

No. 670,217.

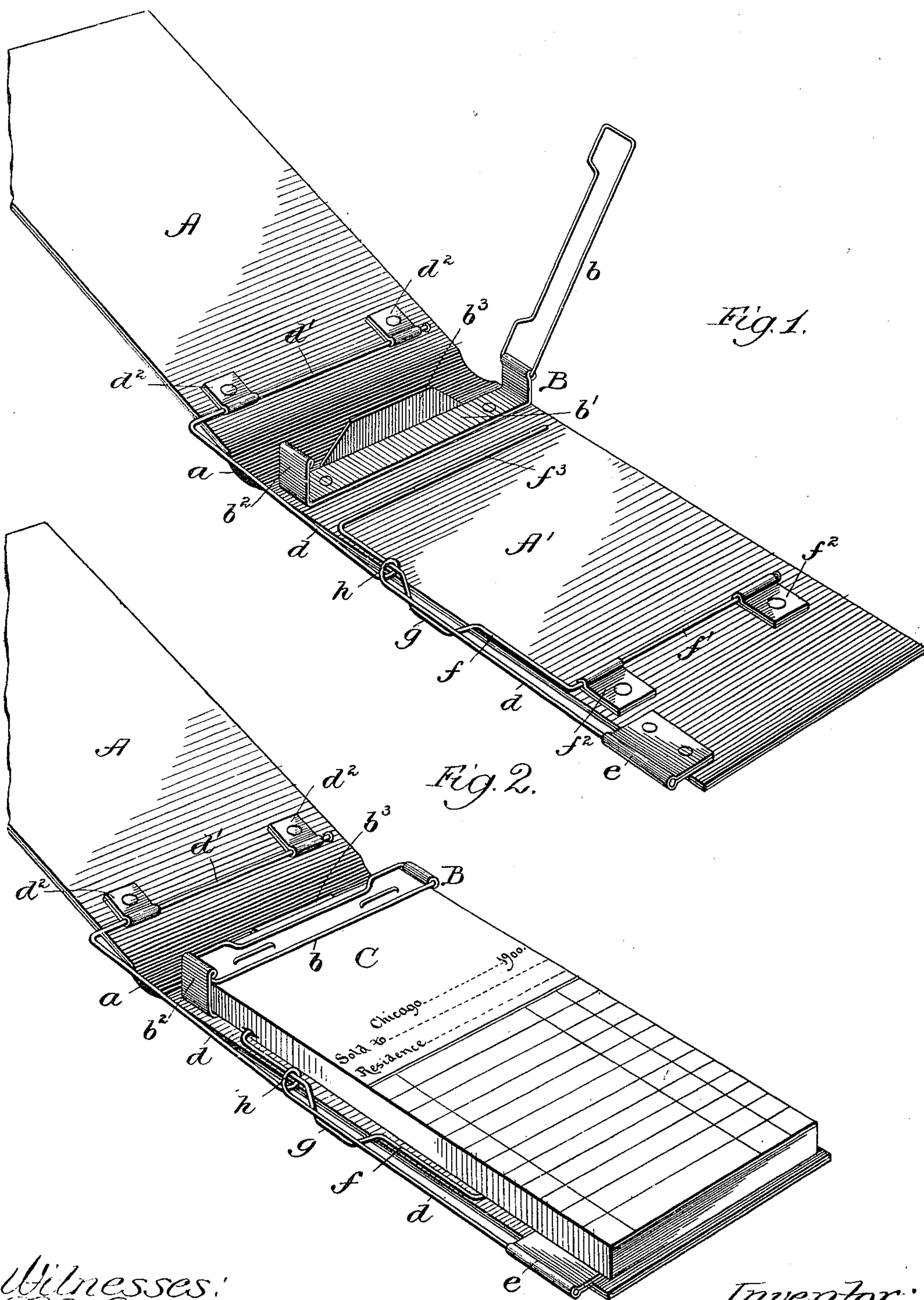
Patented Mar. 19, 1901.

E. B. WILLIAMS.  
MANIFOLDING BOOK.

(Application filed Apr. 2, 1900.)

(No Model.)

3 Sheets—Sheet 1.



Witnesses:  
Chas. E. Gaylord,  
John Anders Jr.

Inventor:  
Ebenezer B. Williams.  
By Banning & Banning & Sherida  
Attys



No. 670,217.

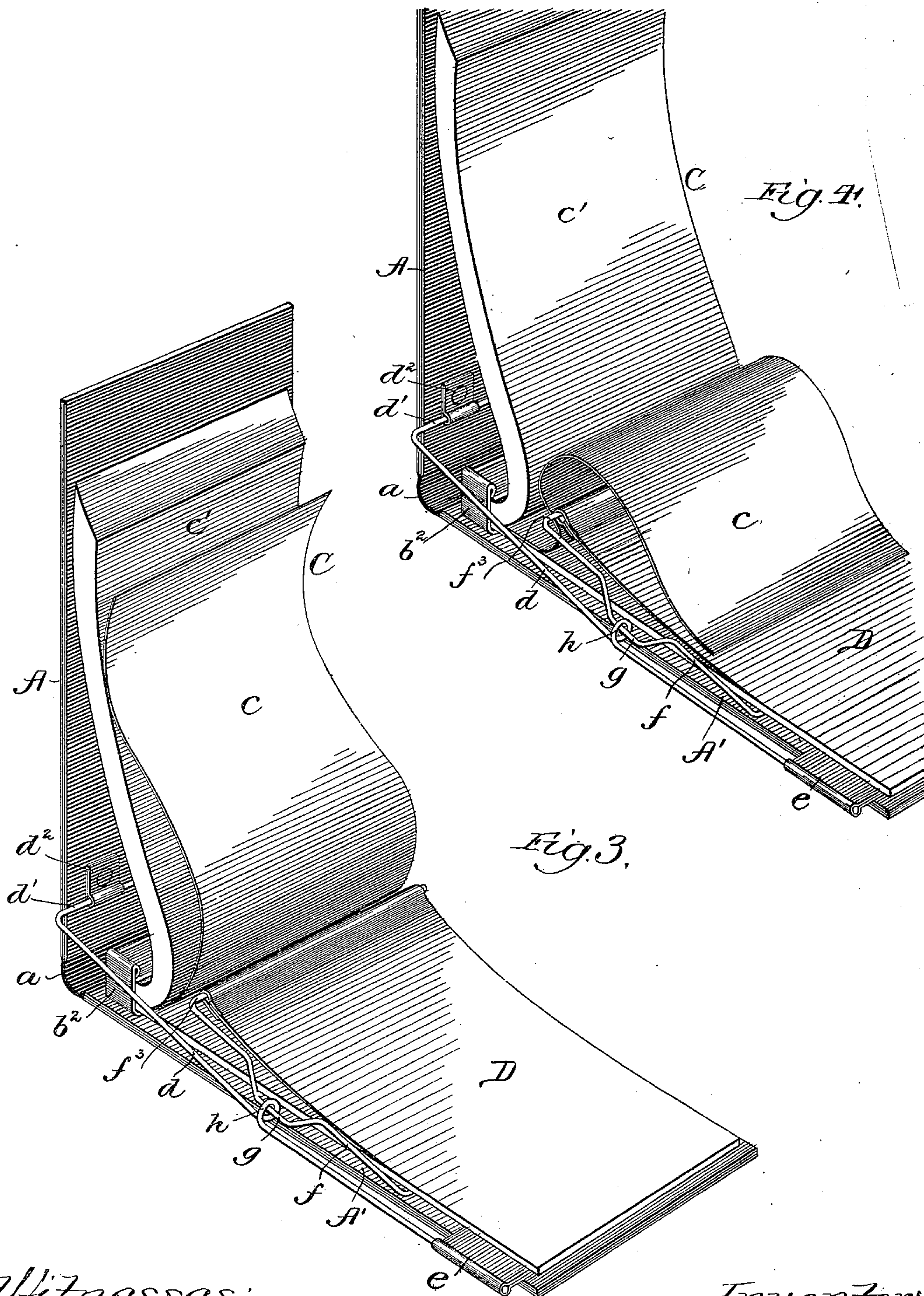
Patented Mar. 19, 1901.

E. B. WILLIAMS.  
MANIFOLDING BOOK.

(Application filed Apr. 2, 1900.)

(No Model.)

3 Sheets—Sheet 2.



Witnesses:  
E. C. Gaylord,  
John Ender Jr.

Inventor:  
Ebenezer B. Williams,  
By Banning & Banning & Sheridan  
Attys



No. 670,217.

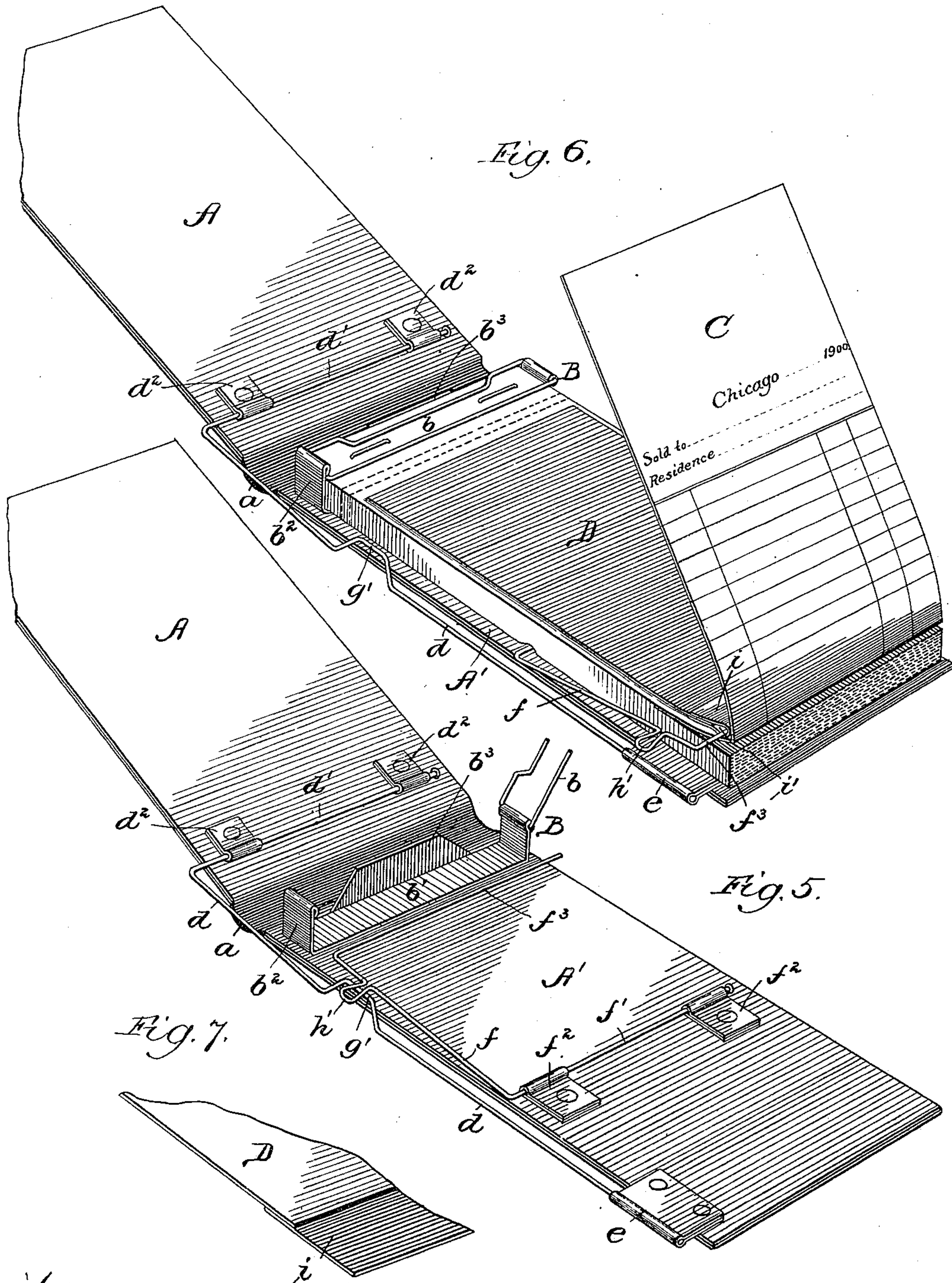
Patented Mar. 19, 1901.

E. B. WILLIAMS.  
MANIFOLDING BOOK.

(Application filed Apr. 2, 1900.)

(No Model.)

3 Sheets—Sheet 3.



Witnesses:  
C. S. Gaylord,  
John Ouders Jr.

Inventor:  
Ebenzer B. Williams,  
By Banning & Banning Sheriden  
Attys.



# UNITED STATES PATENT OFFICE.

EBENEZER B. WILLIAMS, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF  
TO FREDERICK J. BIPPUS, OF SAME PLACE.

## MANIFOLDING-BOOK.

SPECIFICATION forming part of Letters Patent No. 670,217, dated March 19, 1901.

Application filed April 2, 1900. Serial No. 11,101. (No model.)

*To all whom it may concern:*

Be it known that I, EBENEZER B. WILLIAMS, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Manifolding-Books, of which the following is a specification.

In the ordinary construction of manifolding-books used for making an original and duplicate of a memorandum or ticket a loose sheet of carbon-paper is placed between the original and duplicate, which carbon-sheet has to be replaced by hand in the making of duplicates in each instance.

The objects of the present invention are to carry and support the sheet of carbon so as to dispense with the necessity of its removal each time a duplicate and original are produced and have the carrier or support for the carbon-sheet automatically operated by and through the book-cover, so as to raise one end of the sheet for the inserting of the duplicate sheet beneath it to receive the memorandum, and to improve the carbon-sheet carrier or support and its attachment to and operation from the book-covers.

The invention consists in the construction and combination of parts hereinafter described and claimed.

In the drawings illustrating the invention, Figure 1 is a perspective view with the covers of the book open and the locking-bar of the pad or block clasp or retainer thrown up or open and without the pad or block and showing also the carrier or support for the sheet of carbon and its operating-bar; Fig. 2, a perspective view similar to Fig. 1, showing the covers open and the pad or block in place and held by its clasp or retainer; Fig. 3, a perspective view showing the covers standing at an angle with the pad or block raised and the support or carrier for the sheet of carbon raised into position for sliding a sheet or leaf of the pad or block beneath the sheet of carbon attached to the carrier or support; Fig. 4, a perspective view with the parts as in Fig. 1, showing the manner of sliding a pad or block sheet or leaf beneath the sheet of carbon; Fig. 5, a perspective view showing a modified form of construction for the carrier-support and the lifter and showing the car-

rier or support in position to be operated by the lifter; Fig. 6, a perspective view of the construction of Fig. 5, showing the carrier or support swung upward or backward for use without the lifter; and Fig. 7, a detail in perspective of a corner of a carbon-sheet, showing the gummed strip for forming the attaching-loop.

In constructing my improved manifolding-book I employ two covers A and A', united by a flexible back *a*, which covers and back may be made of any suitable material and of any desired dimensions as to size. The cover A' may for convenience be regarded as the bottom or under cover, and to this cover is attached the clasp or retainer B for the pad or block C of leaves or sheets. The clasp or retainer is formed with a top or cross piece *b*, preferably made of wire and pivotally connected at one end to an end standard or upright on a plate *b'*, which plate is riveted or otherwise secured to the cover A' on the inside. The plate *b'* at the end opposite to the pivotal attachment of the locking-bar or cross-piece *b* has an upright or standard *b<sup>2</sup>*, which serves as a catch for the free end of the locking-bar or cross-piece when down, and in order to guide the insertion of the pad or block the plate *b'* has a stop *b<sup>3</sup>* in the construction shown. The pad or block C is to be made with alternating original and duplicate sheets or leaves *c* and *c'*, and the original is to be provided with printed matter and ruled lines, if so desired.

The carbon-sheet for use in the operation of manifolding is to be permanently carried and automatically manipulated so as to be raised at one end to permit of the insertion of a sheet or leaf underneath it for the reception of the memoranda to be made. This is accomplished by mounting on the cover A a lifter or raiser, which preferably is formed of a piece of wire having a side or body *d* with a cross bar or arm *d'*, which bar or arm is mounted in ears *d<sup>2</sup>*, secured to the cover A on the inside for the body or side arm *d* to extend alongside of the edge of the cover A' and enter a guide or socket *e* for its end, which guide or socket is secured to the edge of the cover A' on its inside, as shown in Fig. 1. The carbon-sheet D is mounted on a carrier



or support by attachment of the sheet at one end to the carrier or support. The carrier or support is preferably constructed of a piece of wire bent to have a side  $f$  and end or cross piece  $f''$ , which enters ears  $f^2$ , riveted or otherwise secured to the cover  $A'$  on the inside, and an arm or cross-bar  $f^3$  to receive the end of the sheet of carbon.

As shown in Figs. 1 to 4, the side piece or arm  $f$  has a cam  $g$  in line therewith, but not on the same plane, and the side piece or arm  $d$  has formed therein an eye or loop  $h$ , which surrounds the side piece or arm  $f$  and is so located in relation to the incline or cam  $g$  as that with the opening and closing of the cover  $A$  the loop or eye will ride up and down on the incline or cam. The incline or cam is of such a nature that when the eye is central of the straight portion thereof, at which point the covers  $A$  and  $A'$  stand approximately at right angles to each other, as shown in Fig. 3 and 4, it operates to raise the free end of the carrier or support having the arm  $f^3$ , and such raising of the free end of the carrier or support raises the top end of the carbon-sheet  $D$ , as shown in Fig. 3, leaving a clear space beneath the raised end of the sheet, into which the body of the next succeeding sheet or leaf of the pad or block can be slid, for which purpose the sheet or leaf is left free, as in Fig. 3, and as it drops into the position shown in Fig. 4 it forms an opening into which a pencil can be slipped to engage the face of the sheet or leaf, and by drawing the pencil down under the carrier or support the leaf will be passed beneath the carbon-sheet.

The carbon-sheet in order to facilitate its attachment to the free end of the carrier-support is provided with a loop  $i'$ , and in order to easily construct the loop a strip of gummed paper  $i$  is attached to one end of the carbon-sheet, so that the strip can be turned on itself and the gummed edge attached, forming a loop  $i'$  to receive the carrier or support arm.

The operation will be readily understood from the foregoing description, but briefly is as follows: The sheet to receive the impression is to be placed beneath the carbon-paper, and after a memorandum has been made thereon the sheet or leaf is removed and another sheet or leaf for the necessary memorandum is to be placed thereunder, which placing is done, as already described, by setting the covers at an angle to each other, raising the free end of the carrier or support, and sliding the sheet beneath the carbon-paper, and this operation can be continued until the pad or block is exhausted, when a new pad or block can be inserted, as hereinbefore described.

In Figs. 5 and 6 a modified form of carrier or support and the reciprocating lifter is shown, in the latter figure the carrier or support being shown as thrown upward or backward for use from the lower end of the book. In this form the carrier or support for the carbon-paper is mounted centrally on the

cover, so as to be swung upward and back, and when swung back the carrier or support is free from the lifter and the carbon can be turned over, as in the old way of using a carbon. The carrier or support instead of having the incline or cam thereon is provided with a contact  $h'$ , and the reciprocating lifter is provided with an incline or cam  $g'$ ; but the operation of the contact and the incline or cam is the same as in the other construction so far as regards the raising of the free end of the carrier or support for the entering of a new sheet or leaf beneath the carbon-paper. The central pivoting or mounting of the carrier or support enables the carbon to be used from either end as desired.

The device is exceedingly simple in construction and in use will be found very effective, and by its use the sheet of carbon is always in place and does not require to be lifted to be removed and replaced, as it is always in position to have a new sheet or leaf slid beneath it, and the operation of slipping a sheet or leaf in place is performed easily by reason of the automatic lifting of the end of the carbon-sheet through the position of the cover.

I claim—

1. In a manifolding-book, the combination of two covers, a carbon-sheet carrier or support, and means for raising one end of the carrier or support by the movement of the covers to permit of the inserting or sliding of a sheet or leaf beneath the carbon-paper, substantially as described.

2. In a manifolding-book, the combination of two covers, a carbon-sheet carrier or support mounted on one of the covers and a lifter operated by the other cover to raise the free end of the carrier or support, substantially as described.

3. In a manifolding-book, the combination of two covers, a carrier or support mounted on one cover and having an incline or cam thereon and a reciprocating lifter operated by the other cover and having thereon a contact engaging the cam or incline of the carrier or support for raising one end of the carrier or support by the movement of the cover, substantially as described.

4. In a manifolding-book, the combination of two covers, a pad or block held between the two covers, a carbon-sheet, a carrier or support for the carbon-sheet mounted on one of the covers and having a cam or incline thereon and a reciprocating lifter operated by the other cover and having a contact engaging the cam or incline so that the movement of the reciprocating lifter may raise one end of the carrier or support and permit the insertion of a sheet of the pad or block under the carbon-sheet, substantially as described.

EBENEZER B. WILLIAMS.

Witnesses:

EPHRAIM BANNING,  
BELLE W. BARRY.