No. 729,355.

A. B. KILPATRICK. SAP SPOUT.

APPLICATION FILED FEB. 5, 1903.

NO MODEL.

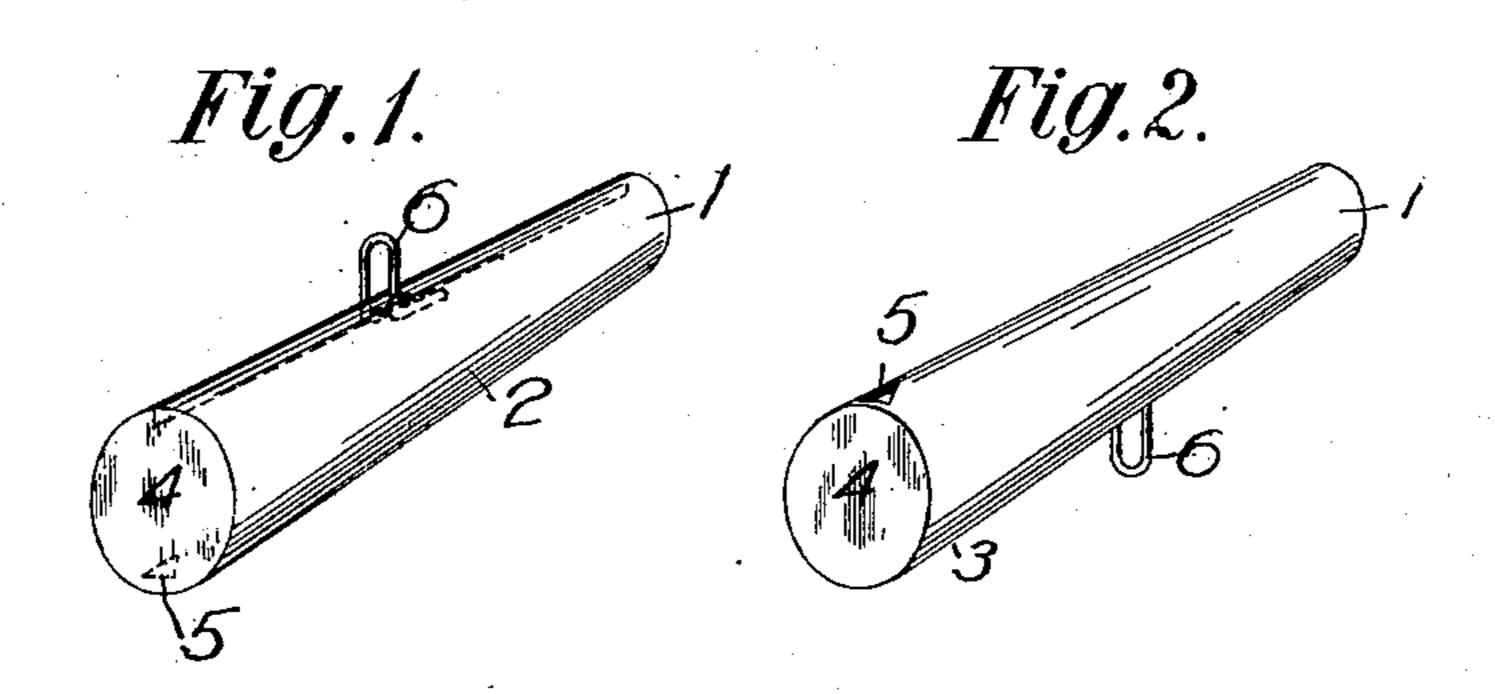


Fig.3.

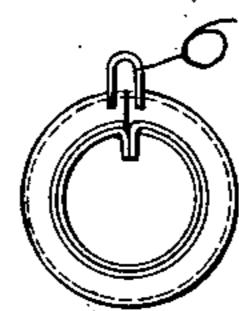
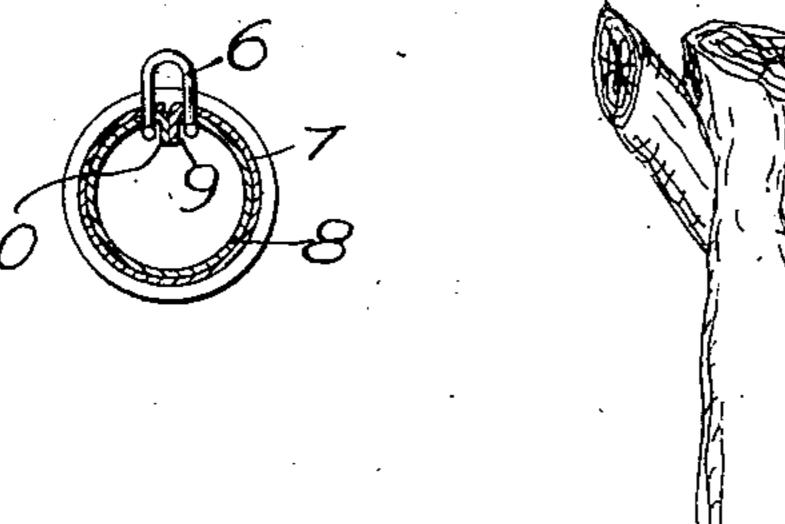
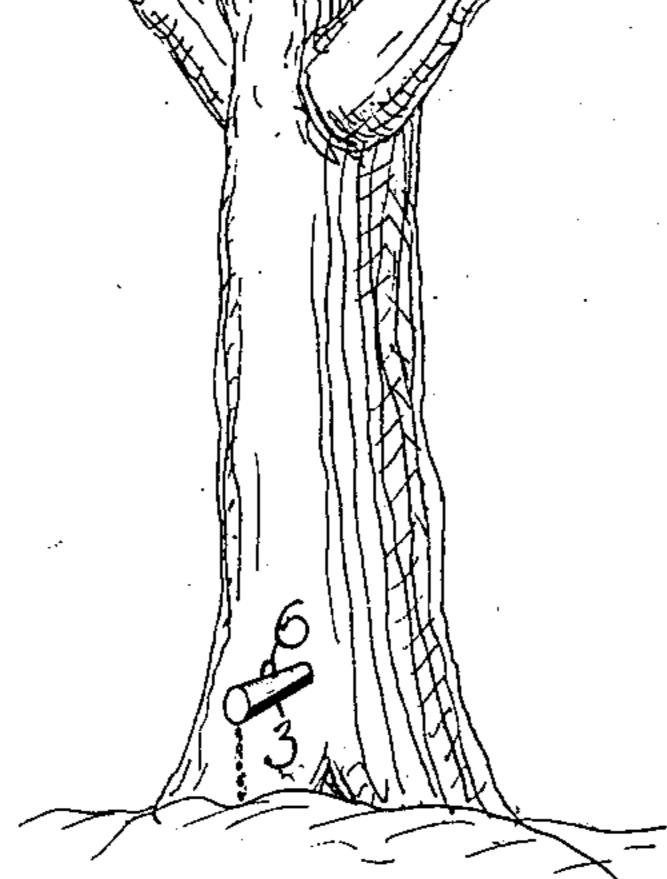


Fig.5.







Witnesses Frankforstentton

Inventor A.B.Kilpatrick by H.Corneys Allorneys

United States Patent Office.

ALEXANDER B. KILPATRICK, OF WARREN, OHIO.

SAP-SPOUT.

SPECIFICATION forming part of Letters Patent No. 729,355, dated May 26, 1903.

Application filed February 5, 1903. Serial No. 142,056. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER B. KILPAT-RICK, a citizen of the United States of America, residing at Warren, in the county of Trum-5 bull and State of Ohio, have invented certain new and useful Improvements in Sap-Spouts, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in sap-spouts, such as are employed to receive the sap from maple-trees and conduct the same from the opening which is bored in the tree to a suitable recep-

I; tacle provided to receive the same.

The object of the invention is to construct a sap-spout with a closed outer end, whereby the wind blowing against the outer end of the spout may not enter the same, which al-20 ways tends to force the sap back into the tree and prevent the free and ready flow thereof. Where the sap is discharged from the end of the sap-spout, the wind has an uninterrupted entrance into the spout and tends to ma-25 terially retard the flow of the sap; furthermore, the sap is in no wise protected from chill during the night and ice frequently forms in the opening or bore in the tree, consequently preventing the flow of the sapuntil 30 this ice has been melted. My invention obviates these difficulties, as it not only closes the entrance to the spout against wind, but protects the sap against freezing in the spout or opening in the tree unless during a very 35 low temperature.

In describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification, and wherein like numerals of reference indicate to like parts throughout the several views, in

which—

Figure 1 is a detail perspective view of the sap-spout constructed in accordance with my invention. Fig. 2 is an inverted perspective view of the same. Fig. 3 is a rear end elevation of a modified construction. Fig. 4 is a perspective view showing the spout in position in the trunk of the tree. Fig. 5 is a cross-sectional view of a modified construction.

My improved sap-spout is preferably made 50 from a single piece of sheet metal, which is drawn or rolled into tubular form and is tapered from the outer to the inner end, whereby the inner end 1 of the tubular spout 2 is of considerably less diameter than the outer end 55 3. The edges of the metal where the spout is made of a single piece of material are brought together and secured, either by interlocking the same, soldering, or any other approved means. The spout is closed at its 60 outer end by the head or disk 4, which may be soldered to the tubular spout or otherwise suitably secured thereto. The end 1 of the spout is adapted to be inserted in the bore or opening made therefor in the tree-trunk, and 65 the spout, being tapered, it wedges securely in the said bore or opening. An outlet-port 5 is made in the underneath face of the sapspout adjacent to the outer or closed end thereof. I preferably provide the spout with 70 a hook or projection 6 on the upper face, over which the bail of the pail or other vessel to receive the sap may be engaged. I may form the spout in the manner shown in Figs. 3 and 5, wherein I employ two sheets of metal 7 and 75 These sheets of metal are rolled in the tapering tubular form, the same as shown in Figs. 1 and 2, the sheet 7 having an inturned lip or flange 9 at one edge and the sheet 8 having an inturned lip or flange 10, which 80 abuts against the lip or flange 9. The solder may be run along the seam thus formed, if desired, though in both this construction and in the single-tube construction shown in Figs. 1 and 2 the hook 6, which is usually made in 85 the form of a staple, serves to bind the edges of the blank together. This double wall or thickness of the body makes the same of considerable strength, whereby it may be firmly driven into the opening or bore of the tree 90 and will sustain a considerable weight.

It will be noted that various changes may be made in the details of construction without departing from the general spirit of my invention.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A device of the type set forth comprising a tapering tubular body open at one end, and provided with an opening in its walls near the larger end thereof, a disk closing the larger end of the body and a hook centrally mounted on the body, substantially as described.

In testimony whereof I affix my signature in the presence of two witnesses.

ALEXANDER B. KILPATRICK.

Witnesses:

W. E. TUTTLE,

W. B. KILPATRICK.