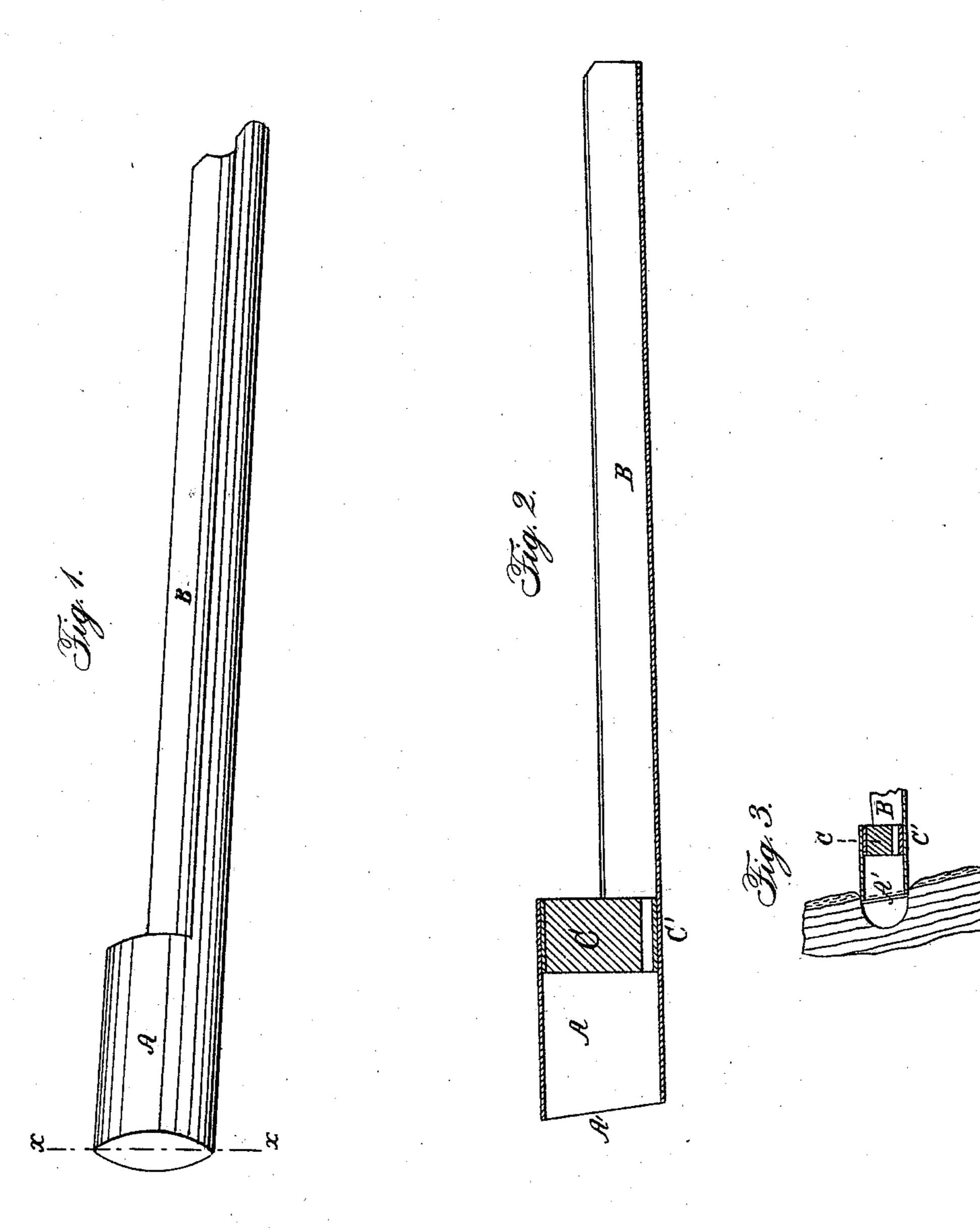
C. S. CURTIS.

Sap-Spout.

No. 42,252.

Patented Apr. 5, 1864.



Witnesses:

G.Br.ainerd. WABarridge. inventor.

Corroin S. Curtis

## United States Patent Office.

CORWIN S. CURTIS, OF FARMINGTON, OHIO, ASSIGNOR TO HIMSELF AND L. B. WOLCOTT, OF SAME PLACE.

## SAP-CONDUCTOR.

Specification forming part of Letters Patent No. 42,252, dated April 5, 1864.

To all whom it may concern:

Be it known that I, Corwin S. Curtis, of Farmington, in the county of Trumbull and State of Ohio, have invented certain new and useful Improvements in Sap-Conductors; and I do hereby declare that the following is a full and complete description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view, and Fig. 2 is a longitudinal section in line of x x, Fig. 1.

Like letters refer to like parts.

The nature of this invention relates to such a construction of a sap-conductor that the incision or cut in the tree is protected from the action of the atmosphere, thus preventing the pores from becoming dried, and at the same time offering no obstruction to the flow of the sap, while its attachment to the tree causes no additional wound in the sap-wood. A still further advantage is found in the readiness with which the incision peels on removing the conductor, as the shallowness of the incision leaves no opportunity for the accumulation or retention of moisture in the wood of the tree. I make the conductor of galvanized sheet iron, the section A being in the form of a hollow cylinder. The end A' is slightly oblique, as shown in Fig. 2, so that when it is placed in contact with a flat vertical surface the whole will incline downward, as shown in Fig.1. The section B is in the form of a half-cylinder, forming a conductor about eight inches in length for the conveyance of the sap into the receiving-vessel.

C represents a plug, of wood or other sub-

stance, which is driven into the section A, as shown in Fig. 2, which it accurately fits, but has at the lower side a small channel or groove, C', to allow the sap to flow into the section B. The end A' is made sharp, so that it can be driven into the firm portion of the bark of the tree.

Any other metal or material other than galvanized iron may be used in the structure of this sap-conductor, but I consider the metal

named the most economical.

In using this conductor I first flatten a suitable place on the side of the tree by removing with a sharp tool the rough bark, then with a suitably-formed bit or gouge I make an incision through the live bark, and through the last two years' growth of timber, of a concave form, similar to that shown in Fig. 3, which shows a vertical section of the same. The end A' of the conductor is then placed concentric with this concave incision, so as to completely encircle the same, and with a light mallet driven into the live bark, but not through it. By this means the incision is protected from the action of the atmosphere, and is preserved from becoming dry.

What I claim as my improvement, and de-

sire to secure by Letters Patent, is-

A metallic sap-conductor having an entire oblique lip, A', plug C, channel C', and conductor B, the several parts being constructed and arranged as and for the purpose specified.

CORWIN S. CURTIS.

Witnesses:

J. BRAINERD, W. H. BURRIDGE.