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2,396,008

METHOD OF PRODUCING LOOSE-LEAF BINDERS

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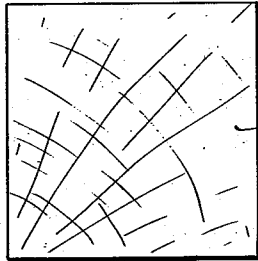


Fig. 2.

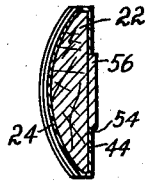


Fig. 6.

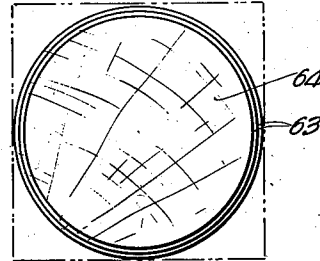


Fig. 3.

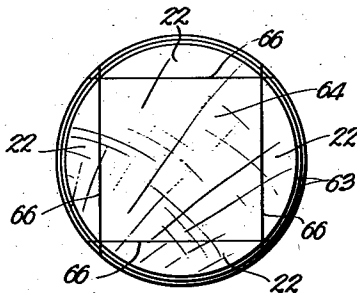


Fig. 4.



Fig. 5.

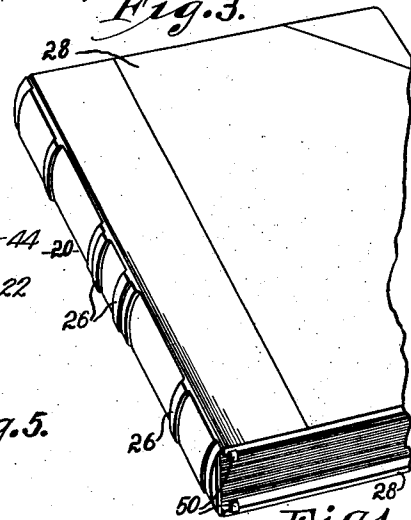


Fig. 1.

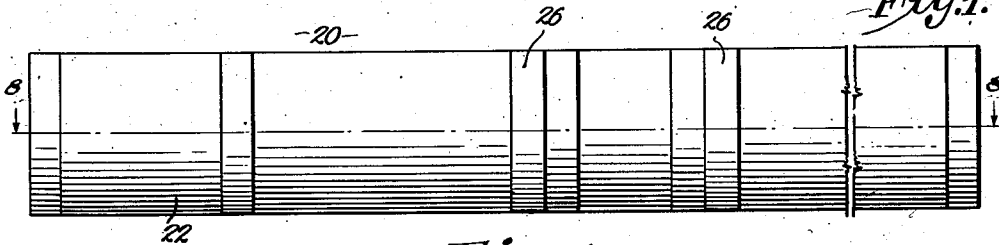


Fig. 7.

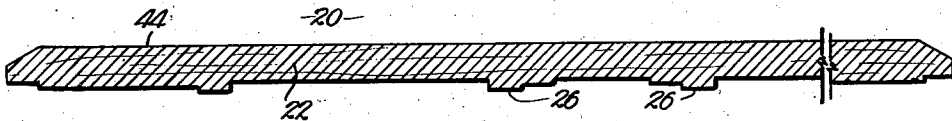


Fig. 8.

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METHOD OF PRODUCING LOOSE-LEAF BINDERS

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1 Claim. (Cl. 144—309)

This invention relates to loose leaf binders of the character employing a number of sheet impaling posts held within the confines of a back and two cover members.

A yet further aim of this invention is to provide a method of easily manufacturing the backs for loose leaf binders from a single block of material, the treatment whereof results in the provision of a number of arcuate hubs on one side of the back member, which hubs are an integral part of the material from which the back is made.

A large number of minor objects of this invention, including the method of forming the unitary back, will appear during the course of the following specification, referring to the accompanying drawing wherein:

Fig. 1 is a perspective view of a post binder having a back member made in accordance with the present invention.

Fig. 2 is an end elevation of the form of material from which a number of back members may be created by following the steps of the method contemplated by this invention.

Fig. 3 is the form of said piece of material prior to longitudinally severing the same.

Fig. 4 illustrates the plane of cut for completing the production of a number of back members from a single piece of material.

Fig. 5 is an end elevational view of the back member after the same has been severed from the piece shown in Figs. 2, 3 and 4.

Fig. 6 is a cross sectional view through the back member after the same has been covered with sheet material during the binding operation.

Fig. 7 is a condensed plan view of the back member; and

Fig. 8 is a longitudinal sectional view through the back member per se, taken on line 8—8 of Fig. 7.

The binder illustrated in the accompanying drawing, is commonly called a "County record book," and is designed for heavy duty, and heretofore, has been constructed principally of steel. Due to the scarcity of this said material and the necessity of maintaining rigidity and durability, certain of the parts may be made of metal and mounted upon elements formed of wood, plastic or similar substances so long as the method of assembly is such as to permit the binder to fulfill the purposes for which it is made.

In producing county record books or post binders of a relatively heavy character, it has heretofore been the practice to provide hubs on the back by affixing to the same a number of separate hub units built up of straw-board, cardboard,

binder's board or even fabric; the back per se has usually been of formed sheet metal to which the said hubs were attached. Heretofore, such binders as form the subject matter of this invention, have included metal hinges and the covers have been of binder's board reinforced at the corners and covered with leather or canvas.

This invention provides a binder, the back and covers whereof are made of wood. In the drawing, the numeral 20 designates the back in its entirety, comprising the back member 22 and its cover 24. A plurality of hubs 26 underlie the covering 24 and are formed as an integral part of member 22, as will presently be described.

The method of forming back member 22 is novel and comprises the steps of treating a single piece of material, the cross sectional contour whereof may be as shown in Fig. 2. In practice a length of wood of suitable dimension is mounted in a lathe for rotation about the longitudinal axis of the material. During rotation, annular ribs 63 are formed on the piece of material 64 as the portions within the dot and dash lines (Fig. 3), are cut away. After hubs 63 are created by grooving the piece of material 64 as needed, the piece 64 is severed longitudinally along lines of cut 66. The back 22 shown in Fig. 5 is thereby separated from piece 64 and has the desired cross sectional configuration with respect to a flat face 44 and an arcuate outer face with arcuate ribs 26 thereon. These arcuate ribs 26 are, of course, sections or portions of the continuous annular rib 63, previously mentioned.

The longitudinal planes of severance should be as shown in Fig. 4 to produce desired shape and a maximum number of backs from each piece of material. These planes of severance are made along two pairs of parallel planes with the planes of severance of one pair intersecting the planes of severance of the remaining pair. The desired flat edge along the longitudinal zones of meeting of the arcuate face and the planar face are thus formed to insure a smooth surface for the binding.

It is conceivable that a number of backs may be made by attaching relatively thin flat pieces of material to a master mandrel and thereafter forming the arcuate ribs thereon, but for speed in production the formation of a plurality of backs from a single piece of material may be accomplished by following the steps just mentioned, after which the back may be quickly covered and used as a part of the binder without waiting for glue or cement to dry as has heretofore been the case.

Having thus described the invention, what is claimed as new and desired to be secured by Letters Patent is:

The method of forming a plurality of back members for loose-leaf binders from a single piece of material which consists in rotating said piece of material about its longitudinal axis while forming annular ribs thereon; and thereafter longitudinally severing the piece of material on

four planes offset from the axis of the piece to remove from the material four back members each having a plurality of arcuate ribs, said planes of severance being made along two pairs of parallel planes, the planes of severance of one pair being made to intersect the planes of severance of the remaining pair thereof.

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