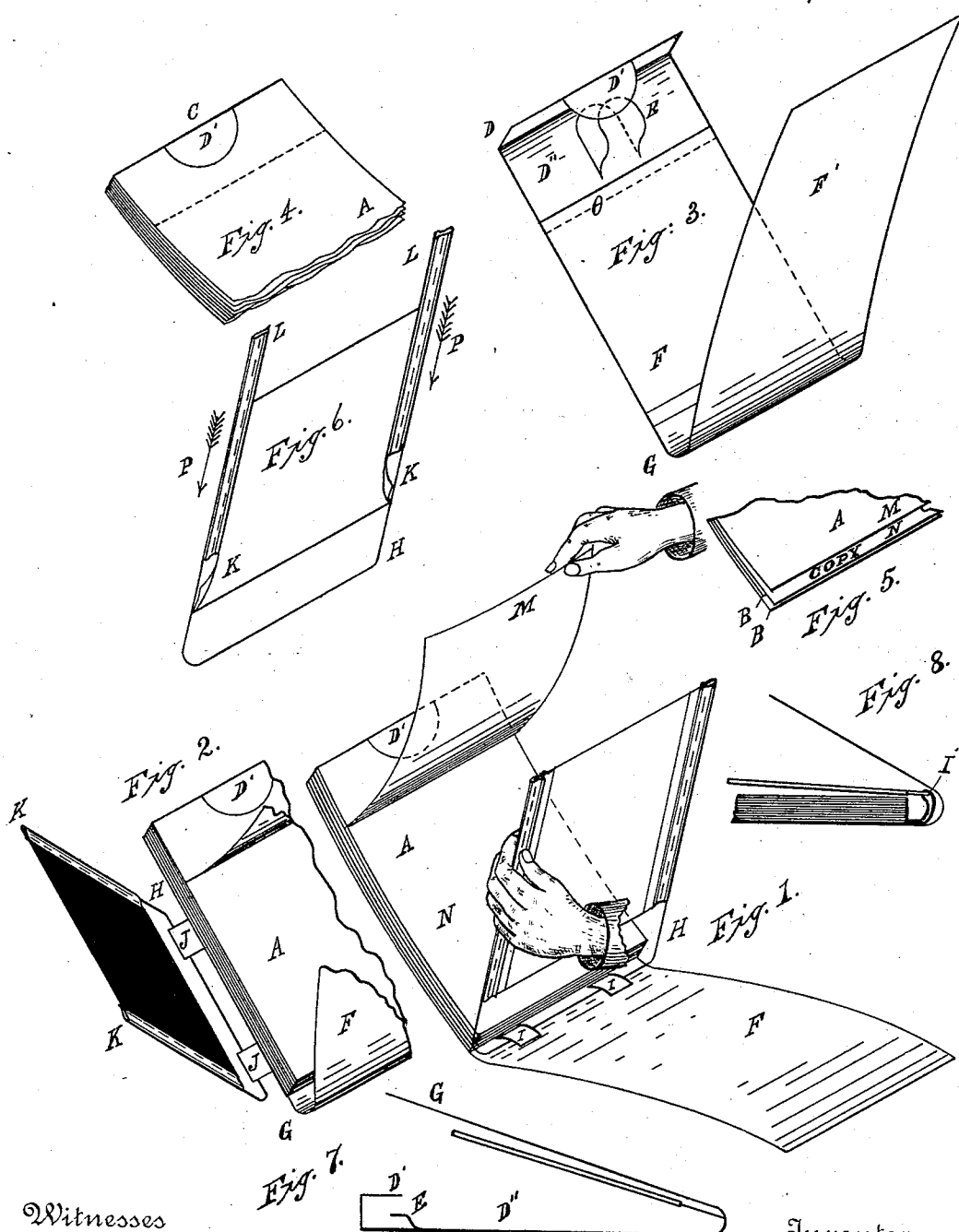


(No Model.)

K. O. ST. JOHN.
MANIFOLD COPYING BOOK.

No. 471,724.

Patented Mar. 29, 1892.



Witnesses

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UNITED STATES PATENT OFFICE.

KING OTTO ST. JOHN, OF TOLEDO, OHIO.

MANIFOLD-COPYING BOOK.

SPECIFICATION forming part of Letters Patent No. 471,724, dated March 29, 1892.

Application filed November 28, 1890. Serial No. 372,975. (No specimens.)

To all whom it may concern:

Be it known that I, KING OTTO ST. JOHN, a citizen of the United States, residing at Toledo, in the county of Lucas and State of Ohio, have invented certain new and useful Improvements in Manifold-Copying Books; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in manifold-copying books in which blank leaves or partially-blank leaves are arranged in book form and disposed in groups of such numbers of leaves as the desired manifold of copies to be produced, the said leaves being also combined with the requisite number of "impression" or "carbon" sheets (so called) to correspond in number with the aforesaid manifold of copies.

The objects of my improvements are, first, an improved method of varying the leaves of the book in relation to each other in their respective groups; second, an improved method of securing the leaves of the book, whereby they are adapted to be adjustably and removably connected with the holding-cover; third, an improved method of attaching an impression-sheet holder to the cover, and of constructing that part of the cover to which it is attached in an elastic form, whereby the impression-sheet connected with said sheet-holder is adapted to be suitably applied between the leaves of the said book; fourth, an improved method of securing the impression-sheets to their holder. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the entire apparatus. Fig. 2 is a perspective view of the apparatus with the impression-sheet hinged to one of the sides instead of at the end of the book. Fig. 3 is a perspective view of the cover. Fig. 4 is a perspective view of a portion of the cover and a portion of the book attached together. Fig. 5 is a perspective partial view of the book with its leaves in opening position. Fig. 6 is a perspective view of the impression-sheet and its holder. Fig. 7 is an end view of the cover and its attachments without the book. Fig. 8 is a side

view of book and cover, showing manner of attaching the impression-sheet wire to the cover.

Similar letters refer to similar parts throughout the several views.

The book A is made in the common tablet form, the leaves of which are most often attached together upon one of their narrow sides, as shown in the drawings in Figs. 1, 2, and 4. These leaves are adapted to be removably adjusted to the cover F, as will be hereinafter explained. At their lower or opening extremity the leaves of the book A are made of varying lengths, as shown at B in Fig. 5. These leaves are preferably disposed in groups, each group consisting of two, three, or more leaves, the under leaf in each group being somewhat longer than those above it, as shown at B'.

D is a metal plate having the overprojecting flange D' and the base-flange D'', out of which flange D'' is formed the upwardly-projecting spring E, thus preferably and cheaply forming from one piece of metal the parts D, D', D'', and E integrally, the said plate D being secured in any suitable manner to and forming a part of the cover F, which cover is adapted to be turned over in a superimposed manner, as shown at F' in Fig. 3, forming the upper member of the cover F. The folding connection G is preferably made in a somewhat springing or yielding form and adapted to hold the impression-sheet frame H in a somewhat varying position by means of a hinge-strap or similar device I, attached thereto, or by a loop, either flexible or non-flexible, such as shown in Fig. 8 at I', the combination of the said back G and hinge I adapting the impression-sheet to be placed at any height in the book—that is, into any opening between the leaves of the book A—as its leaves are successively removed in the process of use. This device may in a similar manner be attached to one of the long sides of the book without changing the nature of my invention, the clip J being made in a yielding form and supplying the place of the connection in this particular.

The impression-sheet holder H is made preferably of a piece of spring-wire bent into form shown in Fig. 6 at H, over which is folded the edges of the impression-sheet, as shown

at K in Fig. 6. The said folds are thereby adapted to be secured in position by means of an impinging clip (shown at L partly in position) and adapted to be slid in the direction of the arrow P in putting on, and in taking off adapted to be slid in the opposite direction.

The operation of my invention is as follows: The book A is placed in position, as shown in Fig. 4, by being pressed between the spring E and the flange D', when the said spring E by its upward action impinges upon the under side of the said book and holds it firmly against the flange D'. One of the leaves of the book is then raised to the position shown in Fig. 1, when the impression-sheet is folded within the book between the leaves M and N. The upper leaf M may then be written upon with an ordinary pencil, when a copy of such writing will, by means of the transfer-sheet, be made upon the leaf N in the usual well-known manner. The group of sheets thus written upon are then severed from the main book upon the perforated line O by the operator, who seizes between his thumb and finger the downwardly or long projecting leaf N at or near B', (the said projecting leaf facilitating the operation,) and with those above quickly tears them asunder. In like manner any number of leaves in such a group may be correspondingly operated upon and any required number of impression-sheets used therewith in an obvious manner.

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

1. A manifold-copying book composed of a series of leaves, a plate folded over one edge of said book and embracing a part of the upper and lower sides of said book between overlapping flanges, to the lower of which is attached a cover adapted to be folded over

lengthwise across the lower edge and on both sides of said book, in combination with a spring secured to said lower flange and adapted to hold the said book in adjustable position against the upper flange of said folded plate, substantially as shown.

2. In a manifold-copying book, the combination of a series of leaves secured together in book form and to a cover adapted to be folded over lengthwise across the lower edge and on both sides of said book, to which fold is attached a hinged impression-sheet holder, substantially as described.

3. In a manifold-copying book, an impression-sheet holder having connected arms hinged to its cover in a flexible manner at the opening extremity of said book and consisting, substantially, of a wire H, having arms arranged in parallel position with respect to each other and adapted to have an impression-sheet folded thereon and held in strained operating position by means of impinging clamps, substantially as described.

4. In a manifold-copying book, an impression-sheet holder having connected springing arms hinged to its cover in a flexible manner at the opening extremity of said book and consisting of a wire H, having arms arranged in parallel position with respect to each other and adapted to have an impression-sheet folded thereon and strained by said arms in tight operating position and secured in position by means of impinging clamps, substantially as described.

In testimony whereof I hereto affix my signature in presence of two witnesses.

KING OTTO ST. JOHN.

Witnesses:

EDWARD H. RHOADES,
HARRY HAYNES.