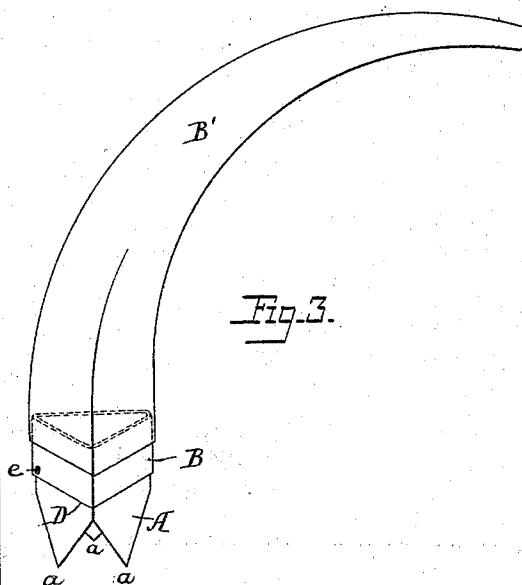
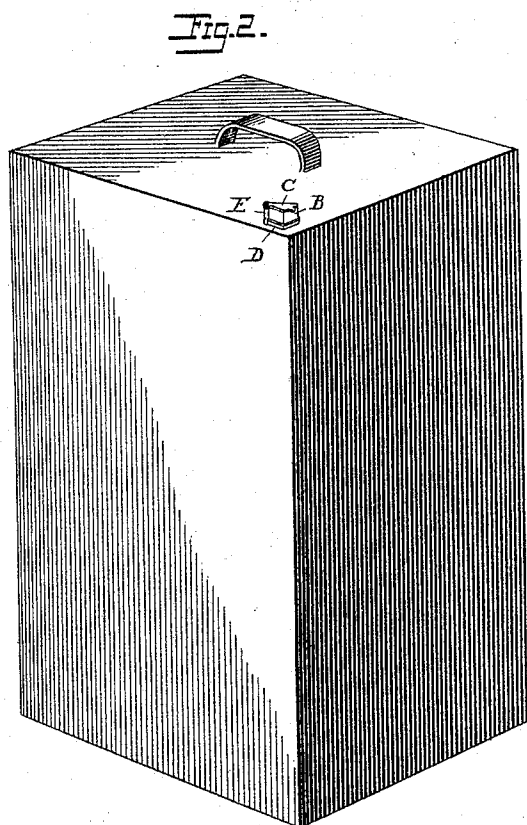
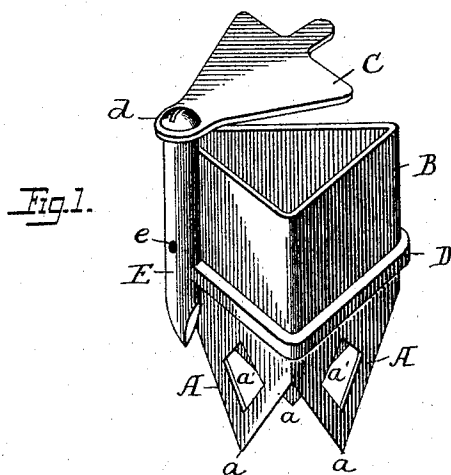


(No Model.)

C. I. McLAUGHLIN.
SEPARABLE SPOUT FOR METALLIC VESSELS.

No. 500,933.

Patented July 4, 1893.



WITNESSES

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UNITED STATES PATENT OFFICE.

CHARLES IRVINE McLAUGHLIN, OF NEW YORK, N. Y.

SEPARABLE SPOUT FOR METALLIC VESSELS.

SPECIFICATION forming part of Letters Patent No. 500,933, dated July 4, 1893.

Application filed October 11, 1890. Serial No. 367,769. (No model.)

To all whom it may concern:

Be it known that I, CHARLES IRVINE McLAUGHLIN, a citizen of the United States, residing at New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Separable Spouts for Metallic Vessels, of which the following is a specification.

My invention has for its object to produce a separable and detachable pouring-spout which may be applied by anyone to a can or other vessel containing liquid or semi-liquid material, and which when the can has been emptied may be removed from such can or vessel and applied to and used upon another, and so on, an indefinite number of times; and it consists of a separable spout having the novel characteristics to be hereinafter set forth.

In the drawings wherein I have illustrated my invention, Figure 1 is a perspective view of one form of a device containing my invention. Fig. 2 is a view showing it applied to a can. Fig. 3 is a side view of another form of my invention.

The device which constitutes my invention consists essentially of two parts, first a cutting portion adapted to be driven through the thin metal of which the can or other vessel to which it is adapted to be applied is composed, and to cut an opening thereinto, and which, when the device is in use, occupies a position on the inside of the can; and second, a spout portion which occupies a position outside of the can and serves as the spout or nozzle through which the contents of the can or vessel may be poured. In practice, a rib, shoulder or equivalent device between the aforesaid parts is employed to form a stop which determines the extent to which the device shall be driven into the can. This detachable spout may be of any preferred shape in cross-section, the style shown in Figs. 1 and 2 of the drawings being triangular; the cutting and spout portions being formed practically of a continuous piece of material formed into tubular shape.

In the drawings, A designates the skirt or cutting portion of the device which is adapted to be driven into the can, cutting the sheet metal as it passes through, and leaving an opening through which the contents of the

can may freely pass. The lower edge of the skirt or cutting part, A, is serrated, forming a number of pointed teeth *a*, the edges of which may be sharpened to any desired extent. These teeth may be perforated as at *a'* to permit the more ready access of the contents of the vessel to the interior of the spout, as well as to reduce the weight of the device.

The spout or pouring portion of the device is designated by B, and may be of the same general configuration as the lower portion A, and entirely open-ended, or closed only with a swinging cover C, as shown in Fig. 1; or it may be closed and formed into a tubular spout B', as shown in Fig. 3, such form of spout being particularly adapted for use with cans or vessels containing illuminating oils, or other light and fluid liquids, while the form shown in Fig. 1 is better adapted for use in connection with cans containing denser, or more or less viscid liquids.

Between the cutting skirt of the spout and the pouring portion thereof is a rib, flange or shoulder, D. As this is adapted particularly to form a stop to limit the distance which the spout shall be driven into the can, by coming in contact with the top thereof, it may be variously constructed. Thus, as shown in Fig. 1, it consists of a continuous flange, but this flange might be broken; while in Fig. 3, the shoulder is formed by making the spout or pouring-portion of the device of larger size than is the cutting part. The form preferred is that shown in Fig. 1, as the continuous flange employed in this construction serves to cover any opening which may be left between the edges of the opening cut into the can and the sides of the spout.

E is a vent tube, the lower end of which opens below the surface of the vessel into which the spout is inserted, and which has a vent opening *e* above or outside the can. This vent tube is found to be essential when the device is employed to draw dense liquids which fill the spout entirely. It is arranged on the outside of the spout, and its lower end is sufficiently strong to cut its way into the can as the device is being driven into the can.

When a cover C is used, it may be secured to the upper end of the vent tube by a screw-bolt *d*.

This spout I prefer to construct of sheet

metal, which can be easily worked into the desired shape, and which shall be sufficiently strong to withstand the blows which may be required to force it through the metal of which
5 a can or other sealed liquid-containing vessel is composed, and at the same time so that the edges of the cutting points or teeth *a* may retain their sharpness in order to cleanly cut the sheet metal. The piece of metal thus cut,
10 and which is inclosed within the skirt of the device, may be either driven into the can or, if the spout portion B be large enough, turned edgewise and drawn out.

Without limiting myself to the precise construction and arrangement of parts shown,
15 what I claim is—

1. The combination of a detachable spout for metallic vessels of tubular shape formed

to have a cutting skirt adapted to cut through the thin material of the vessel, and with a 20 pouring spout, and a vent tube E situated upon the outside of the spout and formed with a lower cutting end, substantially as described.

2. A detachable spout for metallic vessels, 25 of triangular shape in cross-section, having the cutting skirt portion A, the pouring portion B, the flange D between these two parts, the cover C, and the vent tube E, substantially as shown and described. 30

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

CHAS. IRVINE McLAUGHLIN.

Witnesses:

T. HOFMANN,

JAMES M. F. UPDIKE.