

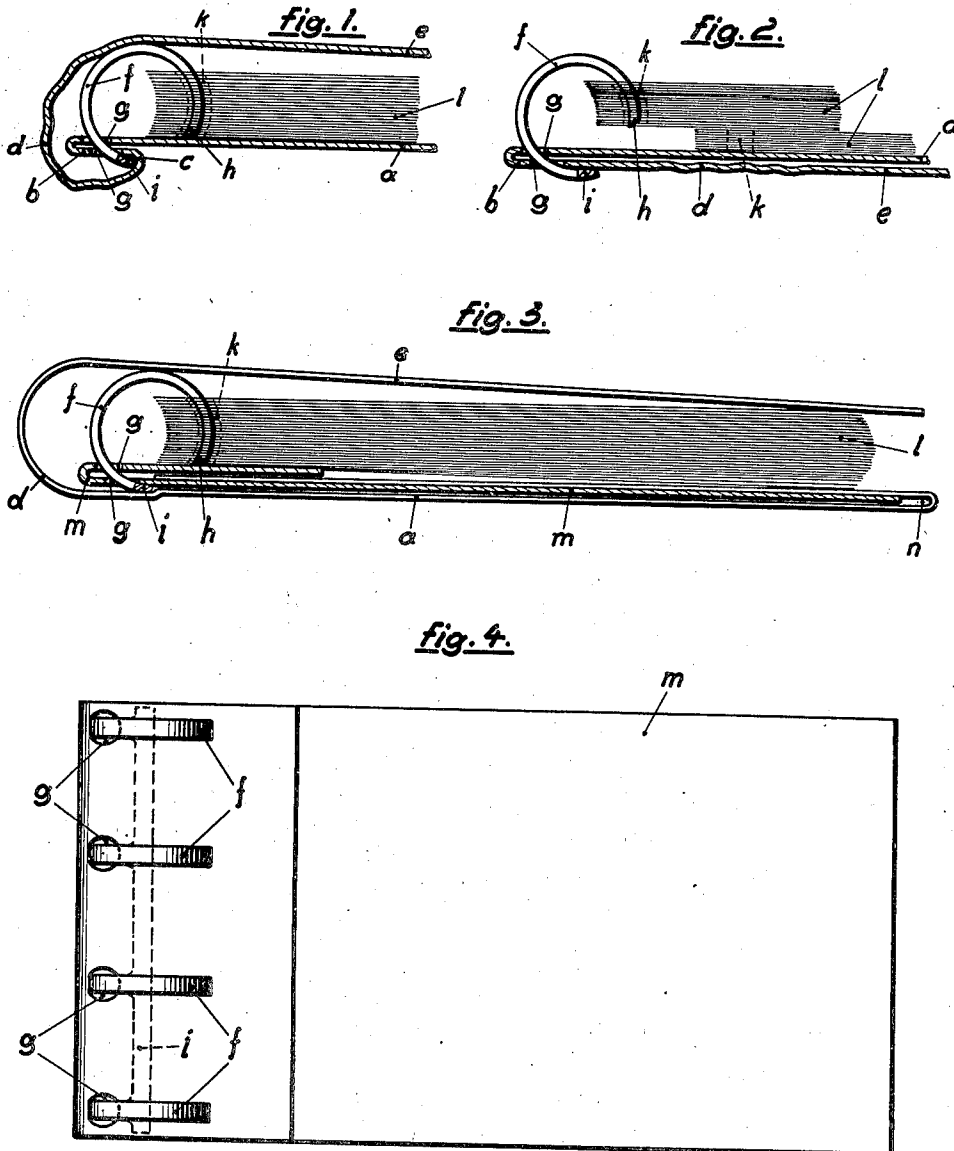
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LOOSE LEAF BOOK

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LOOSE LEAF BOOK

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This invention relates to improvements in binders or loose leaf book covers, the chief object being to provide a device of this character of simple and inexpensive construction.

5 Similar devices are already known, but they comprise a large number of component parts which require a more or less complicated manipulation and are expensive to manufacture, or they are of such a design that the rings are
10 closed either by reason of the elasticity of the rings themselves or by means of other resilient individual parts, thus binding the leaves securely in position. The defect of this latter arrangement is that the parts become stressed or worn
15 by frequent manipulation and therefore the device becomes useless after a comparatively short time.

Binders or loose leaf book covers are also known which are provided with rigidly fixed filing rings
20 mounted at the back of the binding or cover and with a rigid upwardly bent holding member which is apertured for the reception of the extremities of the rings, thus locking the binding rings. The binder or cover of the present invention is simplified
25 by avoiding the use of a holding member and the necessity of connecting the rings rigidly to the back of the binder or cover.

According to the present invention the binder or loose leaf book cover comprises rigid filing
30 rings arranged at the back of the book, and each having an interrupted or cut out portion to afford two ends, one of which is fixed to a rail or bar, the other end being free for insertion through perforations in the leaves, characterized by the
35 fact that the closing or opening of the rings is effected in such a manner that they are moved angularly by reason of the application of pressure to the rail or bar, or the release of such pressure, respectively, caused by one of the book
40 covers, thus forcing the free extremities of the said rings either against or away from, the support for the loose leaves.

In order that the said invention may be clearly understood and readily carried into effect the
45 same will now be described more fully, by way of example, with reference to the accompanying drawing, in which:—

Figures 1 and 2 are sectional views of one constructional form of the invention in which the
50 binder or loose leaf book is in closed position in Figure 1 and in opened position in Figure 2.

Figure 3 is a sectional view of another constructional form in closed position; and

Figure 4 shows in plan the internal part of the
55 embodiment according to Figure 3.

Referring to Figures 1 and 2 of the drawing, the bottom cover *a* of the book is folded over
backwardly at *b* for a convenient length and is then folded over again at *c*, forming a rounded
off back *d*, preferably provided with grooves, corrugations or the like, and then passed over to
constitute the top cover *e*. Rings or filing members *f*, arranged in parallel relationship and supported
by a rail *i*, are inserted in approximately coinciding perforations *g* which are provided in
the bottom cover *a* and in the folded back part *b*
10 in proximity to the back of the cover or binder, the arrangement being such that when the book is being closed, the rail *i* is engaged at *c* by the
rounded off back *d* and is pressed thereby against
15 the edges of the perforations in the folded back part *b*, thus bringing the perforations in the parts *a* and *b* in a more coinciding position. This
causes the rings *f* to move angularly to a position with the free ends *h* thereof in engagement with
20 the bottom cover *a*, thus holding a pile of leaves *l* securely in position within the binders or book, as shown in Figure 1, the leaves *l* being provided
with perforations *k* to receive the rings *f*. When the book is opened completely, the rail *i* is re-
25 lieved of the pressure exerted thereon by the back and the perforations *g* being in a less coinciding position will cause the rings, moving angularly, to slide partially through these perforations. This movement of the rings causes the
30 free extremities *h* of the rings *f* to be forced away from the bottom cover *a*, the rings *f* being then in open position shown in Figure 2, whereby leaves may be placed in, or removed from, the
35 book.

In the embodiment shown in Figures 3 and 4 there is provided a rigid support *m*, one end of which may, if desired, be folded over as shown. The support *m* is adapted to be inserted into a
40 pocket *n* of the book cover or binder *a*, *d*, *e*, with the rings *f* extending through perforations *g* provided in the rigid support *m* and in the folded over part, in such a manner, that when the support *m* is inserted into the pocket *n*, the rail *i* is
45 held stationary relatively to the pocket, either by abutting against one edge of the mouth of the pocket or, if the rail enters the pocket, by the friction between the rail and the wall of the pocket, thus causing the rings to be moved in
the perforations *g* as the support *m* is moved
50 further into the pocket *n*. The pressure on the rail *i* effects angular movement of the rings *f* until the free ends *h* thereof engage the support *m*, in which position the rail *i* may engage the edges
55 of the perforations *g*.

By reason of the rings extending through perforations *k* in the leaves *l* the leaves, when the free extremities *h* of the rings *f* are pressed against the support *m*, are held securely in position within the binder or book. When the support *m* is drawn outwardly of the pocket *n*, the rail *i* is relieved of pressure and the free ends *h* of the rings *f* move away from the support *m* enabling leaves to be removed, or fresh leaves to be added.

It will be understood that as soon as the pressure on the rail *i* is released, the rail tends to move away from the perforations *g* and on account of the perforations in one part being then out of approximate coincidence with the perforations in the other part, the rings, as a result thereof are caused to move angularly to open position by the force exerted on them due to the movement of one perforated part relatively to the other perforated part.

Figure 4 shows the rigid folded over support *m* together with the rail or bar *i* and the filing rings *f*, but without the leaves and without the book cover proper.

In Figure 5, which shows a slight modification of the constructional form, shown in Figures 1 and 2, the extremities of the rings connected with the said rail or bar *i* are bent inwardly with respect to the circumference of the rings, and, as shown, lies approximately parallel to the bottom cover *a*.

What I claim is:—

1. A loose leaf book comprising a cover, a bar extending along the book adjacent the back portion thereof, open rings attached to the bar at

one end and having their free ends cooperating with perforations in the leaves of the book, and a member associated with the cover and placed adjacent the bar and provided with perforations through which the rings extend, which member can slide transverse relatively to the cover to cause the rings to tilt circumferentially about their attached ends.

2. A loose leaf book comprising a cover, a bar extending along the book adjacent the back portion thereof, open rings attached to the bar at one end and having their free ends cooperating with perforations in the leaves of the book, and a fold extending flexibly around the edge of the bar and merging into the back portion of the cover and provided with perforations through which the rings extend, which fold and the adjacent part of the back portion of the cover have superposed parts capable of transverse sliding relatively to each other and to cause the rings to tilt circumferentially about their attached ends.

3. A loose leaf book comprising a cover with a pocket in one of its sides, a bar extending along the book adjacent the back portion thereof and arranged to be held stationary at the mouth of the pocket, open rings attached to the bar at one end and having their free ends cooperating with perforations in the leaves of the book, and a member having perforations adjacent the bar through which perforations the rings extend, which member is movable laterally in the pocket in such a manner as to cause the rings to tilt circumferentially about their attached ends.

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