(No Model.)

R. J. COPELAND & A. E. CHATTERSON.

ORDER SHEET BINDER.

No. 448,411. Patented Mar. 17, 1891.

Fig. 1.

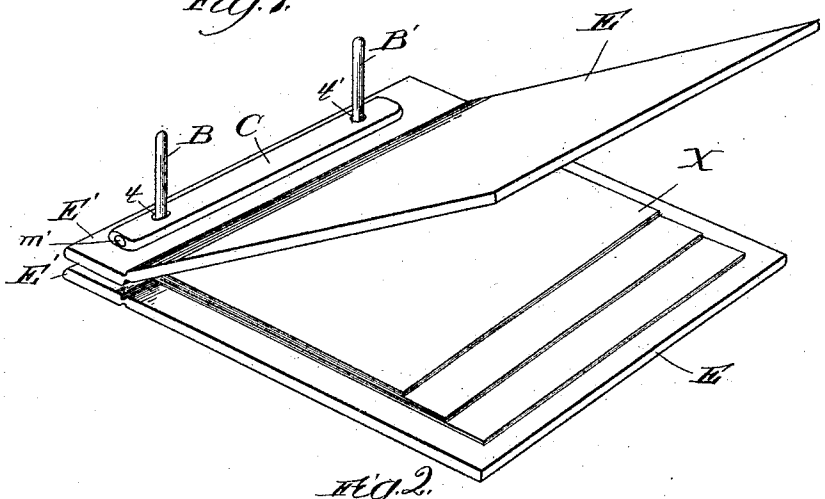


Fig. 2.

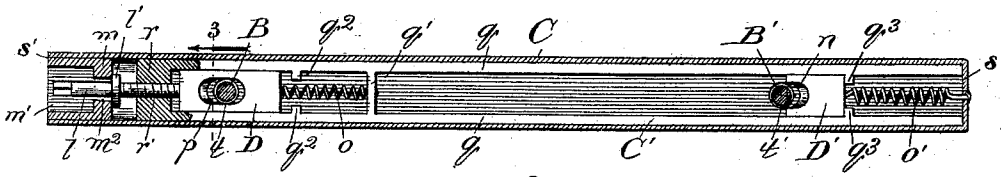


Fig. 3.

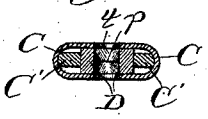
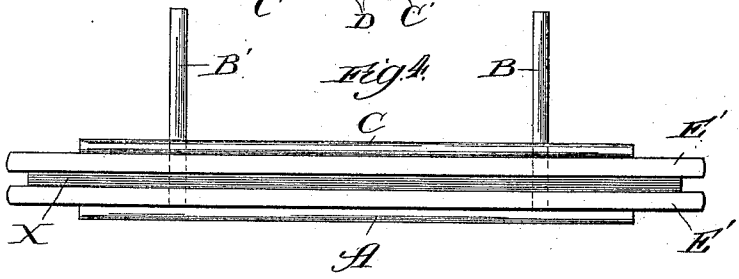


Fig. 4.



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UNITED STATES PATENT OFFICE.

ROBERT J. COPELAND AND ALBERT E. CHATTERSON, OF CHICAGO, ILLINOIS.

ORDER-SHEET BINDER.

SPECIFICATION forming part of Letters Patent No. 448,411, dated March 17, 1891.

Application filed October 28, 1890. Serial No. 369,586. (No model.)

To all whom it may concern:

Be it known that we, ROBERT J. COPELAND and ALBERT E. CHATTERSON, citizens of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Order-Sheet Binders, of which the following is a specification.

Our invention relates to an improvement in the class of binders employed more particularly in large merchandising houses for filing away records, to keep them in a systematic and safe manner and admit of their ready inspection when desired.

Our device is intended more especially for use as a permanent binder for order-blanks where the system of filling orders and posting from the original order-blanks is carried on. In this system as generally practiced the original order-blanks filled out by the salemen, with the items of merchandise sold and prices obtained therefor, are inserted into temporary order-holders for the use of the shipping-clerks, who check off the items thereon as they are shipped. The original blanks are then passed to other clerks, who note upon them the totals and make out therefrom the bills to be sent to the customers. The blanks, which thus contain complete records of the sales from order to shipment and billing and form a check upon each employé through whose hands they have passed, are placed in a binder to form a book which constitutes the journal from which the book-keeper posts to the ledger. When the blanks have been finally disposed in the binder, it is necessary that they remain undisturbed, so that their order may be preserved to render them easy to find on reference to the ledger; and as they are frequently referred to thereafter for various purposes by different employés, it is desirable that the binder be one which will not only hold them securely against becoming accidentally detached, but one which will prevent their being intentionally abstracted by any one but the clerk who has them finally in charge.

Our object is to provide an improved binder for the purpose stated of a simple, durable, and economical construction, and, further, to provide the binder with locking mechanism which will prevent its being opened for the insertion or abstraction of papers except by a person possessing the key.

In the drawings, Figure 1 is a perspective view of our improved binder partly filled with papers that have been filed therein. Fig. 2 is an enlarged sectional plan view of the locking-bar; Fig. 3, a section on line 3 of Fig. 2 and viewed in the direction of the arrow, and Fig. 4 an enlarged view in end elevation of the device.

A is a base-plate upon which are secured two parallel and vertically-extending filing-wires B B′, located at desired distances apart.

C is a hollow bar or case, which may be substantially the same length as the base-plate A, and is provided with openings t t' through it corresponding in relative location with the wires B B′, and aranged to receive the latter, whereby the bar may be placed upon the wires to slide freely upon them and extend parallel with the base-plate. The bar C is closed at its end s and open at its end s'. Incased in the hollow bar C is a loose sliding bar C′, having the head r with a screw-threaded opening r' through it and open at its opposite end. The bar C′, partly for the sake of lightness, is formed of two narrow strips q, which are joined at the head r by a rib q'. Near opposite ends the strips q are provided with coincident internally-projecting lugs q^2 and q^3.

In the space in the sliding bar C′ between the head r and lugs q^2 is a loose sliding block D, having an elongated opening p through it, corresponding in position with the opening t through the case, and a spring o, secured at one end to the rib q', operates to press the block D toward the head r.

D′ is a block having a circular recess n in its end and connected by means of a spring o' with the end s of the case. The spring o' operates to maintain the block D′ against the lugs q^3 and to draw the sliding bar C′ against the end s of the case. In the end s' of

the case is a plug m, formed with a recess m, and an opening m^2, extending through it from the recess.

l is a set-screw which extends through the opening m^2 and passes through and engages the threaded opening r' in the head of the sliding bar C'. Upon the set-screw l is a rim or collar l', which prevents the set-screw from being withdrawn beyond the desired distance through the opening m^2, and the end of the set-screw which projects into the recess m' is squared to receive a key. At its inner end the set-screw bears against the end of the sliding block D. The end of the socket p nearest the head r and the recess n in the block D' are beveled, as shown, to afford knife-blade-engaging edges.

To place the bar upon the filing-wires the set-screw l is turned by means of its key until stopped by contact of its rim l' with the inner surface of the plug m. When this is done, the beveled edge of the opening p is slightly to one side of the opening t in the case and the beveled recess n of the block B' slightly to one side of the opening t' in the case, as shown. Thus the locking-bar may be placed upon the filing-wires without contact of the sliding bars with the latter.

To lock the bar C in position at any desired elevation upon the filing-wires, the set-screw l is turned to force the sliding block D inward to cause its beveled engaging edge to bear against the adjacent filing-wire. As the turning of the set-screw is continued, the pressure of its inner end against the block D and respective filing-wire causes the sliding bar C' to be drawn toward the end s' until the beveled edge of the recess n in the block D' engages the other filing-wire. The engagement of the sharpened edges of the blocks D and D' with the filing-wire, as described, locks the bar C securely in place. To remove the bar the set-screw is turned in the opposite direction when the spring o' will draw the sliding bar C' back to the end s and the spring o will force the block D forward, which moves the engaging edges of the blocks away from the filing-wires.

E E are covers of stiff material hinged to strips E', which are provided with perforations to fit over the filing-wires, and the covers operate to protect the papers X which have been filed and to afford means for the more convenient handling of the device. The papers X are punched with holes in proper relative location to receive the filing-wires before placing them in the binder. The binder may be filled with papers to a height upon the wires which will leave just room enough for the top cover and the engagement of the locking-bar, so that the device when filled to its fullest capacity is as convenient to handle as an ordinary book and the ends of the filing-wires are flush with the top of the locking-bar. This feature is particularly desirable, as it permits the books thus made up to be piled one upon another without interference from projecting filing-wires. Both the covers E E being hinged in place, as described, particular papers may be readily sought out and inspected from either the top or bottom side of the device, and the papers when placed in the binder may be rendered secure against removal, when the locking-bar is secured in place, by any one except one in authority who holds the key.

Among the points of advantage claimed for our improved binder are, that the locking mechanism takes up no material amount of space on the filing-wires, a point which particularly commends the device to users; that the locking mechanism being incased in the hollow locking-bar is not liable to injury in any way by the rough handling to which the device is apt to be subjected in use, and that the papers placed therein may be rendered secure against removal by unauthorized persons. The locking mechanism of each individual device, if desired to render it still more secure against being surreptitiously unlocked, may be arranged to be operated by a particular and removable key.

We do not limit our invention, however, to the employment of a removable key, to the particular form of the locking-bar or of the locking mechanism contained therein, nor to the use with the filing-wires of hinged covers.

What we claim as new, and desire to secure by Letters Patent, is—

1. In a binder, the combination of parallel filing-wires and a removable hollow bar C, adjustable upon the wires and provided internally with locking mechanism to engage the wires, substantially as described.

2. In a binder, the combination of parallel filing-wires, a removable hollow bar C, adjustable upon the wires and provided internally with locking mechanism to engage the wires, and a removable key for the locking mechanism, substantially as described.

3. In a binder, the combination of parallel filing-wires, a removable hollow bar provided with openings through it to receive the filing-wires, and locking mechanism in the hollow bar to engage the filing-wires, comprising sliding blocks provided with engaging edges, and means for operating the locking mechanism from outside the hollow bar to cause it to engage and release the filing-wires at will, substantially as described.

4. In a binder, the combination of parallel filing-wires, a removable hollow bar provided with openings through it to receive the filing-wires, locking mechanism in the hollow bar to engage the filing-wires, and operating means for the locking mechanism at one end of the hollow bar, substantially as described.

5. In a binder, the combination of parallel filing-wires, and a removable locking-bar comprising a case C, provided with openings

through it to receive the filing-wires, a sliding bar C′ in the case having a block D′ toward one end, provided with an engaging edge *n* for one filing-wire, a head *r* at its opposite end, provided with a threaded opening *r′* through it, and a recess adjacent to the head, a loose sliding block D in the said recess, having an engaging edge for the other filing-wire, and a set-screw *l*, extending through the threaded opening *r′*, bearing at one end against the block D and squared at its opposite end to receive a key, substantially as described.

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In presence of—
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M. J. FROST.

ALBERT E. CHATTERSON.

In presence of—
WILLIAM A. WIMBISH,
JNO. D. LITTLE.