(No Model.) 3 Sheets—Sheet 1.

L. H. ROGERS.

MULTIPLE SLIP.

No. 419,359. Patented Jan. 14, 1890.

FIG. I.

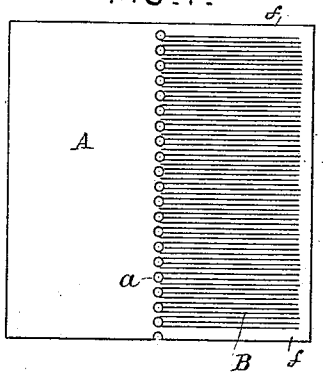


FIG. II.

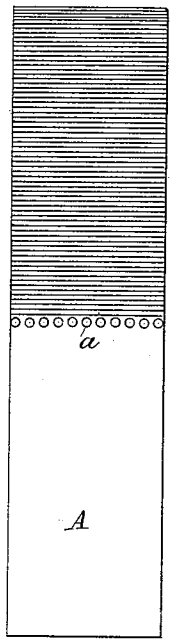


FIG. III.

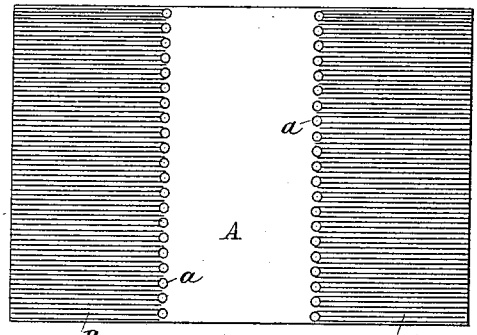


FIG. IV.

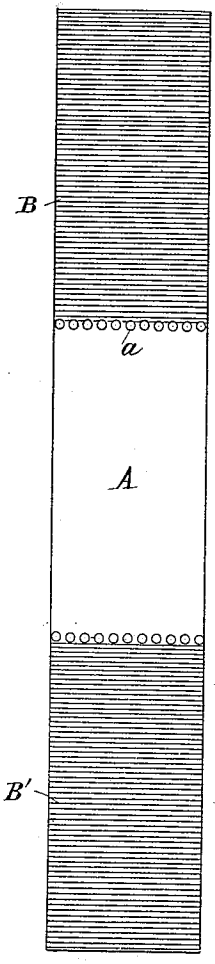


FIG. V.

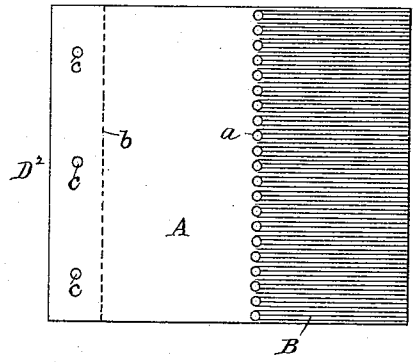
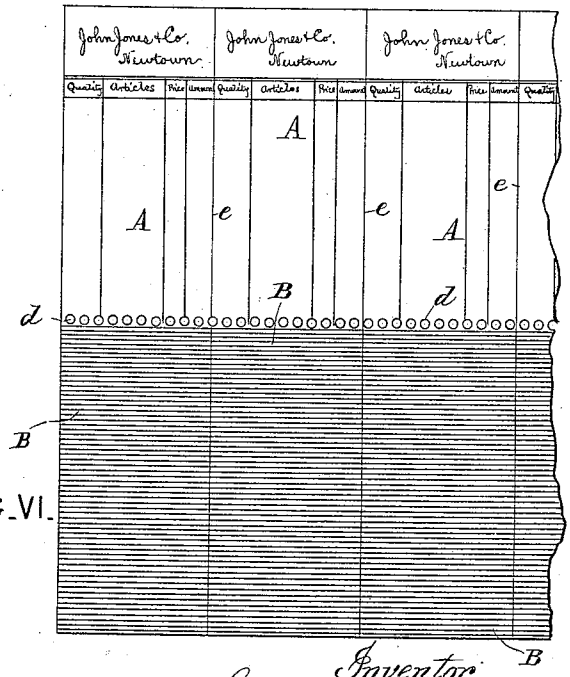


FIG. VI.



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N. PETERS, Photo-Lithographer, Washington, D. C.

(No Model.) 3 Sheets—Sheet 2.

L. H. ROGERS.

MULTIPLE SLIP.

No. 419,359. Patented Jan. 14, 1890.

FIG. VII.

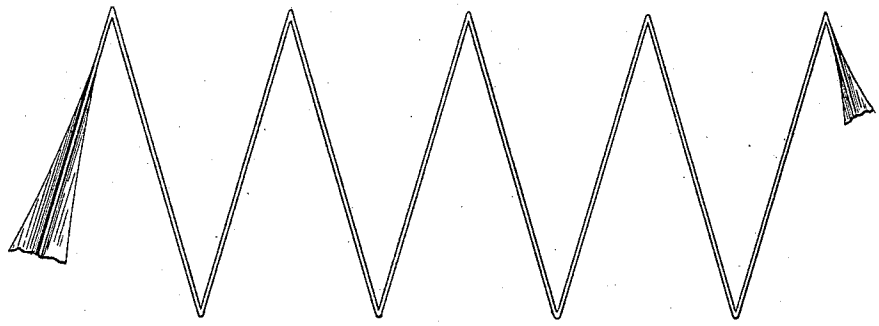


FIG. VIII.

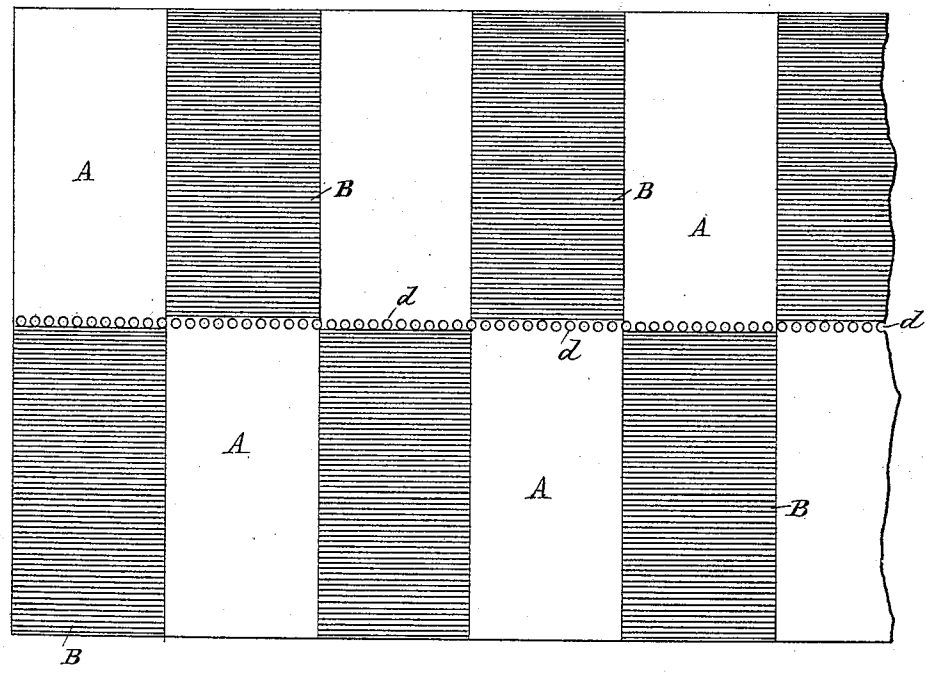
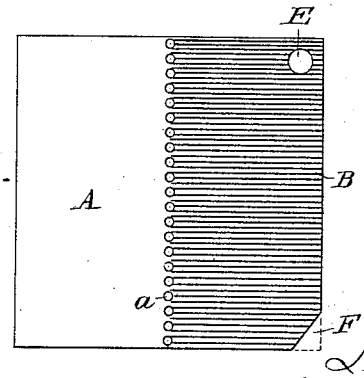


FIG. IX.



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his attorney

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(No Model.) 3 Sheets—Sheet 3.

L. H. ROGERS.

MULTIPLE SLIP.

No. 419,359. Patented Jan. 14, 1890.

FIG. X.

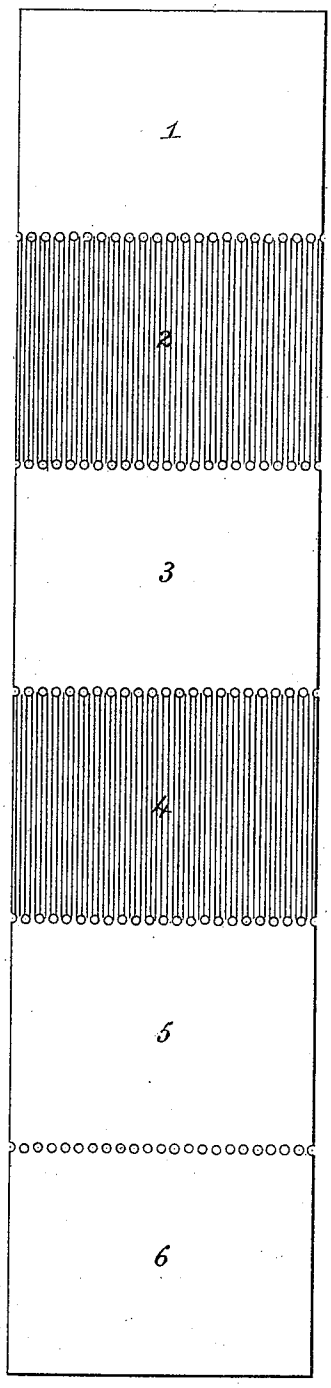
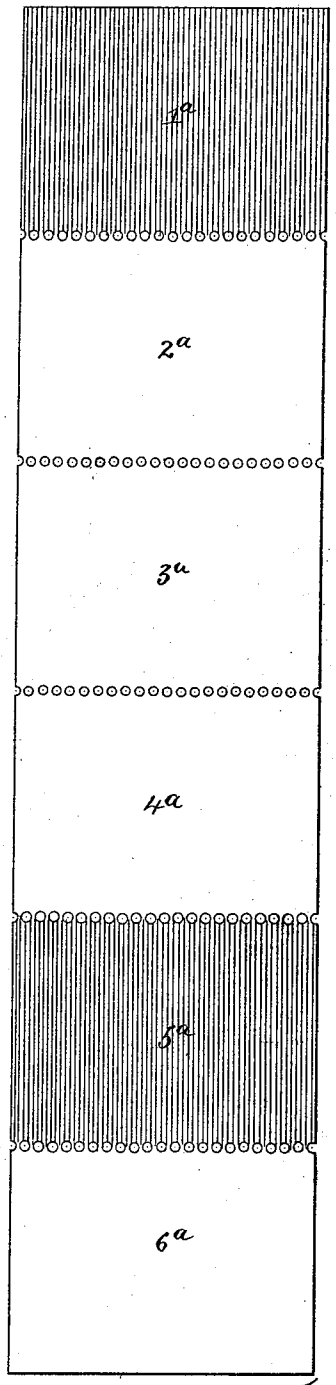


FIG. XI.



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Jos. K. Hagmann

Inventor:
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by A. Pollok
his atty

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UNITED STATES PATENT OFFICE.

LEBBEUS H. ROGERS, OF NEW YORK, N. Y.

MULTIPLE SLIP.

SPECIFICATION forming part of Letters Patent No. 419,359, dated January 14, 1890.

Application filed June 11, 1889. Serial No. 313,884. (No model.)

To all whom it may concern:

Be it known that I, LEBBEUS H. ROGERS, of New York city, in the county and State of New York, have invented a new and useful Improvement in Multiple Sales-Slips, which improvement is fully set forth in the following specification.

The object of my invention is to facilitate the rapid production of two or more invoices or bills for goods sold in retail stores, whereby one copy is retained by the cashier of the store and a second copy given to the customer, and often a third copy retained by the salesman.

My invention relates to the manner of multiplying copies by use of carbon-paper, and the manner of binding or arranging same in pads, books, or series.

Heretofore it has been the custom to make the books or pads, and then as each set of bills is made out or written by the salesman a piece of carbon-paper is inserted between the sheets, thus necessitating the handling of the carbon-paper, which consumes valuable time in its manipulation and is annoying if the carbon-paper is not clean in its manufacture. Another way has been the binding in the book at various places and in various ways of pieces of carbon-paper to save the trouble of extra handling of same. Another way has been to bind in the book alternate sheets of carbon-paper; but this plan adds considerable to the expense as well as to the bulk of the book.

According to the present invention, each sheet, whether in a pad, book, tablet, roll, or other form, is subdivided into two or more parts by lines upon which the sheet is adapted to be folded to form two or more thicknesses, the lines of folding being either lengthwise or crosswise, as preferred. One section of each sheet is clean on both sides, whereas the other sections (if the sheet has more than two) are or may be clean on one side and on the other prepared with carbon or transfer material. When folded and the reverse or clean side of the prepared section is written or printed on, the characters are reproduced on the other section. If the sheet is subdivided into three or more sections and folded, three or more copies of the transaction recorded are made. When the sheet is designed to furnish triplicate copies, the carbon layer may be applied on alternate opposite sides of the sheet, instead of alternately on sections on the same side. Inasmuch as the carbon or transfer material is to be used but once, a very thin layer suffices, and the cost is slight. When folded, the sheet may be printed with an ordinary press or hand-stamp, and one or more reproductions of the printing (which may be of a bill-head, for example) produced at one operation. The printing, as well as the transfer material, may be in different colors. For binding in book form each sheet is provided on one edge with a margin adapted to form a stub, which may be separated from the body of the sheet by a line of perforations, so that the latter can readily be detached. If in the completed book the leaves are folded, and not left to the salesman to fold as used, the stub should be of double width, folded on itself to make a double thickness corresponding to that of the sheets.

I prefer to arrange the sheets in packs or tablets by making a long strip, prepared as already described, alternate sections being coated with transfer material and formed into a pack by folding in alternately-opposite directions. The sheets may be prepared so as to preserve duplicate or triplicate records of each transaction, as may be desired.

My invention includes other features of construction, as hereinafter set forth.

In order that my invention may be fully understood, I will now described more in detail the manner in which I prefer to carry the same into effect, reference being had to the accompanying drawings, in which—

Figures I and II show single sheets divided into two sections; Figs. III and IV, single sheets divided into three sections; Fig. V, a sheet provided with a stub for binding into book-form; Fig. VI, a series of sheets adapted for folding into a pack; Fig. VII, an edge view illustrating the method of folding. Figs. VIII and IX illustrate modifications. Figs. X and XI illustrate the front and back, respectively, of a triplicating-strip.

The whole under surface of the sheet shown is preferably left clean. On the face exposed one or more sections (marked B) is or are

treated with a coating or layer of carbon, while the other section A is left clean. A line of perforations *a* divides the sections from one another, and this line may run lengthwise of the sheet, as in Fig. I, or crosswise, as in Fig. II. For use the sheet is folded on line *a*, so that section B is turned inward and its back exposed for the original record, of which the transfer material on its now inner side produces a duplicate on section A.

In Figs. III and IV the sheet is shown as divided into three sections, of which two B B′ are treated with carbon, as indicated by the shading, the intermediate section A being clean. In folding B is turned over on A, and B′ on B, and triplicate records may be thus preserved.

A strip for making triplicate records may be prepared as shown in Figs. X and XI. The slips 1 2 3 make one series or set; 4 5 6, another, and so on. The first slip is clean on the front side (marked 1) and coated on the rear side 1^a. The second is coated on the front and clean on the rear. The third and sixth are clean on both sides. On folding the slip 1 is outermost, and on writing upon it a duplicate record is formed on 2^a and another on 3. These three slips being detached, the next record is made on 4^a, and so on. The slips shown in these figures and in Figs. I to IV are designed to be sold loose. The sheets may be formed into pads, books, or tablets in various ways.

As shown in Fig. V, each sheet is provided with a margin D^2 for binding, it being separated from the adjacent section A by a line of perforations *b*. This margin D^2 may be used to clamp, paste, or bind the sheets into pads or books. At the time the lines *a b* are perforated the margin D^2 may be perforated at the points *c*, through which perforations wires may be passed for binding the sheets together. The margin D^2 can be folded in the middle before binding or otherwise securing the sheets together, if it be desired to fold the sections A B before the book or pad is delivered to the salesman. Of course the latter can fold the sheets as he uses them, if preferred.

The sheets can be formed into packs or tablets by folding first in one direction and then in the other. In this form, instead of using separate detached sheets, a sheet or strip is formed of any desired length, according to the thickness of the tablet desired, the sheets being prepared to be readily detached from one another by lines of perforations in the usual way. Figs. VI and VII illustrate this plan. The long sheet or web shown in Fig. VI is divided longitudinally into two parts by a line of perforations *d*. On one side of this line the paper is treated with carbon. The sheet is further subdivided by cross-lines *e* at regular intervals, forming the panels or sections A A B B. The sheet is then folded over on the longitudinal line *d* for its entire length, so that a carbon face B is in contact with each clean section A, the reverse sides of sections B being outside. The doubled strip is then folded on cross-lines *e*, each fold being in the opposite direction to the preceding one, producing a tablet of connected double leaves, the folds being alternately at opposite sides, or at top and bottom, as the case may be. Each fold of the tablet is a complete duplicating-slip, whereas as heretofore prepared it required two leaves to make a duplicate of the record.

Sheets or webs prepared as above described, with portions or sections of one or both surfaces carbonized or coated with transfer material, could be made and supplied to manufacturers of different styles of sales-slips, to be by them printed and folded in any way to suit the varying methods or preferences of customers.

The plan of folding a tablet (illustrated in Figs. VI and VII) is believed to be, broadly, new, whether a carbon-coating is applied directly to a portion of the web or the duplication is effected in the ordinary way by introducing a separate carbon-leaf. A folded tablet of this form—*i. e.*, one in which each fold constitutes a complete duplicating-strip—is included in the invention.

As represented in Fig. VI, the clean sections A are printed in any desired way to constitute sales-slips.

The sheet could of course be formed as in Figs. III and IV—that is, with a carbon-treated strip on each side of the clean sections A.

As shown in Fig. VIII, the carbon surface could be on sections alternately above and below line *d*. If in printing it is desired to have any matter on sheet A, Fig. IX, in a distinct color, a hole E of proper size can be made in sheet B, or a corner F cut off to permit the desired impression to be made on part A.

Where it is desired to produce the sheets in such length that they cannot conveniently be folded into tablets, they may be prepared, as shown in Fig. VI, folded on the longitudinal line of separation, and then rolled up, as by winding on a reel, to be unrolled as used. The carbon, after being applied, can be treated to prevent its coming off readily and soiling the fingers or articles with which it may come in contact. To further prevent injury or annoyance from this cause, a clean margin may be left around the edge of each sheet B, as shown at *f* in Fig. I.

It will be observed that while the original record of the transaction, which is to be retained in the store or office, is coated on one side with carbon the duplicate, to be put up with the goods or delivered to the customer, is clean on both sides.

Having now fully described my said invention, what I claim is—

1. A sheet, web, or slip having a section or

sections coated with transfer material and other sections left clean for writing, substantially as described.

2. A tablet comprising a series of slips printed to constitute sales-slips, the tablet being formed of a web or sheet folded longitudinally, the double thickness being folded on transverse lines, which are scored or perforated to facilitate detachment, thus including duplicate recording-slips in each fold or leaf, substantially as described.

3. A tablet for making multiple records, said tablet consisting of a sheet or web of paper divided by lines of perforations and prepared on some of the sections or subdivisions with transferring material, said sheet or web being folded on a longitudinal line, and further folded in alternately-opposite directions upon transverse lines at regular intervals, substantially as described.

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

LEBBEUS H. ROGERS.

Witnesses:
R. A. PIPER,
FREDERICH GELLER.