

No. 859,297.

PATENTED JULY 9, 1907.

C. P. HURLEY.
LOCK SIDE SEAM KEY OPENING CAN.
APPLICATION FILED MAY 25, 1906.

Fig. 1

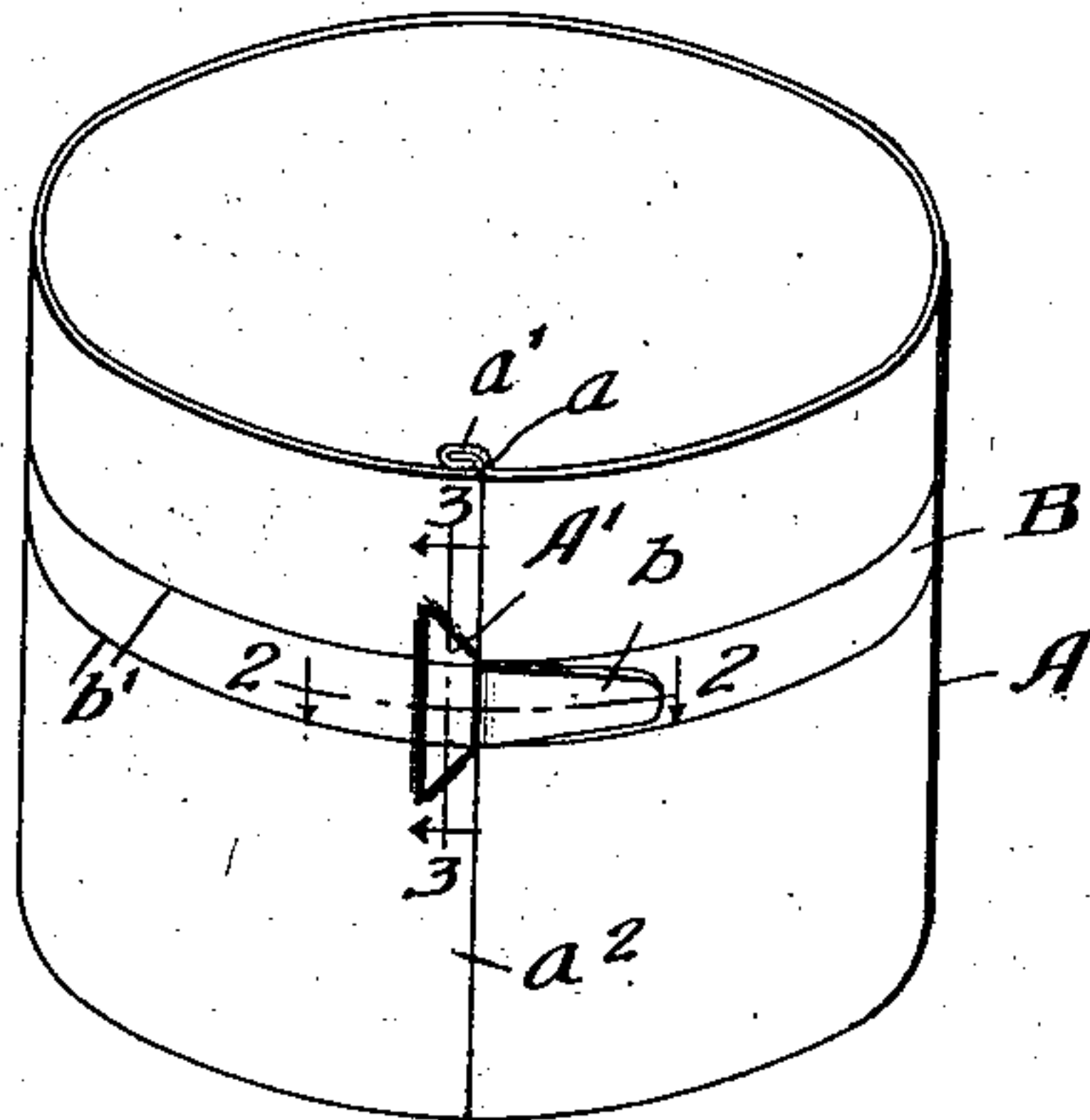


Fig. 2

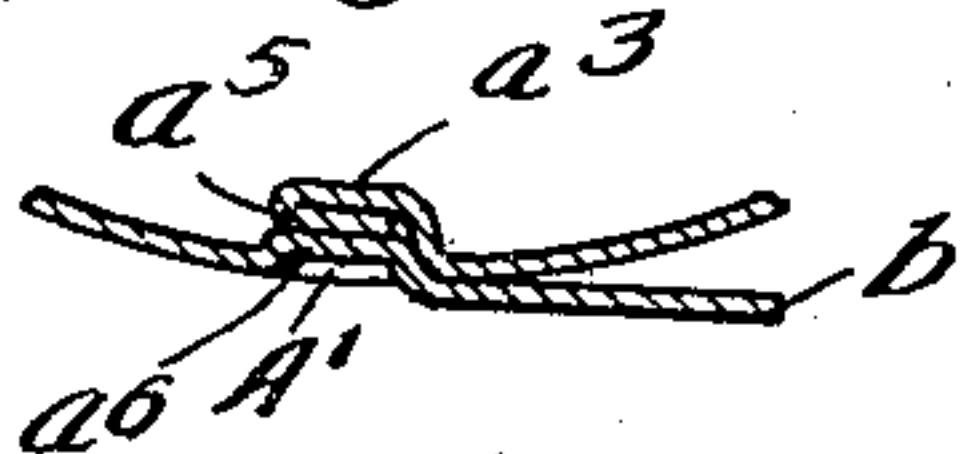


Fig. 3

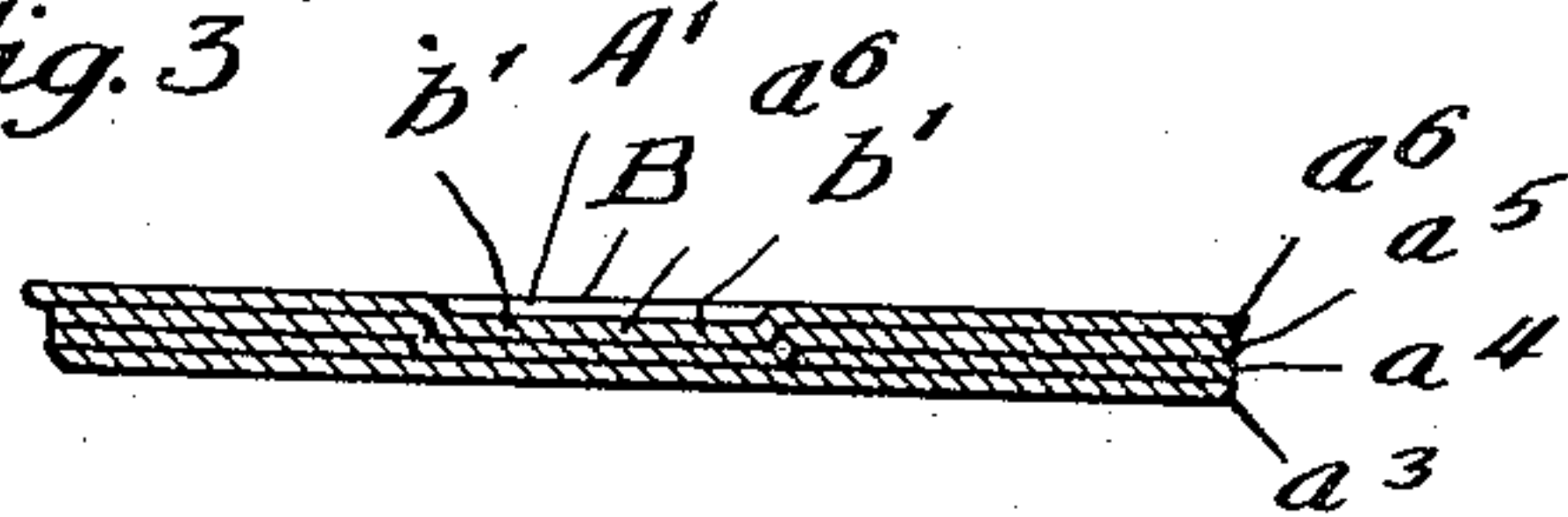


Fig. 4

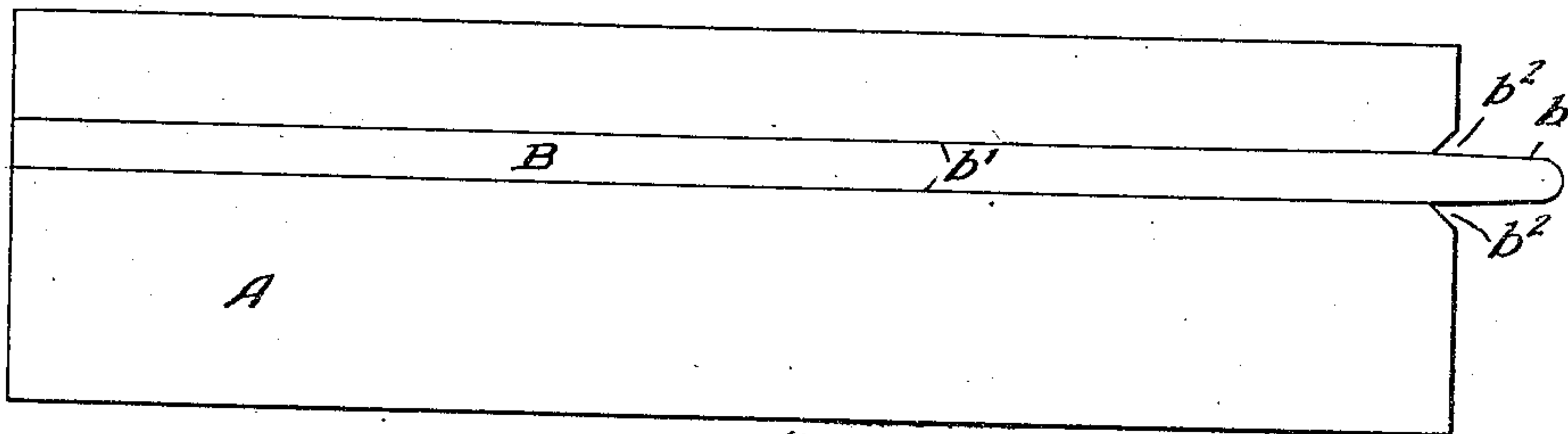
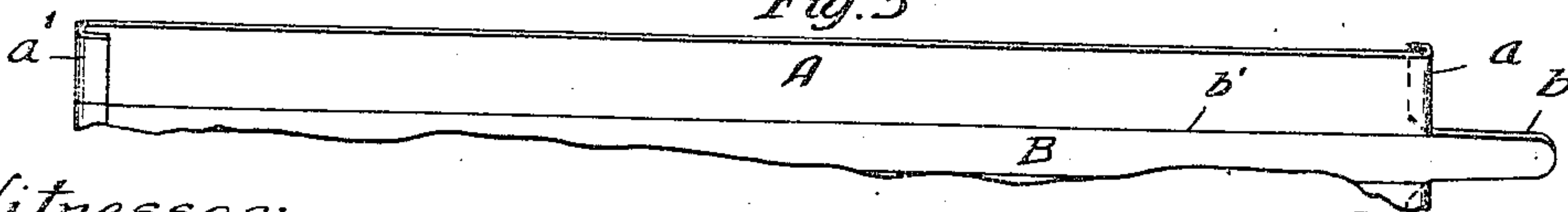


Fig. 5



Witnesses:

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UNITED STATES PATENT OFFICE.

CHARLES P. HURLEY, OF CHICAGO, ILLINOIS, ASSIGNOR TO AMERICAN CAN COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW JERSEY.

LOCK-SIDE-SEAM KEY-OPENING CAN.

No. 859,297.

Specification of Letters Patent.

Patented July 9, 1907.

Application filed May 25, 1906. Serial No. 318,680.

To all whom it may concern:

Be it known that I, CHARLES P. HURLEY, a citizen of the United States, residing in Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Lock-Side-Seam Key-Opening Cans, of which the following is a specification.

This invention relates to improvements in key opening cans, and more particularly to improvements in lock seam key opening cans.

Heretofore in the practical manufacture and use of lock seam key opening cans, such, for example, as shown and described in the Norton patent No. 539,366 or the McDonald patent No. 543,347, great difficulty has been experienced in making the cans hermetically tight at the point in the soldered side seam where the tongue is located and where the seam instead of being of a true lock seam form is really of a lap seam form or composed of but three thicknesses. The leaks in the soldered seam at this point we have discovered are largely due to the cavity or open space left between the two inner folds of the lock seam and to the consequently imperfect contact between the lapping or tongue member of the seam and the adjacent fold of the seam at this point. And we have discovered and demonstrated by practical experiments that the difficulties heretofore experienced may be entirely avoided or overcome by forming the outer or lapping tongue member with an exterior countersink or depression so as to bring all three folds or thicknesses of the stock at the lapping or tongue portion in snug close contact with each other, thus enabling perfect soldering to be performed. This external countersink or depression at the lapping tongue portion of the key opening lock seam can is preferably formed of a truncated triangular shape corresponding to the notches at the base of the tongue in the inturned fold of the lock seam.

In the accompanying drawing forming a part of this specification, Figure 1 is a perspective view of a lock seam key opening can body embodying our invention. Fig. 2 is a horizontal section on line 2—2 of Fig. 1. Fig. 3 is a vertical section enlarged on line 3—3 of Fig. 1. Fig. 4 is a detail view of the blank in the flat and Fig. 5 is a partial detail view of the blank after the hooks or edge folds are formed at the ends thereof, which are interengaged and bumped or squeezed together to form a lock seam.

In the drawing, A represents a lock seam key opening can body having the customary hooks or edge folds a^1 at the meeting ends of the blank which are hooked together or interengaged and then bumped or squeezed to form the lock side seam a^2 of the can body.

B is the tearing strip having the customary project-

ing tongue b and marked off or bounded by scores or weakened lines b^1 b^1 to adapt it to separate from the can body when the tearing strip is wound upon a wire or other key in the usual manner. The can body A is furnished with notches b^2 on each side of the tongue b at the base thereof, preferably to the depth of the hook or edge fold a to permit the hook to be turned or folded without folding the tongue b and the parts to be properly together or engaged.

The side seam a^2 it will be understood, is composed of four folds or thicknesses of stock throughout the length of the side seam excepting for the short space which spans the tongue of the tearing strip, where the seam is composed of three thicknesses. In the drawing, the several thicknesses or folds of the seam are indicated, beginning from the outside by the reference letters a^3 a^4 a^5 a^6 and it will be observed that the thickness or fold a^4 is omitted or wanting at the space extending across the tongue. Owing to the notches b^2 at the base of the tongue, the omitted thickness or fold a^4 at the tongue is of a truncated triangular form, as will be readily understood from the drawing. And to cause the three folds a^3 a^5 a^6 of the side seam at the portion thereof extending across the tearing strip or tongue to be snugly, firmly and closely compressed together, we provide the can body with an external countersink A^1 , preferably of a truncated triangular form, the extent of the countersink or depression corresponding substantially to the thickness of the omitted fold a^4 at this part. By this means, the side seam may be successfully and practically soldered hermetically tight throughout its entire length, across the tearing strip and tongue as well as at other points.

We claim:—

1. A soldered lock side seam key opening can body having a circumferential detachable tearing strip extending across the lock side seam and terminating in an integral free tongue proceeding from the external fold of the seam, said can body having a countersink or depression at the portion of said side seam extending across the tearing strip and tongue, and the several thicknesses or folds of the seam being all in snug close contact with each other at the tearing strip and tongue portion thereof as well as elsewhere, substantially as specified.

2. A lock side seam key opening can body having a circumferential detachable tearing strip extending across the lock side seam and terminating in an integral free tongue proceeding from the external fold of the seam, said can body having an external countersink or depression at the portion of said side seam extending across the tearing strip and tongue, said external countersink or depression being of a truncated triangle form, substantially as specified.

3. A key opening sheet metal can body having interlocked edge folds or hooks forming a lock side seam, and provided with a tongue tearing strip furnished with notches at the base of the tongue to the depth of the hook

or edge fold, said can body being provided with an external countersink or depression at the portion of the side seam extending across the tearing strip and tongue, the several thicknesses or folds of the seam at the tearing strip and tongue being in snug close contact with each other so that the seam may be closely soldered throughout its length, whereby leaks are prevented at the tongue tearing strip portion of the soldered side seam, substantially as specified.

10 4. A key opening sheet metal can body having interlocked edge folds or hooks formed a lock side seam, and provided with a tongue tearing strip furnished with notches at the base of the tongue to the depth of the hook or edge fold, said can body being provided with an external

countersink or depression at the portion of the side seam 15 extending across the tearing strip and tongue to bring the several thicknesses or folds of the seam at the tearing strip and tongue in snug close contact with each other so that the seam may be closely soldered throughout its length, said countersink or depression in the can body 20 being of a truncated triangle form, substantially as specified.

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Witnesses:

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