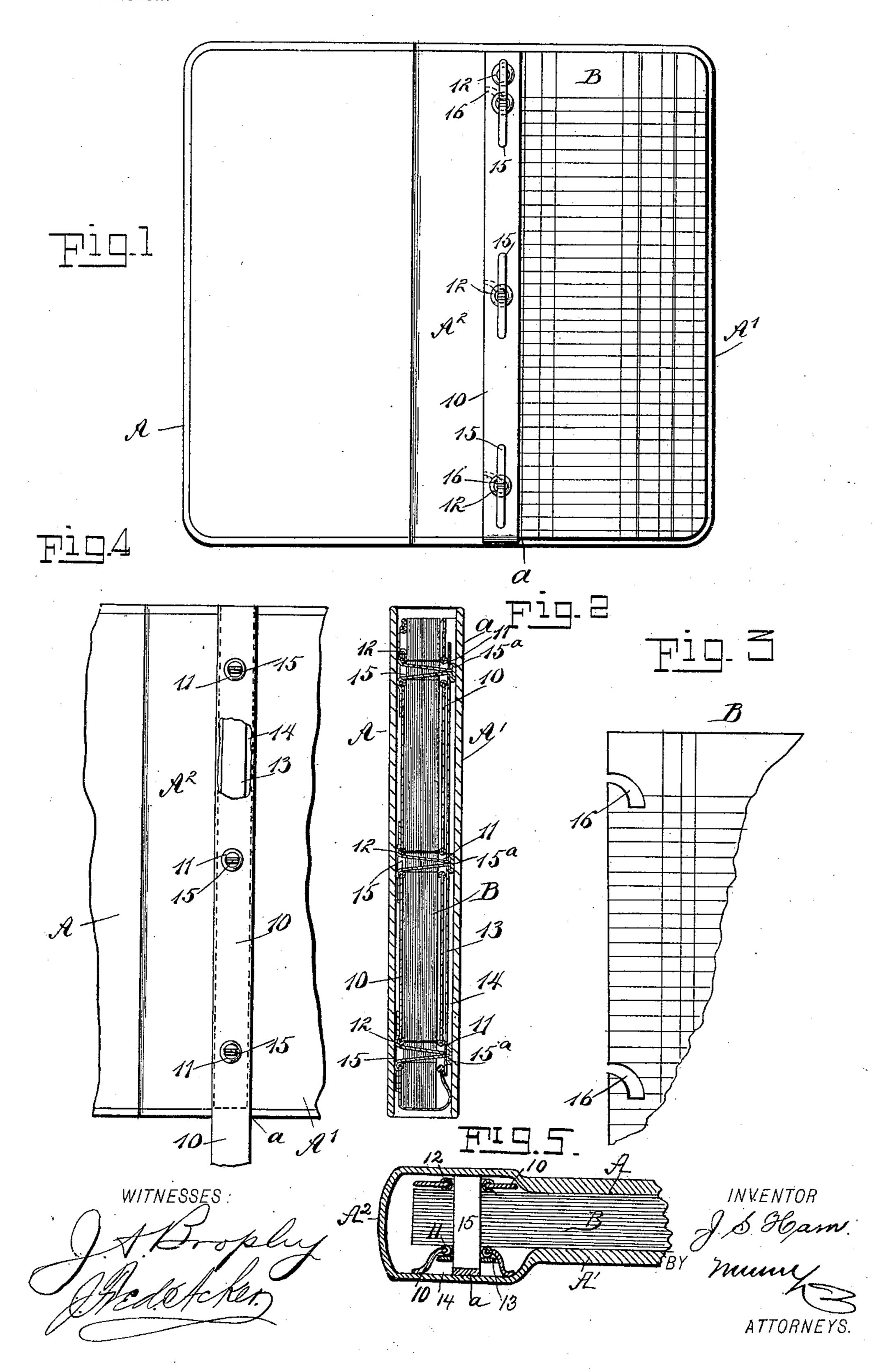
## J. S. HAM. BINDER AND SHEET.

(Application filed Dec. 7, 1897.)

(No Model.)



## United States Patent Office.

JOSEPH S. HAM, OF PORTLAND, MAINE.

## BINDER AND SHEET.

SPECIFICATION forming part of Letters Patent No. 614,386, dated November 15, 1898.

Application filed December 7, 1897. Serial No. 661,056. (No model.)

To all whom it may concern:

Be it known that I, Joseph S. Ham, of Portland, in the county of Cumberland and State of Maine, have invented a new and Improved Binder and Sheets Therefor, of which the following is a full, clear, and exact description.

The object of the invention is to provide a cover of a book with a simple, durable, and economic binding attachment capable of convenient and expeditious manipulation and which will be entirely concealed by said cover of a book.

Another feature of the invention is to provide a means whereby McGill fasteners or fasteners of a similar character may be firmly held between the two sides of the cover at the back and readily replaced should they become damaged.

Another feature of the invention is to provide a binding-strip for the leaves of a book, a portion whereof is arranged to hold in place the fasteners, another portion being adapted to be held in binding engagement with the leaves of the book by means of the fasteners.

Another object of the invention is to provide the individual leaves with recesses so shaped that when the fasteners are in position in said recesses of the leaves said leaves will be held as firmly between the covers as if the leaves were regularly bound therein, it being possible, however, for any one or more of the leaves to be removed from the covers or any one or more of the leaves to be introduced between them, as may be desired.

The invention consists in the novel construction and combination of the several parts; as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of a book having the improvement applied, one of the covers or sides of the book being opened from over the leaves. Fig. 2 is a longitudinal section through the book at the back, the book being closed. Fig. 3 is a partial plan view of one of the leaves detached from the binder. Fig. 4 is a plan view of a portion of the open covers of a book to which the binding attachment is to be applied, the binding attachment being

shown in position on one of the covers adjacent to the back and a portion of the binding attachment being broken away and the leaves 55 removed; and Fig. 5 is a transverse section of the book when closed.

A represents one side of the cover of a book, A' the other side of the cover, and A<sup>2</sup> a flexible back connecting the sides of the cover, the 60 flexible material of the back being extended to an adjacent portion of the cover A', as illustrated at a in Figs. 1 and 4. The binding attachment consists of a strip 10 of a pliable material, which material may be in the form 65 of a tape, as illustrated. A portion of this tape or strip is placed upon the inner face of the flexible portion a of the cover A', extending from end to end of said cover, the tape or strip being attached at its sides by stitching 70 or otherwise to the said cover, and the said tape may be attached at its ends also to the cover, if desired, and is also preferably secured to the cover where it extends over the end portion thereof, the tape or strip being 75 of such length that its free portion or section may be carried over the leaves B to be bound between the sides of the cover and assist in the binding of said leaves, extending longitudinally across the uppermost leaf practically 80 the full length of the cover.

That portion of the strip or tape which is attached to the cover is provided with two or more eyelets 11, and other eyelets 12 are secured in the free portion of the strip, the eye- 85 lets 12 occupying such position that they may be brought in registry with the lower eyelets 11 when the strip of tape is used for binding purposes. These eyelets may be in pairs or in triplets to admit of the leaves being of 90 greater or less number. An anchoring-strip 13 of metal or an equivalent material is located in the pocket 14, formed by the attachment of the strip or tape 10 to the cover A', and McGill fasteners 15 or fasteners of like 95 type are passed through openings in the anchoring-strip 13 through the eyelets 11 in the attached portion of the tape or binding-strip 10, the heads 15° of the fasteners being between the cover A' and the opposing face of roo the anchoring-strip 13, as is also shown in Fig. 2. The leaves B that are to be bound between the sides of the cover by the said binding attachment are provided at their rear

edges with recesses 16, corresponding in number and location to the number and position of the fasteners 15.

The recesses 16 are of peculiar form, ex-5 tending from the rear edges of the leaves inwardly and downwardly, so that the fasteners 15 may be readily entered into the recesses, and when the fasteners have reached the bottom portions of the said recesses 16 there will 10 be no danger of the leaves becoming detached from the fasteners of their own accord. The leaves are trued up so that their recesses 16 register, and the fasteners 15 are made to enter the recesses in the leaves. The free por-15 tion of the binding-strip is then carried over an end of the leaves, as shown in Figs. 1 and 2, and longitudinally along the uppermost leaf, the upper ends of the fasteners being received through the eyelets 12 in the upper 20 stretch of the binding-strip, and when the fasteners have been pressed downward firmly on the upper stretch of the binding-strip, as shown in Fig. 1, the leaves will have been firmly bound in the book, and the said book 25 may be used in the same manner and for all purposes to which an ordinary book is applicable, yet by loosening the fasteners any one or more leaves may be withdrawn from between the covers or any desired number of 30 leaves may be introduced.

It will be observed that no portion of the binding device appears outside of the covers, so that said covers remain as smooth as in an ordinarily-bound book, and a book hav-35 ing the improved binding may therefore be carried in the pocket without danger of unduly wearing the same. In the event that any one of the fasteners should become broken it is simply necessary to remove the 40 upper stretch of the binding-strip from engagement with the fasteners and remove the leaves, whereupon the projecting ends of the fasteners may be bent downward on the pocket portion of the binding-strip and the 45 anchoring-strip carrying the fasteners may be forced out at one end of the pocket. After a new fastener has been introduced into the anchoring-strip the fasteners are bent down upon the binding-strip; but their free 50 ends are slightly upturned, so that when the anchoring-strip is introduced into the pocket, carrying with it the fasteners, the upturned ends of the fasteners will appear at the eyelets 11, enabling the fasteners to be readily 55 drawn out from the pocket and placed in po-

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

sition to receive the leaves.

1. The combination, with the covers of a book, of a binding-strip of greater length than the covers, the said binding-strip being secured at its edges to one of the covers, forming a pocket, the free end of the binding-strip

being capable of returning over the attached 65 portion, and the attached portion and free portion of the binding-strip being provided with openings, and fasteners having their head portions secured within the said pocket and extending outward through the openings 70 in the attached portion of the binding-strip, the said fasteners being capable of entering the openings in the free section of the binding-strip when the said section is returned over the attached section of the strip, as and 75

for the purpose specified.

2. The combination, with a book-cover, of a binding-strip of greater length than the cover, a portion of the binding-strip being secured at its edges to the cover, forming a pocket, the 80 free portion of the binding-strip being of sufficient length to return over the attached portion, both the attached portion and the free portion of the binding strip being provided with openings capable of being brought in 85 registry, an anchor-plate located within the said pocket, and fasteners held by the anchorplate and arranged to extend through corresponding openings in the attached and free portions of the binding-strip, for the purpose 90 specified.

3. The combination, with the cover of a book and a binding-strip of greater length than the cover, a portion of the said bindingstrip being secured at its edges to the cover, 95 forming a pocket, the free portion of the binding-strip being of such length that it may return over the attached portion, the attached and free portions being provided with openings capable of being brought in registry, of 100 an anchor-strip loosely located within the said pocket, fasteners comprising a head and pliable tongues extending from the head, the heads of the fasteners being located between the cover and the anchor-strip, the tongues 105 passing through openings in the anchor-strip and through the openings in the attached portions of the binding-strip, being likewise adapted to pass through the openings in the free portion of the binding-strip, and leaves 110 having recesses in their inner edges, which recesses extend inwardly and downwardly, being adapted to receive the tongues of the fasteners, as and for the purpose specified.

4. A binder, comprising a cover provided 115 with a plurality of fasteners projecting from its inner face, and with a pliable strip secured to and projecting from one end of the cover in alinement with the fasteners, the said strip being of a length to extend over the 120 leaves to be bound and provided with openings to receive the fasteners after they have been passed through the leaves, substantially

as described.

JOSEPH S. HAM.

Witnesses: WM. H. PRINCE, CHAS. M. BUTLER.