for removing writing or other marks in ink from the same, such as acids, chlorine, &c., will destroy or alter the color, the paper thus affording the required safety, as any attempt to remove or alter the writing will at once become visible thereon. The requisite operations for the preparation of such paper are at the same time very simple and do not affect or complicate the ordinary process of manufacturing paper, as the requisite chemicals need only be added to the paper material in the rag-engine.

The invention is carried out in practice as follows: The paper material is colored with indigo, preferably with indigo from the steeping-vat or steeping-trough, and is mixed with a chromate that is insoluble in water and soluble in acids—such as chromate of barium. The extent to which the latter is added depends upon the degree of blue-green to yellow-green coloration of the paper desired. On paper so prepared dilute mineral acids effect a separation of chromic acid that destroys the indigo-blue. Chlorine and solution of chloride of lime also destroy the indigo-blue and cause a yellow color to appear.

Having now described my invention, and also the manner for performing it, what I claim, and desire to secure by Letters Patent, is—

The process of producing safety-paper, wherein the paper material, after being colored with indigo, is treated with chromates insoluble in water, but soluble in alcohol.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GERHARD SCHREIBER.

Witnesses:
ALBERT VIEWES,
OTTO REICHOLD.