

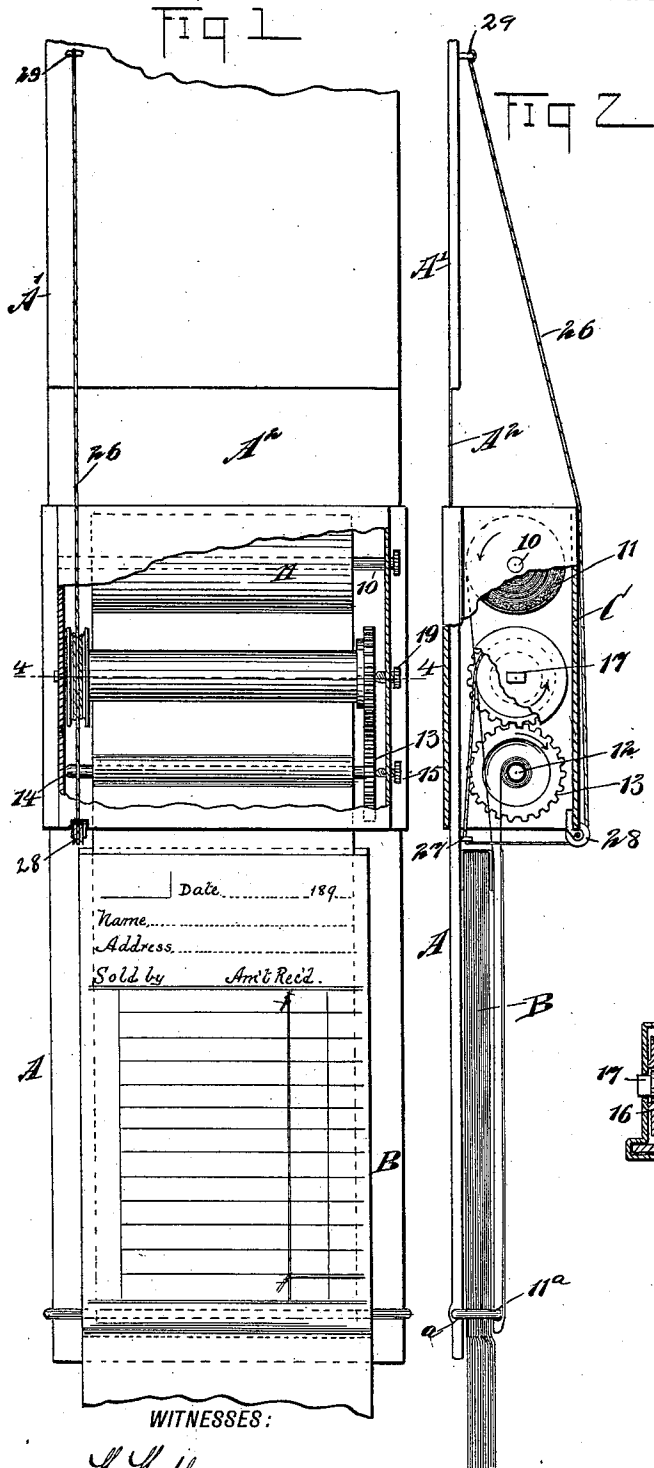
(No Model.)

E. D. McKENNA.

MANIFOLDING ATTACHMENT FOR BOOKS.

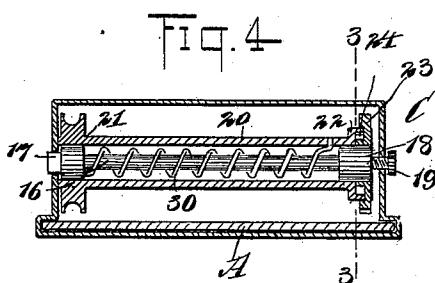
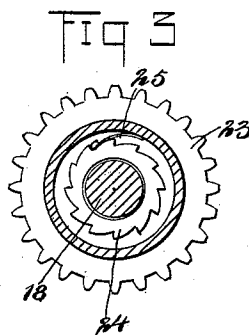
No. 579,835.

Patented Mar. 30, 1897.



WITNESSES:

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UNITED STATES PATENT OFFICE.

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MANIFOLDING ATTACHMENT FOR BOOKS.

SPECIFICATION forming part of Letters Patent No. 579,835, dated March 30, 1897.

Application filed July 9, 1896. Serial No. 598,548. (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 useful Improvement in Manifolding Attachments for Books, of which the following is a full, clear, and exact description.

The object of my invention is to provide a manifolding attachment for books such as are used by salesmen or other persons to give a bill and retain a duplicate of the bill together with a copy of the same; and a further object of the invention is to construct such an attachment in a simple, durable, and compact manner, and in which the copy-sheet will be moved to a position to receive a new entry at each time that the book is opened.

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 plan view of a portion of the book open, a part of the casing of the attachment being broken away. Fig. 2 is an edge view of a portion of the book and a partial edge view of the attachment, parts of the latter being broken away. Fig. 3 is a vertical section, taken through the attachment, practically on the line 3 3 of Fig. 4; and Fig. 4 is a transverse section through the attachment and the book, taken substantially on the line 4 4 of Fig. 1.

In carrying out the invention the book-cover consists of two backs A and A', connected by a flexible strip A² or other form of hinge, and upon the inner face of what may be termed the "back cover" A of the book a pad B of blank bills is secured at its upper end, and each sheet of the bills is in duplicate, the duplicate portion of the bills being adapted to extend below the end of the aforesaid back cover of the book, as shown in Fig. 2.

A casing C is secured upon the back cover of the book adjacent to its hinge connection with the front cover A', and the said casing while extending across the rear of the back cover is mainly located over the inner face thereof and slightly above the point of at-

tachment of the bill-pad B. The casing is preferably open at the ends, being otherwise closed, and at the inner end of the said casing a detachable rod 10 is located, being passed from side to side and secured in one of the sides of the said casing, and the said rod is passed through a roll 11 of tissue-paper or paper of a like character, so that the said roll may readily turn upon the said rod. The paper from the roll 11 is carried downward over the upper face of the pad of bills and around a link 11^a or its equivalent and which is pivoted to the back cover, and the said paper from the roll 11 is thence carried from the link upward to an engagement with a spindle 12, having at its right-hand end a gear 13, rigidly secured thereon, and the left-hand end 14 of the said spindle is journaled in the casing C, while its right-hand end is engaged by the pivot-point of an adjusting-screw 15, as shown particularly in Fig. 1.

Between the rod 10, carrying the roll 11, and the spindle 12, upon which the tissue-paper or record-sheet is rolled, a feed mechanism is located, and the said feed mechanism consists of a spindle or shaft 16, which is provided with a squared or polygonal end 17, located in a corresponding opening in the casing C, and at the opposite end of the said shaft or spindle an enlargement 18 is formed, and the enlarged end of the shaft is held in connection with the casing by means of an adjusting-screw 19 or a similar device.

Around the shaft or spindle 16 a tubular drum 20 is mounted to turn, provided with a peripherally-grooved attached or integral pulley 21 at its left-hand end, and a hub or housing 22 is formed at the opposite end of the said tubular drum. A gear 23 is loosely mounted on the enlarged portion 18 of the take-up or feed spindle 16, and the said gear has secured to its inner face a ratchet-wheel 24, and the said ratchet-wheel is engaged by a pawl 25, which is attached to the hub-section of the aforesaid drum, as shown in Fig. 3, permitting the said gear-wheel to remain stationary under certain conditions and compelling it to turn with the drum under other conditions.

A cord, cable, or chain 26 is wound around the pulley 21 of the drum 20, being attached thereto at one of its ends. The opposite end

of the said cord is carried downward from the pulley through a guide 27, located on the back portion of the cover of the book, as shown in Fig. 2, and thence over a pulley 28 and upward over the casing C to an attachment to a staple 29, or the equivalent of the same, a number of said staples, or whatever equivalent may be employed, being located upon or in the front cover of the book; but the direction of the cord may be changed, as required. A spring 30 is wound around the shaft 16, and one end of the spring is attached to the said shaft, while the opposite end of the spring is secured to the drum 20, as shown in Fig. 4.

In operation, the book being open, a transfer or carbon sheet should be placed between the tissue-sheet and the outer face of the body portion of the bill-pad, and the free end of the bill-pad is carried over the body of the pad, as shown in Fig. 2, in which figure, however, the carbon-sheet has been omitted. When an entry is made with a pencil on the upturned bill-section, a duplicate of the entry will be produced on the lower run of the tissue-paper, and likewise on the uppermost sheet of the body of the bill-pad, so that the uppermost pendent sheet of the bill-pad may be given, for example, to the customer, the continuation of the bill or the uppermost sheet on the body of the pad being given to the cashier, while memoranda of the sale is preserved on the tissue-sheet.

When the top cover of the book is closed, the spring 30 will take up the slack of the cable, chain, or cord 26, winding it on the pulley 21, the pawl 25 slipping over the ratchet-wheel 24. When the book is opened to make a second entry, the drum 20 will be revolved as the cord, chain, or cable is unwound therefrom, and motion will be imparted to the gear-wheel 23 through the medium of the pawl and ratchet 25 and 24, whereupon a sufficient amount of the tissue or record sheet will be wound up on the receiving-spindle 12 and a fresh surface will be presented over the body of the bill-pad.

It will be understood that I do not confine myself to any particular position of the drums and rollers upon the book and that the character of the spring-roller may be varied or an equivalent device substituted.

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

1. The combination, with the covers of a book, a casing located upon one of the covers, a fixed and a revoluble spindle located in the said casing, the fixed spindle being adapted to receive a roll of copying material and the revoluble spindle being arranged for attachment to one end of the said roll, of a spring-controlled roller connected with the said revoluble spindle, and a cable connected with a portion of the spring-controlled roller and with the cover of the book that is adapted to be opened, the connection between the

said cover and the said roller being such as to operate the roller in a manner to operate the rotating spindle when the cover is opened, as and for the purpose specified.

2. In a book, the combination with the covers of the same, a casing attached to one of the covers provided with spindles removable therefrom, and a roll of copying material mounted to turn on one spindle and connected with the other, of a fixed shaft located between the said spindles, the shaft being held stationary in the casing, a drum mounted to turn around the said shaft, a spring coiled around the shaft and connected at one end therewith and at its opposite end with the said drum, a gear-wheel secured to the spindle on which the roll is to be wound, a second gear meshing with the spindle-gear and loosely mounted on the spring-controlled shaft, a ratchet-and-pawl connection between the gear of the spring-controlled shaft and the said drum, and a cable connection between the drum and the opening cover of the book, the said cable being wound upon the said drum, as and for the purpose specified.

3. In a book, the combination with the covers of the same, a casing attached to one of the covers and provided with spindles removable therefrom, and a roll of copying material mounted to turn on one spindle and connected with the other, of a fixed shaft located between the said spindles, the shaft being held stationary in the casing, a drum mounted to turn around the said shaft, a spring coiled around the shaft, connected at one end therewith and at its opposite end with the said drum, a gear-wheel secured to the spindle on which the roll is to be wound, a second gear meshing with the spindle-gear and loosely mounted on the spring-controlled shaft, a ratchet-and-pawl connection between the gear of the spring-controlled shaft and the said drum, a cable connection between the drum and the opening cover of the book, the said cable being wound upon said drum and the cable being also adjustably connected with the aforesaid opening cover, and a pad over which a loop of the copying material passes, as and for the purpose set forth.

4. In a book, the combination, with the covers of the same, a casing attached to one of the covers and provided with spindles removable therefrom, and a roll of copying material mounted to turn on one spindle and connected with the other, of a fixed shaft located between the said spindles, the shaft being held stationary in the casing, a drum mounted to turn around the said shaft, a spring coiled around the shaft, connected at one end therewith and at its opposite end with the said drum, a gear-wheel secured to the spindle on which the roll is to be wound, a second gear meshing with the spindle-gear and loosely mounted on the spring-controlled shaft, a ratchet-and-pawl connection between the gear of the spring-controlled shaft and the said drum, a cable connection between

the drum and the opening cover of the book, the said cable being wound upon said drum and the cable being also adjustably connected with the aforesaid opening cover, a pad over
5 which a loop of the copying material passes, and a guide for the lower end of the aforesaid loop, connected with the cover to which the said pad is secured, substantially as shown and for the purposes specified.

10 5. A book having two cover - sections adapted to carry a number of leaves, a casing on one section, two rollers within the casing,

the rollers being adapted to have a copying-sheet wound thereon, a shaft having connection with one of the rollers, a spring actuating the shaft and a flexible connection wound 15 around the shaft and attached to the cover-section not having the casing, substantially as described.

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Witnesses:

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