J. F. MERRILL.

FRUIT-CANS.

No. 188,477. Patented March 20, 1877.

FIG. 1.

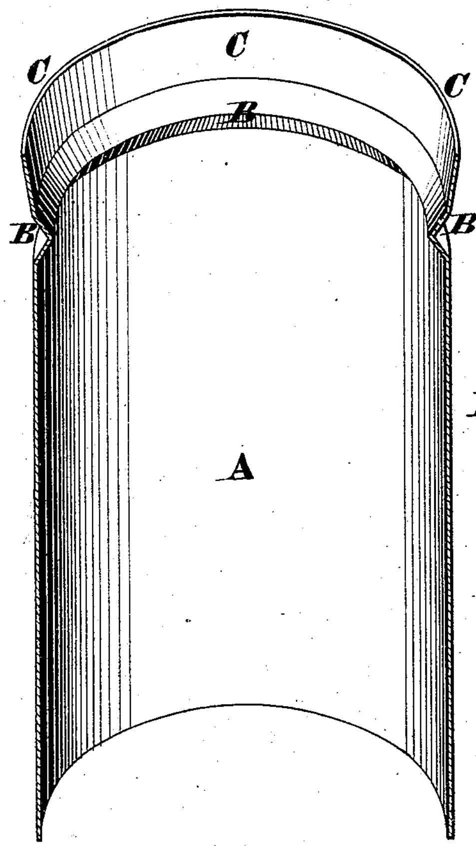


FIG. 2.

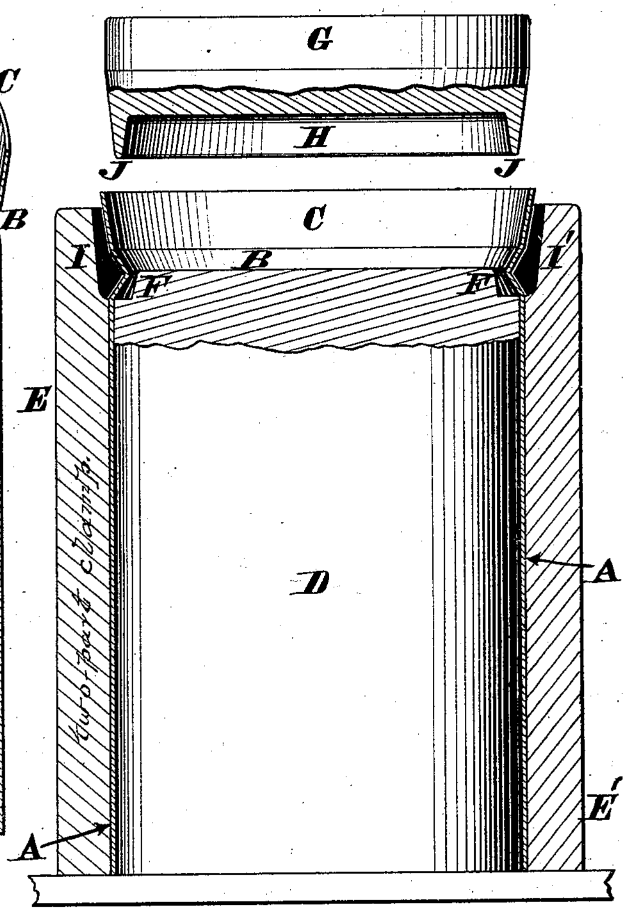


FIG. 3.

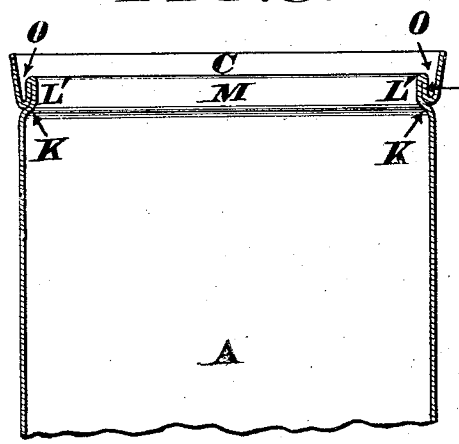
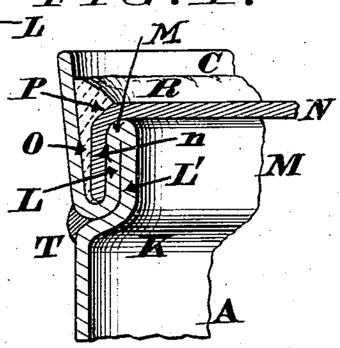


FIG. 4.



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UNITED STATES PATENT OFFICE.

JOHN F. MERRILL, OF CINCINNATI, OHIO.

IMPROVEMENT IN FRUIT-CANS.

Specification forming part of Letters Patent No. **188,477**, dated March 20, 1877; application filed March 16, 1876.

To all whom it may concern:

Be it known that I, JOHN F. MERRILL, of Cincinnati, Hamilton county, Ohio, have invented certain new and useful Improvements in Fruit-Cans, of which the following is a specification:

My fruit-can has its body, outer rim, and internal vertical neck formed of a single piece of tin, said neck being of less diameter than the body proper, and being composed of two folds or thicknesses of metal compressed tightly together.

Adapted to fit snugly around the outer fold of said internal vertical neck is the downturned flange of a cap, which flange is seated in the annular sealing-trough, located between said neck and the outer rim, previously alluded to.

By this arrangement the cap is securely held in position on the neck previous to the application of the wax or cement, and without employing any special retaining devices for that purpose.

Figure 1 is a perspective view, showing a vertical section of my can in the first stage of its manufacture. Fig. 2 is a vertical section, showing the body of the can secured in a clamp-mold and about to receive a blow from the plunger. Fig. 3 is a vertical section through the upper portion of a finished can; and Fig. 4 is an enlarged vertical section through the upper part of a finished can with the lid secured thereto.

The sheet-metal blank A is bent into a cylindrical shape, and provided with a crease, B, and outwardly-flaring rim C, after which said cylinder is slipped over a mandrel, D, whose upper end is reduced in diameter at F. The cylinder is now secured in a two-part clamp, E E′, and subjected to a blow from the chambered plunger G H J. The annular flange J of said plunger strikes the body at the junction of crease B with rim C, and at once imparts to the can the shape shown in Fig. 3, the recessed portions I I′ of the clamp co-acting with the reduced diameter of mandrel D to allow this bending of the metal to take place.

By referring to the aforesaid illustration, it will be seen that the crease B has been bent into two vertical, or almost vertical, folds, L L′, which are forced as tightly together as possible, thereby affording a rigid and internal neck, M, to receive the cap or lid N *n*, whose flange *n* is seated in the trough O. The edge of said lid is beveled off at P, to afford a more secure bearing for the cement or wax R.

The slight crevice at the junction of rim C with the shoulder K may be filled with solder T, if preferred.

The principal advantage due to this construction of can consists in the facility for applying the lid, the flange *n* thereof being first pressed down around the neck L, as soon as the body A is filled with fruit. Owing to this snug fit of said flange around the vertical neck, no weights, or wire braces, or other inconvenient appliances are necessary to maintain the lid in its proper position previous to the application of the wax or cement R. The absence of such retaining devices allows the wax being applied with the utmost facility.

I am aware that it is not new to construct the bodies, necks, and sealing-troughs of fruit-cans, &c., from a single piece of sheet metal; and I am also aware of the fact that it is not a novelty to locate such necks within the body of the can, and, therefore, I lay no claim to these features, but limit my invention to a can whose cap is furnished with a downturned rim that remains securely in position around the neck previous to the application of the wax, cement, or solder.

I claim as my invention—

A fruit-can having the body A, rim C, internal vertical neck L L′ M, said neck having a less diameter than has the body A, and its folds L L′ being in contact, and cap N, whose downturned flange *n* enters the sealing-trough O, and fits snugly around the outer fold L of said neck, so as to retain the lid in position previous to the application of the wax or cement, substantially as herein described and set forth.

In testimony of which invention I hereunto set my hand.

JOHN F. MERRILL.

Witnesses:

JAMES H. LAYMAN,

S. B. SPEAR.