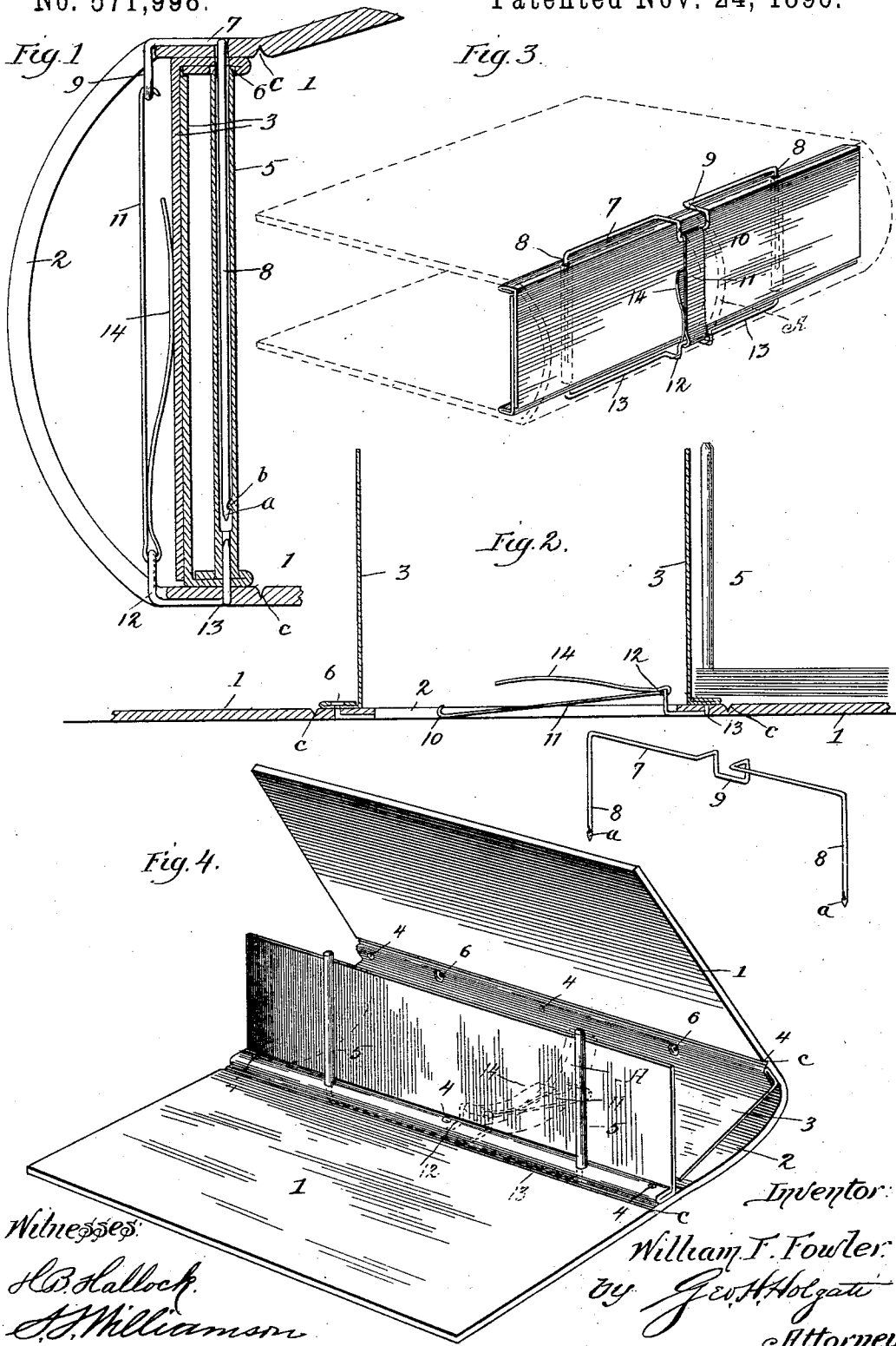


(No Model.)

W. F. FOWLER.
BINDER.

No. 571,998.

Patented Nov. 24, 1896.



Witnesses:

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UNITED STATES PATENT OFFICE.

WILLIAM FILLMORE FOWLER, OF YOUNGSTOWN, OHIO.

BINDER.

SPECIFICATION forming part of Letters Patent No. 571,998, dated November 24, 1896.

Application filed April 6, 1896. Serial No. 586,401. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM FILLMORE FOWLER, a citizen of the United States, residing at Youngstown, in the county of Mahoning and State of Ohio, have invented certain new and useful Improvements in Binders, of which the following is a specification.

My invention relates to a new and useful improvement in temporary binders, and has for its object to provide such a device in which bills, letters, or other papers may be filed, and when so filed easy access may be had thereto after the manner of an ordinary volume or ledger, which will also permit the removal of the papers from the temporary binder in order that they may be transferred to suitable cases, as is common in this class of devices.

With these ends in view my invention consists in the details of construction and combination of elements hereinafter set forth, and then specifically designated by the claims.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, I will describe its construction and operation in detail, referring by letters and numbers to the accompanying drawings, forming a part of this specification, and in which—

Figure 1 is a central cross-section of my improvement, a portion of the back of the binder being broken away and showing the relative position of the parts when the binder is closed; Fig. 2, a similar view showing the relative position of the parts when the binder is open; Fig. 3, a detailed perspective of the angle-plates and the binder being in dotted lines; and Fig. 4, a perspective of the completed binder when open, showing the transfer-wire after having been removed.

Similar letters and numbers denote like parts in the several views of the drawings.

In carrying out my invention I provide stiff covers 1, composed of leather or other material, which are united at *b* by a back 2 of flexible material, and to these covers are riveted the angle-plates 3 by suitable rivets 4. The back and covers may be of the same material, a portion of which is cut away at *c*, thus making the union at this point pliable. Connected to and projecting from one of the angle-plates are the tubes 5, having their upper

ends beveled, so as to facilitate their passage within suitable holes 6, formed through the narrow member of the other angle-plate. The narrow members of these plates are preferably bent back parallel with themselves so as to form a strip, into one of which the tubes are riveted. The holes 6 are of larger diameter when passing through the inner section of the narrow member of the angle-plate than when passing through the outer section thereof, so that when the binder is closed the tubes 5 will project into the holes of larger diameter and bear against the narrow member of the angle-strip in alinement with the smaller holes, so that the staple 7 may be readily inserted within the tubes by being passed through these smaller holes.

A slot is cut in the back 2 midway thereof, (indicated in Fig. 3 by A.)

7 is a staple whose ends 8 are adapted to pass through the holes 6 and into the tubes 5, as clearly shown in Fig. 1, and provided with an offset 9 at its center with which the hooked end 10 of the clasp 11 is adapted to engage, and this clasp is secured to a similar offset 12, formed upon the staple 13, the ends of which are secured within the opposite ends of the tubes. These ends are somewhat shorter than the ends 8 of the staple 7. Upon the lower extremities of the ends 8 are formed hooks *a*, which are adapted to engage suitable projections *b*, formed in the tubes for the purpose of preventing accidental withdrawal of the staple 7. After passing around the offset 12 the clasp is bent backward upon itself, so as to form a plate-spring 14, adapted to bear against one of the angle-plates to facilitate the disengagement of the hook 10 from the offset 9 when it is desired to unclamp the binder.

From this description the operation of my improvement will be obviously as follows: When the papers are to be filed in the binder, they are properly punched in the usual manner and passed over the points of the tubes 5 and down until resting against one of the covers or the papers previously filed thereon, and the opposite cover is closed, so that the upper ends of the tubes enter the holes 6. When the ends 8 of the staples 7 are inserted in the upper ends of the tubes, the hook 10 of the clasp 11 is engaged with the offset 9, which

will securely hold the covers of the book in position and also cause the hook *a* to engage the projections *b*, which will further serve to prevent the opening of the covers until the clamp has been unlatched, as previously described. The ends of the tubes 5 form stops against which the narrow member of the upper angle-plate bears. It will be seen that when pressure is brought to bear upon the staple 7 by the engagement of the hook 10 therewith the two edges of the back 2 will be bound tightly together and prevented from movement by the strain exerted by the clasp 11, and as the ends of the tubes also pass into the holes 6 said tubes are prevented from becoming displaced.

The horizontal portions of the staples fit within suitable recesses formed within the back, so that no metallic surface projects beyond the surface of the binder and therefore cannot injure objects with which it comes in contact. When it is desired to transfer the papers from the binder to a suitable case, the back 2 is opened by disengaging the clasp from the staple 7 and removing the latter within the tubes without passing through the holes 6, thus permitting the papers to be passed onto the ends 8 of the staple, whereby they may be transferred, as before stated, or they may be temporarily held upon the staple when it is desired to remove a paper from the file which is beneath the others, or insert one in such place.

One of the great advantages of my improvement is that it may be used as a petty or retail sales ledger, in which case the leaves are perforated so as to be torn from the stubs when the account is paid, and leaves or its contents may then be made as any ordinary book, since the covers thereof may be opened and closed upon the lines *c*.

Having thus fully described my invention, what I claim as new and useful is—

1. A binder composed of two covers which are connected by a suitable back, angle-plates secured to each of said covers and projecting inward, tubes secured to one of said angle-plates, holes formed in the opposite angle-plate to receive the upper ends of the tubes,

a staple secured within the lower ends of the tubes having an offset, a clasp attached to said offset, and a staple, the ends of which are adapted to be inserted into the upper ends of the tubes, an offset formed with said staple with which the hooked end of the clasp is adapted to engage as specified.

2. In a binder, two covers being connected together by a suitable back formed therewith, angle-plates riveted to said covers so as to project inward, tubes secured to the narrow member of one of the angle-plates, holes formed in the narrow member of the other angle-plate, a staple secured in the lower ends of the tubes, an offset formed with said staple, a clasp attached to said offset, a spring carried by said clasp and adapted to bear against one of the angle-plates when the covers are closed, a staple 7, the ends of which project into the tubes, and an offset 9, formed with said staple with which the hooked end of the clasp is adapted to engage substantially as and for the purposes set forth.

3. In a binder, two covers being connected together by a suitable back formed therewith, angle-plates riveted to said covers so as to project inward, tubes secured to the narrow member of one of the angle-plates, holes formed in the narrow member of the other angle-plate, a staple secured in the lower ends of the tubes, an offset formed with said staple, a clasp attached to said offset, a spring carried by said clasp and adapted to bear against one of the angle-plates when the covers are closed, a staple 7 the ends of which project into the tubes, an offset 9, formed with said staple with which the hooked end of the clasp is adapted to engage, a hook 10 formed upon the clasp and adapted to engage said offset and a cut-away portion in the back whereby access is had to the clasp as shown and described.

In testimony whereof I have hereunto affixed my signature in the presence of two subscribing witnesses.

WILLIAM FILLMORE FOWLER.

Witnesses:

S. S. WILLIAMSON,
D. MURBERGER.