April 3, 1928. 1,665,049

R. C. BAKER

BOOKBINDING AND METHOD OF PRODUCING THE SAME

Filed Oct. 30, 1922

Fig. 1.

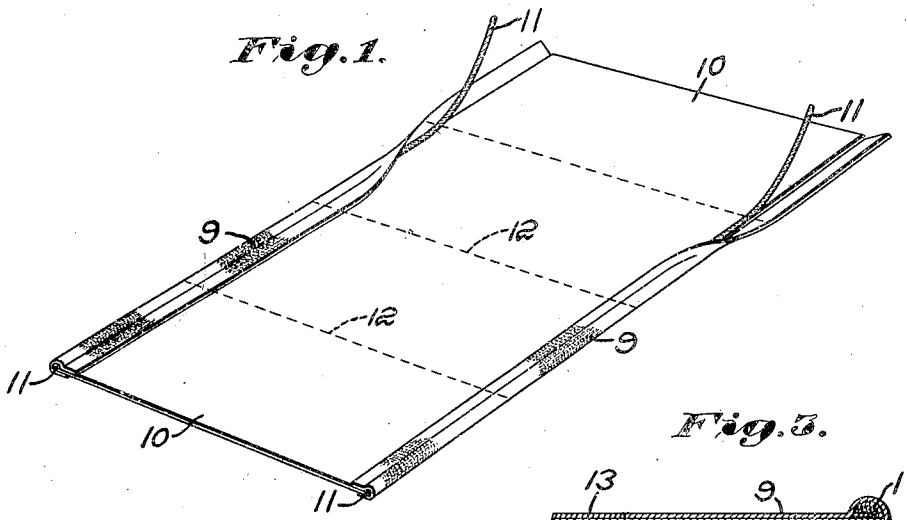


Fig. 3.

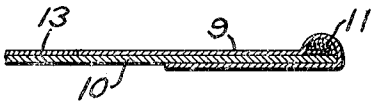


Fig. 2.

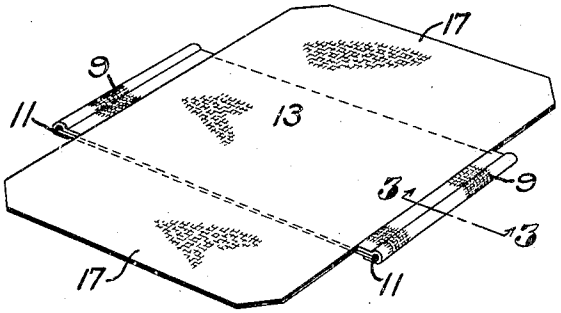


Fig. 4.

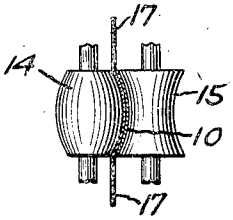


Fig. 5.

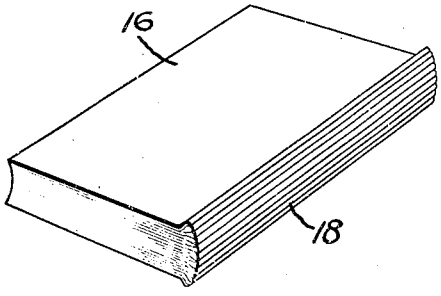
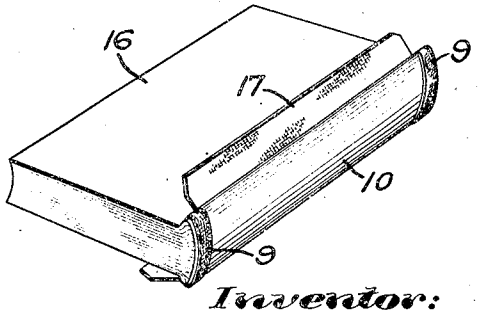


Fig. 6.



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UNITED STATES PATENT OFFICE.

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BOOKBINDING AND METHOD OF PRODUCING THE SAME.

Application filed October 30, 1922. Serial No. 597,738.

This invention aims to provide a novel and improved book-binding and method of producing the same, and will be best understood by reference to the following description, when taken in connection with the accompanying drawings illustrative of one specific binding embodying the invention, and the preferred method of binding the same.

In the drawings:

Fig. 1 is a perspective view illustrating the mode of preparing the back-lining;

Fig. 2 is a perspective view of the completed back-lining, with the super, or cheese-cloth reinforcement, glued thereto;

Fig. 3 is a sectional view on an enlarged scale on line 3—3 of Fig. 2;

Fig. 4 is an elevation illustrating the forming of the back-lining and super, preparatory to gluing the same to the backs of the signatures;

Fig. 5 is a perspective view of the signatures ready for the application of the back-lining and super; and

Fig. 6 is a perspective view of the signatures with the back-lining and super applied thereto.

Referring to Fig. 1 of the drawings, the first step in making the binding is to apply head-bands 9 to opposite edges of a sheet of appropriate material 10, such as paper, which is to constitute the back-lining. In carrying out this step, I prefer to employ an elongated sheet of paper of sufficient length to make a large number of back-linings. In fact, it is convenient to have the strip in the form of a roll which can be passed through an appropriate machine for applying the head-bands to opposite edges thereof by gumming one face of each head-band, which is also in the form of a long strip, and folding the same to embrace the margin of the paper to which it is gummed. As a part of this operation, it is also convenient to assemble with the back-lining and the head-bands two reinforcements, such as strings or cords 11, which, as best shown in Fig. 3, are laid upon one face of the paper, to which the head-band is then applied. A second step is to cut the resulting reinforced sheet into appropriate widths for the back-linings, as indicated by the dotted lines 12 in Fig. 1. These steps result in a large saving of time and repeated handlings of the back-lining and the parts which enter into the make-up of the binding.

The next step is to apply to the back-lining a super 13, which is a generally rectangular sheet or sheets of material, such as cheese-cloth, whose width is such that it just fits between the two-head-bands. The super is caused to adhere to the back-lining by the use of a suitable adhesive, such as flexible glue containing glycerine. This step, also, results in the saving of considerable time, because it can be done mechanically, and without the necessity of handling the book at this stage.

The next step is to shape the back-lining, super and head-bands, as a preliminary to applying them to the signatures, it being found that by previously shaping these parts, they can be caused to adhere to the signatures much better than has been possible heretofore. This shaping may be accomplished conveniently by the use of forms, such as rollers 14 and 15, shown by Fig. 4, one convex and the other concave, the shape corresp nding to the form of the previously assembled and rolled signatures 16, shown in Fig. 5. The super has projecting margins 17, intended for the attachment of the covers, and these margins are allowed to project beyond the rollers, as shown in Fig. 4. It should, of course, be understood that, in carrying out this step, the super is on the concave side, so that when the back-lining is applied to the signatures, the super will intervene between the back-lining and the signatures, as illustrated in Fig. 6.

The next step is to coat the back of the signatures, as at 18, with flexible glue, and then to apply the combined super and back-lining, the assembly being as shown in Fig. 6. The fact that the back-lining and super have been previously shaped is a distinct aid in this step, because they have no tendency to spring away from the signatures, as would be the case if the back-lining and super were applied in a flat condition.

Having thus described one specific binding and method of making the same, but without limiting myself thereto, what I claim and desire by Letters Patent to secure is:

1. The art of binding books, characterized by attaching head-bands to a back-lining, and subsequently attaching the back-lining to the book signatures.

2. The art of binding books, characterized by inserting opposite edges of a back-lining

between the plies of folded head-bands, and subsequently attaching the back-lining to the book signatures.

3. The art of binding books, characterized by attaching to a back-lining reinforcements comprising separate head-bands embracing the back-lining and other reinforcements embraced by said head bands, next attaching a super to the back-lining, and next attaching the super to the book signatures.

4. As a new article of manufacture, a back-lining prepared for application to the signatures of a book by having head-bands applied to its opposite edges.

5. As a new article of manufacture, a back-lining prepared for application to the signatures of a book by having head-bands applied to its opposite edges, and by having a super attached to said back-lining.

6. As a new article of manufacture, means prepared for application to the signatures of a book, the same comprising folded head-bands, and a back-lining having opposite marginal portions received between the plies of said head-bands.

7. As a new article of manufacture, means prepared for application to the signatures of a book, the same comprising folded head-bands, a back-lining having opposite marginal portions received between the plies of said head-bands, and reinforcements also received between said plies.

8. As a new article of manufacture, means prepared for application to the signatures of a book, the same comprising an elongated sheet of flexible material, and two strips of flexible material, each folded and receiving in its fold one of the lengthwise margins of said sheet.

9. As a new article of manufacture, means prepared for application to the signatures of a book, the same comprising an elongated sheet of flexible material, two reinforcements extending along opposite lengthwise margins of said sheet, and two strips of flexible material, each folded and receiving in its fold one of the lengthwise margins of said sheet and one of said reinforcements.

10. The art of binding books, characterized by attaching to a back-lining head-bands whose length is approximately equal to the width of the back-lining, and subsequently attaching the back-lining to the book signatures.

11. The art of binding books, characterized by inserting opposite edges of a back-lining between the plies of folded head-bands whose length is approximately equal to the width of the back-lining, and subsequently attaching the back-lining to the book signatures.

12. The art of binding books, characterized by attaching to a back-lining reinforcements comprising separate head-bands embracing the back-lining and other reinforcements embraced by said head-bands, both reinforcements being approximately equal in length to the width of the back-lining, next attaching to the back-lining a super which is wider than said back-lining and projects beyond said reinforcements, and next attaching the super to the book signatures.

13. As a new article of manufacture, means prepared for application to the signatures of a book, the same comprising folded head-bands, and a back-lining having opposite marginal portions received between the plies of said head-band, the length of said head-bands being approximately equal to the width of said back-lining.

14. As a new article of manufacture, means prepared for application to the signatures of a book, the same comprising folded head-bands, a back-lining having opposite marginal portions received between the plies of said head-band, the length of said head-bands being approximately equal to the width of said back-lining, and a super attached to said back-lining between said head-bands and projecting at both edges beyond the edges of said back-lining and beyond the ends of said head-bands.

In testimony whereof, I have signed my name to this specification.

ROY C. BAKER.