

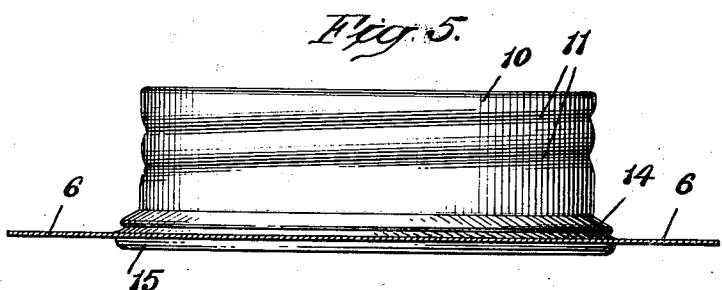
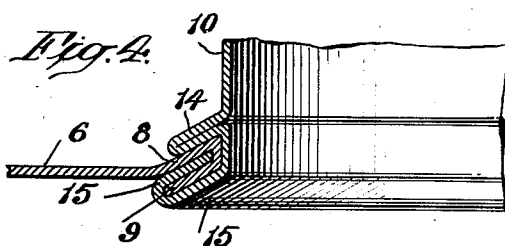
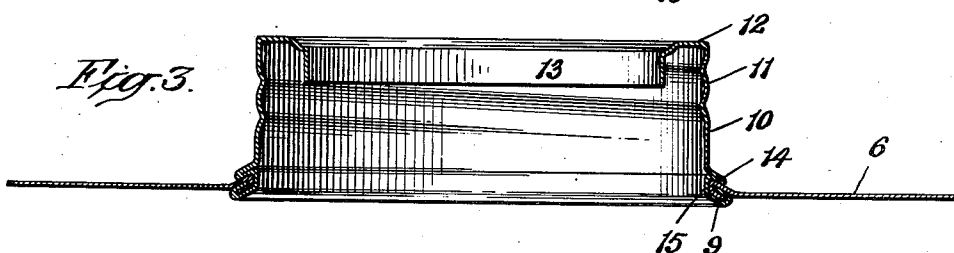
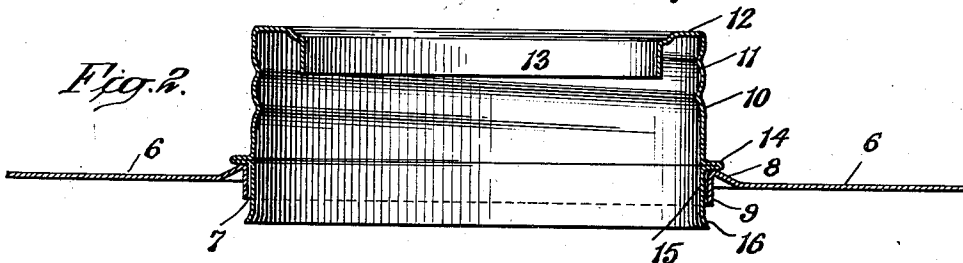
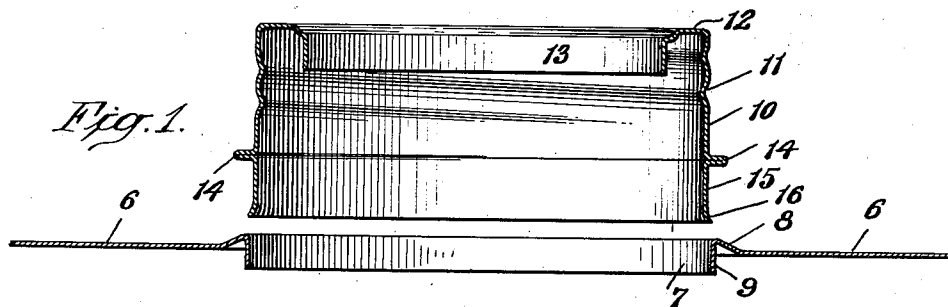
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CAN CONSTRUCTION

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CAN CONSTRUCTION

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2 Claims. (Cl. 285—49)

This invention relates to an improvement in can construction, and particularly to a means and method whereby certain parts of a can are assembled and united. The object of the invention is to provide a can structure wherein a spout or similar element may be effectively and securely attached to the body or other portion of a can without the use of solder or similar means. The improved structure not only reduces the cost of can manufacture by reducing the manufacturing steps, but obviates the cost of solder and the soldering operation, at the same time providing a stronger, more uniform leakproof joint between the spout and body of the can.

In the accompanying drawing, wherein an embodiment of the invention is shown, Fig. 1 is a vertical sectional view through a portion of a can body or can top preparatory to the insertion and affixment of the threaded spout thereto; Fig. 2 is a similar sectional view of the same elements, showing the spout inserted in the opening in the can and ready for the upsetting and interengagement of the flanges on the spout and can; Fig. 3 is a similar sectional view showing the spout secured in place in the can; Fig. 4 is an enlarged sectional view through the joint between the spout and can; and Fig. 5 is a side view of the spout, the top of the can to which it is affixed being shown in section.

With reference to the drawing, 6 indicates a portion of a can body, usually the top of the can or any other portion wherein a threaded spout of the character shown is ordinarily located. For the reception of the spout, the body portion 6 is formed with an opening 7, usually circular, the marginal edge portion of which is stiffened or reinforced by the pressed-up surrounding annular rib or bead 8, produced by forcing the metal around the opening upwardly. The opening is surrounded by the downwardly dependent annular flange 9 which is directed toward the under side of the body portion 6 or toward the inside of the can.

The spout is shown at 10 and in the embodiment disclosed is tubular or cylindrical and is formed with threads 11 for the reception of the ordinary closure cap. The upper end or top of the spout is extended inwardly and horizontally as shown at 12 and then bent downwardly as at 13 to greatly reinforce and strengthen the top portion of the spout.

Near its opposite end the spout is formed with a laterally extending or radially projecting annular rib or bead 14, produced by forcing or distorting the body of the spout outwardly, and below said rib or bead is the annular flange 15 which has its end or extremity slightly expanded or curled outwardly to facilitate a subsequent upsetting of said flange 15 during the operation of affixing the spout in the opening 7.

In placing the spout in position, it is first inserted into the opening 7 until the radially extending rib or bead 14 rests against the marginal edge portions of opening 7 and rests on the rib 8, as shown in Fig. 2. By the use of suitable tools, the two concentrically disposed flanges 9 and 15 on the can body and spout respectively, are upset or curled upwardly, causing flange 9 to be curled or rolled within flange 15 as clearly shown in Figs. 3 and 4. Flange 9 being thus effectively interengaged with flange 15 is securely held between the bead 14, which is then inclined downwardly, and the upset flange 15, resulting in a strong, liquid-tight seal or seam. As the lower end of the flange 15 is "pre-formed" or partly curled before the insertion of the spout in the opening 7, this flange may be easily upset or curled without splitting and it interlocks or interengages tightly with flange 9 resulting in an extremely satisfactory seam on the underside of the can top, or wherever the spout may be located.

This structure may be very satisfactorily employed on oil cans, paint cans, insecticide sprayers and numerous other types of cans where a strong liquid-tight joint between the body of the can and its spout is necessary.

What I claim is:

1. In a can construction, a can having a body portion formed with an opening surrounded by an annular upwardly inclined portion, the edge of said portion comprising a flange directed toward the inner side of the body portion, a spout provided with an integrally formed radially extending annular rib inclined downwardly and overlying and resting upon the inclined portion surrounding the opening, said spout having an annular flange extending through the opening to the inner side of the body portion, said annular flange being upset toward the inner side of the body portion and embracing and interlocking with the flange on the body portion, whereby the flange on the body portion is confined between the annular inclined projecting rib on the spout and the annular flange on said spout.

2. In a can construction, a body portion formed with an opening surrounded by an upwardly inclined portion terminating in a flange, a cylindrical spout provided with an inclined integrally formed radially extending rib overlying the inclined portion about the opening, said spout having a flanged end rolled up toward the body portion, the flange on the body portion being rolled or curled within the rolled up end of the spout whereby the marginal edge portion of the body located about the opening is clamped between the downwardly inclined rib on the spout and the rolled up portion of the spout.

HARLEY PENNEY. 60