H. J. MEGLEY.

BINDING STRIP.

APPLICATION FILED APR. 12, 1919.

1,377,846. Patented May 10, 1921.

Fig 1

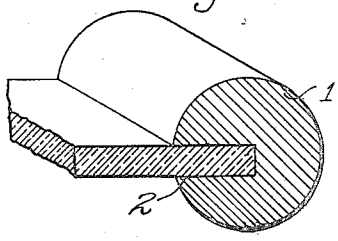


Fig 2

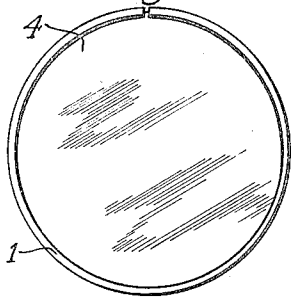


Fig 3

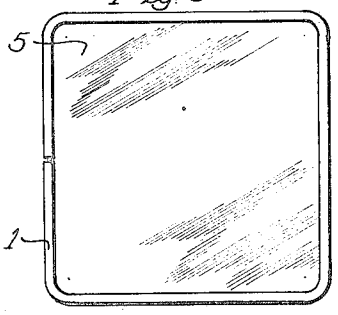


Fig 4

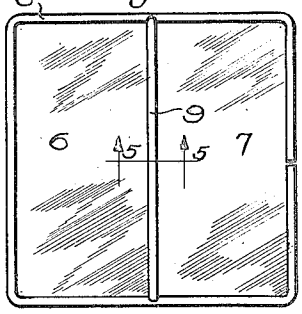


Fig 5

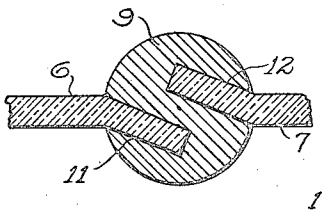


Fig 6

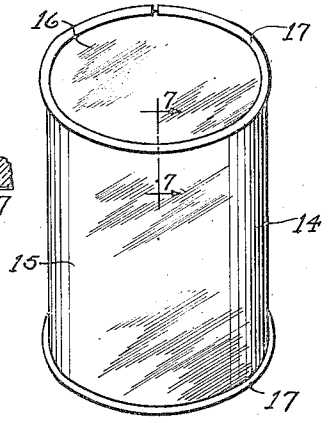


Fig 7

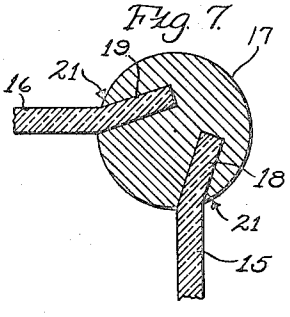


Fig 8

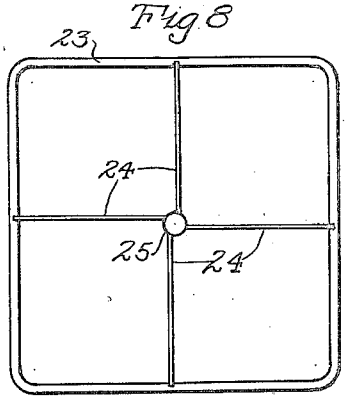


Fig 9

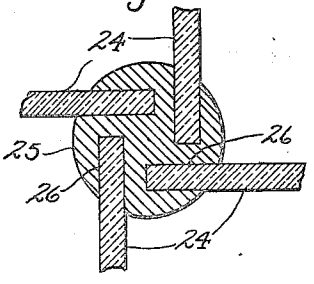
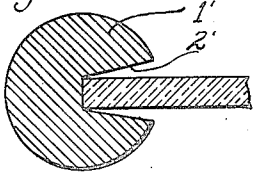


Fig 10



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UNITED STATES PATENT OFFICE.

HARLEY J. MEGLEY, OF CHICAGO, ILLINOIS, ASSIGNOR OF FIFTY PER CENT. TO HIMSELF AND FIFTY PER CENT. TO LEIGH G. NELSON, OF CHICAGO, ILLINOIS.

BINDING-STRIP.

1,377,846. Specification of Letters Patent. Patented May 10, 1921.

Application filed April 12, 1919. Serial No. 289,677.

To all whom it may concern:

Be it known that I, HARLEY J. MEGLEY, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Binding-Strips, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to binding strips.

It is the primary object of my invention to provide an improved and simplified form of strip for binding the free edges of small articles, or for joining the edges of adjoining walls or partitions in the construction of containers and other similar articles. My improved form of binding strip has a practically unlimited field of utility. I shall refer to specific instances of the use of the strip merely for the purpose of illustrating different adaptations thereof, and not with the intention of limiting my invention to any of these uses.

One specific utility of my invention is that of binding the edges of small transparent covers for relish display jars and other receptacles for displaying edibles. I contemplate constructing these transparent covers of celluloid or the like, and to prevent splitting of the edges and to give the cover stiffness against curling, I bind the edges thereof with my improved metallic binding strip.

Another advantageous utility of my invention is that of binding the edges of small celluloid wind shields for airplanes and automobiles, and also of providing framing and mullion strips for celluloid windows.

My invention also has a broad field of utility in the manufacture of cartons and all types of containers constructed of celluloid, fiber board, card board, metal or other suitable material in sheet form where it is desired to join the edges of the material in a simple, inexpensive manner and also to afford stiffness and body to the container.

In the accompanying drawing wherein I have illustrated my improved form of binding strip applied to numerous different articles,

Figure 1 is a perspective view of my binding strip;

Figs. 2, 3 and 4 illustrate different applications thereof;

Fig. 5 is an enlarged sectional view taken on the plane of the line 5—5 of Fig. 4;

Fig. 6 is representative of a carton or any type of container employing my improved binding strip;

Fig. 7 is an enlarged sectional view taken on the plane of the line 7—7 of Fig. 6;

Fig. 8 is a view of a partitioned receptacle;

Fig. 9 is an enlarged sectional view of the central joining strip for joining the intersecting edges of the partitions; and

Fig. 10 is a sectional view of a modified construction of binding strip.

The binding strip 1, which I have illustrated in enlarged section in Fig. 1, preferably consists of a drawn rod or wire composed of flexible, ductile metal. The strip is preferably formed of circular or substantially circular section to obtain the greatest degree of tractability for shaping and bending in order to conform to the perimeter of the surface being bound. Heretofore, binding strips have been constructed of channel section, and of other similarly shaped sections. These sectional formations are obviously not tractable to sharp bending and shaping, as there is no place for the surplus metal to flow, and as a consequence the strip is buckled and strained at the bend. This tractability to shaping and bending is one of the distinguishing features of my improved form of binding strip, whereby I am able to use it in the construction of cartons and numerous articles, where sharp bending of the strip prohibits the use of channel or similarly shaped sections. I refer to the sectional formation of my improved form of binding strip as being substantially circular, by which I intend to include similar tractable sections such as polygonal sections of symmetrical or unsymmetrical formation.

Where the strip is primarily intended for binding a free edge, it is slotted longitudinally by a single radial slot as indicated at 2. The slot is preferably of a depth slightly greater than the radius of the strip and in width is less than one fourth of the diameter of the strip so as to retain sufficient metal in the strip for bending. The strip is shaped to the outline of the article to be bound, and the slot is then passed over the edge of the article and the strip punched to compress the sides of the slot into firm engagement with the material.

In Fig. 2 I have illustrated a cover for relish jars, and the like, to which my improved binding strip has been applied. The cover preferably consists of a circular disk of celluloid 4. The binding strip 1 is first shaped into the circular outline of the disk, and the strip and disk are then placed in a tapering die where the binding strip is contracted closely about the circumference of the disk with the edges of the disk engaging in the slot in the strip 1. The strip is then punched to compress the sides of the slot into engagement with the celluloid. By reason of the fact that the binding strip is firmly secured to the disk 4 it is unnecessary to join the ends of the strip.

Fig. 3 illustrates a square cover member composed of the square pane of celluloid 5, the edges of which are faced by the binding strip 1. It will be understood that these two latter cover members are merely representative of any panel, tray or the like, the edges of which it is desired to finish with a binding strip.

Fig. 4 is representative of another use of my improved binding or joining strip, which use is of utility in a variety of situations. The two panes 6 and 7 can be considered as transparent panes in a picture frame, or as panes in a small celluloid window or the like. The panes are contained in an outside frame 8 which may be constructed of my improved binding strip as hereinbefore described. The adjoining edges of the two panes are joined by a center strip or mullion 9 which, as indicated in section in Fig. 5, consists of my improved binding strip modified by the provision of two diagonal slots 11 and 12. The slots 11 and 12 are cut diagonally across the section of the strip to leave sufficient metal between the slots and still have the slots of the desired depth. After the edges of the panes 6 and 7 have been inserted in the slots 11 and 12 the strip 9 is put under pressure to compress the sides of the slots into engagement with the edges of the panes.

In Fig. 6 I have illustrated one particular utility of my improved joining strip in the construction of containers and receptacles of various kinds. The container 14 is of cylindrical form and is constructed of the main cylindrical portion 15 and the head or end 16. The head 16 is secured in the end of the container by the circular joining strip 17 which, as indicated in enlarged section in Fig. 7, is provided with a diagonal slot 18 cut in the under side of the strip, and a second diagonal slot 19 cut in the inner side of the strip. The slot 18 receives the upper edge of the annular wall 15, and the slot 19 receives the circular perimeter of the head 16. The slots may be compressed upon the material by pressure applied to the strip 17 from both the inside and outside of the container, or by pressure applied at the points 21—21 whereby the container may be closed and completely sealed from the outside. The ends of the joining strip 17 may be connected by soldering or by any other preferred means. The stiffening characteristic of my improved joining strip, acting as a supporting frame, is of particular advantage in the commercial production of cheap cartons as it permits the use of an inexpensive pliable board for the construction of the cartons.

In Fig. 8 I have shown a further utility of my invention for the joining of a plurality of intersecting partitions or the like. The container 23 is divided into four compartments by the four partitions 24—24. These partitions intersect at the center of the container where they are joined together by a joining strip 25, which is illustrated in section in Fig. 9. The strip 25 has a plurality of slots cut therein about the circumference of the strip, one for each of the partitions 24. It will be noted that the slots 26 are each offset from the diametrical line of the strip, successively about the circumference of the strip. This arrangement permits of a greater depth of slot without reducing the extent of metal between the slots. It will also be noted that the slots lie in the plane of the partitions and therefore do not require bending of the edges thereof. This construction is of utility for the joining of panels or sections of fragile material which will not permit of bending of the edges thereof. In such cases cushioning strips might be inserted in the slots to line the same and prevent fracture of the panels or sections.

In Fig. 10 I have illustrated a modified formation of binding strip, differing from the previous forms in that the slot 2′ is of tapering formation rather than rectangular. The edge of the article to be bound is freely inserted into this slot and the strip is then stamped to compress the sides of the slot upon the material as previously described.

From the nature of my invention it will be apparent that it is susceptible to extensive modifications and uses but I intend that these shall come within the spirit and scope of the appended claims.

I claim:

1. A cover for a receptacle comprising a round drawn wire having a relatively narrow slot cut longitudinally in the body thereof and a sheet of flexible non-metallic material of substantially uniform thickness lying in the slot, the sides of the slot being crimped upon the sides of the sheet, said slot being of a width substantially equal to the thickness of a sheet before crimping.

2. A receptacle having side and end walls comprising sheets of flexible non-metallic material of substantially uniform thickness,

said walls being joined by a round drawn wire having a pair of relatively narrow slots cut longitudinally in the body thereof, the side wall of said receptacle lying in one of said slots, the end wall of said receptacle lying in the other of said slots, the sides of the slots being crimped upon the sides of the walls, said slots being of a width substantially equal to the thickness of the associated wall before crimping.

In witness whereof I hereunto subscribe my name this 8th day of April, 1919.

HARLEY J. MEGLEY.