

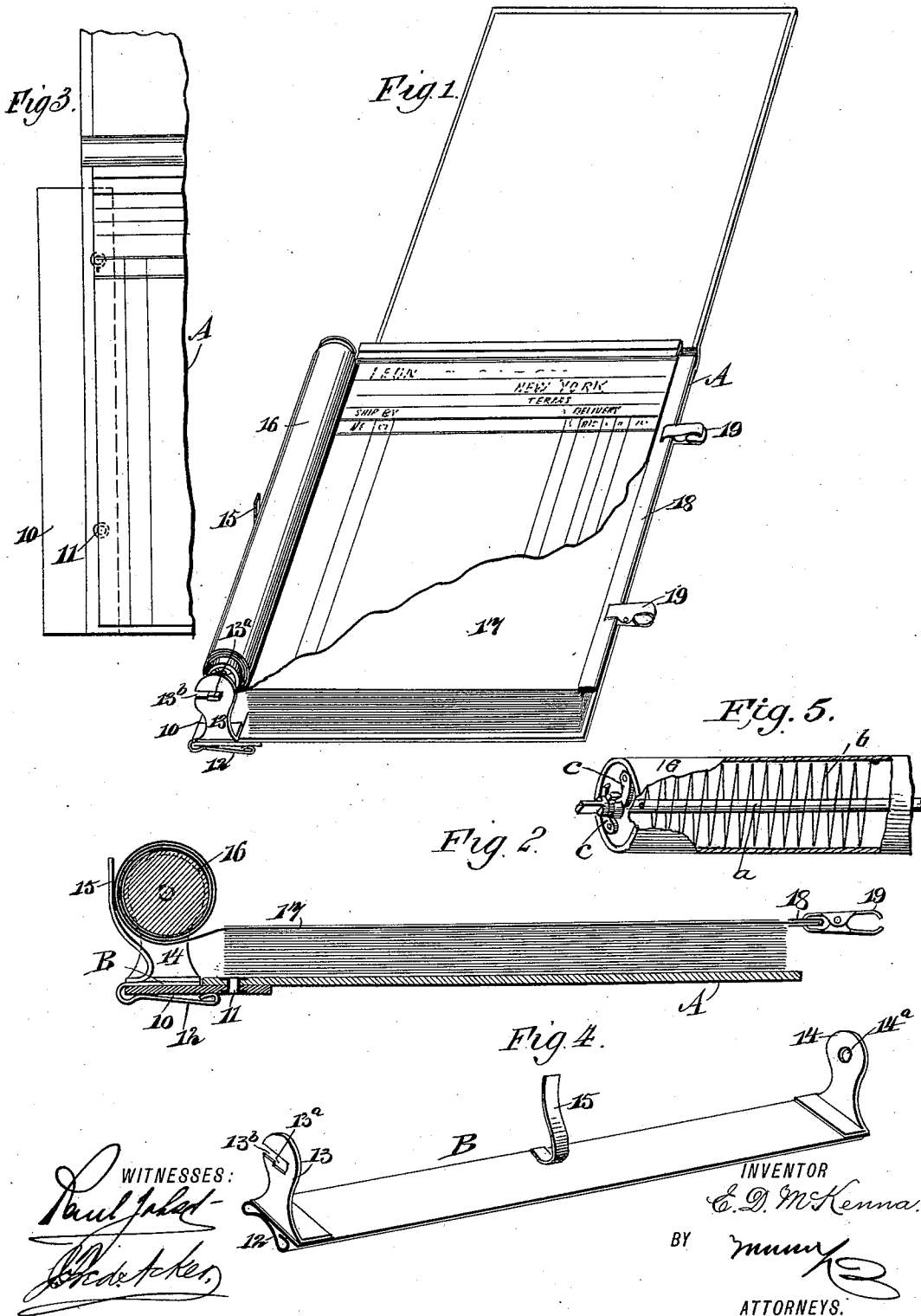
(No Model.)

E. D. McKENNA.

MANIFOLDING ATTACHMENT FOR BOOKS OR PADS.

No. 579,834.

Patented Mar. 30, 1897.



UNITED STATES PATENT OFFICE.

EDWARD D. MCKENNA, OF BROOKLYN, NEW YORK.

MANIFOLDING ATTACHMENT FOR BOOKS OR PADS.

SPECIFICATION forming part of Letters Patent No. 579,834, dated March 30, 1897.

Application filed June 10, 1896. Serial No. 594,961. (No model.)

To all whom it may concern:

Be it known that I, EDWARD D. MCKENNA, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Manifolding Attachment for Books or Pads, of which the following is a full, clear, and exact description.

The object of my invention is to provide an attachment for books, such as order-books, whereby material, such as carbon-paper used for manifolding, may be attached to a removable cover or to a roll and the roll and a support for the same be detachably attached to the book in which manifold copies are to be made, whereby any desired length of carbon or transfer paper may be drawn from the roll and carried between leaves upon which the original and duplicate copies are to be made, the roller being plain or spring-controlled or of a spring type, so that after a predetermined copy of carbon-paper has been drawn therefrom the withdrawn section of the paper will remain quiet, and whereby, furthermore, after the entry has been made, the carbon-paper may be returned to the roll and be entirely out of the way, thus obviating the inconvenience of a loose sheet of carbon-paper, which frequently falls to the floor or is displaced from the book, and in the event of careless handling frequently soils the pages of the book in which the entries are to be made.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of an open order-book, illustrating the manifolding attachment applied, one of the pages being broken away to disclose the carbon or transfer paper between it and the next page; the said carbon-paper being shown as in position for producing a duplicate or multiple copy of the original entry. Fig. 2 is a transverse section through the body of the book and through the attachment. Fig. 3 is a plan view of one side of an open order-book with the attachment removed therefrom, and Fig. 4 is a per-

spective view of a supporting-bar for the attachment. Fig. 5 is a view showing the spring-roller to be hereinafter described.

In carrying out the invention the book A (shown in the drawings) is an order-book, and at one side of the book a horizontal extension 10 is formed, which is mainly outside of the edges of the leaves of the book, and this extension 10 may be an integral portion of the cover of the book, or it may be attached to the cover by means of eyelets 11, as shown in Figs. 2 and 3, or by equivalent means. The said extension 10 may be made of metal, or any other substance may be employed.

The aforesaid extension 10 preferably terminates at the outer edge of the cover and near the flexible binding connecting the two covers of the book, as shown in Fig. 3. This extension 10 from the cover of the book forms a support for a bar B, (shown in detail in Fig. 4,) and the said bar is preferably made of spring metal of suitable length and width, and the metal of the bar is returned upon itself beneath the main portion thereof to form a clamping member 12, as shown in Figs. 1, 2, and 4, and preferably the return or clamping member 12 is curved upward at its center, so as to engage with the body or main portion of the bar at the bottom, and the free end of the return member 12 is bent over upon itself to form a loop, thereby providing for a smooth and regular opening or space between the aforesaid body of the bar B and the return member.

On the upper face of the body of the bar two brackets 13 and 14 are secured, one being preferably at each end, and the bracket 13 is provided with a polygonal opening 13^a, communicating with a slot 13^b, which extends to the outer edge of the bracket, while the opposing bracket 14 is provided only with a circular opening 14^a. At or near the center of the bar B a spring 15 is secured, which is curved in direction of the inner edge of the bar at its base and is then carried upward in direction of the outer edge to a greater or to a less extent. A spring-roller 16 is journaled by its trunnions in the openings in the brackets 13 and 14, and one end of a carbon-sheet 17, or any equivalent thereof, is secured to the aforesaid roller 16 and is adapted to be normally wound thereon. Fig. 5 shows a

construction of the roller 16 which may be employed. This consists in a rod *a*, around which a torsional spring *b* is coiled, the spring being fixed at one end to the roller and at the remaining end to the rod, while the spring is restrained by pawl *c*, all of which is known in the art. The spring 15 bears against the outer face of the roll of paper to assist steadying its action and to insure the regular winding of the carbon-sheet. Preferably a protecting-strip 18 is located upon the free or outer edge of the carbon or transfer paper or sheet 17, and this protecting-strip 18 may be detachably secured to the said sheet by means of clips 19 or like devices, the protecting-strip being provided in order to prevent the fingers of the operator from becoming soiled.

In operation the supporting-bar B for the roller 16 is located upon the extension-strip 10 of the book, the said strip being made to enter between the body portion of the said supporting-bar of the roller and its clamping member 12, as shown particularly in Figs. 1 and 2. When an entry is to be made and a duplicate of said entry is to be provided, the carbon-sheet is drawn from the roller and so placed that it will be located between the sheet or page on which the original entry is to be inscribed and the sheet or page on which the duplicate of the inscription is to be produced, as shown in Fig. 1. The process of manifolding is then carried on in the usual manner. When the entry has been made or the order taken and noted, the carbon-sheet 17 is permitted to again wind itself on the roller 16 and thus will be entirely out of the way.

The improved manifolding device is capable of quick operation. It is always ready for use, and carbon-paper will last longer and will not dry up, because it is protected on the roll, and the coiling of the paper upon itself serves to protect it from the action of the air.

When not in use, the carbon-paper is rolled back from the book and will not soil or grease the sheets to be written upon. The carbon-paper cannot fall on the floor, as frequently

happens with loose sheets of carbon, and through the medium of the protecting-strip 18 at the outer end of the carbon-sheet the fingers will not become soiled in the use of the attachment.

I desire it to be understood that the carbon or other equivalent paper used may be attached to a plain roller or one not controlled by a spring, and that the paper may be secured in any suitable way to a detachable cover for the book or pad in connection with which it is to be employed, and that the bar shown, on which the brackets are secured, may be dispensed with, and the brackets may be individually attached directly to the book-cover or to any extension of the same. Again, the shape of the bearings produced in the brackets for a roller may be varied as occasion may demand and as fancy may dictate.

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

1. The combination, with a book or pad having one of its edges extended beyond its leaves or pages, of a bar provided with a clamp and detachably engaged with the extension of the book or pad, brackets secured upon the said bar, a spring-controlled roller journaled in the said brackets, a carbon or similar paper attached to the roller, being adapted to be rolled thereon or unrolled therefrom, and a spring attached to the said bar and pressing the paper on the said roller, as and for the purpose set forth.

2. A manifolding device adapted to be used in connection with books and pads, the manifolding device having a strip, a clamp running longitudinally with the strip and receiving a portion of the book or pad, brackets rising from each end of the strip, a roller mounted in the brackets, a duplicating-sheet wound on the roller, and a spring carried by the strip and pressing the paper which is on the roller, substantially as described.

EDWARD D. McKENNA.

Witnesses:

JAMES M. HENLEY,
F. W. HANAFORD.