

S. BING.
INVOICE HOLDER.

Patented Oct. 17, 1893.

Fig. 6 is a perspective view of a book with a curved cover and spine. The book is shown open, revealing the pages and the binding structure. The cover is labeled 'A' at the top and bottom. The spine is labeled 'B' and 'C'. The binding structure is labeled 'D' and 'E'. The pages are labeled 'F' and 'G'. The binding structure is also labeled 'H' and 'I'. The binding structure is also labeled 'J' and 'K'. The binding structure is also labeled 'L' and 'M'. The binding structure is also labeled 'N' and 'O'. The binding structure is also labeled 'P' and 'Q'. The binding structure is also labeled 'R' and 'S'. The binding structure is also labeled 'T' and 'U'. The binding structure is also labeled 'V' and 'W'. The binding structure is also labeled 'X' and 'Y'. The binding structure is also labeled 'Z' and 'A'.

Fig. 3

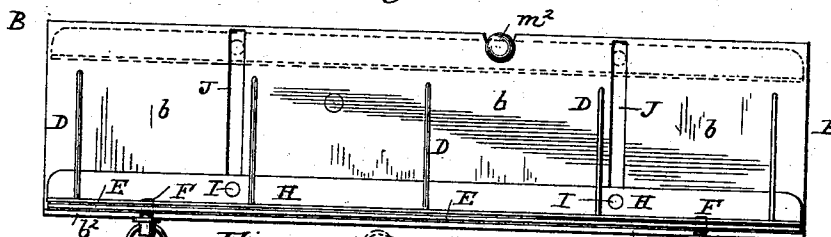


Fig. 4.7

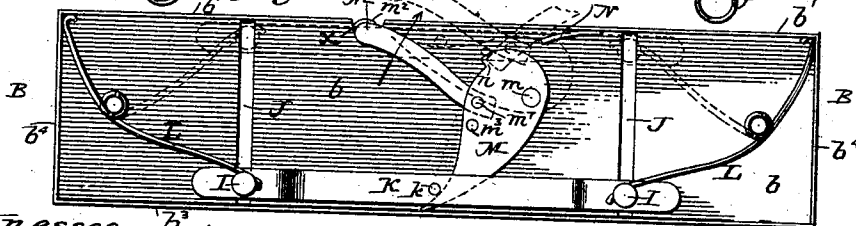


Fig. 5

Witnesses
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UNITED STATES PATENT OFFICE.

SAMUEL BING, OF HUMANSVILLE, MISSOURI.

INVOICE-HOLDER.

SPECIFICATION forming part of Letters Patent No. 506,808, dated October 17, 1893.

Application filed May 25, 1893. Serial No. 475,433. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL BING, a citizen of the United States, residing at Humansville, in the county of Polk and State of Missouri, have invented certain new and useful Improvements in Invoice-Holders, of which the following is a specification.

The object of my invention is to provide improved means for quickly binding together invoices, letters, &c., in such manner that they are securely held together in shape for filing.

The particular object of my invention is to operate the binding mechanism at a greater speed than heretofore and with greater facility.

In the accompanying drawings,—Figure 1 is a perspective view of a book or binder embodying my improvements. Fig. 2 is a cross section of the same. Fig. 3 is a detail view of the binding mechanism, and Fig. 4 is a view of the opposite side thereof. Fig. 5 is a detail view of the devices for locking the sheets after the holders are filled. Fig. 6 is detail view of part of the binding mechanism. My improvements are designed to be applied to an ordinary book cover A.

The frame B, of the binding mechanism may be of sheet metal having a flat vertical portion *b*, a top flange *b'* projecting backwardly, a flange *b²* at the bottom extending forwardly and connecting by a bend with a bottom piece or flange *b³*, which extends backwardly beyond the plane of the vertical portion *b*. The frame has also backwardly extending end pieces *b⁴*. The backwardly extending end pieces and top and bottom flanges are secured to a suitably-shaped block C, secured to the back of the cover.

A series of needles D, five being shown, are secured to a connecting bar E, resting on the flange *b²*. Screws F, having ring handles *f*, extending through openings in the flange *b²*, and into screw-threaded openings in the bar E. The construction is such that by removing the screws, the bar E, and the needles carried thereby, may be separated from the frame.

A supplemental cover G, is secured to the needle-carrying bar in such manner that when the needles are filled with papers and removed from the cover A, the binder may readily be employed to cover the package. As shown, the back *g*, of the binder is flexible and

it extends over and around the bar E, being clamped between the bar E and the flange *b²*.

In order to hold the invoices or papers securely on the needles, after they have been placed thereon, I employ a presser bar H, which extends from one end of the frame to the other, and which is preferably L-shaped, the horizontal portion resting on the inner edge of the papers, while the vertical portion bears against the frame. The presser bar is perforated, as shown, and the needles extend through these perforations loosely, so that the presser bar is free to work up and down when operated.

Studs I, secured to the presser bar extend through slots J, in the vertical portion *b*, of the frame B, and serve to guide the bar and prevent endwise movement thereof, as the bar is raised up and down, toward and from the base of the needles. The ends of the studs I are secured to a connecting bar K, on the inner side of the frame and also at each end to springs L, which normally tend to force the presser bar downwardly toward the base of the needles.

Between the ends of the connecting bar and preferably midway between the slots J, I secure to the connecting bar K, a stud *k*, with which engages a cam-shaped lever M, pivoted to the frame at *m*, and pivotally connected at *m'* with a handle lever M', provided with a knob *m²*. The lever M, also carries a stud *m³*, against which the inner end of the lever M' is adapted at times to bear. A spring catch N, secured to the flange *b'* of the frame, is adapted to engage with a tooth *n*, on the lever M, which raises it to the proper position.

It will be readily understood from the foregoing description that the binding mechanism may be readily placed in position in a suitable cover, and that the supplemental binder G, may be readily attached to the frame of the binding mechanism by simply taking out and replacing the screws F.

In Fig. 2, I have shown a number of papers secured in position. When it is desired to add more papers, the handle M' is moved forwardly, as indicated in Fig. 4, and the lever M, is caused to engage with the connecting bar K, which, being connected with the presser bar H, causes it to rise until it has reached

the top of the frame, as indicated in dotted lines in Fig. 4. When in this position, the catch N, will engage with the tooth *n*, of the lever M, and hold it in position against the force of the springs L. Papers may now be placed over the needles and then by reversing the handle, the catch will disengage from the tooth *n*, and the presser bar will move back and firmly clamp the papers in position.

The frame is cut away at *x*, to accommodate the handle, so that it may fit closely without interfering with the opening and closing of the book cover.

It will be seen by inspecting Fig. 2, that the handle while in convenient position for use when desired, it does not take up unnecessary room and does not interfere with the opening and closing of the book cover.

So far as I am aware, I am the first to provide lever mechanism for raising the presser bar of a binder of this class. By such mechanism, I am enabled to operate the binding mechanism with one hand, while the other hand holds the papers. After the needles are filled with papers, a guard bar O may be employed to finish the binding. This guard bar is provided with vertical perforations corresponding with the needles and with a longitudinal pipe or channel *o*, adapted to receive a wire P. The guard bar is placed over the needles with the pipe or channel in line with the eyes thereof, and the wire P is passed through the pipe and through the eyes of the needles, and the binding is thus completed. The screws F, may now be removed, thus separating the needle-carrying bar E from the frame, and this needle-carrying bar and the needles carried thereby which are filled with papers may be removed and filed away, and a new needle-carrying bar may be secured in its place in the cover and the binder operated as before.

I claim as my invention—

1. The combination of a frame, a series of needles secured thereto, a perforated presser

bar through which the needles extend, a lever connected with the presser bar for raising and lowering it, a catch for holding the presser bar in an elevated position, and a handle for operating the lever.

2. The combination of a frame, a series of needles carried thereby, a presser bar having perforations through which the needles extend, a connecting bar on the opposite side of the frame, devices for connecting this bar with the presser bar, springs for holding the bars in their lowermost position, a lever connected with the bars, and a handle for operating the lever.

3. The combination of a frame, a series of needles secured thereto, a presser bar through which the needles extend, an operating lever, connections between this operating lever and the presser bar, springs for holding the presser bar in its lowermost position, a handle pivotally connected with the operating lever, and a catch for holding the lever and handle in their elevated position.

4. The combination of a frame having upper and lower flanges, a block to which the frame is secured, a needle-carrying bar secured to a forwardly projecting flange of the frame, a presser bar having perforations through which the needles extend, studs secured to the presser bar and extending through slots in the frame, a connecting bar to which the studs are secured, springs for holding the connecting bar and presser bar in their lowermost position, a cam-shaped lever secured to the frame and engaging with a stud on the connecting bar, a handle pivotally connected with the lever for operating it, and a catch engaging a tooth on the lever for holding it in its uppermost position.

In testimony whereof I have hereunto subscribed my name.

SAMUEL BING.

Witnesses:

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