

(No Model.)

E. M. WALLEN, Dec'd.
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BOOKBINDING.

No. 584,198.

Patented June 8, 1897.

Fig 1.

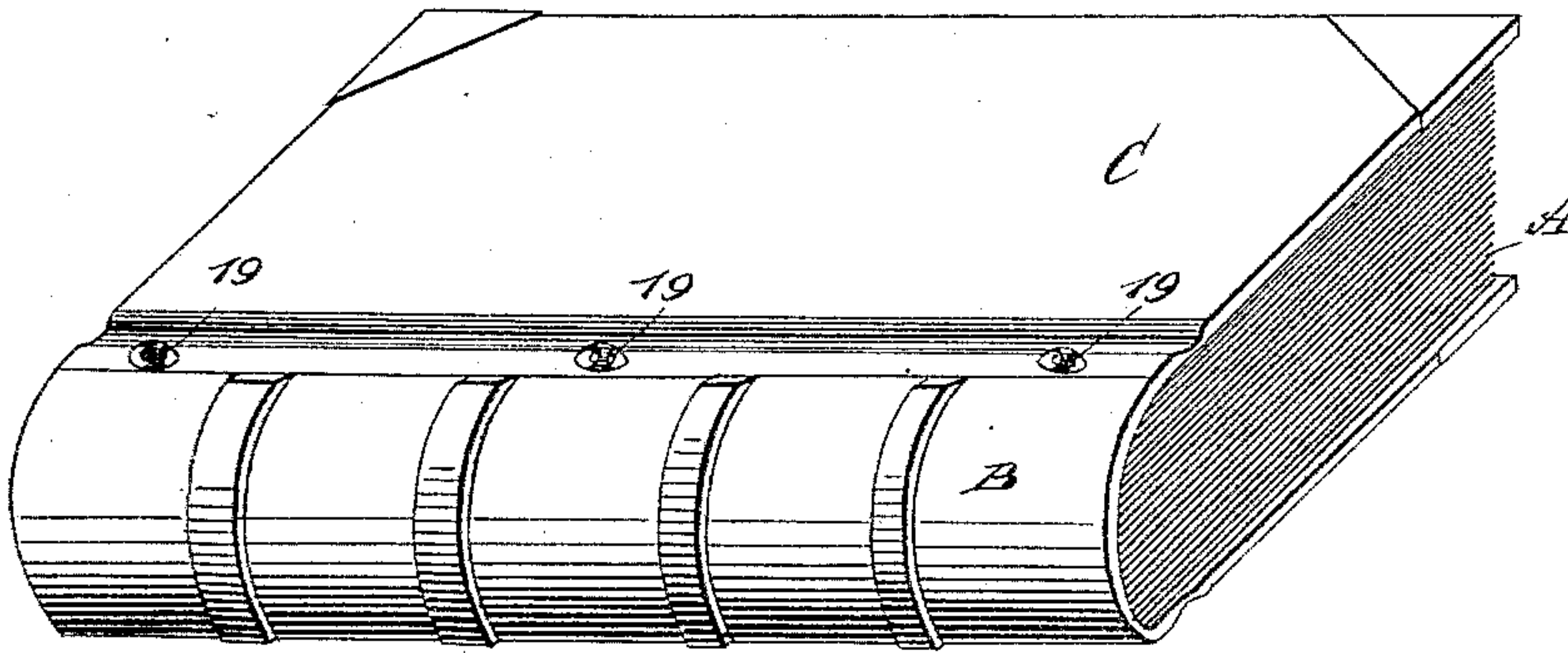


Fig 2.

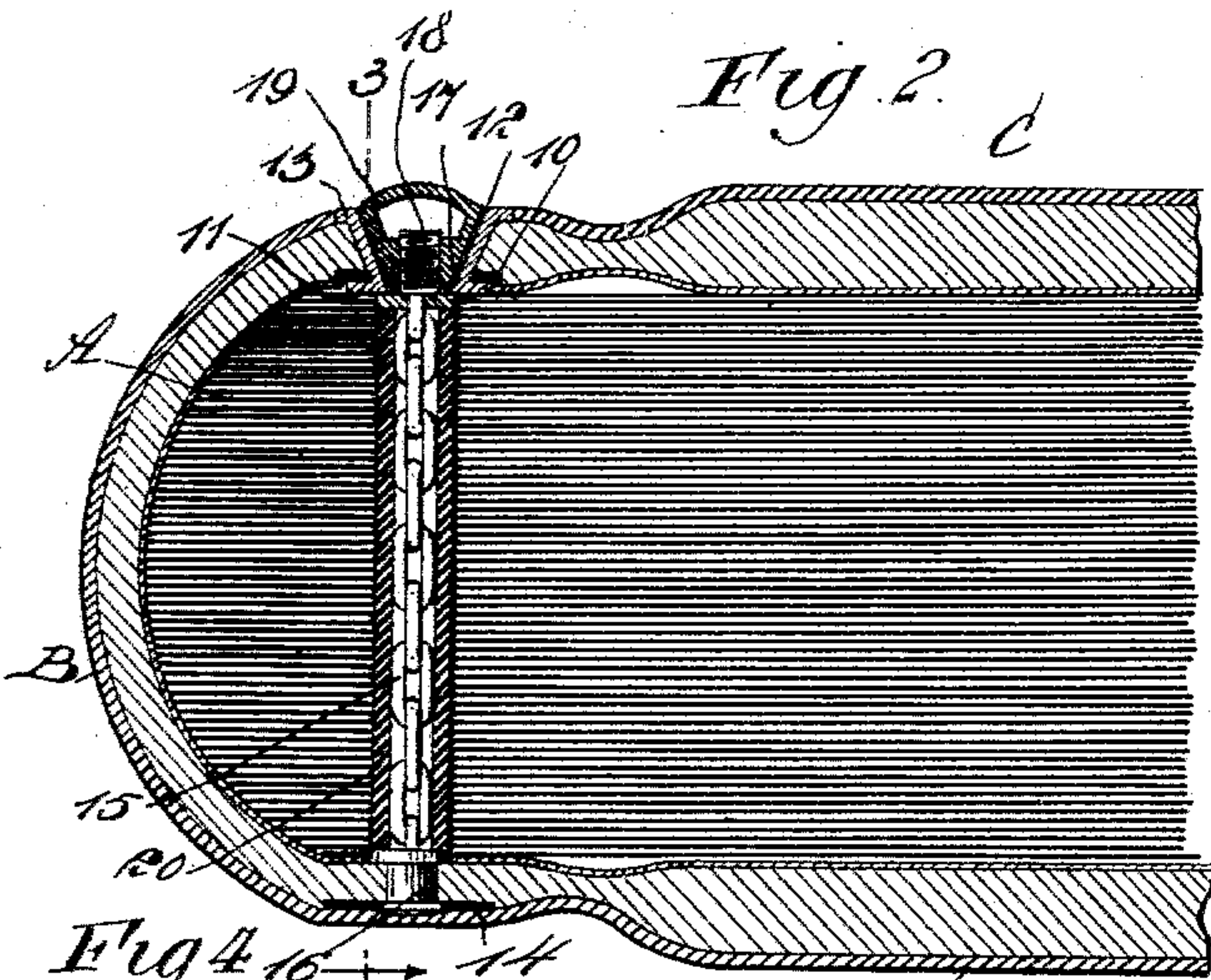


Fig 3.

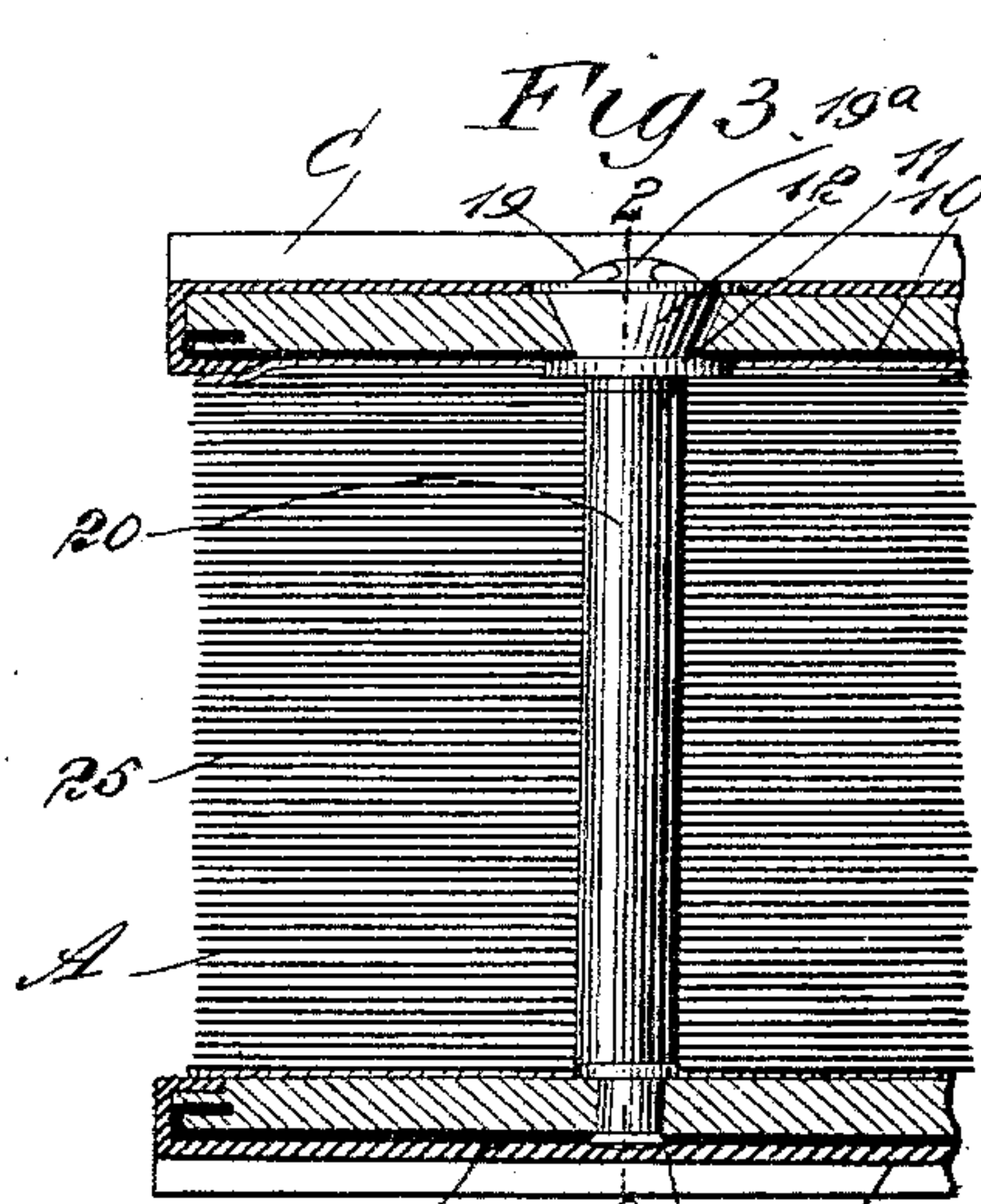


Fig 4.

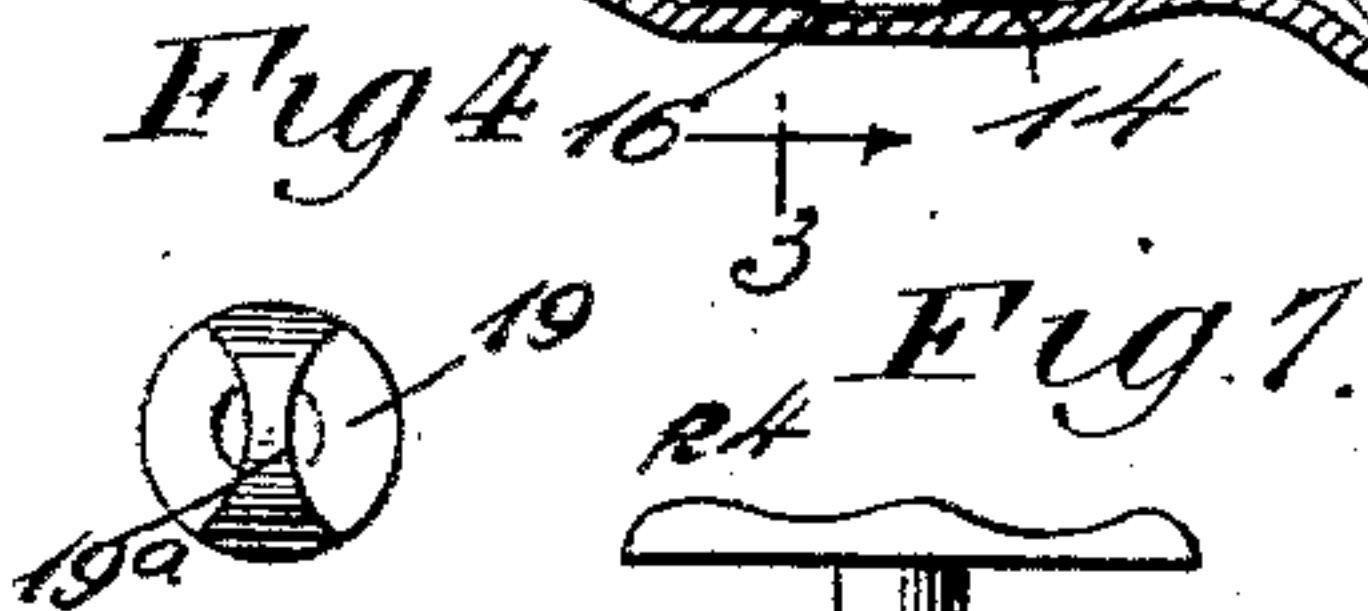


Fig 7.

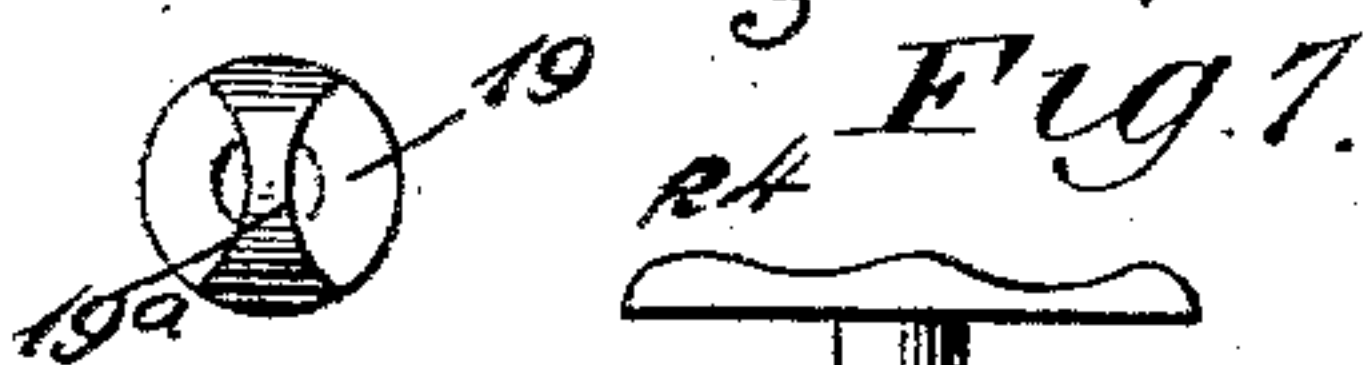


Fig 8.

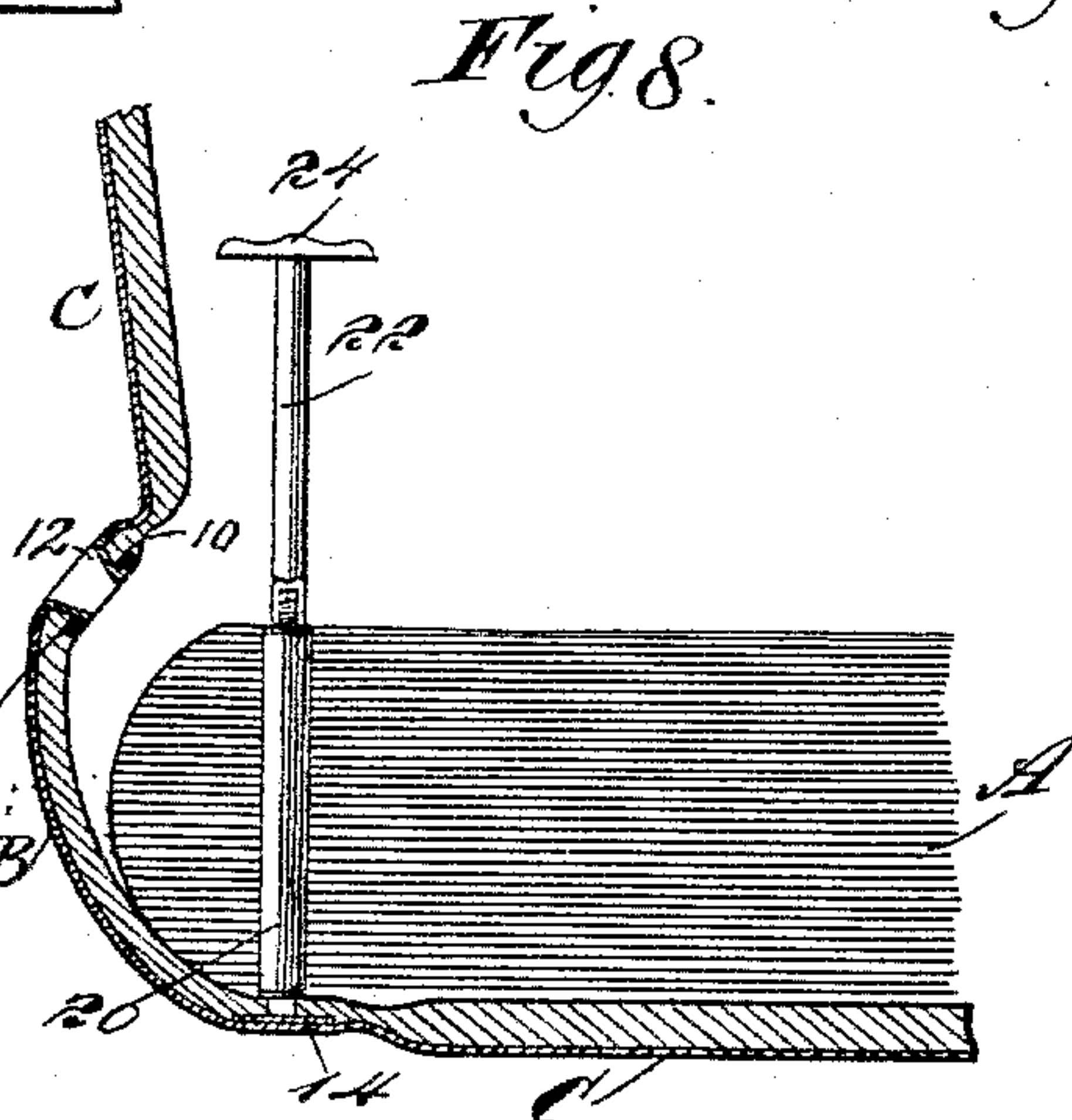


Fig 6.

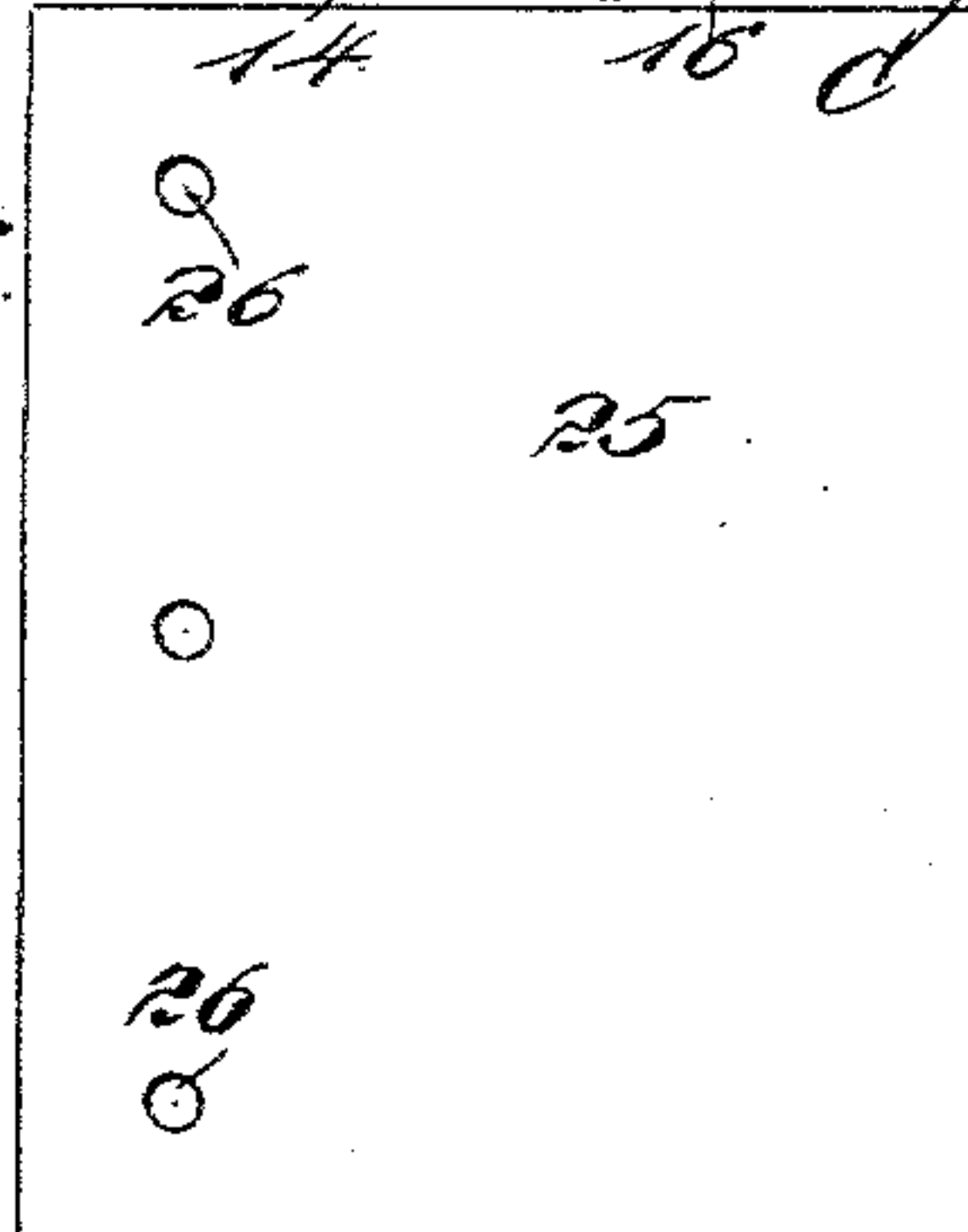


Fig 5.

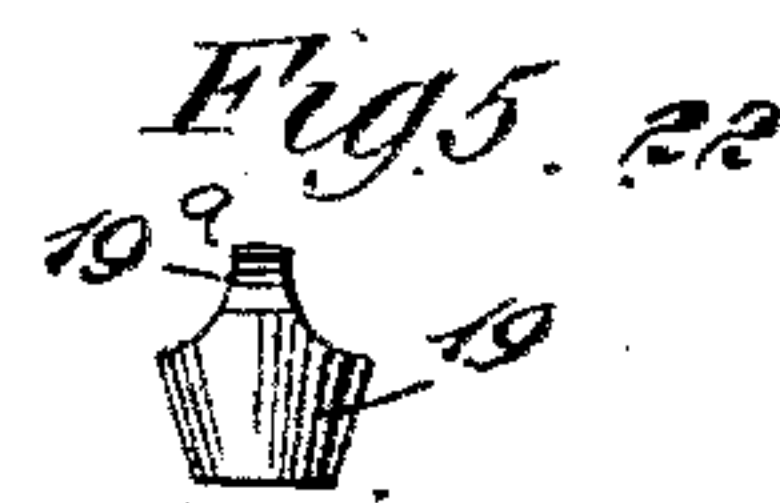


Fig 9.



WITNESSES:

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EDWARD M. WALLEN, OF NEW DECATUR, ALABAMA; MARY B. WALLEN
ADMINISTRATRIX OF SAID EDWARD M. WALLEN, DECEASED.

BOOKBINDING.

SPECIFICATION forming part of Letters Patent No. 584,198, dated June 8, 1897.

Application filed January 30, 1897. Serial No. 621,311. (No model.)

To all whom it may concern:

Be it known that I, EDWARD M. WALLEN, of New Decatur, in the county of Morgan and State of Alabama, have invented a new and useful Improvement in Bookbinding, of which the following is a full, clear, and exact description.

The object of the invention is to provide a binding especially adapted for blank-books, record-books, and books of like type, the binding being so constructed that any one of the leaves in the book may be expeditiously and conveniently removed, so that entries may be made on said leaves through the medium of a type-writer instead of pen and ink, as ordinarily.

A further object of the invention is to provide a binding of the above character which will be exceedingly simple, durable, and economic and which will not in any manner detract from the appearance of the book, and whereby the pages between the cover and the page to be removed may be assembled upon a rod or its equivalent and kept in the same relative position to each other as they occupied when in the book, enabling the leaves on the rod to be readily and conveniently restored to their position between the covers of the book after the withdrawn page has been written upon and replaced.

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 perspective view of a book having the improvement applied. Fig. 2 is a transverse section through the back portion of the book, the section being taken through both of the covers and the back and through the fastening device for the leaves, practically on the line 2 2 of Fig. 3. Fig. 3 is a longitudinal section taken substantially on the line 3 3 of Fig. 2. Fig. 4 is a plan view of a plug used in connection with the binding. Fig. 5 is a side elevation of the plug. Fig. 6 is a plan view of one of the leaves of the book on a small scale. Fig. 7 is a partial side elevation and partial sectional view of a rod adapted to receive the bulk of the

leaves removed from the binding. Fig. 8 is a transverse section through the book, illustrating the application of the rod to a fastening device for the leaves; and Fig. 9 is a partial side elevation and partial sectional view of the fastening-plug for the book.

The binding of the book consists of the usual back section B and covers C, the leaves A being located between the covers and within the back in the customary arrangement. A plate 10 is embedded in the top cover at or near a point where it connects with the back, said plate 10 being located adjacent to the inner face of the cover and extends longitudinally of the cover from end to end. The plate 10 rests upon flanges 11, formed at the bottom of tapering thimbles 12, the said thimbles being introduced into the upper cover of the book over the plate 10, and said plate is apertured for the reception of the thimbles. Each thimble 12 is provided at its upper or flaring end with a marginal flange 13, the flanges 13 being made flush at their outer surfaces with the outer faces of the top cover and the back, or the material applied to the outer face of the cover and to the outer face of the back may extend over the flanges 13, if desired.

At the bottom cover of the book adjacent to the point where said cover connects with the back a plate 14 is introduced into the book-cover, near the outer face of the same, as is best shown in Fig. 2, the under plate 14 being parallel with the upper plate 10, and both of these plates at their ends are returned upon themselves, as shown in Fig. 3, in order that they may be firmly secured to the binding. A chain 15 or the equivalent thereof extends from each of the thimbles 12 to the bottom plate 14. The lower edge of each chain terminates in a head 16, which is riveted or otherwise secured to the bottom plate 14. At the upper end of the chain a plate 17 is attached, provided with a screw extension 18, and the screw extension of each chain is received by a plug 19. The plugs are fitted to the tapering thimbles and have threaded openings for the reception of the threaded extensions 18 of the chains. Each plug 19 is usually provided with a handle 19^a in order that the plugs may be readily attached to or disconnected from the chains. Each chain 15 is passed through a flexible tube 20, made of

rubber or an equivalent material, the tubes extending from one cover to the other, as shown in Figs. 2 and 3.

The leaves 25 of the book are provided with openings 26, arranged at such intervals apart that when the leaves are placed within the covers of the book the tubes 20 will pass through the aforesaid openings. When it is desired to remove a leaf from between the covers, the plugs 19 are unscrewed and the cover containing the thimble is opened back. Rods 22 are then screwed upon the threaded extensions 18 of the chains, and the leaves between the upper cover, or the one thrown back, and the leaf that is to be removed are passed upward on the rods 22. The rods are then unscrewed from the chains and the desired leaf taken off from the tubes 20. After the memoranda have been made upon the detached leaf said leaf is replaced, the rods 22 are again connected with the chains, and the leaves are returned from the rods to their normal position on the rods or tubes 20. The rods 22 are now detached and the plugs restored to their normal positions. The flexible tubes 20 and the chains within the tubes permit the book to be opened as readily as a book having the ordinary flexible binding.

A book having the leaves bound as above set forth will be as durable and can be as readily handled as a book bound in the ordinary way, as any one leaf may be removed from the binding and placed upon a typewriting machine and entries made thereon in as convenient a manner as if the leaf were a single piece of paper.

By placing the strengthening-plate 14 near the outside of the under cover and the opposing strengthening-plate 10 near the inside of the opposite cover, resting on the flanges of the thimbles 12, the tension that is exerted on the chains 15 will serve to hold the strengthening-plates firmly in place and there will be no tendency to draw the plates out from the cover.

After the record has been completed and the book is to be filed away the plugs having the handles are removed and replaced by the plain plugs 21, as shown in Fig. 9, which may be covered by a material the same as the outer cover of the book.

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

1. A binding for books, comprising covers, a flexible connection between the covers, and a flexible casing surrounding said flexible connection, as and for the purpose specified.

2. A binding for books, consisting of a back, and covers connected with the back, flexible connecting devices placed at intervals apart and secured firmly to one cover and detachably connected with the opposing cover, and a flexible casing surrounding each of said connecting devices and extending from cover to cover, as and for the purpose specified.

3. In a binding for books, covers, a chain

secured firmly to one cover and detachably connected with the opposing cover, and a flexible casing surrounding the chain, as and for the purpose specified.

4. In a binding for books, the combination with covers and strengthening-plates located in the covers; of a chain firmly secured to one cover and detachably connected with the opposing cover, and a flexible casing surrounding the chain and extending from cover to cover, as and for the purpose specified.

5. In a binding for books, the combination, with the covers of the binding, strengthening-plates located in said covers and a chain connected with one of the strengthening-plates, of a plug removably located in the opposing cover receiving the opposite end of the chain, and a flexible casing surrounding the chain and extending from cover to cover, as and for the purpose specified.

6. In a binding for books, the combination, with the covers, of a thimble located in one of the covers, a plug normally seated in said thimble, and a flexible connecting device attached to one cover and detachably connected with the aforesaid plug, as and for the purpose specified.

7. In a binding for books, the combination, with the covers, a thimble located in one of the covers and a plug seated within said thimble, a chain connected with one of the covers and removably connected with said plug, and a tube of flexible material through which said chain passes, as and for the purpose specified.

8. In a binding for books, the combination, with the back and the covers of the binding, of a thimble located in one cover, a strengthening-plate in the cover through which the thimble is passed, a second strengthening-plate located in the opposite cover, a plug located in said thimble, a chain detachably connected with the plug, having its opposite end fast to the strengthening-plate opposite the thimble, and a flexible tube extending from cover to cover, through which the chain is passed, as and for the purpose specified.

9. In a binding for books, the combination, with the back and the covers of the binding, of a thimble located in one cover, a strengthening-plate in the cover through which the thimble is passed, a second strengthening-plate located in the opposite cover, a plug located in said thimble, a chain detachably connected with the plug, having its opposite end fast to the strengthening-plate opposite the thimble, and a flexible tube extending from cover to cover, through which the chain is passed, and a rod adapted to be removably attached to the chain when the plug is removed from its thimble, as and for the purpose specified.

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Witnesses:

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JNO. M. RITTER.