Jan. 31, 1933. W. M. CHILDS 1,895,972

BINDER

Filed June 14, 1932

Fig. 1.

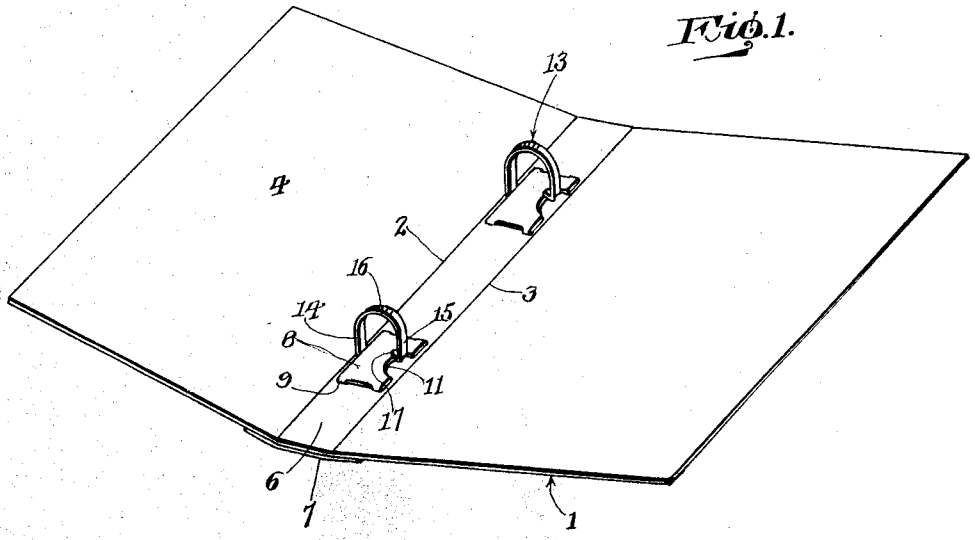


Fig. 2.

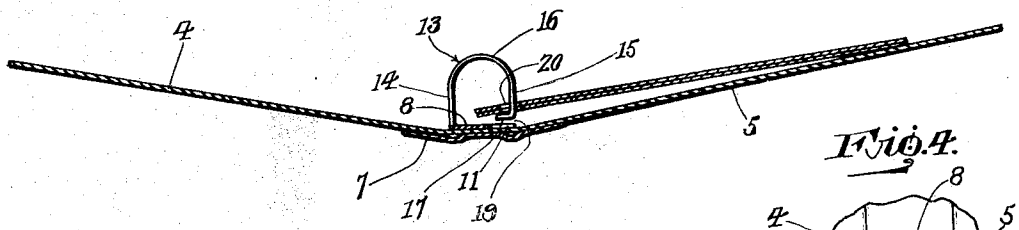


Fig. 4.

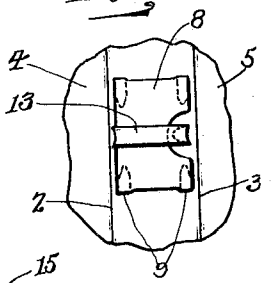
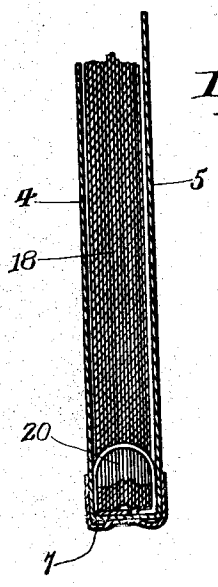


Fig. 3.



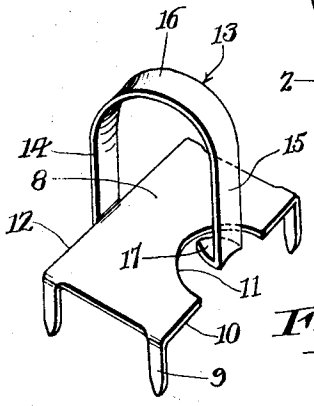


Fig. 6.

Fig. 5.

Inventor

Wesley M. Childs

By Geo. P. Kimmel

Attorney

Patented Jan. 31, 1933

1,895,972

UNITED STATES PATENT OFFICE

WESLEY M. CHILDS, OF ELDORADO, KANSAS, ASSIGNOR TO LORENE W. CHILDS, OF ELDORADO, KANSAS

BINDER

Application filed June 14, 1932. Serial No. 617,192.

This invention relates to a binder designed primarily for loosely and detachably filing or binding of physician's prescriptions, but it is to be understood that a binder, in accordance with this invention may be employed for any purpose for which it is found applicable, and the invention has for its object to provide, in a manner as hereinafter set forth, a binder including means for extension through and for coupling thereto, in a loose-like manner, a prescription sheet or other leaf and with such means so constructed and arranged to prevent the tearing of sheet or leaf when coupling it to the binder, or when reference is had thereto after being filed.

A further object of the invention is to provide, in a manner as hereinafter set forth, a binder of the class referred to including sheet or leaf fastener or coupling elements, so constructed and arranged, to prevent the uncoupling of a coupled sheet or leaf under normal conditions.

A further object of the invention is to provide, in a manner as hereinafter set forth, a binder of the loose-leaf type with sheet or leaf fastening or coupling elements, each including a coupler of inverted U-shape form, having the body thereof of concave-cross section to provide a rounded surface to ride against the edge of the aperture of a sheet or leaf to prevent the tearing of such edge when filing or binding the sheet or leaf and when reference is had to the latter after being filed.

To the above ends essentially, and to others which may hereinafter appear, the invention consists of such parts, and such combination of parts which fall within the scope of the invention as claimed.

In the drawing:—

Figure 1 is a perspective view of a binder, in accordance with this invention, the binder being illustrated as in open position.

Figure 2 is a cross sectional view of the binder when extended and further showing a plurality of sheets or leaves coupled thereto.

Figure 3 is a fragmentary view in vertical section of the binder closed and having coupled thereto a series of sheets or leaves.

Figure 4 is a fragmentary view in top plan illustrating a coupling or fastener element.

Figure 5 is a perspective view of the form of coupling or fastener element employed.

Figure 6 is a cross sectional view of the coupler forming a part of the coupling or fastener element.

The binder comprises a body part 1 formed from a rectangular web of any suitable material scored at two spaced parallel points to provide a pair of hinges 2, 3, an outer or front cover portion 4, an inner or rear cover portion 5 and a back edge portion 6. The cover portion 4 is of less width than cover portion 5. Secured to the outer face of edge portion 6 and extended upon the inner marginal portion of the outer face of each cover portion is a reinforcing member 7 of any suitable material. The portions 4 and 5 are joined by the hinges 2, 3 respectively to the portion 6.

The binder may be formed with one or more coupling or fastener elements for connecting the sheets or leaves to be filed to the body part 1, and by way of example, two of such elements are shown as coupled to the portion 6 in opposed spaced relation. The coupling or fastener elements, hereinafter termed coupling elements are of like form, and the description of one will apply to the other. Each coupling element comprises a rectangular plate 8 positioned against the inner face of portion 6 and provided at the end of each end edge thereof with a bendable securing barb 9 therefor which is passed through portion 6 and bent against that face thereof concealed by member 7. The barbs 9 are interposed between portion 6 and member 7 when the coupling element is anchored in position to the body part 1. The side edge 10 of plate 8, intermediate its ends, is formed with an incut portion 11 having the edge thereof of semi-circular contour. Formed integral with side edge 12 of plate 8, centrally of such edge is a sheet or leaf coupling, fastener or connector 13 hereinafter referred to as a coupler, and the latter is of inverted U-shape contour. The coupler 13 includes a strap-like part comprising a pair of vertical side arms 14, 15 and a top 16 of arcuate con-

tour. The arm 14 is of greater length than arm 15 and is integral with plate 8. The arm 15 when in normal position has its lower end arranged in spaced relation with respect to the plate 8. The lower end of arm 15 terminates in a flat triangular shaped supporting lug 17 which extends inwardly at right angles to arm 15 and acts as a means to prevent under normal conditions the disconnecting of a filed sheet or leaf 18 and in this connection see Figure 2. The lug 17 is spaced above plate 8 to provide a passage 19 for the insertion of a sheet or leaf to be filed. The sheets or leaves are formed with openings 20 corresponding in number to the number of coupling elements employed.

The strap-like part of coupler 13 is of concave-cross section at any point substantially throughout to form a rounded inner surface 21 which rides against the edges of the openings 20 and spaces the side edges of such part from the edges of the openings. This arrangement prevents the side edges of said strap-like part from coming in contact with and prevents the tearing of the edges of the openings in the sheets or leaves when the latter are shifted upon the coupling element or elements.

When the binder has been filled to the extent desired, the coupler is depressed to have the lug 17 arranged in the incut portion 11. See Figure 3. When the lug 17 is arranged in incut portion 11, the space 19 is eliminated and the sheets or leaves are locked in so that none can possibly slip off. The coupler is constructed of such material that if it is absolutely necessary to remove any sheets or leaves it can be so shaped to permit such removal by opening the binder and by remaking space 19. The incut portion 11, although shown of semi-circular contour, can be of any desirable contour suitable to receive lug 17. Although the plate 8 of the coupling element is shown anchored to back edge portion 6 by the barbs 9, it is to be understood that plate 8 can be anchored in any suitable manner and that the means shown is but one embodiment of anchoring the plate 8 stationary.

What I claim is:—

1. A binder comprising, a body part formed of a hinged front cover portion, a hinged rear cover portion and a back edge portion, a plate anchored against the inner face of said back edge portion, an upstanding coupler for connecting sheets or leaves with said body part and including an upstanding inverted U-shaped strap-like part formed with an arcuate top extending across the plate and a pair of sides, one of said sides being integral at its lower end with one side edge of the plate and the other of said sides having its lower end spaced from the plate, and a flat lug spaced above the plate and integral with and extending inwardly at right angles to the lower end of the said other side of said strap-like part.

2. A binder comprising, a body part formed of a hinged front cover portion, a hinged rear cover portion and a back edge portion, a plate anchored against the inner face of said back edge portion, an upstanding coupler for connecting sheets or leaves with said body part and including an upstanding inverted U-shaped strap-like part formed with an arcuate top extending across the plate and a pair of sides, one of said sides being integral at its lower end with one side edge of the plate and the other of said sides having its lower end spaced from the plate, a flat lug spaced above the plate and integral with and extending inwardly at right angles to the lower end of the said other side of said strap-like part, said plate having its other side edge formed with a cutout, and said strap-like part being depressible to position said lug in the cutout.

3. A binder comprising, a body part formed of a hinged front cover portion, a hinged rear cover portion and a back edge portion, a plate anchored against the inner face of said back edge portion, an upstanding coupler for connecting sheets or leaves with said body part and including an upstanding inverted U-shaped strap-like part formed with an arcuate top extending across the plate and a pair of sides, one of said sides being integral at its lower end with one side edge of the plate and the other of said sides having its lower end spaced from the plate, a flat lug spaced above the plate and integral with and extending inwardly at right angles to the lower end of the said other side of said strap-like part, and said strap-like part being of concave contour in transverse cross section at any point substantially throughout its length to provide the inner face thereof rounded.

4. A binder comprising, a body part formed of a hinged front cover portion, a hinged rear cover portion and a back edge portion, a plate anchored against the inner face of said back edge portion, an upstanding coupler for connecting sheets or leaves with said body part and including an upstanding inverted U-shaped strap-like part formed with an arcuate top extending across the plate and a pair of sides, one of said sides being integral at its lower end with one side edge of the plate and the other of said sides having its lower end spaced from the plate, a flat lug spaced above the plate and integral with and extending inwardly at right angles to the lower end of the said other side of said strap-like part, said plate having its other side edge formed with a cutout, said strap-like part being depressible to position said lug in the cutout, and said strap-like part being of concave contour in transverse cross section at any point substantially throughout

its length to provide the inner face thereof rounded.

5. A binder comprising, a body part formed of a hinged front cover portion, a hinged rear cover portion and a back edge portion, a plate anchored against the inner face of said back edge portion, an upstanding coupler for connecting sheets or leaves with said body part and including an upstanding inverted U-shaped strap-like part formed with an arcuate top extending across the plate and a pair of sides, one of said sides being integral at its lower end with one side edge of the plate and the other of said sides having its lower end spaced from the plate, a flat lug spaced above the plate and integral with and extending inwardly at right angles to the lower end of the said other side of said strap-like part, said plate having integral bendable spaced means for extension through and for bearing against the outer face of said back edge portion for anchoring the plate to the latter, reinforcing means secured to the outer faces of the said portions, and said front cover portion being of less width than said rear cover portion.

6. A binder comprising, a body part formed of a hinged front cover portion, a hinged rear cover portion and a back edge portion, a plate anchored against the inner face of said back edge portion, an upstanding coupler for connecting sheets or leaves with said body part and including an upstanding inverted U-shaped strap-like part formed with an arcuate top extending across the plate and a pair of sides, one of said sides being integral at its lower end with one side edge of the plate and the other of said sides having its lower end spaced from the plate, a flat lug spaced above the plate and integral with and extending inwardly at right angles to the lower end of the said other side of said strap-like part, said plate having its other side edge formed with a cutout, said strap-like part being depressible to position said lug in the cutout, said plate having integral bendable spaced means for extension through and for bearing against the outer face of said back edge portion for anchoring the plate to the latter, reinforcing means secured to the outer faces of the said portions, and said front cover portion being of less width than said rear cover portion,

7. A binder comprising, a body part formed of a hinged front cover portion, a hinged rear cover portion and a back edge portion, a plate anchored against the inner face of said back edge portion, an upstanding coupler for connecting sheets or leaves with said body part and including an upstanding inverted U-shaped strap-like part formed with an arcuate top extending across the plate and a pair of sides, one of said sides being integral at its lower end with one side edge of the plate and the other of said sides having its lower end spaced from the plate, a flat lug spaced above the plate and integral with and extending inwardly at right angles to the lower end of the said other side of said strap-like part, said strap-like part being of concave contour in transverse cross section at any point substantially throughout its length to provide the inner face thereof rounded, said plate having integral bendable spaced means for extension through and for bearing against the outer face of said back edge portion for anchoring the plate to the latter, reinforcing means secured to the outer faces of the said portions, and said front cover portion being of less width than said rear cover portion.

8. A binder comprising, a body part formed of a hinged front cover portion, a hinged rear cover portion and a back edge portion, a plate anchored against the inner face of said back edge portion, an upstanding coupler for connecting sheets or leaves with said body part and including an upstanding inverted U-shaped strap-like part formed with an arcuate top extending across the plate and a pair of sides, one of said sides being integral at its lower end with one side edge of the plate and the other of said sides having its lower end spaced from the plate, a flat lug spaced above the plate and integral with and extending inwardly at right angles to the lower end of the said other side of said strap-like part, said strap-like part being depressible to position said lug in the cutout, said strap-like part being of concave contour in transverse cross section at any point substantially throughout its length to provide the inner face thereof rounded, said plate having integral bendable spaced means for extension through and for bearing against the outer face of said back edge portion for anchoring the plate to the latter, reinforcing means secured to the outer faces of the said portions, and said front cover portion being of less width than said rear cover portion.

9. A binder comprising, a body part formed of a hinged front cover portion, a hinged rear cover portion and a back edge portion, one or more plates anchored against the inner face of said back edge portion and each cutout at one edge thereof, an upstanding coupler of strap-like form for extending through sheets or leaves to connect the latter with said body part, said coupler having one end integral with an edge of a plate opposite that edge formed with a cutout and its outer end arranged over the cutout and free of connection to the plate, a flat lug integral with and extending inwardly from the free end of the coupler, said lug being normally arranged in spaced relation to the plate to provide an entrance passage for the sheets or leaves to be positioned on said coupler, and

said coupler being depressible to eliminate said passage and to position said lug in said cutout thereby locking the sheets or leaves to said body part.

10. A binder comprising, a body part formed of a hinged front cover portion, a hinged rear cover portion and a back edge portion, one or more plates anchored against the inner face of said back edge portion and each cutout at one edge thereof, an upstanding coupler of strap-like form for extending through sheets or leaves to connect the latter with said body part, said coupler having one end integral with an edge of a plate opposite that edge formed with a cutout and its outer end arranged over the cutout and free of connection to the plate, a flat lug integral with and extending inwardly from the free end of the coupler, said lug being normally arranged in spaced relation to the plate to provide an entrance passage for the sheets or leaves to be positioned on said coupler, said coupler being depressible to eliminate said passage and to position said lug in said cutout thereby locking the sheets or leaves to said body part, and said coupler being of concave contour in cross section to provide the inner face thereof rounded.

11. In a binder, a fixed coupling element for sheets or leaves, said element including a plate having a cutout, an upstanding coupler of strap-like form for connecting the sheets or leaves to the plate and having one end integral with the plate and its other end normally arranged in opposed spaced relation to said cutout, and a flat lug integral with and extending inwardly at right angles to the free end of the coupler, said lug normally spaced from said plate to form a normally opened entrance passage for the sheets or leaves, and said coupler being depressible for positioning said lug in said cutout to eliminate said passage and to lock the sheets or leaves to said element.

12. In a binder, a fixed coupling element for sheets or leaves, said element comprising a plate having bendable means for anchoring it stationary, an upstanding coupler for loosely connecting sheets or leaves to said plate, said coupler including a strap-like part formed of a pair of sides and a top, said top disposed transversely with respect to said plate, one of said sides having its lower end integral with said plate, the other of said sides having its lower end normally spaced from said plate and a flat lug normally spaced above the plate and integral with and extending inwardly at right angles to the lower end of the said other side, and said strap-like part being of concave curvature in transverse cross section.

In testimony whereof, I affix my signature hereto.

WESLEY M. CHILDS.