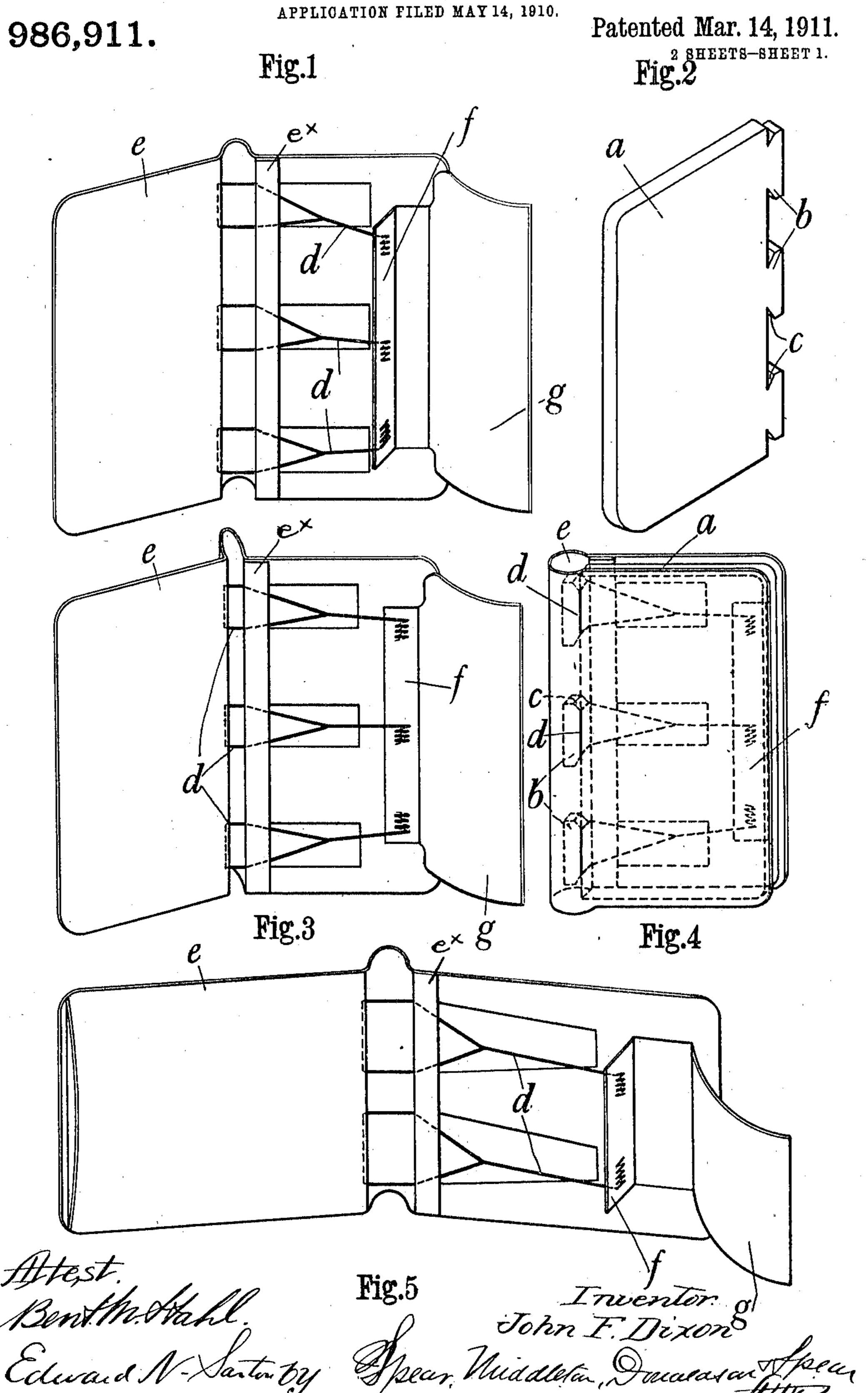
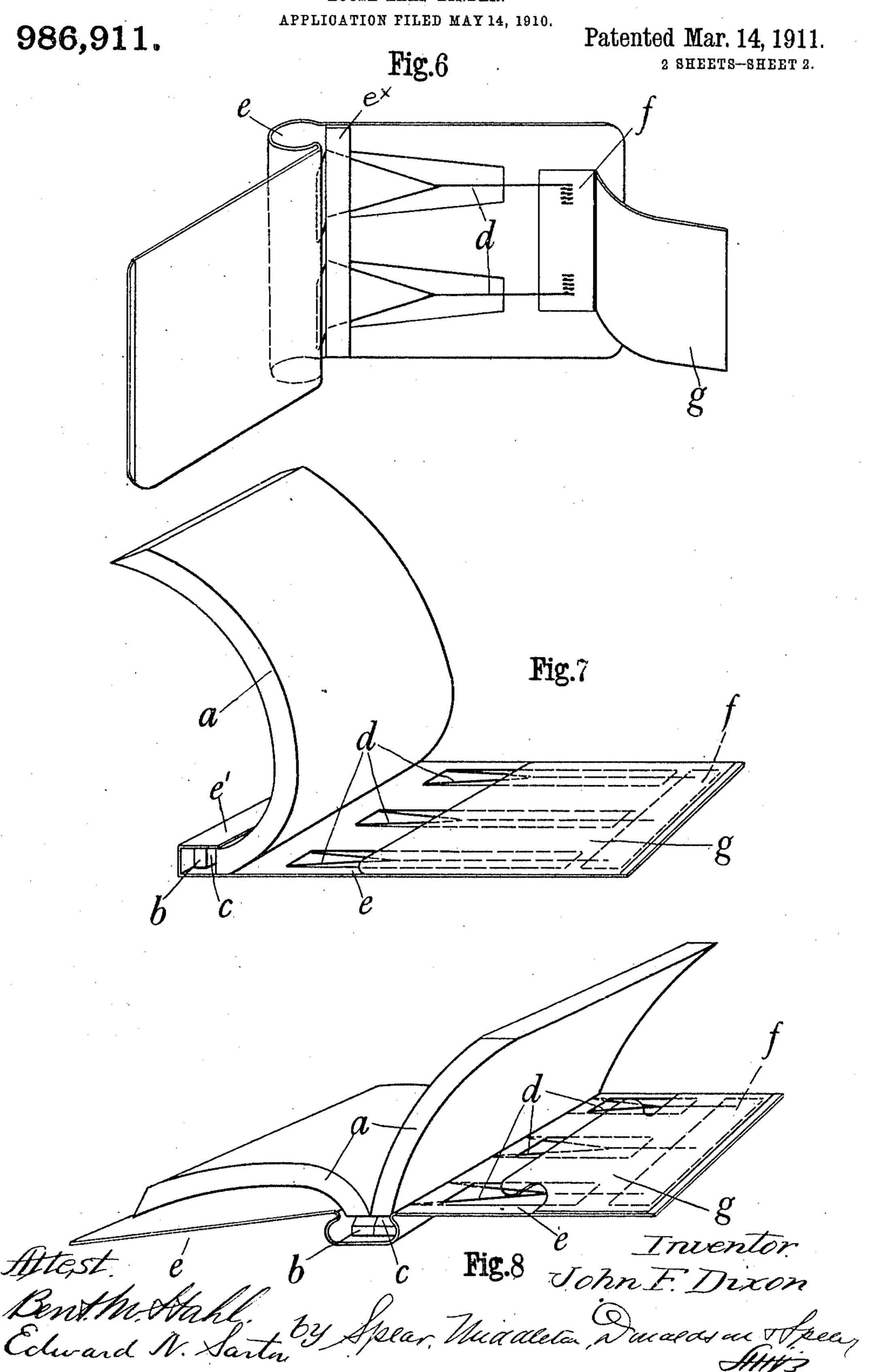
J. F. DIXON.
LOOSE LEAF BINDER.
LIGATION FILED MAY 14, 1910



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## UNITED STATES PATENT OFFICE.

JOHN FREDERICK DIXON, OF WYLDE GREEN, ENGLAND.

LOOSE-LEAF BINDER.

986,911.

Specification of Letters Patent. Patented Mar. 14, 1911.

Application filed May 14, 1910. Serial No. 561,430.

To all whom it may concern:

Be it known that I, John Frederick Dixon, subject of the King of Great Britain, residing at Clovelly, Western Road, Wylde Green, in the county of Warwick, England, have invented certain new and useful Improvements in Loose-Leaf Binders, of which the following is a specification.

This invention relates to note books, pocket books, scribbling pads and other loose leaf books, of the type in which binding threads or the like are arranged in conjunction with a cover, the object of the invention being to provide improved means for detachably

15 securing the leaves in position.

Referring to the two accompanying sheets of explanatory drawings;—Figure 1 illustrates in the open or inoperative condition a cover or binder provided with means for 20 securing the leaves in accordance with this invention. Fig. 2 shows a block or number of leaves adapted for use with binders having this invention applied thereto. Fig. 3 shows the operative position of the binding 25 elements, the leaves being omitted for clearness of illustration, while Fig. 4 shows the complete book. Figs. 5 and 6 illustrate in the inoperative and operative conditions (with the leaves omitted) a modified form of 30 cover. Fig. 7 shows an application of the invention to a scribbling pad and Fig. 8 shows the application to one form of account book or the like.

The same reference letters in the different views indicate the same or similar parts.

In the application of the invention to an ordinary note book as shown in Figs. 1 to 4, the loose leaves a are each formed at one side or end with a number, (preferably 40 three or four) of ears or projections b. The said ears or projections are formed with lateral grooves, notches or recesses c on the opposite sides for engagement by binding cords or threads d provided in the cover or 45 binder e.

One binding cord or thread may be employed for each ear or projection of the leaves, the cords being looped or doubled and arranged so that the loop engages or passes through opposite sides of the fold or back of the cover while its free end or a piece connected with or forming a continuation of the same is attached to or otherwise arranged in conjunction with a flap or equivalent part f hingedly or pivotally formed with or secured to the cover so that it can

operate in the manner of a lever on the cords. When the flap lies flat as shown in Fig. 3 the cords are drawn taut, and the back portions of the cover are closed to- 60 gether, the leaves being thereby secured. When the flap is raised as shown in Fig. 1 the cords are slackened and as the portions of the cover can then be drawn apart or extended the leaves may be withdrawn. To 65 effect such withdrawal it is merely necessary, after raising the flap, to move the leaves in one direction and so free one side of each of the leaf ears or projections from engagement with the now loosened cords. 70 The leaves may then be readily and completely withdrawn. To replace the leaves, one side of each of the looped or doubled cords is engaged and pressed back by the leaves simultaneously; the opposite side of 75 each of the leaf ears may then be at once pressed into engagement with the opposite side of the cords and the final and complete fastening of the leaves effected by depressing the flap which tightens the cords and both 80 causes them to complete the engagement with the leaf ears and to draw the covers together on to the leaves.

Accidental raising of the flap is prevented in any convenient manner such as by a cover strip g which is folded over the flap and held down by the leaves. It may be independently secured by a tongue piece adapted for insertion into a slit in the binding, or as shown in Fig. 8 it may be formed with 90 lateral ears adapted to be tucked under the binding cords. In Figs. 1 and 3 the strip g is shown thrown back to expose the flap and cord.

The rectangles or the like shown in one 95 cover by all the drawings adjacent to each cord represent recesses in the cover in which the loops of the cords lie. The strip of material  $e^{\times}$  secured on the inner side of one of the covers between the rectangular recesses 100 in the cover and the central fold, serves to retain in position the looped portions of the cords passing beneath it, the cover itself or the strip  $e^{\times}$  being grooved on its underside to permit the required sliding movements of 105 the cords.

The book shown in Figs. 5 and 6 differs only from that of Figs. 1 to 4 in shape and the number of binding cords. With the leaves a corresponding number of ears or 110 projections are provided. The pad shown in Fig. 7 is similar in principle to the books

above described. The front cover is dispensed with and the cords are threaded through a portion e' of the back piece e which is caused to overlap the ears of the 5 leaves as shown. A flap f is used with the cords and a cover piece g for securing the flap. The account book shown in Fig. 8 is essentially similar in construction to the books above described but correspondingly 10 heavier and stronger in its various parts.

Adjustment of the tension of the binding cords or threads may be effected by lacing them through a number of holes in the flap so that the cords can be readily tightened or 15 slackened as required. It will be understood that the adjustment is only required when an appreciable addition or subtraction is made to or from the leaves in the book.

The invention is readily applicable to 20 loose leaf re-fills for books of various kinds, and to other services where a loose leaf system may be desired, as, for example, pattern books used by commercial travelers, letter copy books, price lists, and sketch books.

25 Having now described my invention what I claim as new and desire to secure by Let-

ters Patent is;—

1. In loose leaf books, the combination with the loose leaves of a cover, a binding 30 cord engaging the said leaves and cover, and a flap connected to the said cord for

tightening and releasing the cord, as set forth.

2. In loose leaf books, the combination consisting of a cover, loose leaves, notched 35 ears or projections on said leaves, binding cords engaging the said cover and the said notched ears, and a flap connected to the said cords for tightening and releasing the cords, as set forth.

3. In loose leaf books, the combination consisting of a folding cover, loose leaves embraced by the said cover, a flap in attachment with one fold of the cover, and a binding cord attached to the other fold of the 45 cover and to the said flap and engaging the

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said leaves, as set forth.

4. In loose leaf books, the combination consisting of a folding cover, loose leaves embraced by the said cover, a flap in attach- 50 ment with one fold of the cover, binding cords attached to the other fold of the cover and to the said flap and engaging the said leaves, and a cover strip which folds over the flap and is held down by the leaves, as 55 set forth.

In testimony whereof, I affix my signature in presence of two witnesses.

JOHN FREDERICK DIXON.

Witnesses:

EDWARD MARKS, HARRY DAVIS.

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