March 6, 1956 C. E. SCHELL 2,737,313

SHIELD CAN AND BLANK THEREFOR

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FIG. 1.

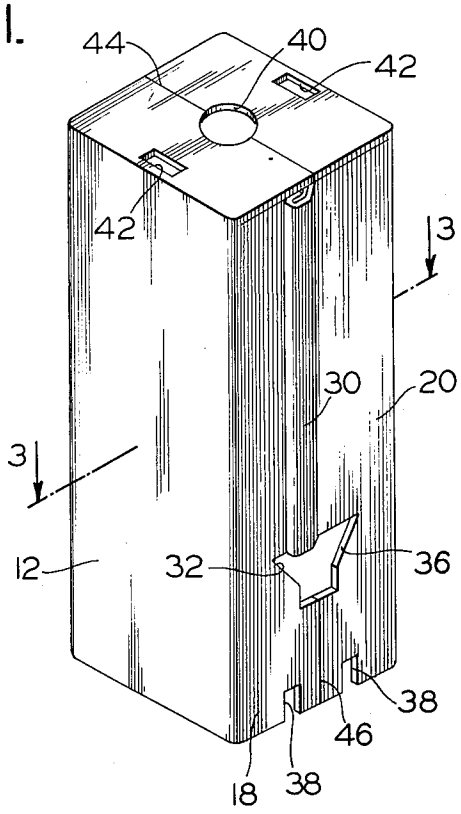


FIG. 3.

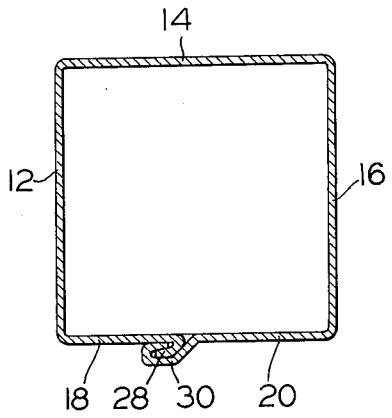
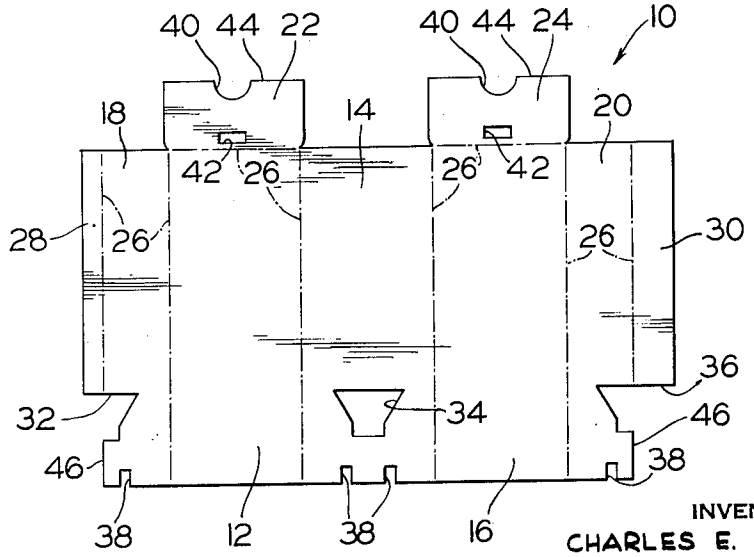


FIG. 2.



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SHIELD CAN AND BLANK THEREFOR

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3 Claims. (Cl. 220—62)

This invention relates to metal cans and blanks therefor.

In particular the invention relates to an aluminum can such as one utilized to shield I.-F. coils in an electronic device and a blank out of which said can may be formed.

In the past it has been the practice to make such cans by drawing a portion of sheet material to shape by passing the same through successive dies and either concurrently with the drawing process or subsequently thereto punching out such openings in the can as necessary.

It is an object of this invention to simplify the manufacture of shield cans by stamping out a blank to proper shape, and with suitable openings, all in one operation and thereafter folding parts of the blank into abutting relation and interlocking other parts to secure a neat product. This can be accomplished by the use of simpler and less expensive machines than previously required.

For a fuller description of my invention, attention is directed to the following specification and accompanying drawings in which:

Fig. 1 is an isometric perspective view of the completed can,

Fig. 2 is a plan view of a blank utilized to produce the can of Fig. 1, and

Fig. 3 is a cross section through the can on the line 3—3 of Fig. 1.

In making the can, the first step is to stamp a blank **10**, a plan view of which is shown in Fig. 2. The blank may be made of any suitable metal such as aluminum or copper of approximately 1/32" in thickness for a can measuring approximately 3/4" square by 1 7/8" high. Obviously for cans of greater size, the thickness may be increased.

The blank comprises what will become three full width panels indicated as **12**, **14**, and **16**, two half width panels indicated as **18** and **20** as well as two half end closures **22** and **24**. The panels and end closures may be delimited by light score lines **26** impressed into the metal.

The sections **18** and **20** which will form the two half panels each have an extension along one of its edges. The extension **28** on the section **18** is for enfolding within the extension **30** which preferably is of a width substantially twice that of extension **28**. The wider extension may be scored longitudinally for ease in folding about the extension **28** so as to form the interlocked seam **30** of Fig. 1.

The sections **18**, **14** and **20** have stamped out therefrom the openings **32**, **34** and **36** as well as the slots **38**, this being effected simultaneously with the formation of the blank. These openings and slots are intended to cooperate with fastening means to secure the can to a radio chassis. Furthermore, additional semicircular openings **40** may be provided in the half closures as well as slots **42**, these being provided for retaining mounting parts in the can and to provide for accessibility of frequency adjusting means.

After the stamping has been manufactured, it is next bent to the shape shown in Fig. 1, with the free edges **44** of the half end closures and the free edges **46** below the extensions in abutting relationship to each other to form a neat can having a smooth inner and outer surface, while the extensions are enfolded one within the other in a lock seam to form a securely held together can, the seam at the same time giving added stiffness to the can structure.

Obviously, although I have shown my can as provided with special openings and slots to provide for mounting the can on a radio chassis and particular openings in the top of the can, these are not essential to my invention.

What I regard as my invention and what I claim is:

1. A can made of a single sheet of metal of appreciable thickness, said can being a rectangular parallelopiped with one end open, one vertical wall of the can having a joint therein formed in part by abutting edges of the metal sheet and in part by an interlocking seam, the top wall being formed in sections extending from opposite walls of the can toward each other in abutting relationship, openings in opposite vertical walls of the can, one of said openings being on that wall of the can having the abutting edges, part of the opening lying on one side of the abutting edge and part on the other.

2. A can made of a single sheet of metal of appreciable thickness, said can being a rectangular paralleliopiped with one end open, one vertical wall of the can having a joint therein formed in part by abutting edges of the metal sheet and in part by an interlocking seam, the top wall being formed in sections extending from opposite walls of the can toward each other in abutting relationship, openings in opposite vertical walls of the can, one of said openings being on that wall of the can having the abutting edges, part of the opening lying on one side of the abutting edge and part on the other, said top wall sections being also provided with mating opening parts.

3. A can made of a single sheet of metal of appreciable thickness, said can being a rectangular parallelopiped with one end open, one vertical wall of the can having a joint therein formed in part by abutting edges of the metal sheet and in part by an interlocking seam, the top wall being formed in sections extending from opposite walls of the can toward each other in abutting relationship, openings in opposite vertical walls of the can, one of said openings being on that wall of the can having the abutting edges, part of the opening lying on one side of the abutting edge and part on the other, with the opening between the two parts of the vertical joint.

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