E. H. ANGIER.

BARREL COVER.

APPLICATION FILED AUG. 12, 1918.

1,337,188. Patented Apr. 20, 1920.

Fig. 1.

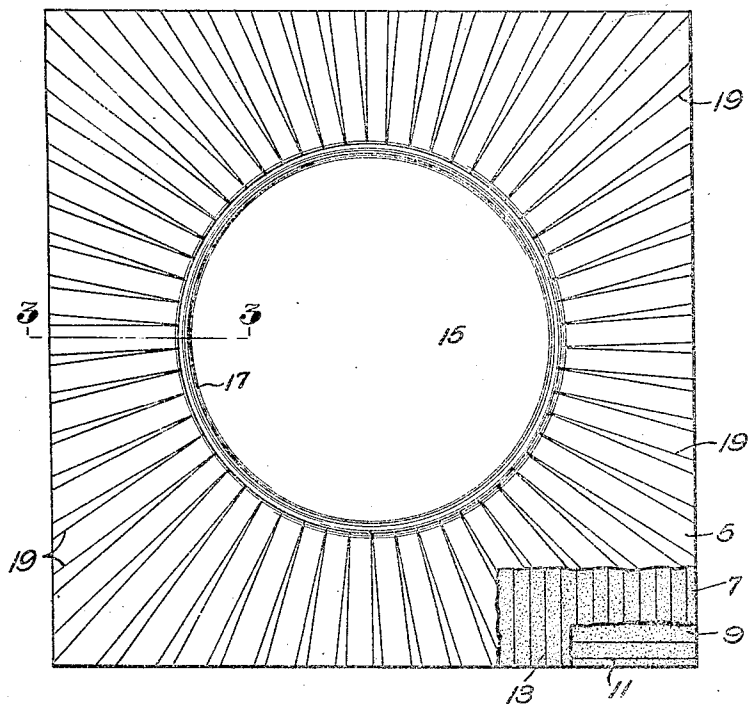


Fig. 2.

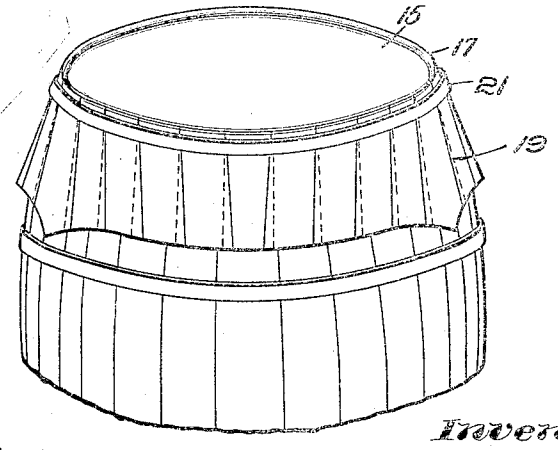
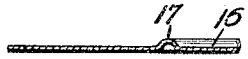


Fig. 3.



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UNITED STATES PATENT OFFICE.

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BARREL-COVER.

1,337,188. Specification of Letters Patent. Patented Apr. 20, 1920.

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To all whom it may concern:

Be it known that I, EDWARD H. ANGIER, a citizen of the United States, and a resident of Framingham, in the county of Middlesex and Commonwealth of Massachusetts, have invented an Improvement in Barrel-Covers, of which the following description, in connection with the accompanying drawings, is a specification, like characters on the drawings representing like parts.

It is customary at the present time to close many barrels or like containers by means of a sheet of flexible material, usually burlap or matting, which is placed over the same and secured by the top hoop. My invention aims to provide an improved device which may be used in a similar manner.

In the accompanying drawings I have shown one illustrative embodiment of my invention and therein:

Figure 1 is a plan view of the barrel cover, partly broken away;

Fig. 2, a perspective of a portion of a barrel, with the cover fitted in place; and

Fig. 3, a section on the line 3—3 of Fig. 1, no attempt being made to indicate the laminated structure of the material.

In preparing my barrel cover, I preferably utilize a material formed, as indicated in Fig. 1, of three sheets 5, 7 and 9 of suitable paper secured together by layers of waterproof adhesive, as indicated by the stippling. This adhesive is preferably mineral pitch. Reinforcing strands may be embedded in these layers, the strands 11 between the sheets 7 and 9 extending across the sheets from right to left in the figure in spaced relation, and the strands 13 between the sheets 5 and 7 extending across the sheets from top to bottom and therefore crossing the direction of the strands of the first set. This material may be and preferably is prepared in the manner disclosed in the patent to William M. Wheildon, No. 1,269,140, June 11, 1918. The material so prepared is waterproof, thoroughly reinforced by the textile threads, firmly secured together by the layers of adhesive and very flexible because it may be built up to a given thickness from a number of comparatively thin sheets. If pitch is used for the waterproofing adhesive, it will permit a certain amount of give between the sheets, promoting the flexibility of the compound material. This is because, while the sheets are secured together firmly, the pitch does not set in a hard and brittle manner as do some adhesives, but remains somewhat lentous.

In preparing a barrel cover in accordance with my invention, I take a sheet of material, preferably formed as described, of a convenient size larger than the top of the barrel which it is intended to cover. The sheet may be, as herein shown, a square section cut from a web of the compound material. The central portion 15 of this sheet is adapted to fit over the barrel head and conveniently may be marked off from the remainder of the sheet by a crease 17, being preferably (as shown in Fig. 3) a so-called bump crease formed by embossing the material without removing or rupturing any of the fibers thereof. The formation of this crease permits the cover to be quickly and accurately centered on the barrel and facilitates the folding over of the marginal portions of the sheet.

The marginal portions of the sheet externally of the central portion 15 are preferably treated so as to soften this portion of the sheet to render it relatively flaccid. For this purpose the form of the paper may be suitably broken up, preferably without substantial rupture of the fibers however, as for example, by crumpling or plaiting. In the illustrated form of the invention I have shown the marginal portions of the sheet formed into more or less regular scores or creasings 19 which can conveniently be formed by means of a suitable die.

When the marginal portions of the sheet are rendered flexible in this manner, they will be more readily bent over the chines of the barrel to the form indicated in Fig. 2. In applying a cover constructed as herein described, it is to be expected that the user will place the sheet over the mouth of the barrel, centering the same (as he may conveniently do by means of the bump crease 17) and that he will then apply the top hoop 21 and drive it down over the chines of the barrel, thus turning down the marginal portions of the sheet about the same. This proceeding, if practised upon an ordinary heavy and comparatively stiff sheet of paper, would naturally tend to rupture the same

at the barrel chines. The flexibility of the material described tends to prevent this and the weakening of the marginal portions of the sheet, as by means of the scores 19, permits them to move almost automatically into cup-shaped form and fold over the sides of the barrel without placing a breaking strain on the sheet. The bump crease 17 if used, also coöperates to this end as it forms a sort of hollow ridge at the margin of the barrel when the sheet is folded over which serves as a cushion and protects the material from the initial cutting strain and friction of the hoop as it is applied and driven down. The reinforcing strands also act to take up the initial frictional strain of the barrel hoop as it is driven in place and thus prevent breaking of the paper sheets.

It will be seen from the above description that I have provided a form of barrel cover which may be quickly and conveniently applied and which will have all the advantages of burlap and the added advantages of waterproofness and cheaper cost. I attain these desirable results in greatest degree by the combination of features described and their coöperation. By utilizing paper, and in particular paper combined with cementing layers of pitch, I provide a cover which is imperforate and impervious. While the compound material as described is desirably flexible, partaking somewhat of the qualities of leather rather than those of paper, it nevertheless to a lesser degree partakes of the rupturable brittleness of paper when sharply bent and strained between two closely adjacent points. However, by giving the marginal portion of the sheet a formation such as described, it will readily draw into form when the hoop is clamped down over the same without subjecting the material to such a strain as would impair the integrity thereof.

Having explained in detail the embodiment of my invention chosen for purposes of illustration, what I claim as new and desire to secure by Letters Patent is:

1. A cover for barrels or the like comprising a laminated sheet of paper layers united by lentous adhesive having a central portion corresponding to the mouth of the barrel and a marginal portion creased to facilitate the gathering of the same over the sides of the barrel.

2. A cover as described in claim 1 wherein reinforcing strands are embedded in the adhesive.

3. A cover for barrels or the like comprising a sheet of a size to cover the mouth of the barrel and extend over the sides thereof, said sheet comprising a plurality of paper layers united by lentous adhesive and having substantially radial creases facilitating the gathering of the marginal portion over the sides of the barrel.

4. A cover for barrels or the like comprising a sheet of paper having a central portion to fit the mouth of the barrel and a marginal portion crumpled to impair slightly the fibrous structure thereof and render the same relatively flaccid.

5. A cover for barrels or the like comprising a sheet of paper having a marginal portion provided with radiating creases whereby to facilitate gathering of the same over the sides of the barrel.

6. A cover for barrels or the like comprising a sheet of paper of a size to cover the mouth and extend over the sides of the barrel and having a circular embossment corresponding to the mouth thereof.

7. A cover for barrels or the like comprising a sheet of paper having a central portion corresponding to the mouth of the barrel, having a peripheral embossment and a crumpled marginal portion.

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

EDWARD H. ANGIER.