W. J. L'ENGLE.

TURPENTINE CUP.

APPLICATION FILED JUNE 25, 1910.

1,011,823. Patented Dec. 12, 1911.

Fig. 1.

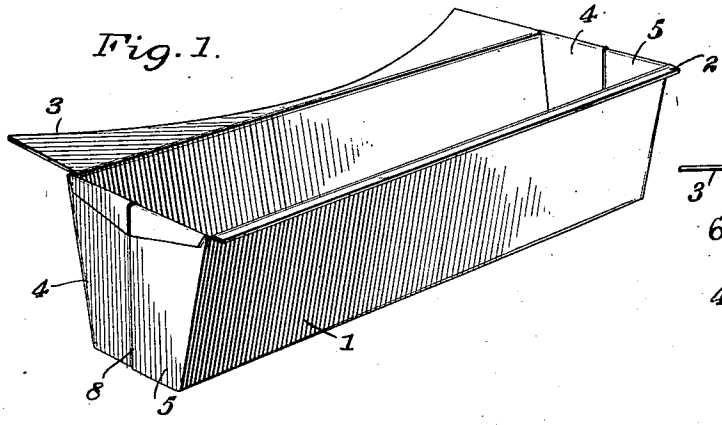


Fig. 2.

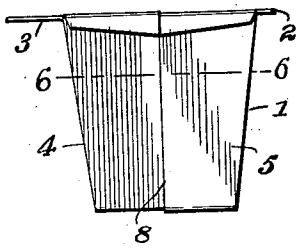
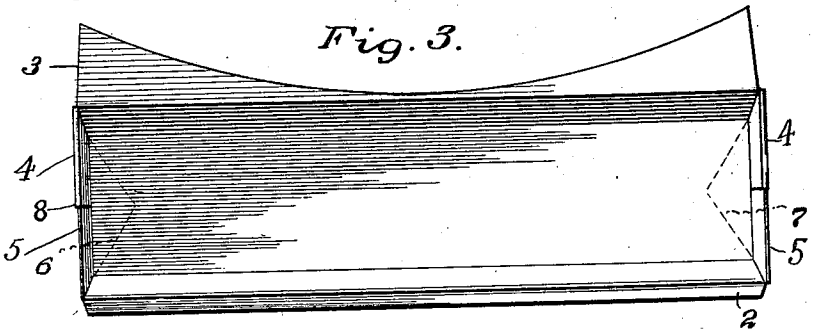


Fig. 3.



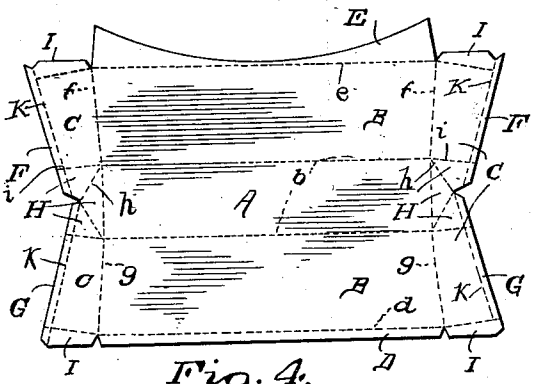


Fig. 4.

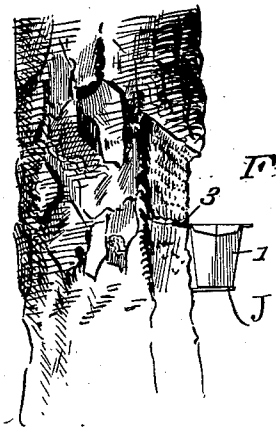


Fig. 5.

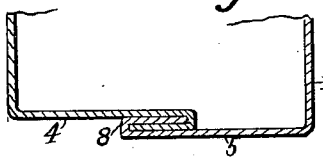


Fig. 6.

Witnesses

J. Adolph Bishop.

Otto T. Stanley.

Inventor

William J. L'Engle.

By Knight Bros

his Attorney

UNITED STATES PATENT OFFICE.

WILLIAM J. L'ENGLE, OF NEW ORLEANS, LOUISIANA.

TURPENTINE-CUP.

1,011,823. Specification of Letters Patent. **Patented Dec. 12, 1911.**

Application filed June 25, 1910. Serial No. 568,924.

To all whom it may concern:

Be it known that I, WILLIAM J. L'ENGLE, a citizen of the United States, residing at New Orleans, in the parish of Orleans and State of Louisiana, have invented certain new and useful Improvements in Turpentine-Cups, of which the following is a specification.

In the drawing, Figure 1 is a perspective view of a sap cup embodying my invention; Fig. 2 is an end elevation of the same; Fig. 3 is a top plan view of the cup; Fig. 4 is a plan view of the blank from which the cup is constructed, and Fig. 5 is a view of a tree with my improved cup attached thereto. Fig. 6 is a section on the line 6—6 of Fig. 2.

My improved sap or turpentine cup is made from one piece of metal or any other suitable material with a minimum number of folds or bends. It is important in cups of this character that the folds or bends, when the cup is constructed of metal, be as few as possible, inasmuch as it has been found that the metal has a tendency to flake by reason of the sharp fold or bend, which results in the bend rusting very quickly rendering the cup useless because the iron rust mingles with the sap making it very red or dark, thus reducing its market value; the amber or natural-colored sap makes the lightest rosin which always brings the highest price in the market. Therefore, it is very desirable to protect the sap from the iron rust.

1 represents a turpentine cup constructed according to my invention of a shape which will permit nesting of a series of cups for the purpose of shipping and handling. The cup is constructed from one piece of any suitable material, such as sheet steel, iron, either galvanized in the sheet before cutting out of the box or galvanized after the box is bent up, or a black metal covered with suitable enamel, or a water proof fibrous material. At the upper edge of the front side of the cup is a flange 2 extending the full length of the cup. On the rear side is a flange 3, the outer edge of which is concaved to conform to the general contour of a tree.

4 and 5 are interlocking flaps folded down on the end walls of the box, and 6 and 7 are interlocking flaps folded on the bottom of the cup.

8 is an interlocking seam at each end of the cup.

Referring to the blank from which the box is formed, A is the bottom of the box, B the side walls thereof, C the end walls thereof, D the flange at the top edge of the front wall and E the flange at the top edge of the rear wall of the box.

F, F, are the portions to be folded to form one member of the seam at the ends of the box, and G, G are portions to form the other member of the seam at the ends of the box. The portions H, H are portions which form the flap folded on the bottom of the box. The portions I constitute the fold at the top of the end walls of the box. It will be noticed from the drawing that the seam members F are wider than the seam members G. The reason for this is that the fold G is made on the center line of the end of the box, while the folds F are made beyond the center line of the completed box, so that the extreme edge of the fold F will fit snugly in the fold G at the center line of the end of the box.

The box may be folded or struck up by any suitable machinery. Preferably, a die is placed on the bottom portion A, after which the side walls B are bent up on the lines *b* and the top side flanges are formed by the metal being bent on the lines *e* and *d*. The members of the end flanges are formed by the metal being bent on the lines *f*, *g*, and the bottom flap is formed by the metal being bent on the lines *h*, while the end flaps at the top edge of the end walls are formed by the metal being rebent on the line *i*. After the side walls are bent up as described, the end walls are rebent on the line *k*. It will be noted from Fig. 4 that the fold *k* of the end wall is not at right angle to the fold *b*. I incline this bend from the right angle in order to give a certain amount of slope to the end of the box, thus adapting it to be nested with a series of boxes for the purpose of minimizing space in shipping and handling. The ends of the box are formed by bending the blank along the lines *k*, the seams having already been formed by bending the metal along the lines *f*, *g*, and as soon as the members of the seams are brought into juxtaposition, they are interlocked. At this time, a suitable device bends or crimps the metal of the end walls along the lines *i*, whereby the portions I are bent or folded snugly against the outer face of the end walls. The portions H are now folded or bent along the lines *h* against the bottom of the cup.

From the above, it will be seen that the

only rebend of the metal inside of the cup is that along the line *k* or seam 8 at each end of the cup, thus reducing to a minimum exposure of rebent portions of metal to the sap, thereby practically eliminating danger of discoloring the sap.

From the blank, it will be observed that I am enabled to manufacture a sap cup, by reason of the particular folds without waste of material, thus reducing the cost of the cup very materially, to say nothing of reducing the number of exposed bends of metal to a minimum.

The flange 3 at the top of the rear wall of the cup serves as an apron to conduct the sap into the cup. A suitable cut is made in the tree by the instruments usually employed for that purpose, as shown in Fig. 5, into which the flange 3 is driven, thereby sustaining the cup on the tree. The cup is further sustained and held in position on the tree by means of the usual sustaining wooden peg J. By the apron or flange 3, I am enabled to dispense with the usual apron employed in sap gathering, thus again reducing expense in this line of business. In this connection, I will explain that it is customary to use with the cups heretofore universally used, a separate apron driven into the tree immediately above the cup to conduct the sap into the cup.

The cup may, if it is found desirable, be constructed of corrugated metal or portions of the box may be corrugated to give additional strength or rigidity to the cup. This corrugation may be formed in the metal before the blank is bent up or it may be formed in the walls of the cup after it is constructed.

What I claim and desire to secure by Letters Patent is:—

A blank for a turpentine cup comprising a single piece of material, a flange on one edge of the blank having a concaved edge, a straight flange on the diametrically opposite edge of the blank, end portions, two of which are of greater width than the other two, flap portions connecting the end portions and flap portions at the top of each end portion, the edges of the flap portions and end portions having extensions to be rebent to form a seam, which when the blank is folded to form the cup, lock the portions together, whereby a single seam of rebent metal is exposed on the interior of the cup at each end thereof.

The foregoing specification signed at Washington, District of Columbia, this 21st day of May, 1910.

WILLIAM J. L'ENGLE.

In presence of two witnesses:
EDWIN S. CLARKSON,
IDA T. STANLEY.