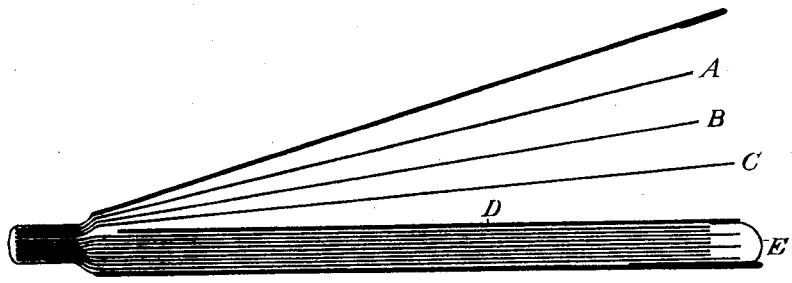
(No Model.)

H. P. BROWN.

DUPLICATING PAD OR SHEET.

No. 589,372. Patented Aug. 31, 1897.



Witnesses,
J. L. Howse
E. A. Brandau

Inventor,
Horace P. Brown
By Dewey & Co.
attys

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

HORACE P. BROWN, OF SAN FRANCISCO, CALIFORNIA.

DUPLICATING PAD OR SHEET.

SPECIFICATION forming part of Letters Patent No. 589,372, dated August 31, 1897.

Application filed December 23, 1896. Serial No. 616,796. (No specimens.)

To all whom it may concern:

Be it known that I, HORACE P. BROWN, a citizen of the United States, residing in the city and county of San Francisco, State of California, have invented an Improvement in Duplicating Pads or Sheets; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to an improvement in the duplication or manifolding of marks or entries upon separate sheets, such as shipping-receipts, cash memoranda, pads, and sheets generally where any repetition of the mark or entry is required.

It consists, essentially, of the application by printing or other means to one surface of a sheet of a non-drying transparent ink or other suitable material, which serves to duplicate upon a following sheet any entry or mark made upon the face of the first-named sheet or of sheets anterior thereto, and in certain details of construction and mounting, which will be more fully explained by reference to the accompanying drawing, in which the figure illustrates my invention as applied to a receipt-book.

In the method now generally employed for making duplicate or triplicate receipts, cash or memorandum tags, where more than one copy is desired, it is customary to employ independent sheets of carbon-paper, which are laid between the upper and lower sheets, so that when a mark or entry is made upon the upper sheet it will be transferred by means of the carbon surface of the next sheet below and this again to a third sheet by the use of a second sheet of carbon. These carbon-sheets are necessarily loose and changeable from one part to another of the book, pad, or other record for the purpose of each new entry and are somewhat expensive to produce.

In my invention I print or apply upon the back of a sheet by means of any printing-press or other suitable means a surface of non-drying and transparent ink, which when superposed over another sheet will transfer any entries or marks made upon the front side of said sheet or upon any sheet anterior thereto to a subsequent sheet, which may be placed below the one having the above-described surface. This surface may be a uniform tint or made in "half-tone," so called, or in any other suitable manner. This ink being transparent will not in any way interfere with any printed matter which it may be desired to have upon the back of the sheet, as in the case of conditions, &c., which are printed upon shipping-receipts and other like documents.

The word "ink" is here employed to designate any suitable substance or preparation which may be applied and used, as herein described, and is to be so considered throughout this specification.

This invention is especially valuable because of the rapidity and cheapness with which the sheets can be prepared, the expense being very much less than that of preparing the ordinary carbon-sheets or other similar means used to make manifold work.

In the accompanying drawing I have illustrated my invention as applied to a system of shipping-receipts which is usually employed in duplicate or triplicate. In this case the sheets A, B, and C are respectively the shipping-order, the duplicate shipping-receipt, and the original shipping-receipt. These are bound in series of three into a book of any suitable shape or size, the sheets A and C having lines of perforation along the back edge close to the binding, so that they can be easily removed. The first sheet consists of the shipping-order and the second the duplicate shipping-receipt. Upon the back of each of these sheets is imprinted a surface of a transparent ink, which may be made of any suitable or desired color. In the present case I have used an ink of such a color and character that the conditions which are usually printed upon the backs of such receipts can be printed in black ink thereon and can easily be read through the transparent surface which has been applied thereto. These first two sheets having this imprinted or prepared surface are slightly shorter than the sheet C, as shown, so that each series of three is easily separated and identified by reason of the front edge of the sheet C projecting a short distance beyond the edges of the other two.

The entry being made upon the first sheet A with pencil or other marking implement the marks will be transferred, respectively, to sheets B and C. The first, constituting the shipping-order, may then be removed and

delivered to the shipper and the third, which is the original shipping-receipt, is also removed in the same manner, leaving the second or duplicate shipping-receipt in the book. The next series is used in the same manner, and so on through the book.

In order to prevent the marks being transmitted beyond the desired number of sheets, the third sheet C will have no transferring-surface printed upon it. Consequently the transfer is limited to the sheet subsequent to the last one having this surface upon it.

For convenience in writing and to provide a properly hard surface to insure the clear marking through the various sheets I employ a flap D, of hard pasteboard or other suitable material, which is loosely hinged to the front edge of the rearmost cover of the book, as shown at E, so that it may be folded over the leaves of the book which are behind the ones to be written on, and these latter leaves, as A, B, and C, are then laid down upon this surface, so that the marking or writing is readily transferred as far as desired. This flap will also serve to prevent a transfer of the mark beyond itself if introduced behind sheets which have the transferring-surface upon them.

It will be manifest that this transfer-surface may be imprinted or prepared directly upon the sheets, either bound or unbound, which form the shipping receipts and orders, or cash or memorandum tags or pads of any description, or it may be imprinted or applied upon intermediate sheets which are secured in rotation with those upon which the marks are to be placed, the essential feature of the invention consisting in applying the duplicating or manifolding surface by printing upon one side of a sheet.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The improvement in manifolding consisting of sheets having applied upon the printed backs thereof a surface of non-drying transparent transferable ink.

2. The improvement in manifolding for sheets, pads, or books consisting of sheets arranged in series having applied upon the printed backs thereof a surface of non-drying transparent transferable ink and a device for separating said sheets into groups of as many as the number of copies desired and preventing a further imprinting upon subsequent sheets.

3. The improvement in manifolding consisting of sheets bound together in series of as many as there are desired copies having imprinted upon the printed backs of those sheets from which copies are to be transferred, a non-drying transferable ink, perforations or means for separating the sheets from the binding being formed upon those sheets which are to be removed, and the final sheet of each group having its edge projecting beyond the previous one so as to separate the groups.

4. The improvement in manifolding-sheets bound into books consisting of a surface of non-drying transferable and transparent ink imprinted upon the printed backs of sheets through which the transfer is to be made, said sheets being bound in series of as many as there are copies required and with the front edge of the final sheet projecting slightly beyond the anterior ones to separate the groups, lines of perforations formed adjacent to the binding along those sheets which are to be removed from the book, and an impenetrable flap or surface loosely hinged to the front edge of the book and adapted to be folded between the series of sheets to prevent a transfer beyond the particular series required.

In witness whereof I have hereunto set my hand.

HORACE P. BROWN.

Witnesses:
S. H. NOURSE,
GEO. H. STRONG.