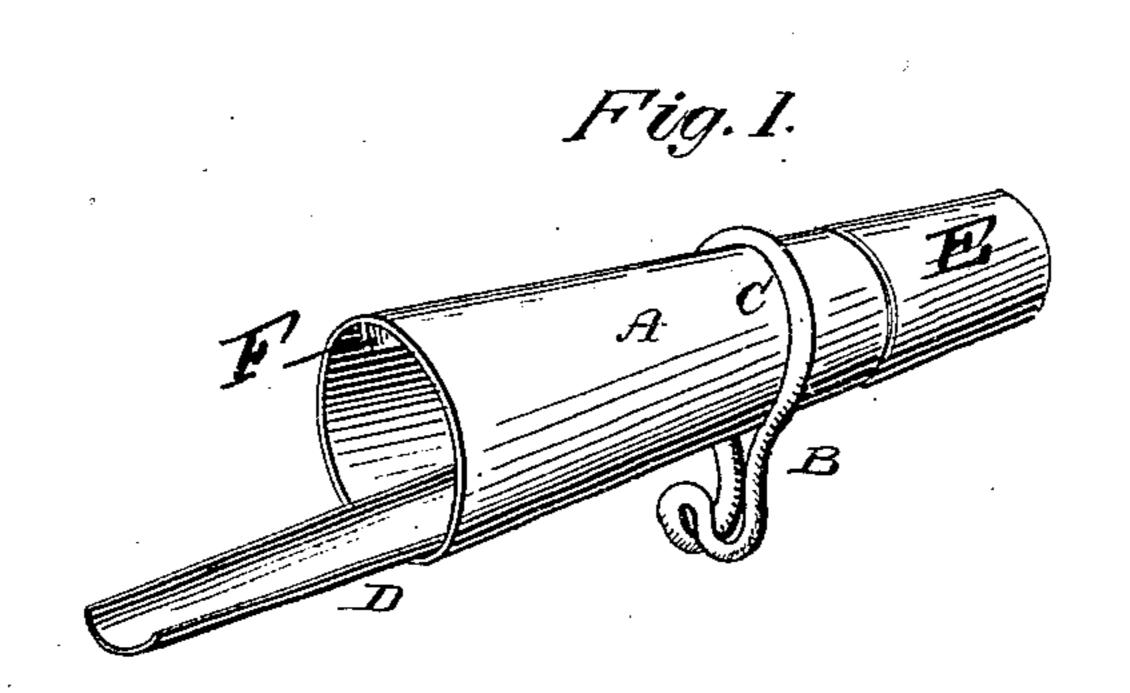
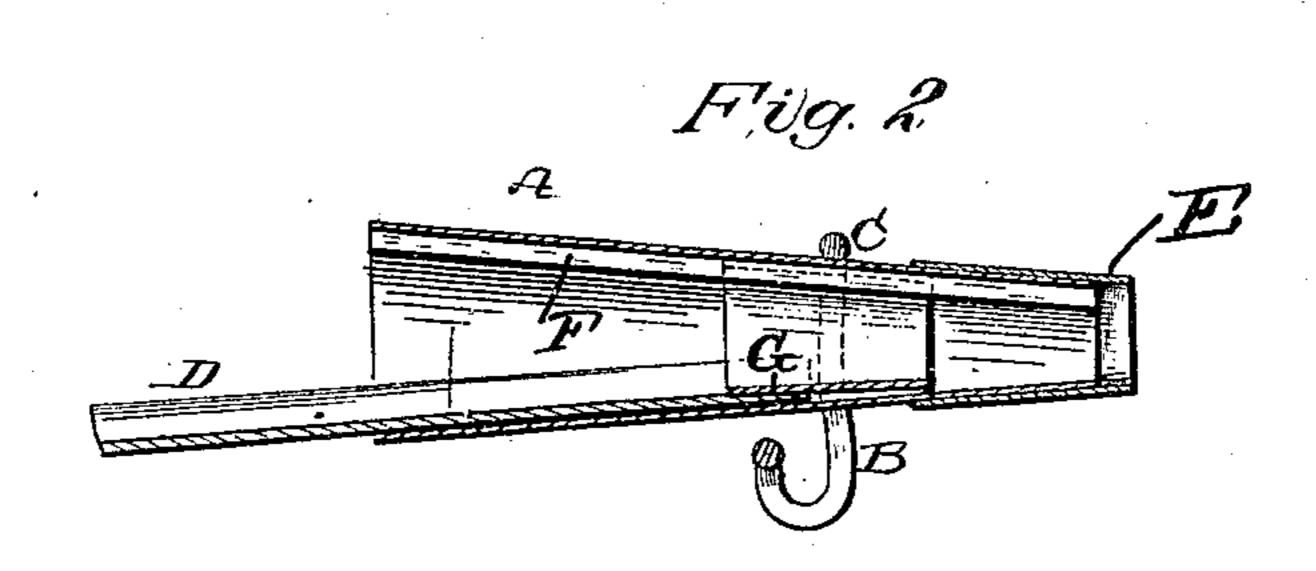
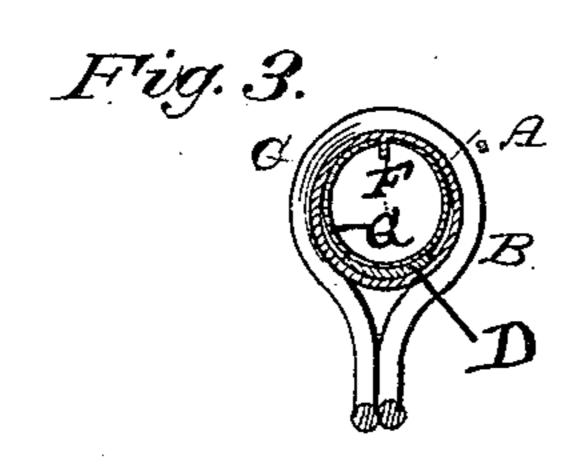
## I. H. SPELMAN. Sap Spout.

No. 234,437.

Patented Nov. 16, 1880.







Witnesses: Fied G. Dieterich

McLittell,

Inventor:

Trwin A. Spelman,

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Alborneys.

## United States Patent Office.

IRWIN H. SPELMAN, OF CORTLAND, OHIO.

SPECIFICATION forming part of Letters Patent No. 234,437, dated November 16, 1880. Application filed February 19, 1880.

To all whom it may concern:

Be it known that I, IRWIN H. SPELMAN, of Cortland, in the county of Trumbull and State of Ohio, have invented certain new and use-5 ful Improvements in Sap-Spouts; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference to being had to the accompanying drawings, which form a part of this specification.

Figure 1 is a perspective view. Fig. 2 is a longitudinal sectional view, and Fig. 3 is a

cross-section.

Corresponding parts in the several figures are denoted by like letters of reference.

This invention relates to sap-spouts; and it consists in certain improvements in the construction of the same, which will be hereinaf-20 ter fully described, and particularly pointed out in the claims.

In the drawings hereto annexed, A represents the body of the spout, which consists simply of a conical or tapering tube formed of sheet 25 metal, and provided with an interiorly-located longitudinal flange, F, which tends to strengthen it and prevent it from being bent or otherwise injured in driving it.

I preferably form the conical tube and in-30 ternal flange in the following manner: The blank sheet is first cut out and one of the side edges inserted in a longitudinal recess or groove in one of a pair of conical rollers, and the crank turned to cause the sheet to envelop 35 one of the rollers. The flange F consists of the edge remaining in the groove in the roller. The tube is then soldered while yet on the roller and then removed. This flange may be | my own I have hereto affixed my signature in formed in any other suitable manner either by [ 40 machinery or by hand, and is intended to strengthen the spout. To further the same object the small end of the tube is re-enforced by a ring or band, E, of wire or sheet metal. Around the tube or spout A is adjusted a

In tube A is adjusted a smaller tube, G, between which and tube A the end of an extension-trough, D, may be inserted, said trough 50

wire ring, C, provided with a hook, B, upon 45

which a pail may be hung to receive the sap

flowing out through the spout.

being held in position by the inner tube, G. Said inner tube should be provided with a longitudinal slot, to enable it to be adjusted irrespective of the longitudinal flange F in tube A.

From the foregoing description, taken in connection with the drawings hereto annexed, the operation and advantages of my invention will be readily understood. It is simple, durable, inexpensive, and easily adjusted with- 60 out danger of injury to the spout in driving it into position.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. The combination, with a sap-spout consisting of a conical or tapering tube, A, of a tube, G, adjustable within said tube A and adapted to hold in position an extension-trough, D, substantially as and for the purpose set 70 forth.

2. In a sap-spout, the conical or tapering tube A, having the internal longitudinal strengthening-flange, F, formed with or otherwise secured thereto, substantially as set forth.

3. In a sap-spout, the conical or tapering tube A, provided with the internal longitudinal strengthening-flange, F, in combination with the smaller slotted tapering tube G, substantially as and for the purposes set forth.

In testimony that I claim the foregoing as presence of two witnesses.

IRWIN H. SPELMAN.

Witnesses:

W. F. MEEK, H. D. Holcomb.