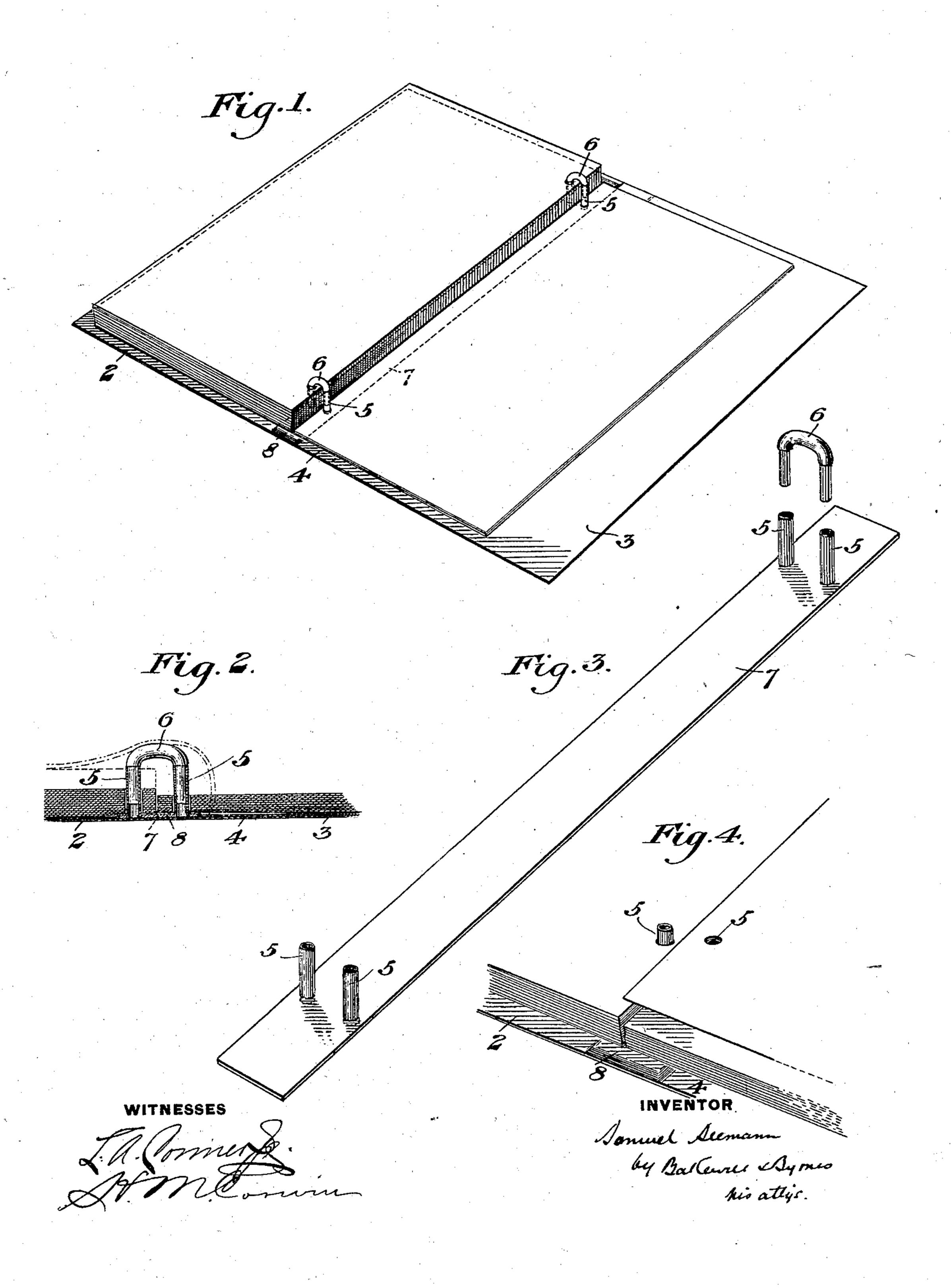
## S. SEEMANN. LOOSE LEAF BOOK. APPLICATION FILED MAY 6, 1901.

NO MODEL.



## United States Patent Office.

## SAMUEL SEEMANN, OF SHARPSBURG, PENNSYLVANIA.

## LOOSE-LEAF BOOK.

SPECIFICATION forming part of Letters Patent No. 719,886, dated February 3, 1903.

Application filed May 6, 1901. Serial No. 58,851. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL SEEMANN, of Sharpsburg, Allegheny county, Pennsylvania, have invented a new and useful Loose-5 Leaf Book, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a perspective view of my improved book in open position. Fig. 2 is a partial cross-section on a larger scale, showing the arrangement of the arch members and illustrating in dotted lines the position of the leaves and top cover when the book is closed.

Fig. 3 is an enlarged perspective view of the metal strip and connected parts, and Fig. 4 is a detail perspective view showing the manner of inserting or removing a leaf at the desired point.

My invention relates to that class of books wherein the leaves are loose and are removably held in place; and its object is to provide such a book wherein any leaf throughout the series may be removed without removing or disturbing the relation of the other leaves. Heretofore in these removable-leaf books if a leaf was to be removed or inserted at an intermediate point it was necessary to remove all the leaves on one side of such leaf, thus causing trouble and delay in the rebinding of the removed leaves in their proper relation.

consists in providing removable arch-shaped members which are secured to the back of the book and the arch portions of which are removable, thus allowing any leaves to be removed without disturbing the other leaves. In the drawings, 2 and 3 represent the front

My invention overcomes this difficulty, and it

and back cover, and 4 the flexible back, of my improved loose-leaf book. Projecting inwardly from the back are a plurality of hollow posts 5, arranged in pairs and receiving therein the legs of arch-shaped members 6. The legs of the arch or U shaped holder are preferably held in the tubular posts by friction, and in case any one of these becomes loose it may be tightened by striking the ends of the legs with a hammer to peen them up slightly.

Any desired number of the sets of posts and arch members may be used, and the posts may be secured in the back in many different ways.

I have, however, shown a preferred form in which the posts extend through holes in a rectangular metal strip 7, being expanded and 55 soldered or otherwise secured to this strip. The legs of the arches are preferably reduced in diameter to fit within the posts, the arch portion being approximately the same diameter as the posts. This gives a smooth continuous surface. This metal strip may be secured to the inside of one cover adjacent to and forming an extension of the back by means of a leather or fabric layer 8, extending over and inclosing it or in any other desirable manner.

In using the book the arch-shaped members are removed and the perforated leaves fitted over one or both posts. The archshaped members are then inserted in the 70 posts and the book is ready for use. When the book is closed, the leaves resting on one cover are moved over with this cover and rest upon the other leaves, the cover resting on the U-shaped members in the form shown. 75 Thus in Fig. 2 I show the cover in curved dotted lines in its closed position, the righthand leaves then assuming the position shown in straight dotted lines in this figure. If a leaf is to be removed or inserted at an inter- 80 mediate point, the book is opened and the leaves are opened to the point desired. The arch-shaped members are then removed and the leaf taken out or inserted. The archshaped members are then replaced and the 85 book is again complete. By removing and replacing the arch-shaped members successively all liability of misplacing the other leaves is done away with.

The advantages of my invention result 90 from the fact that the book may be used in the same way as ordinary loose-leaf books, being opened and closed in the usual manner, the continuous smooth arch preventing any tearing of the leaves, while any leaves 95 may be removed or replaced without disturbing the other leaves.

The posts may be made solid, if desired, the legs being hollow to fit over them, and many other modifications may be made in the 100 form and arrangement of the parts without departing from my invention.

It is obvious that the arch-shaped members must be arranged transversely to the book to

permit the leaves to be swung over from one post of each pair onto the other posts. These arched members, however, are not necessarily arranged at right angles to the edge of 5 the book.

I claim—

1. A loose-leaf book having a back and two covers, projecting posts rigidly secured to the inside of one coveradjacent to the back, and ro removable arch-shaped members detachably engaging said posts and arranged trans-

versely; substantially as described.

2. A loose-leaf book having a back provided with two covers arranged to inclose the 15 leaves, projecting posts rigidly secured in pairs within the back portion of the book, and arch-shaped members detachably engaging said posts and arranged transversely; substantially as described.

20 3. A loose-leaf book having covers and a back, hollow posts projecting inwardly with-

in the covers in the back portion of the book, and removable arch-shaped members having legs arranged to enter said posts and arranged transversely; substantially as de-25 scribed.

4. A loose-leaf book having covers secured to a back and arranged to inclose the leaves, a metal strip secured to the inner face of one cover adjacent to the back, posts arranged in 30 pairs and secured to said strip, and removable arch-shaped members having legs engaging said posts and arranged transversely, the inside of the other cover contacting with the arch-shaped portions when the book is 35 closed; substantially as described.

In testimony whereof I have hereunto set

my hand.

SAMUEL SEEMANN.

Witnesses:

H. M. Corwin,

C. P. Byrnes.