Heath's

AT SIGHT.

AT'D JULY 12,1367.



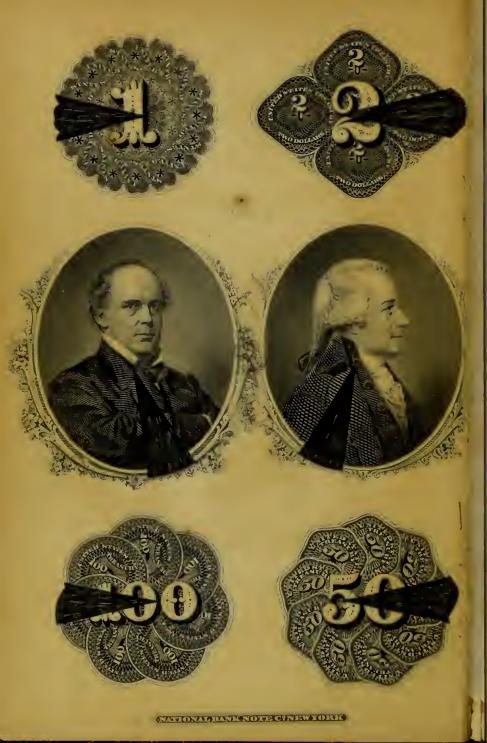
HEATH LABAN 2-P-s-7

two microscope are on each of two pages. Plates in Counterfeiting Detector, etc. 39 numbered pages, plus Heath's Greatly Improved Infallible Government 25 **d**, 10 **e** and 5 **e** fractional; Pl. 3 over 3; Pl. 4; Pl. 1 over 6 following order: Pl. 2; Pl. 5; 50 ∉ gen. and ctf fractional; Pl. 6; Pl. 7 over 7; Pl. 8 over 8; Pl. 9 over 9; Pl. 10 over 7; July 12, 1867 patentdate. Nick on spine. Sidewise dark green cover imprint with erroneous Pl. 11; 12; 13; 14 and 17. Recommendations 34-39.

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HEATH'S

GREATLY IMPROVED AND ENLARGED

INFALLIBLE

GOVERNMENT COUNTERFEIT DETECTOR,

AT SIGHT.

THE ONLY INFALLIBLE METHOD OF DETECTING COUNTER-FEIT, SPURIOUS, AND ALTERED BANK NOTES, GOVERNMENT BONDS, &c.

APPLICABLE TO ALL BANKS IN THE

UNITED STATES AND CANADAS,

AS NOW IN CIRCULATION OR THAT MAY BE ISSUED,

WITH

GENUINE DESIGNS FROM THE ORIGINAL GOVERNMENT PLATES.

BY AUTHORITY FROM THE

United States Treasnry Department, and the American, National, and Continental Bank Note Ccs., New York and Boston.

Second Edition.

BOSTON, MASS., AND WASHINGTON, D. C.: PUBLISHED BY LABAN HEATH,

TEACHER OF COUNTERFEIT DETECTION,

No. 20 Washington Street, Boston, to whom all orders should be addressed

Entered, according to Act of Congress, in the year 1866, by LABAN HEATH,

In the Clerk's Office of the District Court of Massachusetts.

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Treasury Department,

September 3, 1866.

Siv :

In reply to yours of June 30, 1866, applying to this Department for certain "cuts" used on the ipucs of the National Bank Notes and the U. S. Legal Tender! Nates, for use in your Counterfeit_ Detector, I have to say that permission to use certain of these cuts will be granted you, to be carried into effect in the followings manner, viz: you will please file in this affice a correct Schedule of the designs you desire, described in the following manner, i. c. giving the character and denomination of the matel, the subject of the rigneted or design, its location upon the particular nate, as "upper left=hand corner of the face of the note," Sc., Sc., and the number of copies of each that you' desire. Upon the reception of this Schedule, authority will be given to the Bank! Nate Companies wha engraved and printed these mates, to print for you the specified number of copies upon " plain plate paper," The necessary expense of which you will pay to them' upon delivery and secciful in duplicate for the copies delivered in like form as the list or order furnished by you to this Department.

Fiespectfully yours,

(Signed)

H. McCullache,

Laban' Heath', Esqu.

INTRODUCTION TO THE SECOND EDITION.

In presenting a second edition of the "Counterfeit Detec tor" to the public, I wish to add a few remarks enabling the reader more fully to understand its import. Having had unlimited experience in the detection of counterfeit and altered bank-notes, I felt the necessity of placing this knowledge within the reach of all; consequently, iu June, 1864, I published the first edition of "Heath's Counterfeit Detector," which met with such favor from the public that it reached the enormous sale of twenty-five thousand copies, and would have far execcded this number, had not the whole currency of the country been changed to what is commonly known as greenbacks and national bank-bills. This change gave apparent security for a time, and it was confidently believed that the counterfeiter's "occupation was gone." But this delusion was suddenly dispelled by the appearance in our midst of counterfeit greenbacks, so uicely executed that they were passed over the counters of our leading banks as genuine notes and in fact to a great extent over the entire country. This, together with the numerous and dangerous counterfeits of the new national currency, induced the author to apply to the Secretary of

INTRODUCTION.

the United States Treasury for certain cuts and dies used on the greenbacks and other national bills. This all-important request led the department to thoroughly investigate the matter, inquiring into the practicability of granting it. The officers of the leading Bank Note Engraving Companies were consulted upon the subject, and after a thorough investigation, permission was granted, on condition that the dies should be so mutilated as to prevent all possibility of counterfeiters making any use of them in their nefarions business, and yet preserving the symmetry of the work.

I am, therefore, through the kindness of the Secretary of the Treasury, enabled in this new edition to give fac-simile cuts and dies from nearly all the Government issues, thus placing in the hands of all the means of detecting the most skilfnlly prepared counterfeits that can be excented.

In issuing this work, I have retained all of the plates and euts that were in my first edition save two, which have become obsolete, and have added about fifty of the most beautiful Government devices, including "vignettes," "dies," etc. These devices are now considered the most important safeguards, as the whole ingennity of the most experienced rogues seems to be directed against the Government issues since the State bank-bulls have mostly been withdrawn from circulation.

The labor and expense of getting up this *new* work has been very great, and I assure the public that I have neither spared time nor money in perfecting it, so that I could present to them a *standard* work, not only worthy of the title it bears, but a sure safeguard against all classes of counterfeits.

In conclusion, I cannot refrain from expressing my gratitude to the Hon. Hugh McCulloch, the able banker and Secretary of the Treasury; Hon. Wm. E Chandler, his assistant and executive officer; Gen. F. E. Spinner, U. S. Treasurer,

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INTRODUCTION.

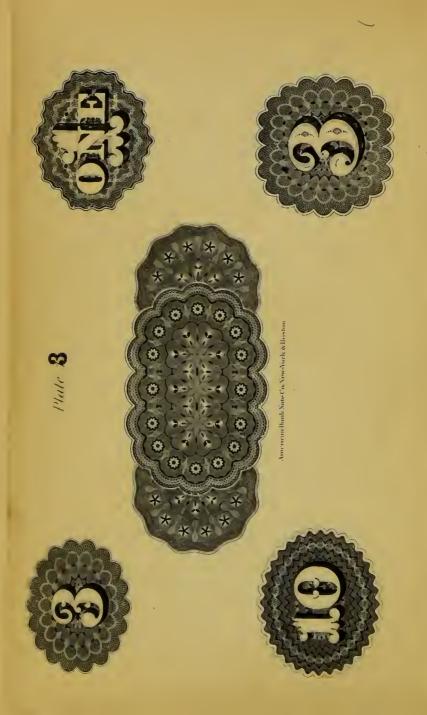
whose bold, inimitable signature is better known than that of any American now living; to Mr. Clark, of the Printing Bureau, and Mr. Wood, detective officer, as well as to the officers of the American, National, and Continental Bank Note Companies, and many others, whose suggestions have been of great value to the author.

LABAN HEATH.

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INTROD CTION TO FIRST EDITION.

THE object of this work is to furnish the public with a standard guide, and, in a comprehensive form, the means of deteeting Counterfeit Bank-Notes at sight, - the same means employed by Engravers, Brokers, Cashiers, and other experts. Many a man, after taking half a dozen counterfeit bills, has thrown away his "Bank-Note Reporter" in disgust, feeling that there is no certain means of protection against this kind of frand. The Reporters, however, are not at fault. They do all they profess to do; namely, give the standing of the Banks, and describe known Counterfeits. The same is true of the " Safeguards" and "Detectors" describing all genuine bills. The difficulty lies in the fact that many counterfeits do not find their way into the "Reporters" for a long time, or they are rushed upon the community in various places at once, and the damage is done before there is time to warn the people. Many counterfeits, also, are such exact imitations of the genuine that no description can enable one to detect them. The only sure protection, then, is to possess the power of judging the genuineness of the note by the quality of the work. Thi^a knowledge has been reduced to fixed principles, so clear and simple that any one, with the aid of the microscopic glass, can understand and apply them. Many ladies, under the tuition of the author, have become experts in detecting counterfeits, and all who have become acquainted with the anthor's mode of teaching the art have shown the deepest interest in it, and a desire to know still more. This fact, and a desire to fur-



nish the community a protection against the enormous amount of spurious currency now afloat, have prompted the author to prepare the present work. The expense of the work has been very great, owing to the high cost of genuine engravings with which it is so profusely illustrated. It may also be remarked that the author has enjoyed peculiar facilities for procuring such engravings, which are obtained with great difficulty, owing to the misuse which might be made of them by counterfeiters; and he is thus able to apply the principles, here taught to the United States and National Bank-Note currency, with full illustrations of the same.

The general principle upon which the detection of counterfeits is based is that all parts of genuine notes are engraved by machinery, — with some exceptions hereafter named, — while all parts of counterfeit notes are engraved by hand, with exceptions hereafter given.

The machines employed in engraving are very elaborate and expensive, thus placing them beyond the reach of counterfeiters, who, even if they had the capital, would hardly risk investing from \$75,000 to \$150,000 in an illegitimate business which might be taken from them at any moment by the officers of the law. The size and weight of such apparatus would also prevent concealment.

The work executed by the regular Bank-Note Company is of great beauty and perfection; and in all its parts mathematically and geometrically exact. Engraving exceuted by hand or even with the aid of some simple machinery, can never approach the beauty and exactness of genuine work. The sucecss of counterfeiters in circulating their spurious issues is not at all due to any excellence of work that would deceive a practised eye, but to the general ignorance of the public as to what constitutes good and poor engraving; so general is this

INTRODUCTION.

ignorance, that it is rare to meet a man who knows the object or character of the beautiful devices found upon every banknote, and which are its only safeguard against counterfeiting. In judging of the genuineness of a note, some look carefully for piu holes, others for signs of wear, and others still examine the paper, all of which are easily imitated by counterfeiters.

In the engravings of this work will be found a *standard of excellence*, with which all genuine work will favorably compare; while connterfeits will fuil to stand the test. A careful comparison will reveal their defects, — defects which will never be found in genuine work. Some works of similar character to this have attempted to give specimens of counter. feit engraving by means of wood-ents. This, however, is impossible, as there is no standard for counterfeits, varying as they do from poor to excellent.

The various kinds of work will be fully described in the following sections. They consist of -

SEC. 1. Geometrical Lathe Work.

- " 2. Ruling Engine Work.
- " 3. Medallion Ruling Engine Work.
- " 4. Vignettes.
- " 5. Solid Print.
- " 6. The Perkins Plate.
- " 7. Minor Rules.

Then will be added -

SEC. 8. Altered Bank-Notes.

- " 9. General Directions.
- " 10. Particular Directions.
- " 11. Remarks.
- " 12. Microscope or Magnifying Glass.

\$ 10 Vational Currence \$ 5 Grown Back American Bank Nate Ca.New-Yark & Boston S 10 Green Buck \$ 20 Green Buck Plate 1. S 10 Green Buck S.5 Gurn Buck 200 - TALITO 23.0

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COUNTERFEIT DETECTOR.

SECTION FIRST.

GEOMETRICAL LATHE WORK.

[Cannot be Successfully Imitated.]

ALL the figures on bank-notes, of eireles, ovals, squares, etc., and upon which the denomination is usually placed (see Plates 2, 3, 4, 5, and 6), are composed entirely of a *network of fine lines*, crossing each other at such angles and distances as to produce the desired effect. This *fine line* is the characteristic of this description of engraving, and in genuine work can be traced by means of a lens throughout the figure, never breaking or losing itself in another line, or pursuing any irregularity whatever. This line is usually white, on a black or green ground, or sometimes red, but may be a black, green, or red line on white.

Plate 5, shows the beautiful lathe work, on the right end of the Facks of the \$10, \$20, \$50, and \$100 National Currency Notes; they are printed

in green, the same color used for the bills. A careful comparison of any suspicious note of the above denomination (with the aid of a lens) will at once determine its character. This line is produced by the Geometrical Lathe, a wonderful and beantiful engine, invented by Mr. Asa Spencer, of Connecticut, and first introduced into general use in 1818-19. The patterns produced by the geometrical lathe are of every conceivable variety of form and figure; but this fine line is the characteristic of them all. The lathe does not engrave its patterns directly upon the bank-note plate, but upon pieces of soft steel one-eighth of an inch thick. This piece is then hardened by a peculiar process, and then a cylinder of soft steel is rolled over it by means of a powerful machine called the Transfer Press, and the engraving is transferred to the cylinder. This eylinder is then hardened, and is capable of transferring the same design to the bank-note plate, by means of the Transfer Press. In counterfeit engraving, on the contrary, the design is engraved directly upon the plate, and will fail in two ways. First, it will be impossible to produce the perfect line of the genuine, and the effect to the naked eye will be a more or less dull and sunken appearance, and sometimes a "scratchy" look. The figure will also be darker or lighter in spots, because the lines will be sometimes heavier and sometimes lighter. The lens will also show the lines to be imperfect; some.



times broken, irregular in size, and irregular in their course; and, second, it will be impossible to produce two dies exactly alike. In the genuine plate, when two dies oceur alike, both are "transferred" from the same eylinder and must be alike; but in the counterfeit, each being separately engraved, and by hand, it is *impossible* to produce two exactly alike. An examination of the plates showing the more frequent forms of geometrical lathe dies will show the beautiful, clear, raised impression produced by the eorreet lines of the genuine engraving. Sometimes the whole face of a note, except the vignettes and dies, will be *tinted* a pale red or other eolor. This tint is eomposed of fine eurved or looped lines, running aeross the whole face of the bill, and is done by the geometrical lathe. In the genuine it will be perfect in the lines and in the shades, like all lathe work, as described above; and the counterfeits will have the same imperfeetions, in the lines and in the shades, before described. In all the Government issues (with the exception of the old fractional currency now nearly obsolete) the geometric lathe work is largely used, constituting the chief test of genuincness. This should be made a particular study by earefully examining the plates, both with the lens and the naked eye. The student will thus become familiar with genuine and perfect work.

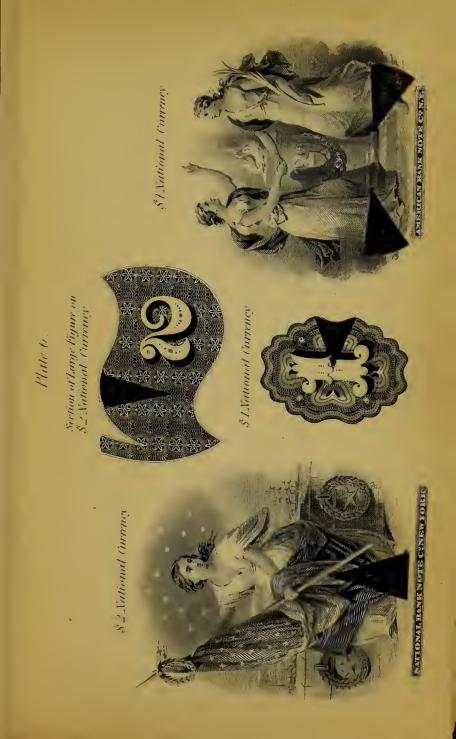
SECTION SECOND.

RULING ENGINE WORK.

THE fine line is also the characteristic of this kind of work; but the lines, instead of forming circles, are *parallel*. This work is always used for the *shading of letters* (see Plates 7 and 8), and forms a perfectly even pale gray shade. The lines are usually very fine in genuine work, so that the shading appears light. It may, however, be dark and yet be genuine.

The engraving is produced and transferred in the same way as the geometrical lathe work, and the shade will always be uniform, — no part darker than another, — the lines will all be perfect, and the spaces between them exact. They may be horizontal, i. c., directly across the plate, or diagonal, running crosswise the plate. In the counterfeit, this work, like all other, is engraved upon the plate by hand, aided sometimes, perhaps, by some simple and imperfect machinery.

Consisting of the fine line, like the geometrical lathe work, it will fail in the same particulars; namely, will be more or less dull and sunken, looking as though done with a lead-peneil, and may also have the "'serateby" appearance; and,



second, it will be *impossible* to produce two letters with exactly the same shade. The first letters of the name will be lighter or darker than the middle or last ones. The lens will show the lines to be more or less coarse and uneven, frequently breaking, and sometimes ending too soon, as seen in Counterfeit Plate 16.

The lines are also liable to be erooked, — not perfectly parallel. Fine specimens of Ruling Engine work will be found on Plates 7 and 8. It is generally used, as there, for the shading of names of Banks, and also for the names of Town, State, etc. It is also used for the large letters aeross the face of some notes, indicating the denomination of the bill, as seen in Plate 8.

For the purpose of more fully illustrating the difference between genuine and eounterfeit engraving, we have at great trouble and expense obtained a eounterfeit plate engraved by eounterfeiters, and taken from them at the time of their arrest. (See Plate 16.) This plate is in the hands of the American Bank Note Company, from which these specimens are printed. Plate 15 is a beautiful specimen of engraving by the American Bank Note Company. The geometrical lathe work in each corner of the note, and medallion ruling work which encloses the title are exceedingly beautiful, and shows at once the impossibility of counterfeiters ever obtaining the beauty, found on this plate. Plate 16 is the counterfeit plate already referred to, and is pronounced by all an excellent specimen of counterfeit work, but by comparison, with a lens, the difference will be instantly perceived.

SECTION THIRD.

MEDALLION RULING ENGINE WORK.

The beautiful medallion heads, the raised shields, upon which the denomination of the note is sometimes placed (see Plate 9), and the raised work sometimes seen in the large figures 5, 3, etc., running across the face of the bill, are produced by this engine. The fine line is still the characteristic of this work, as of the two already described. The difference is that in the first the lines formed circles (eccentric, concentric, and geometric); in the second the lines were parallel; in this they are waved. (See medallion head, Plate 9.) A careful examination of the plates will show that in the dark places the lines approach nearer to each other; in the light places they separate more. This engine engraves from a pattern. A medal, or coin, or other prepared pattern, is placed in the machine as a "guide," and every undulation of this "guide" is copied

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by the machine with unerring exactness. The lines extend entirely through the figure, approaching and departing from each other, but never breaking. The engraving is then "transferred," as described in Section First. The effect of this is a beautiful raised appearance, with an almost metallic lustre and brilliancy, as may be seen in the plates. In counterfeits, this work, like all other, is engraved upon the plate by hand, or possibly with the aid of some imperfect machinery. The result will be that the lines will be found by a close examination to break off in the pattern, and sometimes to be forked, and also irregular in size, - some coarser and some finer, and one line will not be of the same size throughout. The effect of this is that the engraving will have a dull and sunken appearance, - more like a wood-eut. The pattern, also, wants the ease and grace of the genuine. The flat expression will be the most striking. When used as a counter upon which to place the denomination, and there are two dies that pretend to be alike, they will (if genuine) be exactly alike, both being transferred from the same cylinder; while in counterfeits they will not be exactly alike, being done by hand at different times. The beautiful work of the medallion ruling engine can be seen in Plate 9. It has not been used upon any Government issues thus far, probably because it can be a little better imitated than the lathe work.

SECTION FOURTH.

VIGNETTES.

[Can be Imitated.]

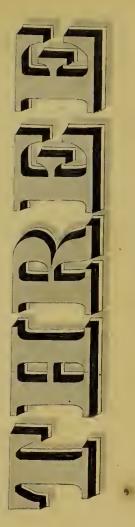
The three kinds of work previously described are always and invariably machine work in genuine bills, and therefore cannot be imitated successfully by the means in the hands of counterfeiters. Vignettes may be classed as the artistic part of bank-note engraving, as the greater part of it is done by hand, and in all genuine work by firstclass artists. Water and sky are sometimes done with the ruling engine, and when they are, come under Section Second, and cannot be successfully imitated. The only thing required for a firstclass vignette is a first-class artist; but as such artists receive high rates of compensation, and can usually find plenty of employment from the regular companies, eounterfeiters can offer little temptation to induce them to work for them, and there is also little temptation for artists to become counterfeiters. It is therefore rare to see fine vignettes on counterfeit notes. That good work is sometimes found upon such issues is, however, not to be denied; and some works of a similar character to this have taught people to rely











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too much upon the character of the vignettes. Much is said about the appearance of the eyes, hair, skin, drapery, fingers, toes, etc., leading people to suppose these are infallible "guides." The Plates 6 and 11 give fine specimens of firstelass vignettes, which will be readily recognized by the reader as belonging on the different denominations of National bills, and all vignettes which fail to compare well with these should cause the note to be carefully examined; but the style of vignette should not be allowed to overturn judgment based upon the work described in the first four sections. If that be all genuine, an ordinary vignette eannot make the bill counterfeit, and if that be counterfeit, no vignette can make the bill genuine. The vignettes on the backs of the \$5, \$10, \$20, \$50, and \$100 National Currency Notes are taken from historical paintings from the U.S. Capitol at Washington, which are exceedingly lifelike and beautiful. The engraving on the back of the \$5 is the landing of Columbus; on the back of the \$10 is De Soto discovering the Mississippi; on the back of the \$20, the baptism of Pocahontas; on the back of the \$50, the embarkation of the Pilgrims; on that of the \$100, the signing of the Declaration of Independence. Being under the necessity of mutilating all the dies furnished by the U.S. Treasury Department, as referred to in the Introduction, I have taken the right end of back vignette of \$5 National Currency, and the right end of face of \$5 National Currency, and the left-hand half of

the \$10 and the right-hand half of the \$20; also, the left-hand half of the \$50 and the right-hand half of the \$1(0, and put them together, to preserve their symmetry, instead of mutilating the entire back. (See Plates 12, 13 and 17.)

On the centre of Plate 14 will be seen the vignette which appears on the left-hand end of the \$5 greenback. At the right of it is the vignette of the \$20 greenback; at the left is vignette on right end of \$10 greenback. The portraits in Plates 1, 2, and 4 were executed by men at the head of their profession, and are exceedingly lifelike and beautiful. Counterfeiters oftener fail in portraits than in out-door scenes, - giving them generally a sunken and lifeless expression. The vignettes upon the Government issues consist of ont-door scenes, historical pictures, portraits, and allegorical figures. All are of exceeding beauty, and it is not probable that counterfeiters will ever succeed in successfully imitating such work. Specimens of all are given, - the splendid portraits of Chase and Hamilton, on Plate 2, executed by the National Bank Note Co., of New York, cannot fail to strike the eye of the most casual observer. Yet the portrait of Hamilton has been dangerously imitated on a counterfeit \$50 greenback. But it should be understood that, however perfect, a counterfeit cannot be the same as the original. This portrait of Hamilton, for instance, has been engraved but once, and all impressions of it upon Gavernment notes, or in this book, are exact copies 

Plate 9

American Bank Note Co. New-York & Boston





of that one engraving, being all made from it by the transferring process already described. The same is true of all vignettes upon Government issues. A comparison, therefore, of a supposed counterfeit with the specimens in this book will show whether it be exactly the same or not.

SECTION FIFTH.

SOLID PRINT.

[Can be Imitated.]

In genuine work the lettering is done by a firstclass artist, who makes it his exclusive employment, and therefore arrives at a high degree of perfection. The name of the engraving company is always engraved upon the genuine with great care and accuracy. It will be found on the upper or lower margin of the bill. In counterfeits, it is more or less irregular and uneven. The chief use of solid print is to prevent alterations, as will be hereafter explained. It is classed as capable of imitation, because a good artist can engrave it for counterfeiters, if so disposed, as well as for the regular engraving companies. A specimen of solid print will be seen at the bottom

of Plate 7. Much has been said in some "Detectors" about the lettering of "Promise to pay," etc., as being nearly infallible. The truth is, however, that this is of little value, being frequently very neatly done in counterfeit notes. Some bank-bills have the denomination of the bill engraved in very fine letters across the whole or part of the face of the bill, - one dollar, one dollar, one dollar, etc. This, in the genuine, produces a perfectly even shade of black, green, red, or otherwise, according to the color of ink nsed; but in the counterfeit cannot be so well produced; and, therefore, the shade will be lighter in some places, and darker in others. This is nearly infallible. This latter form of using the solid print is not used on Government notes.

SECTION SIXTH.

THE PERKINS PLATE.

THE Perkins Stereotype Plate is an engineruled die; and in the face of the note does not differ from other work of this kind, as described in Section Second. Its chief characteristic is the *check back*, composed of various sizes and kinds of type, thrown together in a most confused man-

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ner, and then arranged in ovals, bars, etc., eovering the back of the note. It is usually printed in reddish-brown or black. For a long time this was also thought to be a nearly perfect safeguard; but it has been imitated, and is now mostly superseded, even on State bank-notes, by the more beautiful designs of the geometrie lathe.

SECTION SEVENTH.

MINOR RULES.

WE will now give some indications which, though not infallible, are important.

Printing.

Genuine bank-notes are always printed with great eare. The plate is covered with ink, which is then earefully wiped off, excepting what remains in the lines of the engraving; the impression is then taken with a powerful press, with great eare and accuracy. This gives a clear and beautiful impression, which will be more or less wanting in counterfeits.

Ink.

The ink used in genuine bank-note printing is of peculiar quality, and very difficult for counterfeiters to obtain. If black, it gives a clear, glossy

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HEATH'S INFALLIBLE

impression, without any *smutty* appearance, such as is sometimes seen in counterfeits. The green ink used in Government work is *almost* impossible to imitate; and the red and other colors are almost as difficult. Genuine ink of any color has a more or less clear and *glossy* appearance, while counterfeit inks look dull and muddy.

Paper.

Genuine bank-notes are printed upon paper composed of linen, and it is usually of good quality. It varies much in thickness, it being sometimes very thin. Persons who are not acquainted with paper sometimes pronounce the thin paper poor. We have seen one of the beautifully-engraved notes of the Suffolk Bank, Boston, looked upon with suspicion by persons unacquainted with the art herein taught, simply because the paper was thin. It is, also, not impossible for counterfeiters to procure good paper. Out of twelve connterfeit notes now lying before us, four are upon very poor paper, two upon rather poor paper, and six upon very good paper; one at least of the latter is upon paper of the first quality. It will be seen, therefore, that the paper, though important, is not infallible.

Signatures.

The only thing counterfeit about a bill sometimes is the signatures, the notes having been

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Plate II.

Vignettes on National Currency Notes





stolen before they were signed. There can be, of course, no sure protection against this for all. Those who are well acquainted with the signatures of the officers of the bank where bills are stolen may not be deceived, as imitated signatures have a more or less cramped and unsteady appearance; but those who live at a distance cannot possess this knowledge.

SECTION EIGHTH.

ALTERED BANK-NOTES.

BANK-NOTES are altered in two ways; first, by raising the denomination; second, by changing a genuine bill on a broken bank to a good bank.

Denominations are altered, first, by pasting. Figures or letters of larger denomination are pasted over the denominations of the note to be altered, first scraping the genuine until thin. This can frequently be discovered by simply examining it with a little eare, and always by holding the suspected note up to the light, when, if pasted, the pasted parts will be darker, because thicker. A counterfeit \$50 greenback has been recently made to look like a genuine, by pasting on a portrait of Hamilton cut from a genuine \$2 greenback. Second, by taking out the denomination of the genuine with an acid, and printing in a higher with a counterfeit die. In this case, the ink will not be the same as the original, as explained in Section Seventh; neither will the work compare with the original. If solid print, it will not be as exact and perfect; and if the original is shaded, the shading of the counterfeit part will have the faults described in Section Second. For instance, the words ONE DOLLAR may be changed to FIVE DOLLARS. In that case the *five* will be engraved by hand, and the *dollar* by genuine means; an S must also be added, and the work will appear crowded.

Another indication is that the acid will spread a little, taking out more than the counterfeiter intended, so that parts of the neighboring letters will be more or less injured. The paper, also, will be either bleached or stained by the acid, as can be seen most plainly upon the back.

In the United States bills, or greenbacks, the ones, twos, and threes have a circle of green lines radiating from the denomination. This circle can be found on no larger notes than threes, if genuine. This is an additional safeguard against altering United States notes. The solid print will also be found defective, as described in Section Fifth.

The second kind of alteration — that of broken banks to good ones — sometimes requires a close

Right end of Back \$ 20 National Currency American Bouk Note Co.New-York & Boston Sectories and Plate 12. BOTO DISCOVERIN Left and al' Buck & 10 National Currency



examination to detect them; but a good understanding of the principles here taught will seeure any one from deception. To make this change, the name of the Bank and signatures of the officers always have to be removed, and new ones inserted, and generally the name of the Town and sometimes of the State are also changed. These must be removed by acid, and the work inserted will be eounterfeit, and will be recognized as such by an application of the principles already taught. If the letters are shaded, it will be done by hand : nd not by the ruling engine, and will have the imperfections described in Section Second. If solid print, the counterfeit will have the faults given in Section Fifth. Sometimes only a part of the name is ehanged, and then the contrast between the counterfeit and the part not changed is more evident. There will also be marks of the acid, the same marks mentioned above, and the counterfeit signatures are apt to be faded, from some acid remaining in the paper, after removing the original signature.

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SECTION NINTH.

GENERAL DIRECTIONS.

In receiving bank-bills, first look at the general appearance of the bill, - casting your eye across it, - and if anything is wrong, it will probably catch your eye. Then examine the various parts more perfectly, examining the geometrical lathe work. Then examine the shading of the letters, - the ruling engine work, - and look for any indication of alteration in the title or denomination of the note. Then if there are any Medallion Heads or Shields, or other Medallion Ruling, compare it with Plate 9, and examine the lines. Examine the Vignettes and Portraits, noticing whether their style and perfection compare well with the standard work of the plates, and whether they are exactly the same. If there is engine ruling in the sky or water, you will have an additional proof. An examination of the Solid Print and engravers' names will confirm the decision, whatever it may be; and the Printing, Ink, and Paper may also be considered in making a full decision. Such an examination of a note, with a very little practice, and a frequent reference to these standard plates, will secure any man of ordinary ob ervation and intelligence against deception.

Right end al Back \$ 100 Sotional Ouronge American Bank Note Co.New-York & Boston. Plate 13. North Street Left end of Buck \$ 50 Mational Currency 5

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SECTION TENTH.

PARTICULAR DIRECTIONS

FOR DETECTING COUNTERFEIT GREENBACKS, NATIONAL CUR-RENCY NOTES, AND FRACTIONAL CURRENCY.

In receiving the note, look at the general appearance, and if it is not perfectly satisfactory, compare it with the corresponding work in the book, as you will find parts of all the eirculating notes (Greenbacks, National, and Fractional Currency, with the exception of \$500 and \$1,000) in this work, and if, on comparison, it does not come np fully to the standard, it must be counterfeit. One of the most successful counterfeits ever excented is the \$50 U. S. Greenback, which has deceived some of the most experienced. Certain parts of the gennine work are in this book, on Plate No. 2; and a person, having the book and magnifier, can, upon comparison, discover the difference at once.

In presenting to the public two plates of Serip, or Fractional Currency, we wish to say that the 50 eent Serip (which is the first on the plates) is the best executed counterfeit ever issued. It was engraved by a man who was an expert in the art, as thousands who have been made dupes to his nefarious designs can testify. He was finally arrested by the Secret Service Division, convicted, his plates secured, and his illegal business broken up.

HEATH'S INFALLIBLE

SECTION ELEVENTH.

REMARKS.

WE will add here a few suggestions, hints, and items, which, although important, could not be added elsewhere without confusing the mind of the learner.

Genuine Dies on Counterfeit Bills.

A genuine lathe die will sometimes be seen on a counterfeit bill. The die so used may have been stolen, although that is very difficult to do, as all such work is gnarded by the best of safes and other protections, or it may be one of the lot that was sold at anction in New York, in 1841, and some of which fell into the hands of counterfeiters. These dies, however, do not render the other work genuine. The ruling of the letters, solid print, in short, all the other work on the bill will be counterfeit, - and a single piece of counterfeit work condemns the bill. Some of those auction dies were vignettes, - so that even the geometrical lathe dies and vignette may be genuine work, yet the ruling and other work will be enough to condemn the note. This applies only to State bank-bills.

Check Backs.

The work upon the back of bills is usually done by the geometr cal lathe (except the Perkins

A COLORADO \$ 20 Green Back 100 American Bunk Nate Co. New York & Boston 55 Green Buck Plate 11. -RELIS \$ 10 Green Back

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Plate), and therefore comes under Section First. A beautiful specimen of eheck back is seen upon the Government notes, the "greenbacks;" we mention it here to remark that bills with check backs are rarely altered or counterfeited. If counterfeited, the check back is often omitted. In attempting to alter such bills, the acid strikes through and destroys part of the back, which cannot be replaced. If the alteration be in the denomination, it will have to be altered in the back, also, as it is usually expressed there, and such an alteration would be likely to stain through upon the face.

It will sometimes be noticed that two bank-notes that should be alike differ somewhat in size, one being a little shorter than the other; and this may excite some suspicion. It is owing, however, to a little shrinkage of the paper, after printing, and happens as often to genuine bills as any.

Piecing.

Some counterfeiters make ten bills of nine, by cutting a counterfeit note into ten pieces; one of these pieces is pasted into a genuine bill, cutting out a piece of the genuine of the same size. In pasting nine genuine bills in this manner, nine, pieces are obtained, which, with one piece of counterfeit, will make a tenth bill which is the profit. Banks will redeem the genuine parts of such bills at their fractional value. This operation is not a very successful one, as the difference between the eounterfeit and the genuine will be very evident to any one who possesses a knowledge of the art here taught. To hide this difference, they generally deface the counterfeit part somewhat, and give the note a worn appearance.

The new National Currency, which has nearly taken the place of all other issues, except United States Notes, is supposed by some to be entirely seeure from counterfeiting, and, therefore, that no knowledge of detecting will be necessary, and no care in receiving such bills will be required. Such, however, is not the case. It is true that the remarkable excellence and abundance of the work upon the Government and National Currency, and the difficulty of imitating the green, will render counterfeiting very difficult. It should be remembered that this currency offers great inducements to counterfeiters, and a successful counterfeit will repay great outlay and care, - for two reasons : first, the greenbacks will go anywhere in the United States, and if a counterfeit becomes known in one State or section, it can be taken to another : while counterfeits on local banks, when once known, are killed; and second, a plate may be prepared to counterfeit the currency of the National Bank in one town, may be run npon that . till known, and then with simply a change in the title of the bank, be immediately changed to another bank, and thus, as fast as it becomes known. can go through all the banks in the United States,

thus having an opportunity for *sixteen hundred* changes, thereby increasing the chances of success *sixteen hundred times*.

The fifty cent postal and fractional eurrency is already freely counterfeited; yet hundreds of such counterfeits pass without any question, where the application of the first rule in this work would de teet the fraud; the lathe work would condemn them in an instant.

These facts are not mentioned to depreciate our new eurrency in any way, but to warn the public against a false security, and thus most effectually head off the rascally authors of counterfeit issues, by forewarning and forearming the people. Every man, woman, and child has occasion to handle more or less money; and if all would possess themselves of the knowledge here taught, counterfeiting would soon become a profitless business. We want to see a knowledge of this art in every place of business,-yes, in every house and cottage in the country. It has long been our business and our pleasure to forewarn and defend the peoplc against the miscreants who tamper with the commercial life-blood of the nation, defrauding the poor, the widows, and the fatherless of their scanty store, and giving to all vexation and loss in place of security and profit; and we hope to still further disarm and paralyze them, by a more general diffusion of the knowledge of this art, by means of this 1 ttle work. Vigilant officers of poliee may do much to guard the community, but their most painstaking vigilance is not always successful; while a general knowledge of detecting bank-notes by the engraving will root out the very fangs of the serpent, — Counterfeiting.

SECTION TWELFTH.

MICROSCOPIC OR MAGNIFYING GLASS.

The beautiful fine lines required in the engraving of all bank-bills, even in moderately wellexecuted counterfeits require the aid of the microscopie glass, and sometimes a microscope of great power is absolutely indispensable in order to diseern the genuine line, and discriminate between the true and the false work. The ordinary magnifying glass now in use by banks has failed, in many instances, to bring out this delieate work sufficiently to detect some of the late skilfully-executed counterfeits. In order, therefore, to meet this difficulty, I have, after much labor, invented a combination Micro-telescopic Glass, and in May, 1866, seeured letters patent on the same, which is designed for use and sale with the "Detector."

This glass is a fine magnifier, a powerful microseope, and spy, or opera glass. By a simple change, this instrument is convertible into either

PLATE 15. Right end of face of \$5 National Currency



ENGRAVED BY THE CONTINENTAL BANK NOTE COMPANY, NEW YORK.



Right end of back vignetic \$5 National Currency



one of the above-named glasses, and is very useful at all times, and for other purposes than the detection of counterfeits, and will be worth the cost for family use, as an opera glass or microscope.

Fig. 1 shows the Glass as put up for sale. Fig. 2 shows it as a microscope. In using it for this purpose, you must have a good light, and have it shine direct on the object you wish to examine, first placing the object on a piece of white paper; then adjust the glass to the right focus by sliding the smaller section. Fig. 3 shows the section used for examining notes and other things of a like description. Fig. 4 shows it as used for a spy-glass.

These glasses, now being manufactured in Paris, will be furnished as soon as completed with or without the "Detector," by mail, pre-paid, at the following prices : —

Lower Section or Magnifying Portion, \$3.00.

Upper Section combining Microscopic and Telescopic, \$5.00.

Making the whole "Combination Glass" \$8.00.

If only one section is wanted at first, the other portion can be ordered at any future time.

RECOMMENDATIONS FROM MEMBERS OF CONGRESS.

SERGEANT AT ARMS OFFICE, U. S. HOUSE OF REPRESENTATIVES, WASHINGTON, D. C., Dec. 1st, 1866.

LABAN HEATH, ESQ., has spent much time and labor in the perection of his system for the detection of Counterfeit Currency, and if properly encouraged by those most interested, I have no doubt will be able to aid the public materially in driving out of existence the numerous dangerous Counterfeits that are now afloat.

I can cheerfully recommend Mr. Heath as an upright, energetic man.

N. G. ORDWAY,

Sergeant at Arms, U. S. House of Representatives.

I concur in the foregoing recommendation.

CHARLES B. HALL,

Secretary of the Association of Banks for the suppression of Counterfeiting.

BOSTON, MASS.

U. S. HOUSE OF REPRESENTATIVES, WASHINGTON, D. C., Dec. 1st, 1866.

The undersigned having examined the Proof Sheets and Plates of Heath's "Government Detector," concur in the utility of his system, and cheerfully recommend his work.

Hiram Price, President State Bank, Iowa, M. C., 2d Dist., Iowa.
J. B. Grinnell, M. C., 4th Dist., Iowa.
T. W. Ferry, Bankor, and M. C., 4th Dist., Michigan.
Charles Upson, M. C., 2d Dist., Michigan.
Columbus Deleno, President 1st National Bank, Mount Vernonj and M. C., 13th Dist., Ohio.
James M. Ashley, M. C., 10th Dist., Ohio.
Francis C. LeBlond, M. C., 5th Dist., Ohio.
Sidnoy Clark, M. C., Kansas.
Delos. R. Ashley, M. C., Nevada.
Fhomas N. Stillwoll, Cashior 1st National Bank of Anderson, and M. C., 14th Dist., Indiana.

Godlovo S. Orth, M. C., Sth Dist., Indiana.

Shelby M. Cullum, M C., 8th Dist., Illinois.

John Wontworth, M. C., 1st Dist., Illinois. Goneral II. E. Paino, M. C., 1st Dist., Wisconsin." Philetus Sawyer, M. C., 5th Dist., Wisconsin. Honry T. Blow, M. C., 2d Dist., Missouri. John Hogan, M. C., 1st Dist., Missouri. Georgo W. Anderson, M. C., 9th Dist., Missouri. Ignatius Donnelly, M. C., 2d Dist., Minnesota. Adam J. Glossbrenner, M. C., 15th Dist., Pennsylvania Myors Strouso, M. C., 10th Dist., Pennsylvania. Goorge V. Lawrenco, M. C., 21th Dist., Pennsylvania Edmund Cooper, M. C., 4th Dist., Tennessoo. Samuel McKeo, M. C., 9th Dist., Kentucky. Gonoral Lovoll II. Rousseau, M. C., 5th Dist., Kontucky. Charles E. Pholps, M. C., 3d Dist., Maryland. John L. Thomas, M. C., 2d Dist., Maryland. John A. Nicholson, M. C., Dover, Delaware. George Latham, M. C., 2d Dist., Wostorn Virginia. John F. Starr, M. C., 1st Dist., New Jorsoy. William A. Nowell, M. C., 2d Dist., New Jersey. John H. D. Honderson, M. C., Oregon. D. C. MeRuer, M. C., California. Theodore M. Pomroy, M. C., 24th Dist., N. Y., and Chairman Com. on Banking aud Currency. William E. Dodge, M. C., Sth Dist., New York. Daniel Morris, M. C., 25th Dist., New York. John A. Griswold, Prosident Troy City National Bank, and M. C., 15th Dist., Now York. Calvin T. Hulburd, M. C., 17th Dist., New York. Hamilton Ward, M. C., 27th Dist., New York. Henry C. Doming, M. C., 1st Dist., Connecticut. Augustus Brandegeo, M. C., 3d Dist., Connecticut. James G. Blaine, M. C., 3d Dist., Maino. Samuel Hoopor, M. C., 4th Dist., Massachusetts. Thomas A. Joncks, M. C., 1st Dist., Rhodo Island. James W. Patterson, M. C., 3d Dist., New Hampshire. Edward II. Rollins, M. C., 2d Dist., New Hampshire. Portus Baxter, M. C., 3d Dist., Vermont. P. W. Hitchcock, Delegato in Congress, Nobraska. 66 66 66 W. H. Hooper, Utah. 66 66 66 Arthur II. Denny, Ter'y of Washington. 66 66 66 Samuel McLean, .Montana. " 66 22 New Mexico. J. F. Chaves, - 66 66 66 John N. Goodwin, Arizona.

RECOMMENDATIONS.

OFFICE OF AMERICAN BANK-NOTE COMPANY BOSTON, June 23, 1864.

The "Counterfeit Detector," published by Mr. Hoath, is all that it purports to be. The engravings, by which it is illustrated, aro the true standard of work to be found on genuine notes. I fully approve of the work.

ISAAC CARY, Manager.

SUFFOLK NATIONAL BANK, BOSTON, December 2, 1867.

THE "Counterfeit Dotector" published by Mr. Heath, I consider one of the most valuable works offered to the public for the purpose designed, that of dotecting Counterfeit Government or National Bank Notes. Without hesitation, I recommend it to Bankors and all business men.

EDWARD TYLER, Cashier.

BANK OF MUTUAL REDEMPTION, BOSTON, JUNO 21, 1864.

I CONSIDER Mr. Heath's "Counterfoit Detector" a valuable work. A study of the rules laid down by him for the detection of Counterfoit and Altered Bank-Notes will enable any person to become a good judge of money.

C. B. BRADBURY, Supt. Foreign Money Dept.

FROM BANK OFFICERS.

CHICOPEE BANK, SPRINGFIELD, Nov. 1, 1864.

I HAVE examined the "Counterfeit Detector," published by L. Heath. I think it is one of the best works over published, to detect counterfeit money.

I do not hesitate in recommending it to all business men, or persons that handlo bank-bills.

LEWIS WARNER, Teller.

MANUFACTURERS' AND TRADERS' BANK, PORTLAND, JUNO 23, 1864.

We consider Mr. Hoath's work a valuable aid to any one whe will examine the principles of engraving, and compare counterfeit

RECOMMENDATIONS.

bills with the true. With this help, careful study and attention will onable most young persons to become good judges of paper currency.

E. GOULD, Cashier. W. H. STEPHENSON, Cashier Mech. Bank. WM. EDW. GOULD, Cashier Inter'l Bank. GEO. C. PETERS, Teller Canal Bank.

BANK OF CUMBERLAND, PORTLAND, July 1, 1864.

I HAVE oxamined the "Counterfeit Detector," published by Mr. Heath, and consider it a very valuable aid in the detection of counterfeit bills. SAMUEL SMALL, Cashier.

FROM CASHIERS OF BANKS IN BANGOR.

TRADERS' BANK, BANGOR, Sept. 20, 1864.

Ir concerns every porson to know whether the money he is handling every day is counterfeit or genuine.

The idea generally prevails that only the few experienced money dealers and professional experts are capable of distinguishing the good from the bad. But the system taught by Mr. LABAN HEATH establishes the fact that every person may readily acquire the art.

As an aid to the living teacher, I consider the little Manual pro pared by Mr. Heath invaluable; and, indeed, its instructions and explanations are so clear and full, and the ongraved illustrations so perfect, that its thorough study will enable any person to determine the character of any paper money at sight.

E. TRASK, Cashier.

WE fully concur in the foregoing sentiments expressed by Mr. Trask

| WM. J. LORD, | Cashier | of | Veazie Bank. |
|----------------|---------|----|-----------------------|
| JOHN WYMAN, | ** | ** | First National Bank. |
| M. T. STICKNEY | , | ** | Merchant's Bank. |
| JOHN S. RICKER | i, " | " | Mercantile Bank. |
| T. S. DODD, | 66 | " | Kenduskeag Bank. |
| W. H. MILLS, | 66 | " | Eastern Bank. |
| W. H. PARSONS | , | 66 | Farmer's Bank. |
| W. S. DENNETT, | 66 | ** | Second National Bank. |

NOTICES OF THE PRESS.

THE JOUNTERFEIT DETECTOR. - Mr. Laban Heath, teacher of counterfeit detecting, has published a book, describing the method by which counterfeit and altered bank-notes may be known at once. The work has been commended by the Suffolk Bank and Bank of Mutual Redemption in this city, and contains much valu able information, especially for young men who are qualifying themselves to be cashiers in large houses. All parts of genuine notes, with a few exceptions, are engraved by machinery, while nearly all parts of counterfeit notes are engraved by hand, because the machines are too expensive and too cumbersome for a business which has to be carried on in secret, and may at any time be broken up by the police. The machine dees its work neatly and exactly; the result of the workmau's labors is rough and unfinished, and presents radical blemishes which cau be detected by the practised eye. The application of this principle is explained by Mr. Heath, with the aid of illustrations executed by the American Bank Note Company. - Boston Daily Advertiser.

DETECTION OF SPURIOUS BANK-NETES. — An infallible guide to aid In the detection of counterfeit bank-notes has long been desired by business men. Mr. Laban Heath has recently published a little volume which seems to entirely satisfy this want. In compiling this book, he has been favored with engravings from the Bank Note Co., with which he is enabled to give to every merchant and accountant a standard of genuine bank-note engravings, by which he may compare all bills coming into his hands, and readily detect the worthless. This system has received the highest testimonials and therefore is entitled to the greatest confidence. — *Portland Daily Press.*

FROM HUNT'S MERCHANTS' MAGAZINE.

NEW YORK, OCTOBER, 1864.

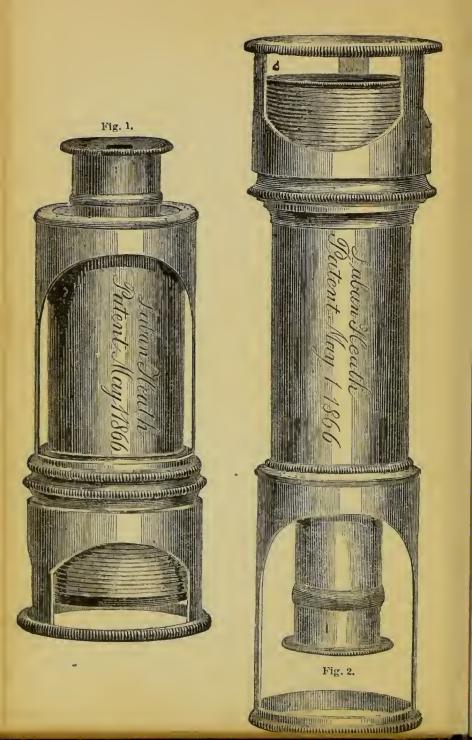
HEATH'S INFALLIELE COUNTERFEIT DETECTOR AT SIGHT. The only infallible mothod of detecting counterfeit, spurlous, and altered bank-notes, and applicable to all banks in the United States and Canadas, as now in circulation or that may be issued, with genuine bank-note designs, by the American Bank-Note Co. Boston: LABAN HEATH. 1864.

"Any roliable mothod of detecting spurious notos in these days of paper currency, whon counterfeiting might almost be said to form a regular businoss, is a matter of importance to every indi vidual; how much more so is it, when the mothod is so simple as to be understood by every one who will take the trouble to oxamino it, and so infallible as to detect the most carefully-prepared counterfoit, even on the first application of the test. Mr. ILEATH'S method for detecting bad bills requires no knowledge of the differont bauks, which are scattered, as thick as blackberrics, all over the country; but the fineness of the work is made to tell whether the bill is good or bad. Genuine bank-notes are prepared by one or the other of the great Bank-Note Companies, whose machinery is exceedingly costly, and whose engraving is of the very finest de scription. No ongraving done by hand can equal that done by this machinery, and no counterfeiter would care to invest \$75,000 to \$150,000 in au illegitimate business, which, if discovered, - and on account of the bulk of the machinery it would be difficult to conceal it, -- would not only result in a total loss of capital, but subject him, also, to a criminal's punishment. There are, also, ways given to detect altered bills, and the book is illustrated by vory beautiful specimons of bank-note engraving. It will be found very useful to those who would rather carry good than bad money in their pockets."

UNITED STATES TREASURY, CURRENCY DEPARTMENT, New York, January 15, 1867.

I have examined the "Government Counterfeit Detector" published by Mr. Heath, and consider it a very valuable work to familiarize the public in the detection of counterfeits on Government and National Notes.

F. C. FIELD, Receiving Teller.





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