

T. G. HINTZ.
Sap-Spout.

No. 215,220.

Patented May 13, 1879.

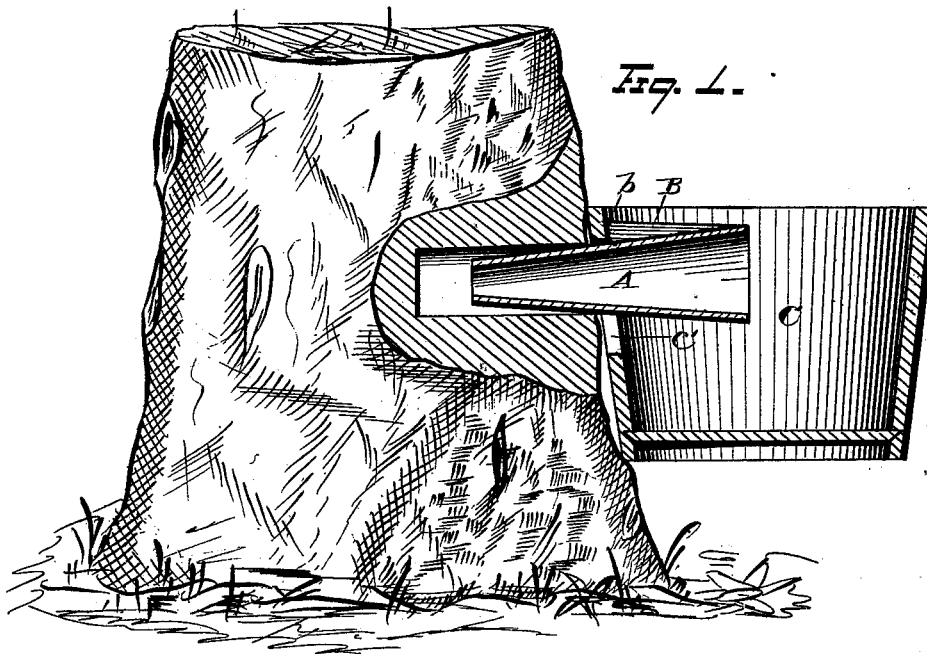


Fig. 2.

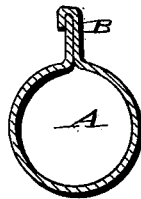
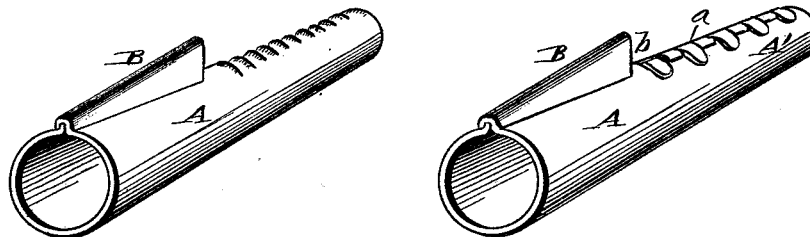
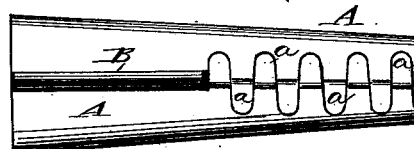


Fig. 3.



Fig. 4.



WITNESSES
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IMPROVEMENT IN SAP-SPOUTS.

Specification forming part of Letters Patent No. **215,220**, dated May 13, 1879; application filed April 2, 1879.

To all whom it may concern:

Be it known that I, THEODORE G. HINTZ, of Chagrin Falls, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Sap-Spouts; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to sap-spouts; and consists in a metallic funnel of conical form, provided with a rib along its upper edge, back of which and between its end and the tree a sap-bucket with a suitable hole in its side may be suspended.

In the drawings, Figure 1 represents a longitudinal central section of my improved sap-spout with a sap-bucket suspended therefrom. Fig. 2 represents a separate view, in perspective, of one of my sap-spouts, made of tin. Fig. 3 shows cross-sectional views through the same. Fig. 4 is a plan view.

A represents the body of my improved spout. It is made in conical form, because in this shape it will come to a firm bearing within the tree, and at the same time permit the sap to escape around those portions not in contact with the sides of the hole into which it is driven.

This sap-spout may be made of any suitable material, either wood or metal; but I prefer that it shall be made of metal, and in practice I prefer to make it of tin, cut to any suitable pattern and bent into funnel form.

B is a rib formed upon the upper edge, and extending backward to a point intermediate between the two ends of the spout. This rib serves to stiffen the spout, and especially is this so when the spout is made of tin. Moreover, that end of it toward the small end of the spout forms a shoulder, *b*, for securely holding a bucket, as shown in the drawings.

The portion 'A' of the spout, which is designed to enter the tree, may be smooth; or it

may be provided with transverse ribs or grooves, so that as the spout is driven into the hole prepared for its reception the fibers of the wood setting into the grooves or back of the ribs will prevent the spout from being readily withdrawn. When, however, the sap-spout is made of tin, lips *a* may be left upon the opposite edges, so that when the edges are brought together these lips *a* will interlock with each other, and, when pressed down close upon the surface, will present the appearance shown in the drawings, and constitute irregularities which will serve the purpose of transverse ribs or grooves. The rib B, especially upon the tin spout, serves also the purpose of preventing any liability to buckle as the spout is driven into the tree.

The operation of this device is as follows: A suitable hole having been bored into the tree, the small end of the spout is entered, and the spout driven in until it comes to a snug bearing. A bucket, C, provided with a hole, *c'*, may then be slipped over the spout until it drops behind the shoulder *b*.

By providing the edges with the lips *a*, made to interlock, as shown, the edges themselves are thereby held, when the sap-spout is driven into the tree, against overlapping—a difficulty to which it might be liable in case it were made with the edges simply abutting each other and not interlocking, as shown.

What I claim is—

1. A sap-spout provided with the rib which strengthens the same, and serves as a support for the pail, substantially as set forth.

2. A conical sap-spout provided with a rib, B, and transverse grooves or ribs along the entering portion, substantially as and for the purposes described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

THEODORE G. HINTZ.

Witnesses:

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W. E. DONNELLY.