No. 811,728.

PATENTED FEB. 6, 1906.

D. R. LEVIN & G. E. SUNDSTROM.

SHEET METAL RECEPTACLE.

APPLICATION FILED JAN. 30, 1905.

Fig. 1.

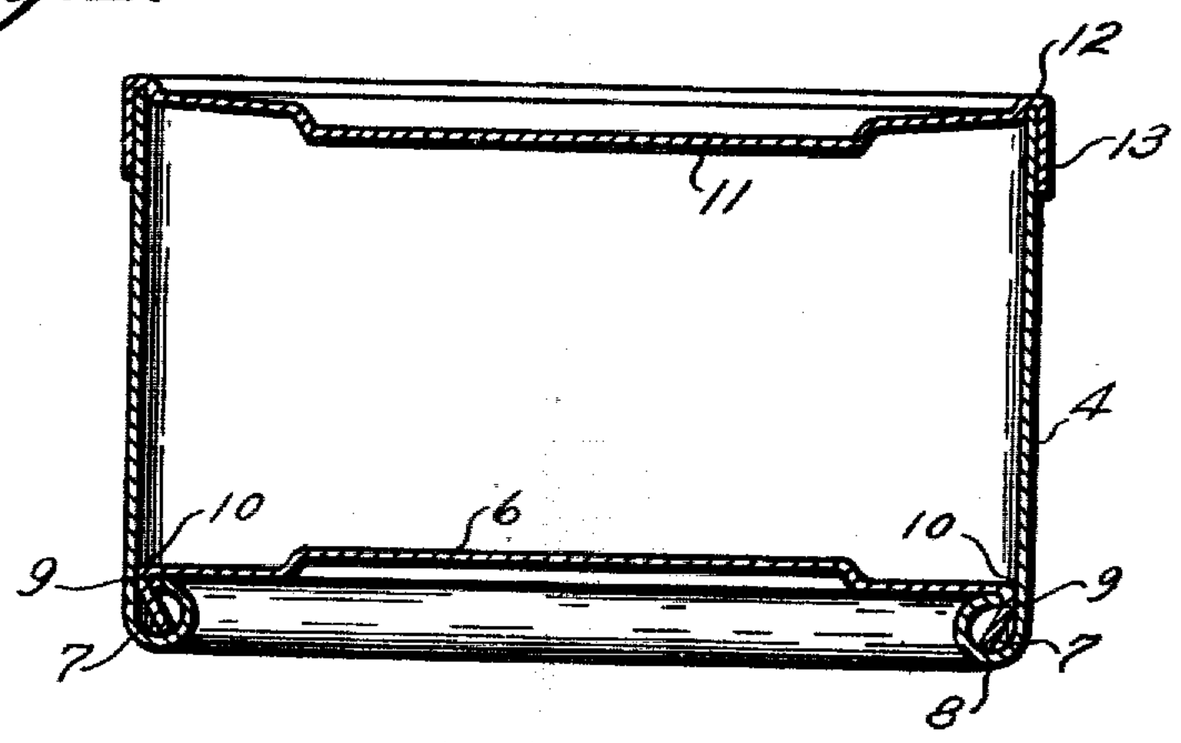



Fig. 2.

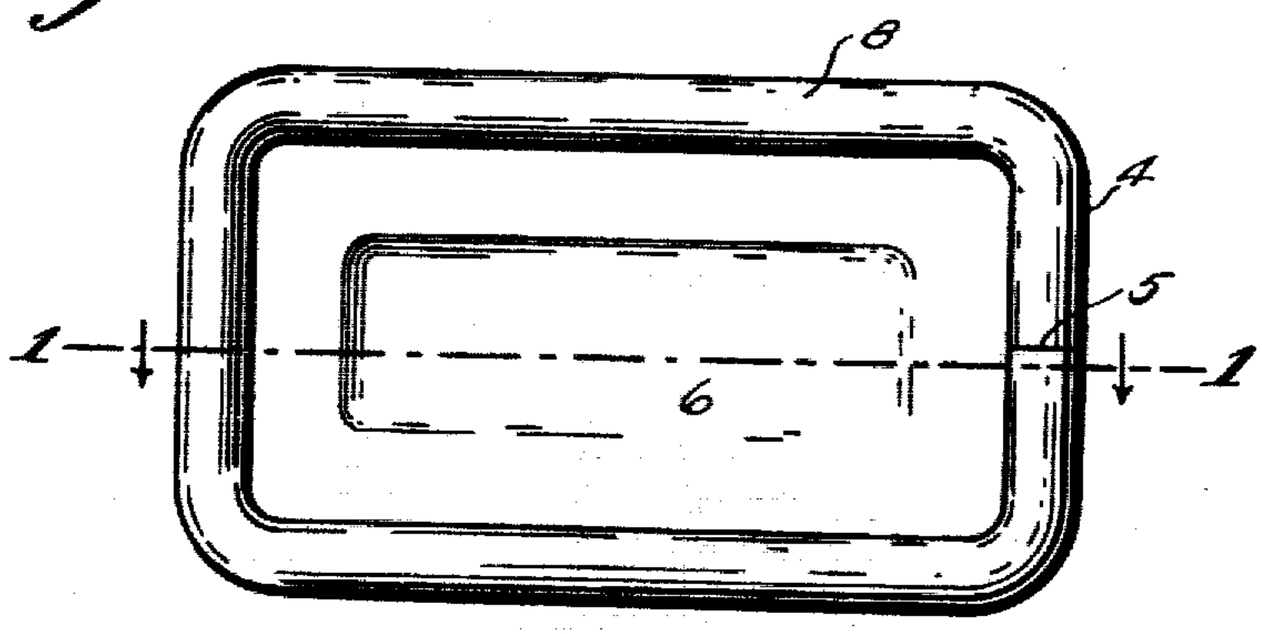
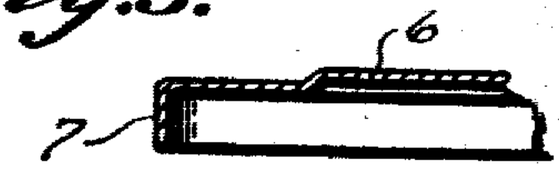



Fig. 3.

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# UNITED STATES PATENT OFFICE.

DAVID R. LEVIN AND GABRIEL E. SUNDSTROM, OF CHICAGO, ILLINOIS;
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## SHEET-METAL RECEPTACLE.

No. 811,728. Specification of Letters Patent. Patented Feb. 6, 1906.

Application filed January 30, 1905. Serial No. 243,339.

*To all whom it may concern:*

Be it known that we, DAVID R. LEVIN and GABRIEL E. SUNDSTROM, citizens of the United States of America, and residents of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Sheet-Metal Receptacles, of which the following is a specification.

This invention relates to sheet-metal receptacles, and has particular reference to the form of joint for connecting the side walls and heads of receptacles at their contiguous edges.

The main objects of this invention are to provide an improved form of joint for connecting the bottoms to the side walls of cans and other sheet-metal receptacles and to produce a water-tight joint at the bottom edges without forming a seam with raw edges or crevices around the lower edges of the can and at the same time improving the outward appearance of the can. We accomplish these objects by the device shown in the accompanying drawings, in which—

Figure 1 is a longitudinal section of a sheet-metal receptacle constructed according to our invention, the line of section being indicated at 1 1 in Fig. 2. Fig. 2 is a bottom view of the same receptacle. Fig. 3 is a section of the bottom, showing the position of the flange thereon prior to the curling of the edges of the side walls to complete the joint.

In the drawings, the thickness of the walls, and the size of the beading of the joint are somewhat exaggerated for the sake of clearness.

In the form shown in the drawings the body 4 of the receptacle is tubular in form, being substantially rectangular in transverse section and having rounded corners. The body 4 is preferably formed of a single sheet of material bent to the desired shape and having its seam formed in any usual way, but with its edges abutting at 5 in the way of the joint with the bottom. The head 6, which forms the bottom of the receptacle, fits snugly within the lower part of the walls of the body 4 and has a downwardly-extending flange 7, about which the lower edges of the walls of the body are curled inwardly to form a bead 8, as shown in the drawings. The part of the joint in the side walls which is in the way of the curled part of said walls has abutting edges, as indicated at 5, so as to avoid any unsightly projections from the bead 8.

The bottom 6 is first formed with its flange 7 extending at right angles thereto, as indicated in Fig. 3. Said bottom is then inserted into the lower end of the body part of the receptacle and is supported in its proper position by a suitable plunger extending into the can from the opposite end. The side walls are then curled inwardly by a curling-die which is forced in a longitudinal direction toward the plunger which supports the bottom 6. The curling-die is suitably formed to cause the side walls to roll inwardly and form a substantially circular bead 8, extending around the edges of the can and unbroken at the rounded corners of the body. Since the curled bead springs from the side walls at a point above the lower edge of the flange 7, said flange is forced inward during the curling operation to a position substantially as shown in Fig. 1. The curled part of the side walls bears tightly against the lower edge of the flange 7, and the edge 9 is forced endwise into the bosom of the angle formed between the bottom 6 and the flange 7. The apex or heel of the angle of said flange is thus expanded and forced outwardly into tight contact with the adjacent part of the side walls. The joint thus formed has, besides the close contact at 10 between the bottom and the inner face of the side walls of the body, two other tight joints, one of which is formed by the flange 7 bearing endwise against the inner surface of the curled part of the walls and the other of which is formed by the curled part of the walls bearing endwise into the bosom of the angle between the flange 7 and the bottom 6. The pressure which causes the curling of the side walls of the receptacle forces the edge of said walls into the bosom of the angle of the flange and through this action also tends to force the bottom into more intimate contact with the inner surface of the side walls at this point.

The upper end of the body 4 is straight in the form of receptacle which is shown in the drawings and is closed by means of a cover 11, which is provided with a recess 12 for receiving the upper edge of the side walls of the receptacle and is flanged outwardly at 13 to fit around the outside of said walls.

These cans are used largely for the purpose

of packing powdered material, such as snuff, and it is of the utmost importance that the exterior surface of the side walls be free from horizontal seams or recesses into which the powdered material may become lodged during the process of filling cans. Such filling is usually accomplished by using the can itself as a scoop for picking up the material. The smooth exterior of the can also adds to its attractiveness. It will be noticed that the contiguous parts of the bottom and side walls interlock with each other in such manner as to securely hold the bottom in position.

It will be seen that some of the details of the construction shown may be altered without departing from the spirit of our invention.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. In a sheet-metal receptacle, the combination of a body having side walls, and a head fitting within the body near one end, said head having at its edge a flange disposed at an acute angle both to the head and the adjacent part of the side walls and extending toward the adjacent end of the walls of said body, said walls being curled inwardly around said flange and having an edge bearing endwise into the inner apex of the angle between said flange and head, and said flange bearing endwise against the inner surface of said curled part, said curled part having contact with said flange only along the line of the edge of said flange and along the line of the apex of the angle between said flange and head.

2. A sheet-metal receptacle, comprising side walls and a head fitting within said walls near one end, said head having at its edge a flange disposed at an angle to the head and extending toward the adjacent end of the side walls, said walls being curled inwardly around said flange, and the curled part of said walls having its edge forced endwise into the inner apex of the angle between said flange and head so as to bear abruptly against the flange and expand the same outward to form a tight joint with said walls.

Signed at Chicago, this 26th day of January, 1905.

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