

Jan. 7, 1947.

E. S. ZIEGLER

2,414,007

BINDER FOR PERIODICALS

Filed June 13, 1945

2 Sheets-Sheet 1

Fig. 1

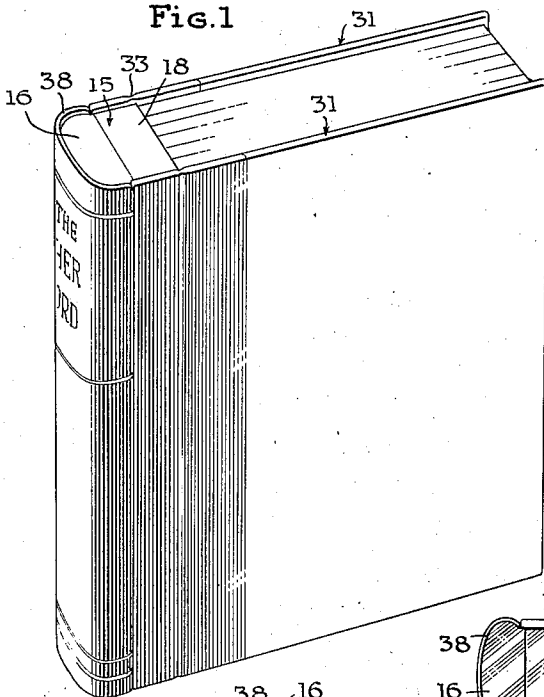


Fig. 10

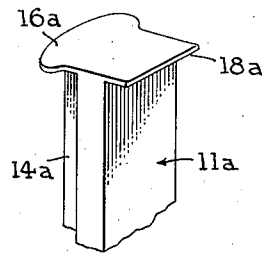


Fig. 2

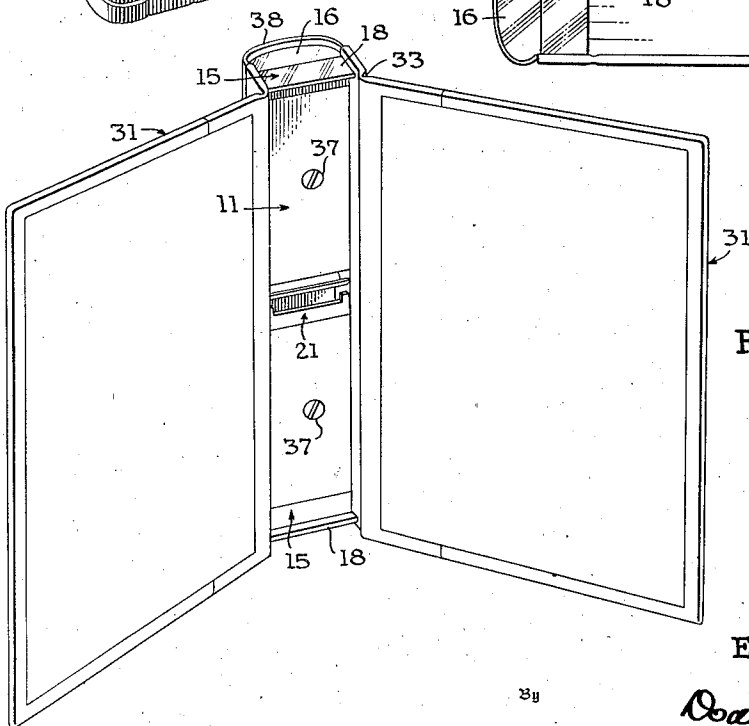
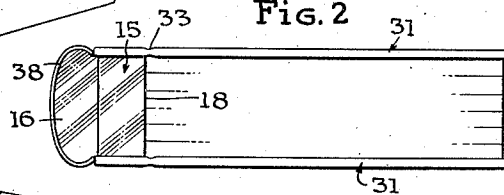


Fig. 3

Inventor
Edwin S. Ziegler

Doyle and Im

Attorneys

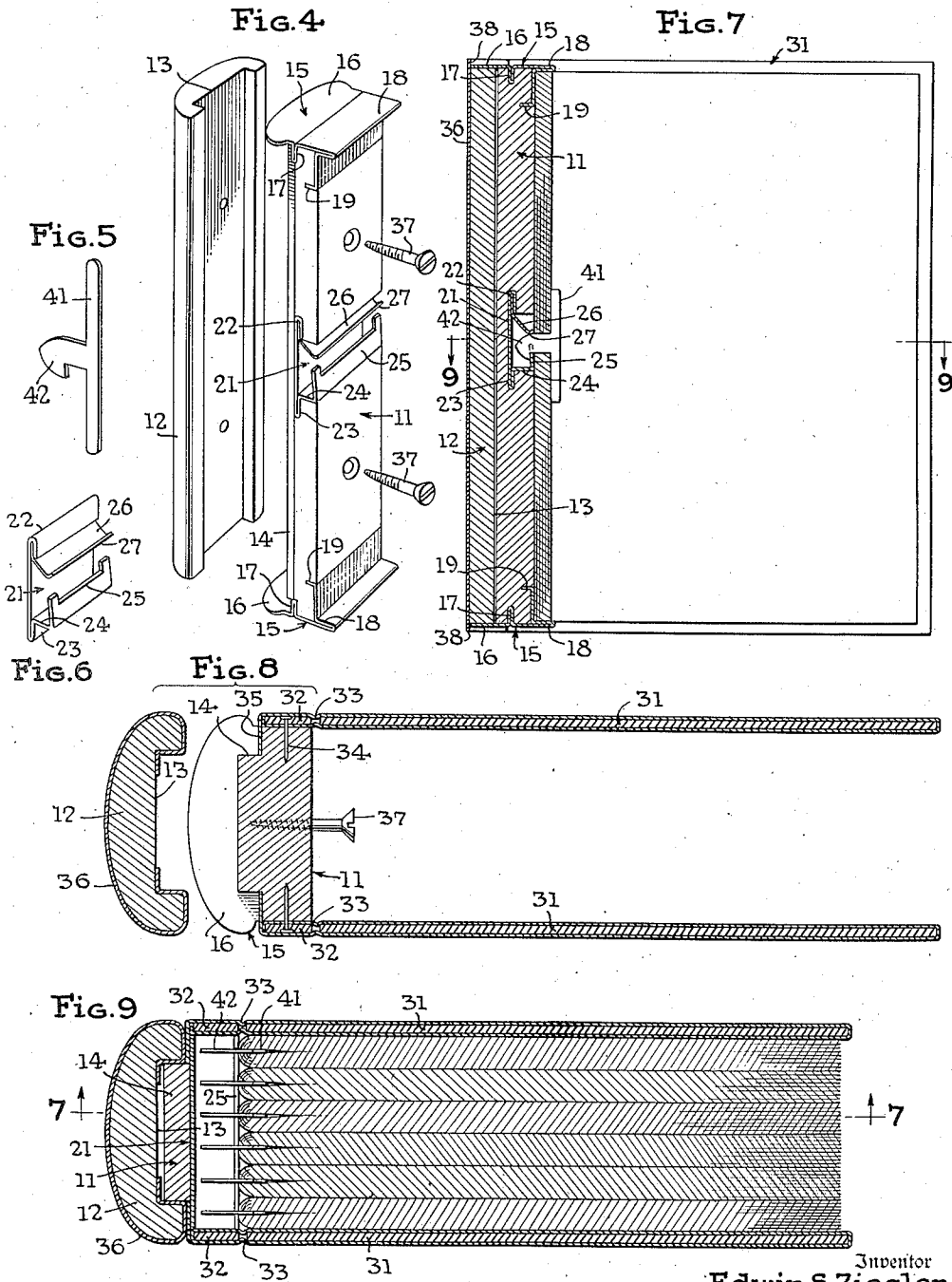
Jan. 7, 1947.

E. S. ZIEGLER
BINDER FOR PERIODICALS

2,414,007

Filed June 13, 1945

2 Sheets-Sheet 2



Inventor
Edwin S. Ziegler

Dodge & Inn

Attorneys

UNITED STATES PATENT OFFICE

2,414,007

BINDER FOR PERIODICALS

Edwin S. Ziegler, York, Pa.

Application June 13, 1945, Serial No. 599,260

8 Claims. (Cl. 281—25)

1

This invention relates to binders of the semi-permanent type used for binding periodicals. The object of the invention is to produce a binder which can be manufactured inexpensively and in quantity in a considerable range of sizes.

The different sizes use standardized parts so that binders may be made up economically to receive a number of issues of a periodical, and be dimensioned to suit the aggregate thickness of such issues. The binder can be applied very easily by the purchaser. Once the binder is applied it can not readily be removed. This feature makes it particularly suitable for library use.

A preferred embodiment of the invention designed for a periodical of small size will now be described with reference to the accompanying drawings, in which:

Fig. 1 is a perspective view of the bound volume.

Fig. 2 is an elevation of the upper end thereof.

Fig. 3 is a perspective view of the binder in the form in which it would be received by the purchaser.

Fig. 4 is an exploded view showing the parts which make up the spine structure.

Fig. 5 is a perspective view of one of the latch clips.

Fig. 6 is a perspective view of one of the latch units withdrawn from its mount.

Fig. 7 is a section on the line 7—7 of Fig. 9.

Fig. 8 is a sectional view showing how the back piece is applied after the covers have been attached.

Fig. 9 is a section on the line 9—9 of Fig. 7.

Fig. 10 is a perspective view similar to a portion of Fig. 4, showing a modification.

The spine is made up of two parts; namely, a latch carrier 11 and the spine proper 12. The part 12 has a longitudinal channel 13 which fits over a rib 14 formed on the member 11. The member 11 has a transverse slot across each end, and a transverse slot across its inner face adjacent each end. These slots receive, and because they are at right angles with each other retain, flanges on an end clip generally indicated by the number 15.

The clip 15 has an arcuate portion 16 which overlies the end of the member 12, a folded flange 17 which enters the slot in the end of the member 11, a folded flange 18 which projects from the inward face of the member 11 and a flange 19 which enters the second slot in the member 11. This end clip 15 is simply slid to place in the slots cut in the member 11, and ultimately is retained by the book covers which are later applied.

There is one clip 15 at each end of the mem-

2

ber 11 (see Fig. 4). The clips may be severed from a continuous folded strip, and consequently are simple to produce. They may be cut from the strip in lengths to suit the width, over all, of the spine proper 12.

Since the illustrated binder is intended for periodicals of small sizes, it requires only a single latch member, and only one is shown. It should be understood, however, that one or more may be used.

The latching member comprises a unit 21 which is slid into a transverse slot and retained by flanges which enter under-cuts at the base of that slot. This latch member 21 is shown withdrawn from the slot in Fig. 6. It comprises a base plate which is folded upon itself at each end to form flanges 22 and 23. The flange 23 terminates in the extension 24, which projects forward at right angles to the base plate and carries a notched keeper 25, which makes an angle with extension 24 slightly more acute than 90°, so as to have a retentive effect on the latch nose, later to be described.

The flange 22 is folded down upon the margin of leaf spring member 26 so as to clamp this spring member. The spring member terminates in a rounded nose or flange 27.

The latch unit 22 is mounted in the under-cut slot in member 11 as clearly shown in Fig. 4. It is slid transversely to place and is retained by the covers.

In manufacturing the device, the member 12 is formed as shown by any suitable manufacturing procedure. The member 11 is formed with the rib 14 and is then preferably fed transversely through a machine which by means of rotary saws or other cutters forms, in a single operation, the two end slots for the flanges 17, the two front slots for the flanges 19 and the under-cut notch which receives the latch member 21.

The two covers comprise each a piece of binders board 31, a strip 32 of binders board and a fabric or other facing adhesively attached to the parts 31 and 32 and arranged to form a flexible hinge at 33. The cover is made up complete except that the facing is not adhesively attached to the outer face of the strip 32 until after that strip has been attached to the member 11 by any suitable means such as the tacks 34. After they have been so attached, the edge of the fabric is caused to adhere to the outer side of the strip 32 and is folded down, as indicated at 35, in the rebate in member 11 outside the rib 14.

The member 12 is covered with suitable fabric or sheet material 36, and the edges of this are

folded into the slot 13, after which the member 12 is applied to the member 11 and the two are connected together by any suitable means such as the screws 37. This produces a binder whose general appearance is clearly illustrated in Fig. 3. As best shown in this view, and in Figs. 1 and 7, the fabric 36 is arranged to overhang the ends of the member 12, as indicated at 38, and thus surround the edges of the members 16, which overlap the ends of the member 12. The flanges 18 overlap the ends of the bound periodicals and prevent their shifting. The inner margin of the flange 18 terminates substantially in line with the hinged portions 33.

Since the binder illustrated has only one latch member 21, a single latch clip is used to retain each periodical that is bound. This clip is shown in Fig. 5 and is a sheet metal stamping, comprising a bar member 41 with a latch nose 42 projecting from it, preferably at about its mid-length. The engaging edge of the latch nose is under-cut slightly to give a retaining effect.

To mount an issue of a periodical in the binder, it is laid open at its middle and pierced through the back at the proper point. A latch member such as that illustrated in Fig. 5 is then inserted so that the latch nose projects through the back of the periodical and the bar 41 engages the inner fold. The periodical with the latch member in place is then inserted in the binder so that the latch nose forces the spring member 26 back until the latch engages the keeper 25. Thereupon the spring 26 maintains engagement. After the binder is filled it is difficult, but not impossible, to remove the inserted periodicals.

The parts 11 and 12 are preferably made of wood or plastic, and if made of plastic they may be molded. The end pieces 15 and the latch member 21 are made of sheet metal. However, if the member 11 is molded of plastic a construction such as that shown in Fig. 10 becomes conveniently possible. Here the parts 16a and 18a, functionally identical with parts 16 and 18, are molded as integral parts of the plastic member 11a.

The invention has been embodied successfully in binders of a number of different sizes. Small magazines, 6 by 8 or smaller, are adequately bound with a single latch. The larger sizes require two or even three, but this involves mere duplication of the latch mechanisms, which are constructed and inserted in exactly the same manner.

A very important consideration from the manufacturing standpoint is that the members 12 with their fabric cover bearing titles can be made up on an interchangeable basis so that any tilted back can be applied to the back of the binder without affecting any detail of the remainder of the binder, and without imposing limitations on the manufacturing processes affecting parts other than the single part 12.

What is claimed is:

1. A binder for periodicals, comprising bars having hook-like latch noses adapted to be inserted through the backs of periodicals of a group to be bound and to project therefrom; a cover structure having a spine unit provided with end flanges to confine the ends of the backs of said group of periodicals; and at least one spring latch unit mounted in said spine unit and comprising a keeper adapted to receive and engage said latch noses, and spring means opposed to said keeper and serving to hold the latch noses in hooked engagement with the keeper.

2. A binder for periodicals, comprising bars having hook-like latch noses adapted to be inserted through the backs of periodicals of a group to be bound and to project therefrom; a cover structure having a spine unit provided with end flanges to confine the ends of the backs of said group; and at least one spring latch unit mounted in said spine unit and adapted to receive and retain the latch noses of the entire group, said latch unit comprising means defining a slot with an overhanging keeper extending transversely of the spine and an opposed leaf spring, said keeper and spring extending substantially the entire width of the spine unit.

3. In a binder, the combination of a latch-carrying member having a transverse slot to receive and retain a latch; a self-contained latch mounted in said slot; and covers attached to said member and serving to obstruct the ends of said slot and thereby inhibit withdrawal of the latch therefrom.

4. In a binder, the combination of a latch-carrying member having a transverse slot to receive and retain a latch; a self-contained latch mounted in said slot; covers attached to said member and serving to obstruct the ends of said slot and thereby inhibit withdrawal of the latch therefrom; and a spine piece releasably attached to said member and arranged to overlie portions of said covers.

5. In a binder, the combination of a latch-carrying member having transverse slots at its ends and at least one transverse slot-like latch seat between its ends; self-contained latch means engaged in said seat; end pieces having flanges engaged in said slots retained by such engagement, and provided each with a flange which is arranged to engage the end of a bound periodical; and covers attached to said latch-carrying member and serving to obstruct the ends of said slots and thereby inhibit withdrawal of the end pieces and latch means from the respective slots and latch seat.

6. In a binder, the combination of a latch-carrying member having transverse slots at its ends and at least one transverse slot-like latch seat between its ends; self-contained latch means engaged in said seat; end pieces having flanges engaged in said slots, retained by such engagement, and provided each with a flange which is arranged to engage the end of a bound periodical; covers attached to said latch-carrying member and serving to obstruct the ends of said slots and thereby inhibit withdrawal of the end pieces and latch means from the respective slots and latch seat; and a spine piece releasably attached to said latch-carrying member and arranged to overlie portions of said covers.

7. Binding means for periodicals, comprising in combination bars having latch noses adapted to be inserted through the backs of periodicals of a group to be bound and to project therefrom; a latch-carrying member having at its ends transverse slots arranged in intersecting planes and having between its ends an under-cut latch seat; end pieces having flanges slidable into said slots to retain the end pieces on the member, each end piece having a flange to engage the corresponding end of the group of periodicals; a unitary latch assembly comprising a keeper and an opposed leaf spring of a length sufficient to receive and confine a plurality of juxtaposed latch noses, said assembly being so formed as to be slidable into retaining engagement with the under-cut portion of the latch seat; and a cover structure

5

attached to said latch-carrying member and serving to obstruct the ends of said slot and thereby retain said end pieces and latch assembly against withdrawal from their respective slots and seat.

8. Binding means for periodicals, comprising in combination bars having latch noses adapted to be inserted through the backs of periodicals of a group to be bound and to project therefrom; a latch-carrying member having at its ends transverse slots arranged in intersecting planes and having between its ends an under-cut latch seat; end pieces having flanges slidable into said slots to retain the end pieces on the member, each end piece having a flange to engage the correspond-

5

10

15

6

ing end of the group of periodicals; a unitary latch assembly comprising a keeper and an opposed leaf spring of a length sufficient to receive and confine a plurality of juxtaposed latch noses, said assembly being so formed as to be slidable into retaining engagement with the under-cut portion of latch seat; covers attached to said latch-carrying member and serving to obstruct the end of said slot and thereby retain said end pieces and latch assembly against withdrawal from their respective slots and seat; and a spine piece attached to said latch-carrying member and arranged to overlie portions of said covers.

EDWIN S. ZIEGLER.