C. D. SEROPYAN.

METHOD OF PREVENTING BANK NOTES, &c., FROM BEING COUNTERFEITED.

No. 14,069.

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C. D. SEROPYAN, OF NEW HAVEN, CONNECTICUT.

METHOD OF PREVENTING BANK-NOTES, &c., FROM BEING COUNTERFEITED.

Specification forming part of Letters Patent No. 14,069, dated January 8, 1856.

To all whom it may concern:

Be it known that I, Christopher D. Seropyan, of New Haven, in the county of New Haven, in the State of Connecticut, have invented a new and improved mode of preventing counterfeiting bank-notes, drafts, and other papers representing value by photographic process, by transferring on lithographic stone, or by anastatic printing—i. e., preventing banknotes, drafts, and other papers representing value from being counterfeited by the abovementioned three different processes—viz., photographic, transferring, and anastatic processes; and I do hereby declare that the following is a full and exact description thereof, reference being had to the specimens accompany-

ing this application.

The nature of my invention consists in using oil-colored paper for bank-notes, drafts, and all other papers representing value, and printing them with indigo-ink, or an ink which would equally reflect or transmit the chemical rays of light, and which is equally or more fugitive than the color of the paper itself, so that when an attempt is made to copy the bank-note by photographic process there will not be produced a distinct copy of the said bank-note. In order, therefore, to copy the same the color of the said bank-note must be removed by some bleaching reagent. This cannot be done without destroying the vignettes and the lettering of the said bank-note, so that there will be left nothing to copy. Again, bank-notes and drafts printed on oil-colored paper cannot be transferred upon a lithographic stone, for when the ink of the bank-note is loosened by potash or some other alkali the color of the paper will also be loosened and transferred upon the lithographic stone, and thus the vignettes and the lettering of the bank-note will be effaced, so that there will be left nothing to copy. Again, bank-notes and drafts printed on oil-colored paper cannot be copied by anastatic printing, for when the bank-notes and drafts are laid upon the zinc, and when the proper acid is applied upon the back of the bank-note in order to act upon the zinc through those parts of the bank-note where there is no ink of the vignettes and that of the lettering, and thus produce the copy of the said banknote upon the zinc plate will be prevented;

for the printer's varnish or the boiled linseedoil of the color of the paper will protect the other parts of the bank-note where there is no ink of the vignettes and of the lettering. In order, therefore, to be able to produce the copy of the bank-note upon the zinc plate, the printer's varnish or the boiled linseed-oil of the color of the paper must first be removed by potash or by some other reagent; but this cannot be done without removing the varnish or the boiled linseed-oil of the ink also; and thus when the acid is applied upon the back of the bank-note it will act upon the zinc plate uniformly all over and produce no copy on the zinc plate. Therefore, from what has been stated it is evident that the combined action of the oil-colored paper and the fugitive ink will prevent bank-notes, drafts, and all other papers representing value from being counterfeited by photographic process, by the process of transferring upon lithographic stone, or by the process of anastatic printing.

To enable others skilled in the art to make and use my invention, I will proceed to describe my mode of manufacturing bank-notes, drafts, and other papers representing value.

I use different oil-colored papers. They are red, pink, orange, yellow, green, gray, and light-indigo colors. These may be prepared by first taking the different coloring substances and grinding them fine with the printer's varnish or boiled linseed-oil, and print the color uniformly thus prepared upon the bank-note paper by lithographic process; or take common bank-note paper colored in the ordinary way, or not colored at all, sized or not, and print upon it by the same process a film of the printer's varnish or boiled linseed oil, and thus the oil will permeate through the paper, being sized or unsized, and protect the color of the paper from being acted upon by the bleaching reagents, and also prevent the acids from acting through the paper. The ink I use to print the bank-notes and drafts with is indigo, or some other organic or metallic substance which will reflect or transmit the chemical rays of light, as well as the color of the paper, and that is equally or more fugitive than the color of the paper. These coloring substances, out of which the printing-ink is to be made, are also ground fine in the printer's varnish or boiled

linseed oil in the same manner as when the color of the paper is prepared.

What I claim as my invention, and desire to

secure by Letters Patent, is—

The application of oil-colored paper, together with a fugitive ink, to the manufacture of banknotes and drafts, which will prevent the counterfeiting of the said bank-notes and drafts by photographic process, by transferring on lithographic stone, or by anastatic printing, as herein described, using for that purpose the aforesaid combined action of the oil-colored paper and the fugitive ink—i. e., the combina-

tion of the oil-colored paper and the fugitive ink, which produces the desired result, and not the oil-colored paper alone without the fugitive ink, nor the fugitive ink alone without the oil-colored paper, but the protecting power resulting out of the combination of the oil-colored paper and the fugitive ink, or any other substantially the same, and which will produce the intended effect.

CHRISTOPHER D. SEROPYAN.

Witnesses:

GEORGE E. JACKSON, FRANCIS MILLER.