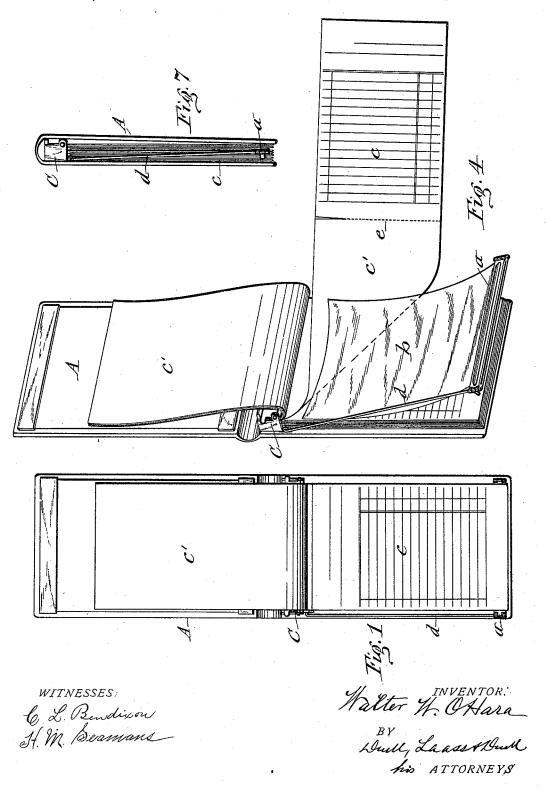
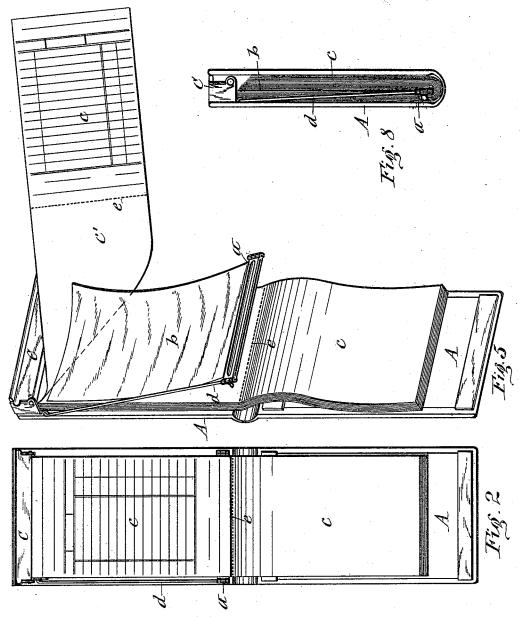
No. 490,675.

Patented Jan. 31, 1893.



No. 490,675.

Patented Jan. 31, 1893.

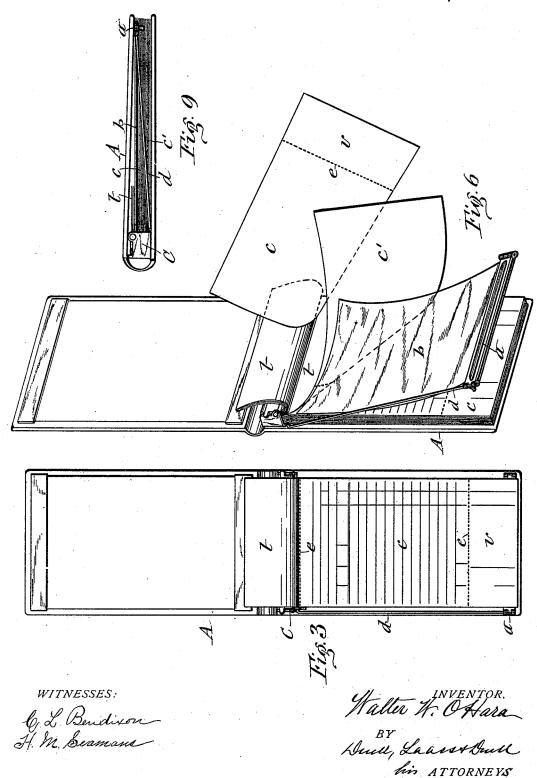


WITHECCEC

C. L. Bendison H. M. Seamans Matter It. OHara BY Soull, Laaes Heun his ATTORNEYS

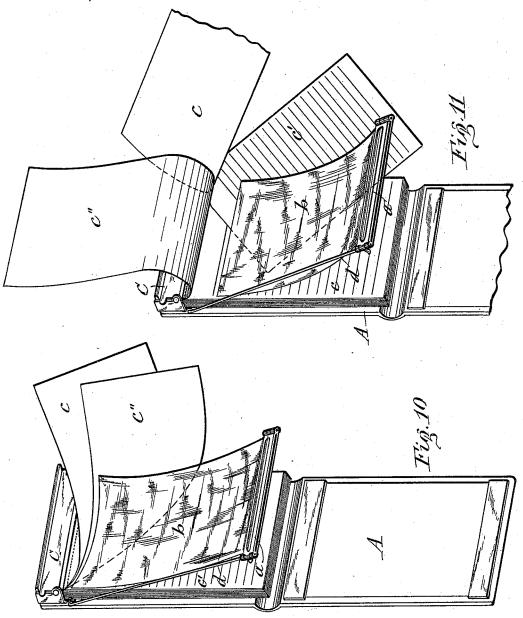
No. 490,675.

Patented Jan. 31, 1893.



No. 490,675.

Patented Jan. 31, 1893.



WITNESSES:

C. L. Bendixon H. M. Beamans Maller H. OHara

BY
And Laass Howl
his ATTORNEYS

#### United States Patent Office.

WALTER W. O'HARA, OF ARLINGTON, MASSACHUSETTS, ASSIGNOR TO THE CARTER & COMPANY, LIMITED, OF NIAGARA FALLS, NEW YORK.

#### MANIFOLD MEMORANDUM-BOOK.

SPECIFICATION forming part of Letters Patent No. 490,675, dated January 31, 1893.

Application filed February 23, 1892. Serial No. 422, 358. (No model.)

To all whom it may concern:

Be it known that I, WALTER W. O'HARA, a subject of the Queen of Great Britain, and a resident of Arlington, in the county of Middle-5 sex, in the State of Massachusetts, have invented new and useful Improvements in Manifold Memorandum-Books, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact de-10 scription.

This invention relates to the class of memorandum books in which a carbon sheet is secured to the book in such a manner as to allow said sheet to be introduced between the 15 leaf upon which the memorandum is to be written and the subjacent leaf and thus produce on the latter a fac-simile of the memo-

randum written on the top leaf.

The object of my present invention is to 20 provide a manifold memorandum book which shall allow the duplicate or copy of the memorandum to remain in the book without necessitating handling the carbon-sheet. And to that end the invention consists essentially 25 in the combination, with the cover and block of memorandum leaves fastened thereto, of a carbon-sheet holder sustained movably to and from said block as hereinafter more fully described and specifically set forth in the claims. The invention is fully illustrated in the an-

nexed drawings in which

Figures 1, 2 and 3 are plan views of memorandum books embodying my invention, Figs. 4, 5 and 6 are perspective views illustrating 35 the method of using said books, Figs. 7, 8 and 9 show said books in a closed condition, and Figs. 10 and 11 are perspective views of a modification of the memorandum book and showing the same in two different conditions 40 which it assumes in the manipulation thereof.

Similar letters of reference indicate corre-

sponding parts.

A— represents the cover of the book, -c—c—c—c—the memorandum leaves which are 45 bound in block-form and secured at the bound end to a clamp -C - fastened to the cover -A- either at the center or at one end thereof according to the form of the memorandum

length as the cover and each of said leaves is folded separately upon itself the clamp -- Cis fastened across the center of the length of the cover as shown in Figs. 1, 4, 7, 3, 6 and 9 55 of the drawings. When the aforesaid leaves are all folded jointly the clamp -C is attached to the upper end of the cover —A—as shown in Figs. 2, 5 and 8 of the drawings, and when the memorandum leaves extend 60 only half the length of the cover, the clamp —C— is also fastened to the upper end of the cover, as represented in Figs. 10 and 11 of the drawings.

b—denotes the carbon sheet which is at- 65 tached at one end to a clasp -a— which is connected to the cover by an elastic support which sustains said clamp across the top of the free portion of the block of memorandum leaves and movably to and from the same.

To facilitate the manipulation of the book so as to retain the copies therein without handling the carbon sheet as hereinafter described, I employ for the support of the clasp -a a single bar -d which extends along 75 one side of the block of leaves and is secured at one end to the cover at or near the clamp —C— to which the block of memorandum leaves is fastened. The clasp —a— is attached at one end to the free end of the bar 80

The manipulations of the several modified forms of books shown in the drawings are as follows: In using the book shown in Figs. 1, 4 and 7 of the drawings the upper and free 85 end of the uppermost individually folded leaf -c— is to be lifted and carried down to allow the carbon sheet -b— to be placed between the two sections of the leaf -c— which is effected without handling the carbon sheet by 90 the operator taking hold of either the bar -d— or end of the clasp -a— adjacent to said bar. After the carbon sheet has been thus placed the fly or previously raised section of the memorandum sheet is placed upon 95 the carbon sheet which has the carbon face on the underside. The memorandum being then written by a pencil upon the overlying section of the leaf causes the carbon sheet to leaves and the manipulation required in the some of the book. When the memorandum leaves are of the same or nearly the same leaf. Then the top section of the memorandum produce an exact copy of said memorandum 100 on the underlying section of the memorandum

dum leaf is to be again carried down by one hand, and the memorandum leaf thus distended is to be drawn laterally out from under the carbon sheet and carried over the up-5 per end of the cover —A. The section upon which the memorandum was primarily written is then severed from the fixed section or copy -c'— by tearing the leaf along the line of perforations -e. The copy -c'— of the 10 memorandum is retained in the book, as shown in Fig. 4 of the drawings. In carrying the aforesaid memorandum leaf from under the carbon sheet the latter is allowed to drop onto the succeeding folded memorandum leaf. To bring this leaf into its requisite position for entering the next memorandum the user of the book inserts his pencil between the two sections of said folded leaf at the upper end thereof and, by drawing the pencil down to 20 the line on which the leaf is folded, the upper section of said leaf is drawn out from under the carbon sheet and the memorandum leaf is thrown into a distended position. Then the section of said leaf which has been drawn 25 out as aforesaid is thrown over upon the carbon sheet and the book is in condition for entering a memorandum.

In the book shown in Figs. 2, 5 and 8 of the drawings, all the memorandum leaves lie with 30 their entire length successively one upon the other and therefore in using this book the fly or free end portion of the uppermost memorandum leaf has to be thrown up and onto the top of the carbon-sheet -b- and after 35 the memorandum has been written upon said portion of the leaf it is to be drawn out laterally to carry the copy or fixed end portion of the leaf from under the carbon leaf, which then falls upon the next memorandum leaf as 40 hereinbefore described. The section -cwhich contains the original entry is then torn from the section -c' containing the copy, and the latter is left in the book. The memorandum leaves are provided with a line of 45 perforations —e— across the central portion thereof where the leaves are to be severed.

The book illustrated in Figs. 3, 6 and 9 of the drawings is made up of single memorandum leaves arranged in pairs -c-c'. The 50 primary leaf -c—is provided with two lines of perforations—e—e—respectively at the upper end or close to the clamp—C— and a suitable distance from the lower end to form a detachable voucher -v-, and the succeeding 55 companion leaf -c' has the line of perforations—e—at a proper distance from the upper or fast end of the leaf to form a stub -twhich receives a copy of the memorandum written on the top portion of the overlying 60 leaf -c and is retained in the book.

In using this book the uppermost memorandum leaf is to be raised so as to allow the carbon sheet to drop onto the underlying leaf and then the top leaf is to be laid upon the 65 carbon sheet. After the memorandum has been written on the top-leaf—c—the same is  $\frac{1}{2}$ 

torn out of the book on the line of perforations -e - adjacent to the clamp -C -, then the carbon sheet is to be raised and the underlying copy-leaf -c'— is to be drawn to the side 70 opposite that on which the bar -d-lies until the said leaf -c'—is drawn completely from under the carbon-sheet, the main portion of said leaf is then separated from the stuband the latter is left in the book.

Figs. 10 and 11 show a book which is designed to produce two separate copies of the original writing in the book. The leaves of the block are arranged in sets of three each. The first and third leaves—c—and —c'—of 80 each set are provided with the row of perforations—e—near the clamp—C—where they are to be separated from the book, and the intermediate leaf -c'' is of tissue paper and designed to be retained in the book.

In connection with this book I employ a carbon sheet —b—faced with carbon on both sides. This carbon sheet is interposed between the second and third leaves of the set, and in writing the memorandum on the top 90 leaf—c—the third leaf receives a fac-simile of the memorandum and the intermediate tissue paper receives said impression reversed on its underside, but the transparency of the paper allows the impression to be easily read 95 from the upper side thereof.

In the use of either of the described books, the clasp -a affords a handle by which to adjust the carbon sheet without handling the same, and each of said books retains therein 100 a copy of the memorandum.

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

1. The combination, with a memorandum 105 book having its leaves bound together at one end, of a rod attached at one end to said book at the fixed ends of the memorandum leaves and extending along only one side of the book, a clamp on the free end of said rod, and the 110 carbon sheet attached to said clamp and lying with its free end normally adjacent to the fixed ends of the memorandum leaves whereby the uppermost copy-leaf may be drawn out laterally from under the carbon sheet and 115 severed from the book, and a memorandum retained in the book as set forth.

2. A manifold memorandum book having its leaves arranged in sets of three each, the top and bottom leaves of each set having rows 120 of perforations to facilitate the severing thereof from the book, the intermediate leaf being of tissue paper, and a sheet faced with carbon on both sides and inserted between the tissue paper and subjacent copy-leaf, sub- 125 stantially as described.

Intestimony whereof I have hereunto signed my name this 2d day of February, 1892.
WALTER W. O'HARA. [L. s.]

Witnesses:

O. H. Burleigh, EUGENE H. MOORE.