UNITED STATES PATENT OFFICE.

WILLIAM JOHN CLAPP, OF NANTYGLO, COUNTY OF MONMOUTH, ENGLAND.

PREPARATION, &c., OF PAPER FOR CHECKS, NOTES, STAMPS, &c.

SPECIFICATION forming part of Letters Patent No. 305,292, dated September 16, 1884.

Application filed April 23, 1884. (No specimens.) Patented in England October 15, 1883, No. 4,905.

To all whom it may concern:

Be it known that I, WILLIAM JOHN CLAPP, a subject of the Queen of Great Britain, residing at Nantyglo, in the county of Monmouth, England, surgeon, have invented certain new and useful Improvements in the Preparation and Treatment of Paper for Checks, Notes, Stamps, and other Documents, in order to prevent fraud, (for which I have received Letters Patent in Great Britain, No. 4,905, dated October 15, 1883;) and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

The invention has for its object improvements in the treatment of paper for checks, notes, stamps, and other documents, in order to prevent fraud. For this purpose I satu-20 rate the paper, either in the process of manufacture or afterward, with a solution of gallic and tannic acids, or gallo-tannic acid mixed with gum-acacia or other suitable gum and alum. The solution above described must be 25 sufficiently fluid or watery to enable it to be readily taken up by the paper, and yet of sufficient strength to produce the effect desired. It will be found that a saturated solution of the acid and alum, or a solution slightly weaker, combined with a small proportion of gum in solution, will answer the purpose.

This treatment will make little change, if any, in the color of the paper, but will render it everywhere sensitive to the action of prepara-35 tions of iron. In some cases I add to the acid solution a few drops of the preparation of iron, hereinafter referred to, in order to fa-cilitate the action on the prepared paper of inks which are weak in the iron constituent.

o In the event of its being desired to print on the prepared paper in colors, then I add to the acid solution a proportion of some alkali,

which shall to a certain extent neutralize the acid, which latter is, however, left in sufficient excess to answer the purposes of my in- 45 vention.

I print and write on paper, prepared as above and afterward dried, with an ink or preparation containing ferri-sesquichloride or other similar preparations of iron in quantity 50 sufficient to cause the writing and printing to pass entirely through the body of the paper, whereby, in the event of any portion of the writing on the check, note, stamp, or other document being obliterated, the printing will 55 also be removed, and the color of the body of the check or other document so altered as to render the attempted alteration apparent. This will also be the effect when any attempt is made to remove the obliterating-mark from 60 stamps and other documents. I also prefer to print on both sides of the check or other document, in order to increase the difficulty of alteration. I also prefer to glaze the back of the paper.

Having thus described the nature of my said invention and the mode in which I carry the same into effect, I would have it understood that what I claim is—

The preparation and treatment of paper for 70 the purposes described, which consists in saturating it with a solution of gallic and tannic acids, or gallo-tannic acid mixed with gum and alum, and then printing and writing on such prepared paper with an ink or preparation containing ferri-sesquichloride or other similar preparations of iron, substantially as herein described, and for the purpose stated.

W. J. CLAPP.

Witnesses:

WILL. J. LLOYD,
Solicitor, Newport, Monmouth.
EDWARD W. HILL,
His Clerk.