A. H. C. WENDLAND & C. F. BRENNE.

LOOSE LEAF BINDER.

APPLICATION FILED MAR. 29, 1915.

1,175,895. Patented Mar. 14, 1916.

FIG. 1

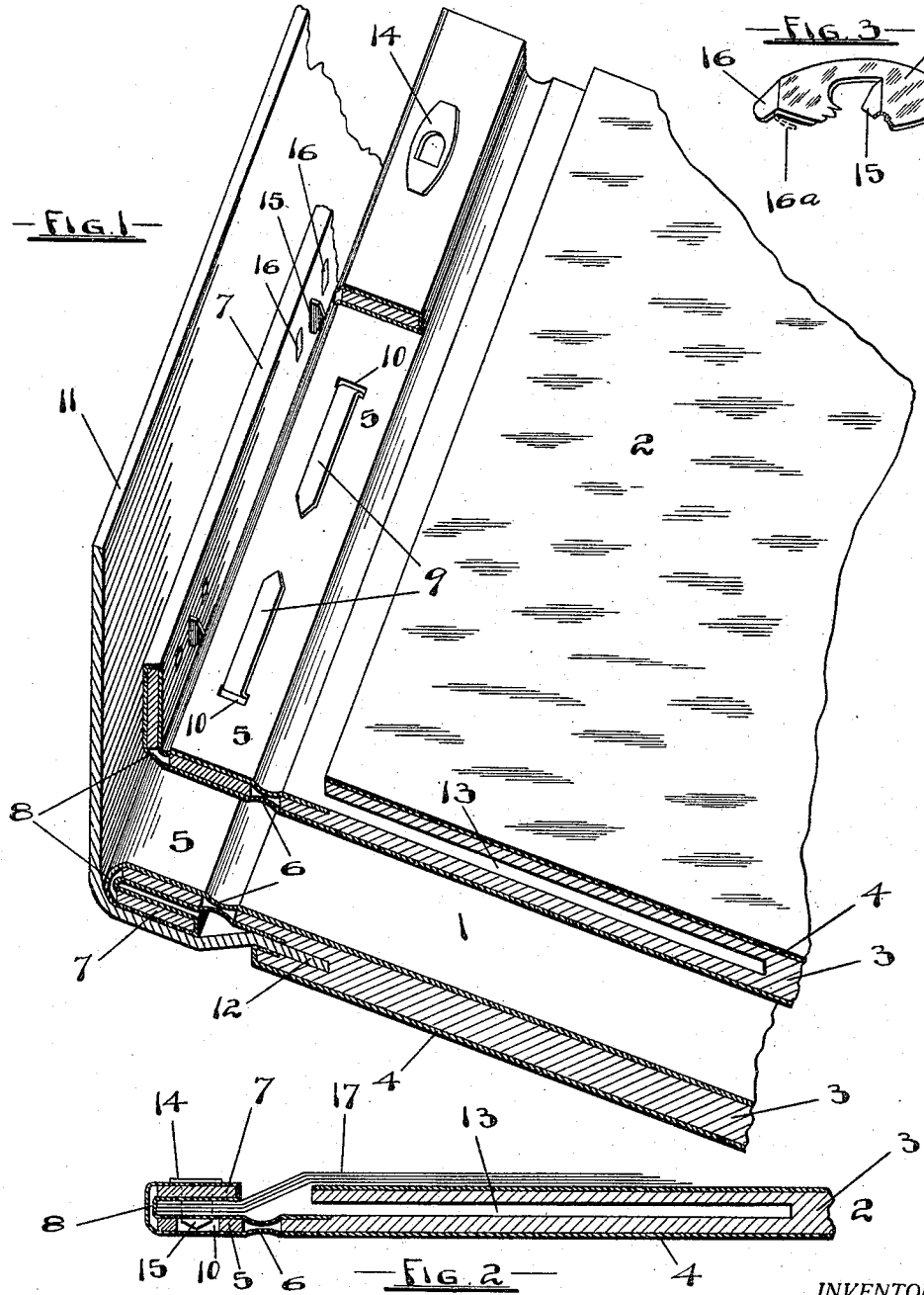


FIG. 3

FIG. 2

WITNESSES:

C. S. Brown

Irene Watson

INVENTORS

ARTHUR H. C. WENDLAND AND CARL F. BRENNE.

BY C. F. Blake

ATTORNEY

UNITED STATES PATENT OFFICE.

ARTHUR H. C. WENDLAND AND CARL F. BRENNE, OF PORTLAND, OREGON.

LOOSE-LEAF BINDER.

1,175,895. Specification of Letters Patent. Patented Mar. 14, 1916.

Application filed March 29, 1915. Serial No. 17,812.

To all whom it may concern:

Be it known that we, ARTHUR H. C. WENDLAND and CARL F. BRENNE, citizens of the United States, residing at Portland, in the county of Multnomah and State of Oregon, have invented certain new and useful Improvements in Loose-Leaf Binders, of which the following is a specification.

Our invention may be considered as an improvement over that set forth in an application for Letters Patent, filed May 26th, 1914; Serial No. 841145, allowed November 11th, 1914, and relates to binders for holding loose leaves or sheets, and particularly to that class of binders having separable covers, and has for its object the provision of a punching attachment integral with one or both of said covers, whereby the sheets to be bound may readily be punched correctly to receive the binding posts or staples.

We attain the above object by means of the construction herein described, and illustrated in the accompanying drawing, which therefore forms a part of this application for Letters Patent, and in which:—

Figure 1 is a fragmentary perspective view of a binder embodying our invention. Fig. 2 is a transverse section of one cover embodying our invention. Fig. 3 is a perspective view, partially broken away, of the punching eyelet.

Like characters of reference indicate like parts throughout the several views of the drawing, in which the numeral 1 is one cover, designated for convenience, the lower cover, and 2 is the other cover, designated for convenience, the upper cover. Said covers are formed of book board 3, or other suitable material, covered with cloth, paper, leather or other suitable material 4. Each cover is provided with a hinge portion 5 flexibly connected to the cover by means of the material 4, as shown at 6.

A flap or hinge cover 7 is flexibly connected to each hinge portion by means of the material 4, as shown at 8, said connection being upon that edge of the hinge portion opposite that by which said hinge portion is connected to the cover. By means of its flexible connection the flap 7 is adapted to fold over the hinge 5 until the outer surface of said flap lies in substantially the same plane as the outside surface of the cover, as shown in Figs. 1 and 2.

Staples 9, of soft malleable material, are secured to the hinge portion of cover 1 and are adapted to enter and protrude through orifices 10 in hinge 5 of cover 2. By first passing said staples through the sheets to be bound and then through orifices 10, and bending said staples down upon the hinge portion 5, as shown in Fig. 1, the sheets will be firmly confined within or between the covers.

In order to present a neat and finished exterior appearance, we provide a flexible back portion 11 which may be of the same material 4 as is used upon the covers. Said flexible back portion is secured within a pocket 12 provided in cover 1, and is adapted to surround the hinge portions 5 with their flaps 7 and enter a pocket 13 provided in cover 2. Flap 7 of cover 2 is provided with eyelet punches adapted to register with orifices 10 in the hinge portion 5. Said eyelet punches, of any suitable metal, are formed with a body portion 14, a knife or punch portion 15, and attaching ears 16, as shown in Fig. 3. Said eyelets are secured upon flap 7 by passing ears 16 through the same and turning said ears over, as shown in dotted lines at 16^a in Fig. 3. When said eyelets are attached to flap 7 the knife or punch portion 15 of the eyelet is passed entirely through the flap, as shown in Fig. 1, and allowed to protrude normally to same, and a position to register with orifices 10 when flap 7 is turned down upon hinge portion 5. By placing the sheets 17 to be bound upon the outside surface of cover 2, flap 7 may be used as a guide for bringing the edges of sheets 17 even, and then by forcibly turning flap 7 down, the knives or punches 15 will perforate the sheets and enter orifices 10, as shown in Fig. 2. The perforated sheets 17 may then be placed over the staples on cover 1, cover 2 placed in position over said staples, and the staples turned down, as shown in Fig. 1, when the sheets are firmly bound between the covers. The back portion 11 may then be inserted in pocket 13, and a neat and serviceable binder results.

Our invention may be made of any size, and constructed of any material deemed suitable and convenient for a device of this character, and while we have illustrated and described a preferred form of construction and arrangement of parts considered advisable in materializing our invention, we wish to include in this application for Letters Patent all mechanical equivalents or substitutes that may fairly be considered to come

within the scope and purview of our invention as herein illustrated and described, and defined in the appended claims.

Having illustrated and described our invention so that others skilled in the art to which it appertains may be enabled to construct and use the same, what we claim as new and desire to secure by Letters Patent, is:—

1. A loose leaf binder comprising a duality of separable covers, a hinge portion flexibly attached to each of said covers, a flap flexibly attached to each of said hinge portions and adapted to fold over upon said hinge portion, and means to fasten leaves intermediate said hinges.

2. In a loose leaf binder, separable covers, perforated hinges flexibly attached to said covers, flaps flexibly attached to said hinges and adapted to fold over upon said hinges, means to oppositely engage the perforations in said hinges and to hold leaves intermediate said hinges.

3. In a loose leaf binder, separable covers, perforated hinges flexibly attached to said covers, flaps flexibly attached to said hinges, ductile clips adapted to oppositely engage the perforations in said hinges and to hold loose leaves intermediate said hinges, said flaps being adapted to fold over upon said hinges and to cover said ductile clips.

4. In a loose leaf binder, a duality of separable covers, perforated hinge portions flexibly attached to each of said covers, flaps flexibly attached to each of said hinge portions, punching knives secured to one of said flaps, said knives being adapted to enter the perforations in the adjacent hinge portion when said flap is folded over upon said hinge portion.

5. In a loose leaf binder, a punching eyelet comprising a body portion, attaching ears, and a knife portion, said knife portion being adapted to perforate the leaves before binding.

6. In a loose leaf binder, a duality of separable covers, perforated hinge portions flexibly attached to each of said covers, a flap flexibly attached to one of said hinge portions, and means upon said flap to perforate the leaves before binding same.

7. In a loose leaf binder, a duality of separable covers, a perforated hinge portion flexibly attached to each of said covers, ductile clips adapted to oppositely engage the perforations in said hinge portions, flaps flexibly attached to each of said hinge portions and adapted to fold over upon said hinge portions and to cover said ductile clips, punching knives upon one of said flaps, said knives being adapted to enter the perforations in the adjacent hinge portion, in combination with a flexible back portion attached to one of said covers, said flexible back portion being adapted to infold said hinge portions and said flaps and to be secured in a recess in the opposite cover.

In testimony whereof we claim the above as our own and hereto affix our signatures in the presence of two subscribing witnesses.

ARTHUR H. C. WENDLAND.
CARL F. BRENNE.

Witnesses:
DAVID E. LOFGREN,
J. A. BACKSTRAND.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."