J. G. HODGSON.
CONSTRUCTION OF CANS.
APPLICATION FILED MAY 21, 1914.

1,316,237.

Patented Sept. 16, 1919.

Fig. 1

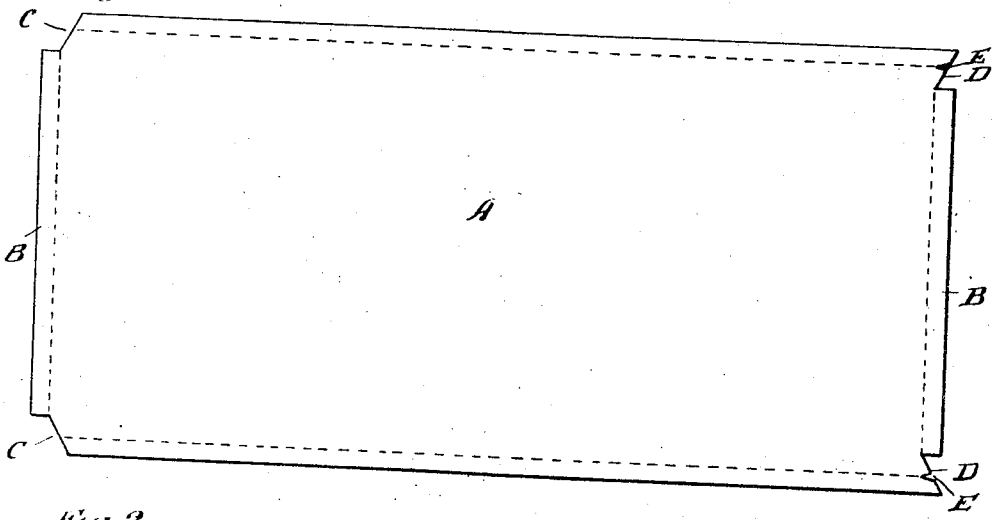


Fig. 2

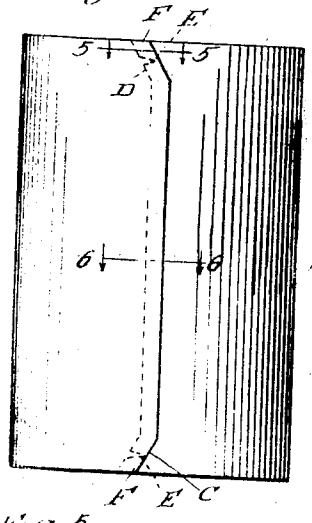


Fig. 3

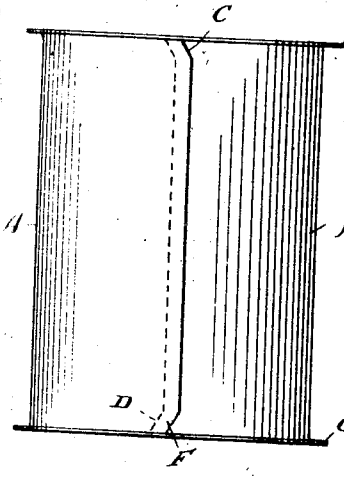


Fig. 4

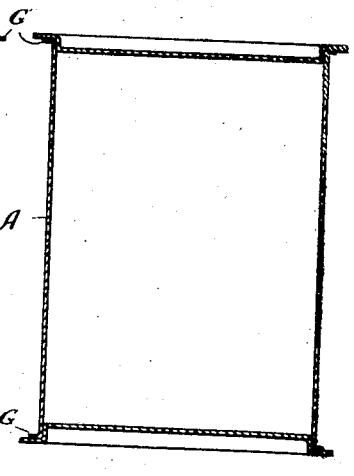


Fig. 5

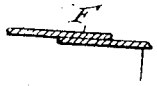
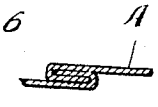


Fig. 6



Witnesses:
Wm. Geiger
Esther Abrams.

Inventor
John G. Hodgson
By Munday, Evarts, Adcock & Clarke
Attys

UNITED STATES PATENT OFFICE.

JOHN G. HODGSON, OF MAYWOOD, ILLINOIS, ASSIGNOR TO AMERICAN CAN COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW JERSEY.

CONSTRUCTION OF CANS.

1,316,237. Specification of Letters Patent. Patented Sept. 16, 1919.

Application filed May 21, 1914. Serial No. 839,986.

To all whom it may concern:

Be it known that I, JOHN G. HODGSON, a citizen of the United States, residing in Maywood, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Construction of Cans, of which the following is a specification.

This invention relates to an improvement in the construction of cans and especially relates to the formation of the side and end seams of the can. And said invention consists in the novel devices and combination of parts and devices hereinafter more fully set forth and made the subject matter of claims.

In the accompanying drawing which forms a part of this specification, Figure 1 represents an extended view of the body blank out of which the can body is to be formed. Fig. 2 shows said body blank formed up into a cylinder. Fig. 3 shows said cylinder flanged. Fig. 4 is a sectional view of the can body and the can head. Fig. 5 is a fragmentary, enlarged section on the line 5—5 of Fig. 2. Fig. 6 is a fragmentary, enlarged section on the line 6—6 of Fig. 2.

For some excellent reasons, well understood by those skilled in the art, it has been long known that in the manufacture of sheet metal food containers, such as packers' cans, it is extremely desirable to employ what is known as a lock side seam, that is to say, a hooked side seam for the can bodies, such a seam as is illustrated in Fig. 6. Where these can bodies are to be flanged at one or both ends, it is found necessary to have the seam at this point of single, instead of double, thickness, in other words, a lap seam as illustrated in Fig. 5. It has also been found desirable to better accommodate the subsequent operation of rolls in the double seaming of the head to the can that the lapped portion of the seam shall be diagonal in position instead of parallel to the axis of the can. This is, because, for one reason, the seaming rolls ri e more easily over the lapped seam if it lies diagonally to their path, just as a vehicle rides more easily over a rail that lies diagonally in its road than it rides over one that lies squarely across its path, as will be readily understood. When the two parts of the lapped portion of the seam are soldered together, which is done before the flanging takes place, and the thus joined parts are bent into the flange, there is a tendency of one of the parts slipping upon the other in bending. This movement must take place of course and it is permitted by the stretching of the solder of the lapped part of the joint. And since the adhesion of the solder must be greater than the power required to stretch the solder, it has been found desirable to make the lapped part of the seam as narrow as possible in order that this stretching may more easily occur. I have found that it is advantageous to make a weakened or narrower part of the lapped seam at the point where the bend in the formation of the flange occurs. This, I find, can be done without danger to the integrity of the hermetical joint and that it greatly facilitates the manufacture and insures better work.

In the accompanying drawing, A represents the body blank of the can. At each end is the hook bar B, B for the formation of a locked side seam. At one end of the blank the upper and lower edges are formed with the inwardly inclined notches C, C, and the other end with the outwardly inclined notches D, D. The outwardly inclined notches D are further provided with incisions E, E, made, at a distance from the edges, equal to the extent of the desired flange. When the pieces B, B are formed into oppositely disposed hooks and the blank bent into the form of a cylinder with the hooks joined together, as indicated in Fig. 2, that portion of the same becomes, as indicated, a diagonal lap, as shown at F, F. The seam thus formed is then soldered, after which, a flange G is formed at each end, the bend being at the weakened point or incision E. In the manufacture of the can the next step is the application of the heads double seaming of one or both to the cans in the usual way.

I claim:—

1. The lock and lap seam for uniting the ends of sheet metal blanks to form can bodies, the lap portion of said seam having a weakened place coincident with which is to be formed the bend near the end of the can body to produce the flange which is to be seamed with the can head, the weakened place being located between the inner and outer ends of the lap portion and which extends transversely to the line of the body seam.

2. A blank for the formation of a side-

seamed and end-flanged can body, having the end-seam portions which are to lap each other cut on substantially parallel inclined lines, said portions at an end of the blank being formed with incisions E located at intermediate points between the ends of the inclined lines.

Signed this 19th day of May, 1914, in the presence of two subscribing witnesses.

JOHN G. HODGSON.

Witnesses:
H. M. MUNDAY,
THOMAS J. O'BRIEN.