J. LUCAS.

Safety-Nozzle for Cans.

No. 212,147. Patented Feb. 11, 1879.

Fig. 2.

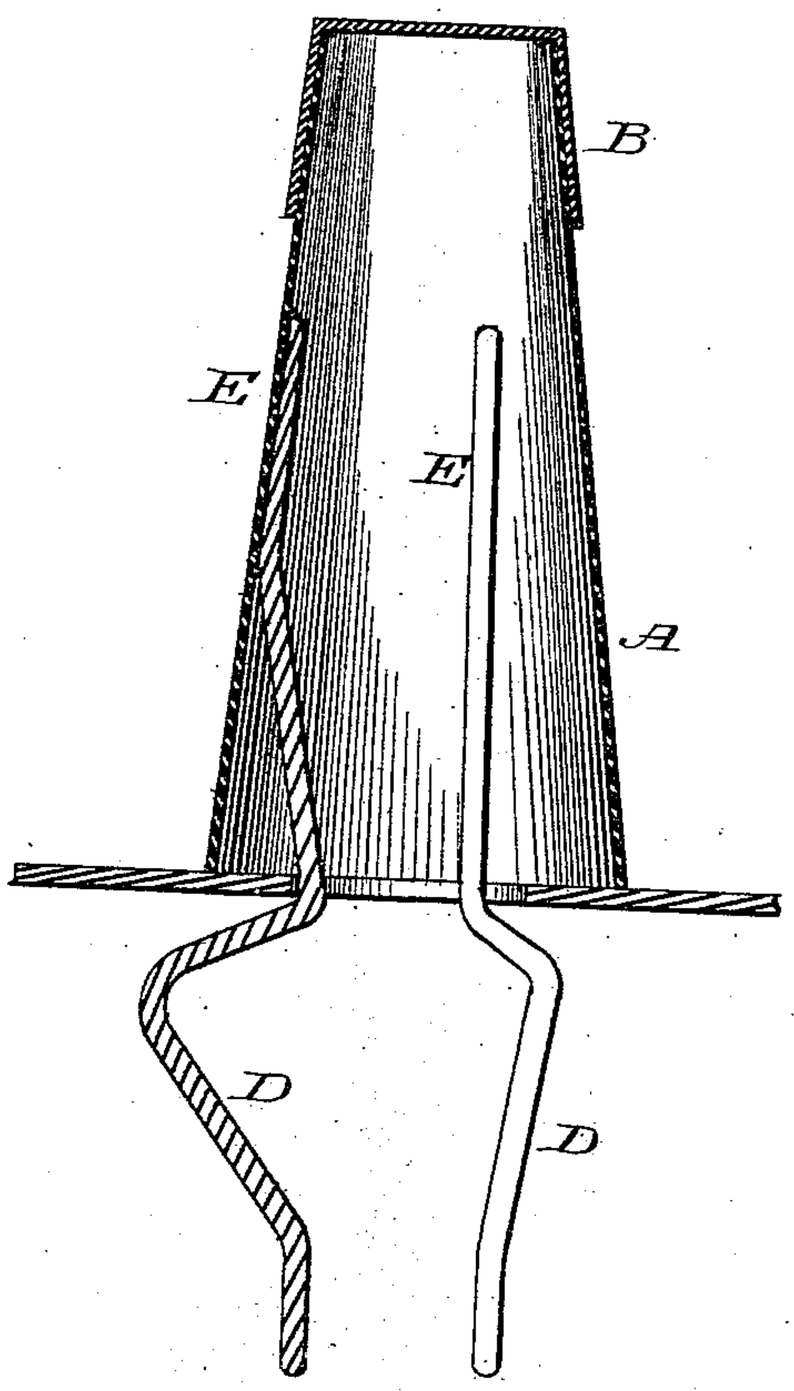

Fig. 1.

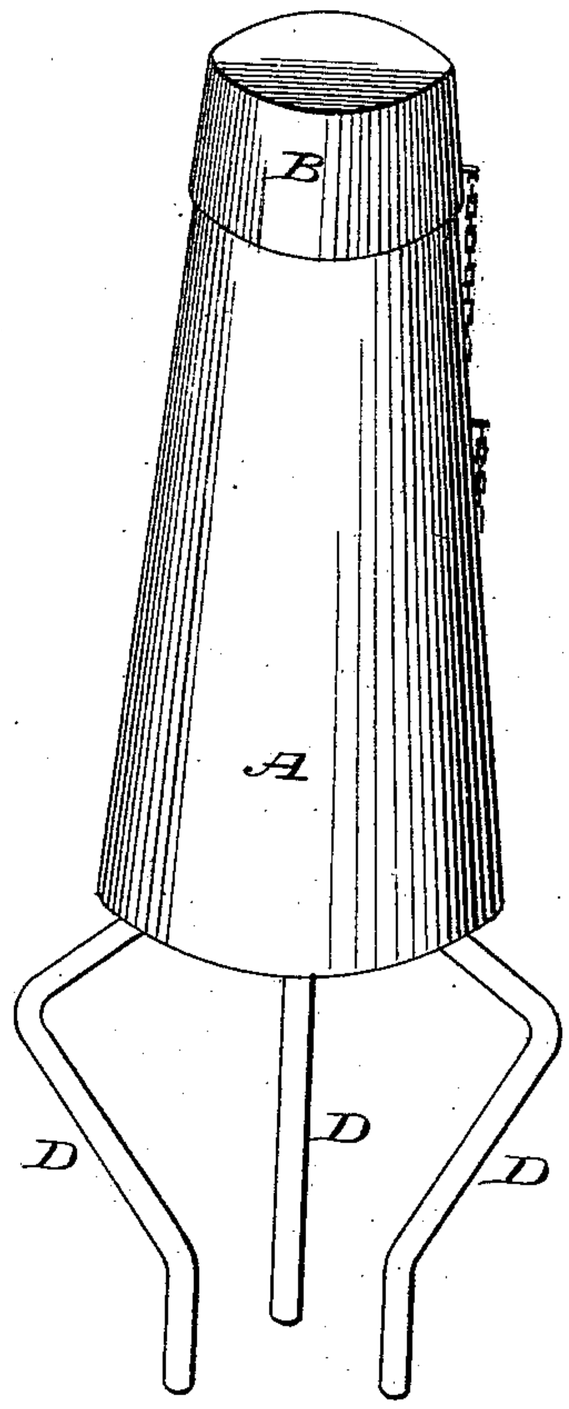

Fig. 3.

Witnesses:

Charles G. Elliott

Jno. F. Braine

Inventor:

John Lucas

By Horace B. McCook

Attorney.

UNITED STATES PATENT OFFICE.

JOHN LUCAS, OF POTTSVILLE, PENNSYLVANIA.

IMPROVEMENT IN SAFETY-NOZZLES FOR CANS.

Specification forming part of Letters Patent No. **212,147**, dated February 11, 1879; application filed December 6, 1878.

To all whom it may concern:

Be it known that I, JOHN LUCAS, of Pottsville, in the county of Schuylkill and State of Pennsylvania, have invented a new and useful Improvement in Safety-Nozzles for Cans, of which the following is a specification:

The invention relates to nozzles for cans or packages made of thin material, and having a round orifice for the discharge of its contents.

Such cans or packages have heretofore been made with simple holes or orifices, or a nozzle or spout secured to the can or package. When a simple orifice is used, there is, in very many cases, considerable wasting or spilling of the contents of the can or package in pouring from it, while in many cases the cans or packages, for various reasons, are not, or cannot be, provided with secured spouts or nozzles. In such cases my invention is intended to be used.

The object of my invention is to provide a portable safety-nozzle for cans or packages made of thin materials, so that the contents can be poured out without wasting or spilling.

The invention consists of a sheet-metal tapering tube provided with a cap for closing the exposed end, and having two or more wire springs, of a peculiar shape, for the purpose of securing the nozzle to the can or package on which it is used.

In the accompanying drawings, in which similar letters of reference indicate like parts, Figure 1 is a full view of my invention; Fig. 2, a section of the same affixed to the top of an ordinary sheet-metal can. Fig. 3 is a full view of one of the springs.

A is a tapered sheet-metal tube, and B is a cap of same material fitting closely on the small end of A. The cap is secured to A by means of a small chain, so that it will not be easily lost or mislaid.

D D D are wire springs, of peculiar shape, as shown in Fig. 3, one end of which is secured by soldering to the tube A at E, and the other end projects below the tube. These wires have sufficient spring to allow them to be pressed together and when released spring back to their original positions.

The operation of the device is as follows: The wire springs are pressed into the orifice of a can and the tube pressed down. The springs expand and hold the tube firmly in position.

In constructing the device, I make the base of the tube A larger than the orifice it is to cover, and I form the springs D D D of wire, with enough spring to hold the tube firmly in any sized hole that they will enter, up to a hole slightly smaller than the base of the tube.

It will be readily seen that the nozzle can be attached to any can or vessel made of thin materials, such as sheet-metal, thin boards, &c. In many cases cans or vessels have their discharge-orifice some distance from the edge, and without a nozzle it would be a difficult matter to pour the contents out without wasting and spilling the same. In the case of powder-cans, such as are used in mines or quarries, the cans have flat tops, with the discharge-orifice a short distance from the edge. The miners pour the powder from the can into thin paper cartridge-shells, and lose and spill at nearly every such operation.

My device is instantaneously attached to such a can, and can be used for years on different cans. It forms a perfect safeguard against spilling or wasting, acts as a leading spout or funnel for filling cartridges, and saves much time and trouble in such operations, besides lessening the danger arising from the loose handling of powder. This is but an illustration of one of the many uses to which the nozzle may be put, as it may be used on any vessel to which it can be attached and held by the springs.

What I claim is—

A safety-nozzle consisting of the tapering tube A, with cap B and the springs D D D, combined substantially as and for the purpose shown and described.

JOHN LUCAS.

Witnesses:

CHARLES J. ELLIOTT,

JNO. H. BRAINE.