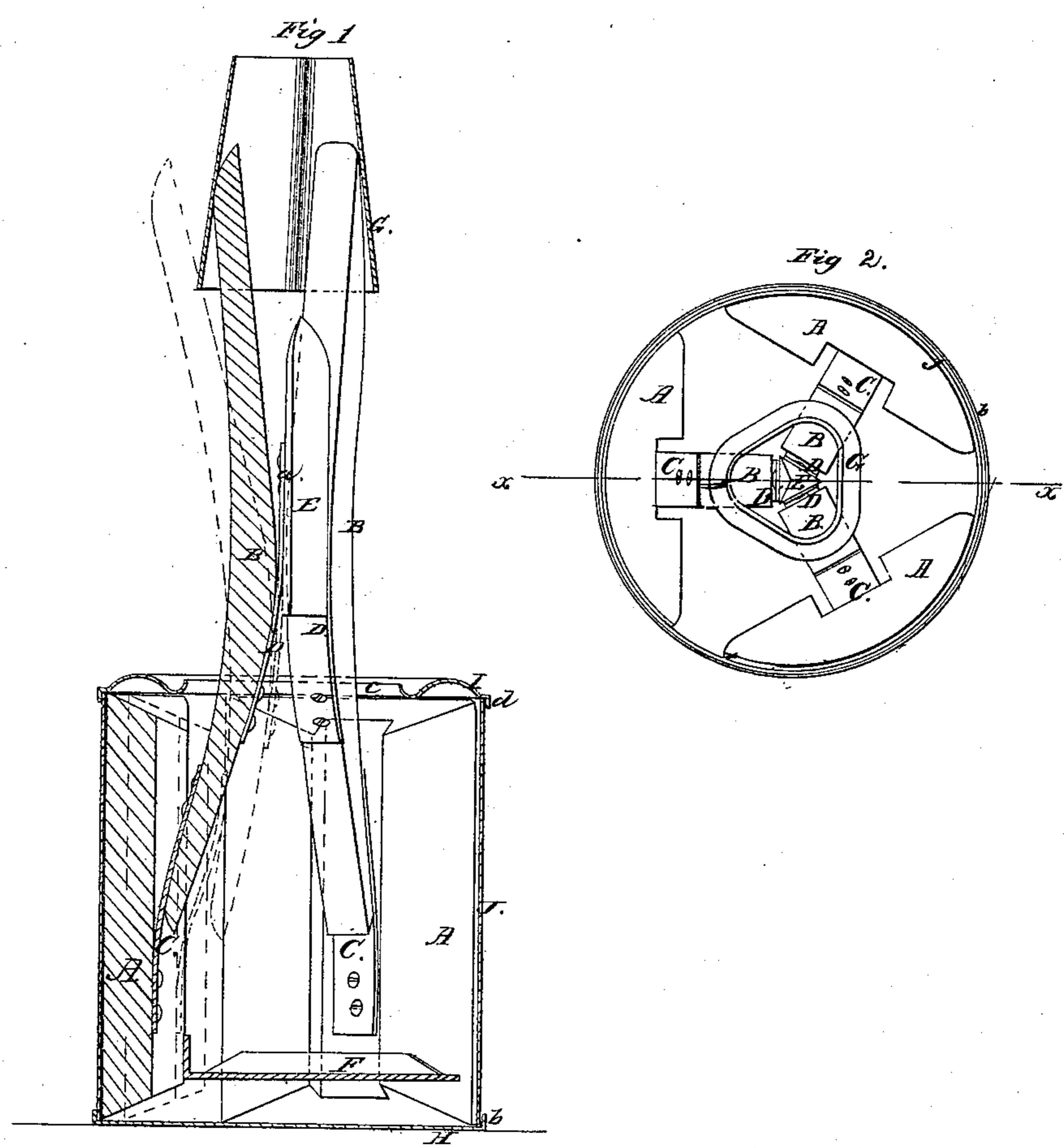


S. Hunt,
Soldering Clamp.
No 37,400. *Patented Jan. 13, 1863.*



Witnesses:
J. W. Coombs
G. W. Reed

Inventor:
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per Munn & Co
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UNITED STATES PATENT OFFICE.

SOLOMON HUNT, OF DANVILLE, INDIANA.

IMPROVEMENT IN SHEET-METAL CANS.

Specification forming part of Letters Patent No. 37,460, dated January 13, 1863.

To all whom it may concern:

Be it known that I, SOLOMON HUNT, of Danville, in the county of Hendricks and State of Indiana, have invented a new and useful Implement or Device to be Used in the Construction of Sheet-Metal Cans; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a sectional elevation of my invention, taken in the line *xx*, Fig. 2. Fig. 2 is a plan or top view of the same, the top of the can being removed.

Similar letters of reference indicate corresponding parts in the two figures.

This invention relates to a new and useful implement or device to be used in the construction of sheet-metal cans—such as fruit-cans and the like—whereby the manufacture of the same is not only materially facilitated, but a cheaper quality of sheet metal—tinned plate—rendered capable of being used.

The invention consists in the employment or use of an expanding cylinder or block provided with levers, a bearing-piece, and a slide, all arranged in such a manner that a perfect and durable can is obtained without a grooved seam, the latter requiring a good quality of tinned plate in order to be reliable.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A A A represent three segments of a cylinder, the length of which is equal to the length of the cans to be manufactured. These segments may be constructed of wood, and each has a lever, B, attached to its inner surface by a spring, C, the latter being secured to the outer surfaces of the levers at their lower parts, as shown clearly in Fig. 1. The levers B are connected by springs D to a central bar, E, the springs D being secured to the inner surfaces of the levers B, and attached to the bar E at points somewhat above their centers, as shown at *a* in Fig. 1. The springs D have a tendency to keep the edges of the segments A in contact, while the springs C not only serve as a means for attaching the segments to the levers, but also serve to admit of the segments assuming a vertical position when forced outward or expanded under the operation of the

levers B. The segments A A A, when in contact, do not form a perfect cylinder; but when forced a little outward by pressing the upper ends of the levers B toward each other they form a perfect cylinder, a small space being between them.

To the inner side of one of the segments A, near its lower end, there is attached a plate, F, of tri-lateral form, and this plate serves as a bearing for the lower parts of the segments when they are in contact with each other.

G is a slide or cap constructed of such a form that it may be fitted on the upper ends of the levers B when the latter are pressed toward each other, and on being pressed down serve to force the upper ends of the same together, as will be fully understood by referring to Fig. 1.

The implement is used as follows: The can bottom H is made with a vertical lip or flange, *b*, all around its edge, and the segments A are set upon the bottom H and within the lip or flange *b*. The top I is then placed on the levers B, the latter passing through the central opening, *c*, at the center of the top. The body J of the can is then placed around the segments, the lower end of the body being fitted within the lip or flange *b* of the bottom H, and the lip or flange *d* of the top fitted over the top of the body. The upper ends of the levers B are then pressed toward each other, and the slides G fitted on them and pressed down. This latter operation expands or forces outward the segments A, causing them to press against the inner surface of the body J, which is retained by the flanges of the bottom and top, and said parts are bound together and retained in proper position, so that they can be soldered with the greatest facility, the edges of the body J being connected by solder and the flange *b* of the bottom H being connected to the body J by solder. The top I is not soldered, but is retained on the levers for a succeeding operation, as the the tops are all alike in cans of a given size, and one top will answer for aiding in soldering any number, a top being soldered to each body J after it is removed from the machine. Thus by this simple arrangement the parts of the can are held firmly in proper position while being soldered, and grooved seams are dispensed with, thereby admitting of the use of cheaper

tinned plate than can be employed with grooved seams, and the manufacture of the cans is greatly expedited.

On removing the slide G the segments collapse into their normal condition, and other parts of a can are applied and operated upon as before.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination of the levers B, springs C D, bearing-piece F, and segments A, with or without the slide G, arranged for joint operation as and for the purpose specified.

SOLOMON HUNT.

Witnesses:

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SQUIRE WADE.