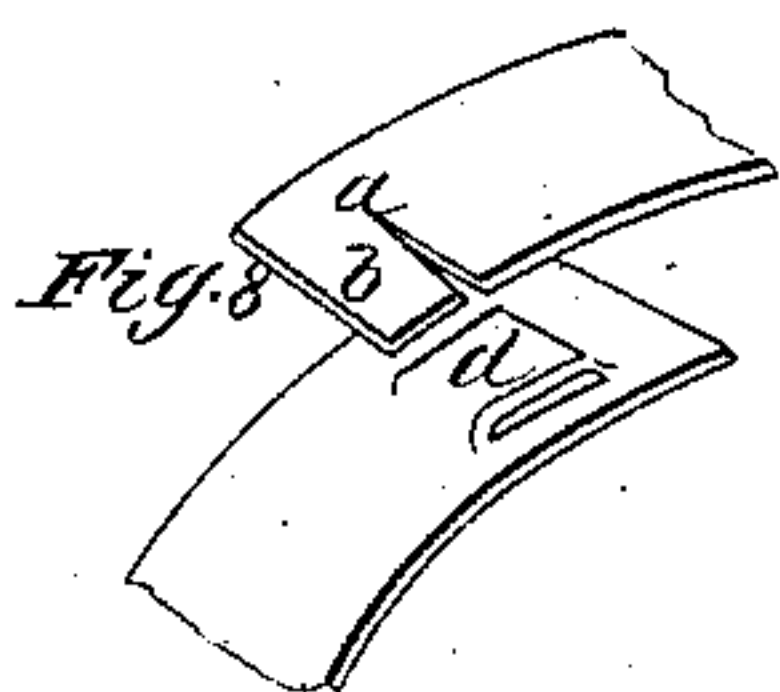
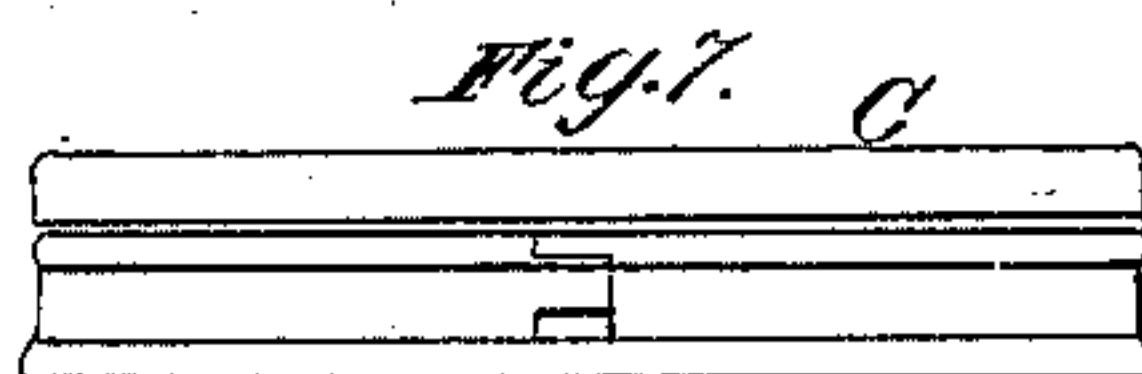
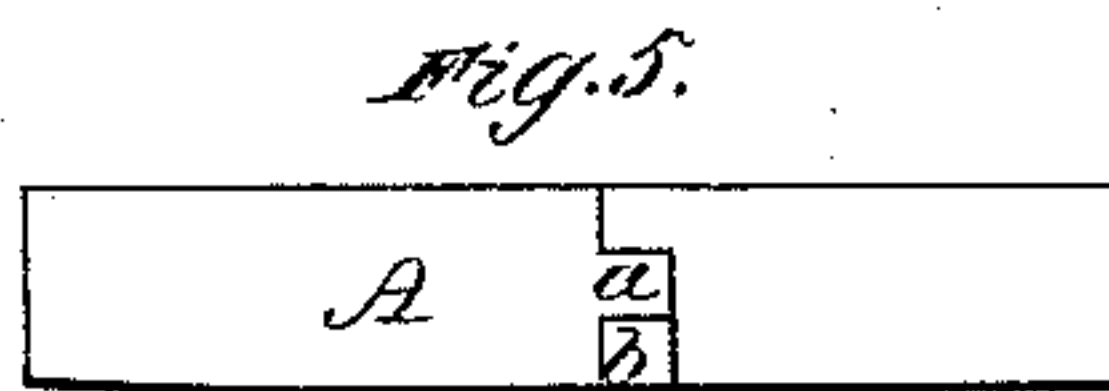
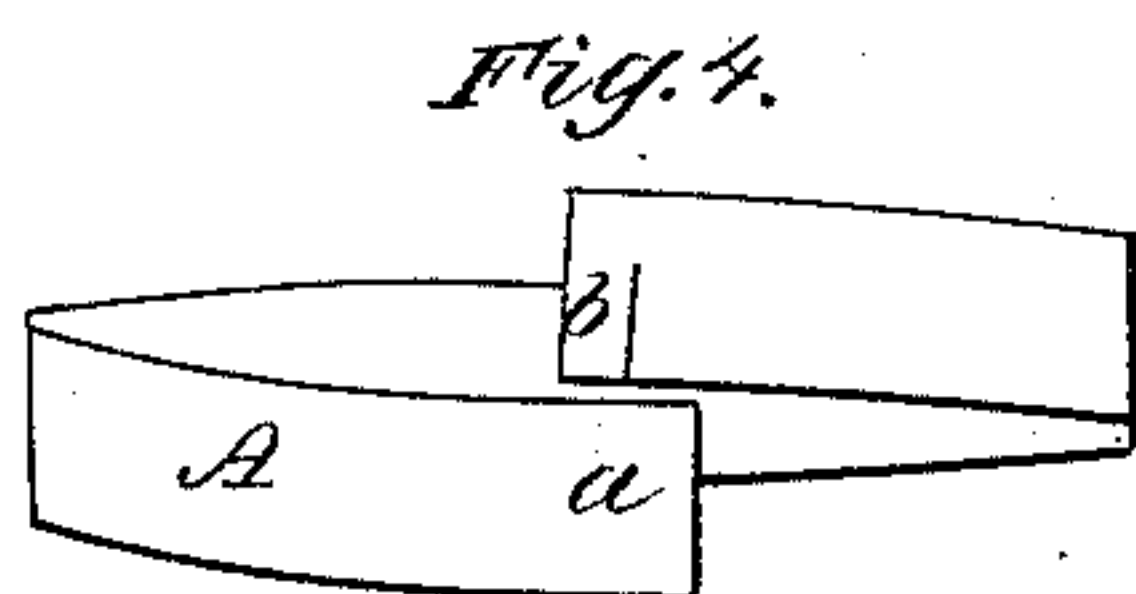
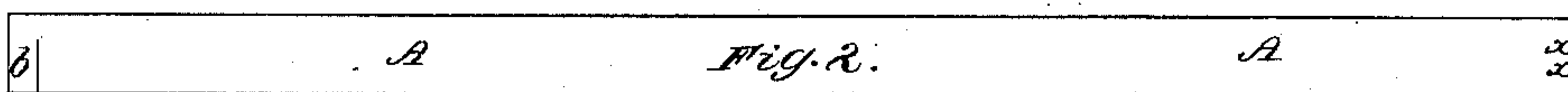
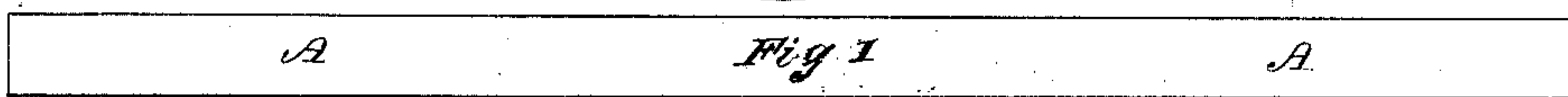
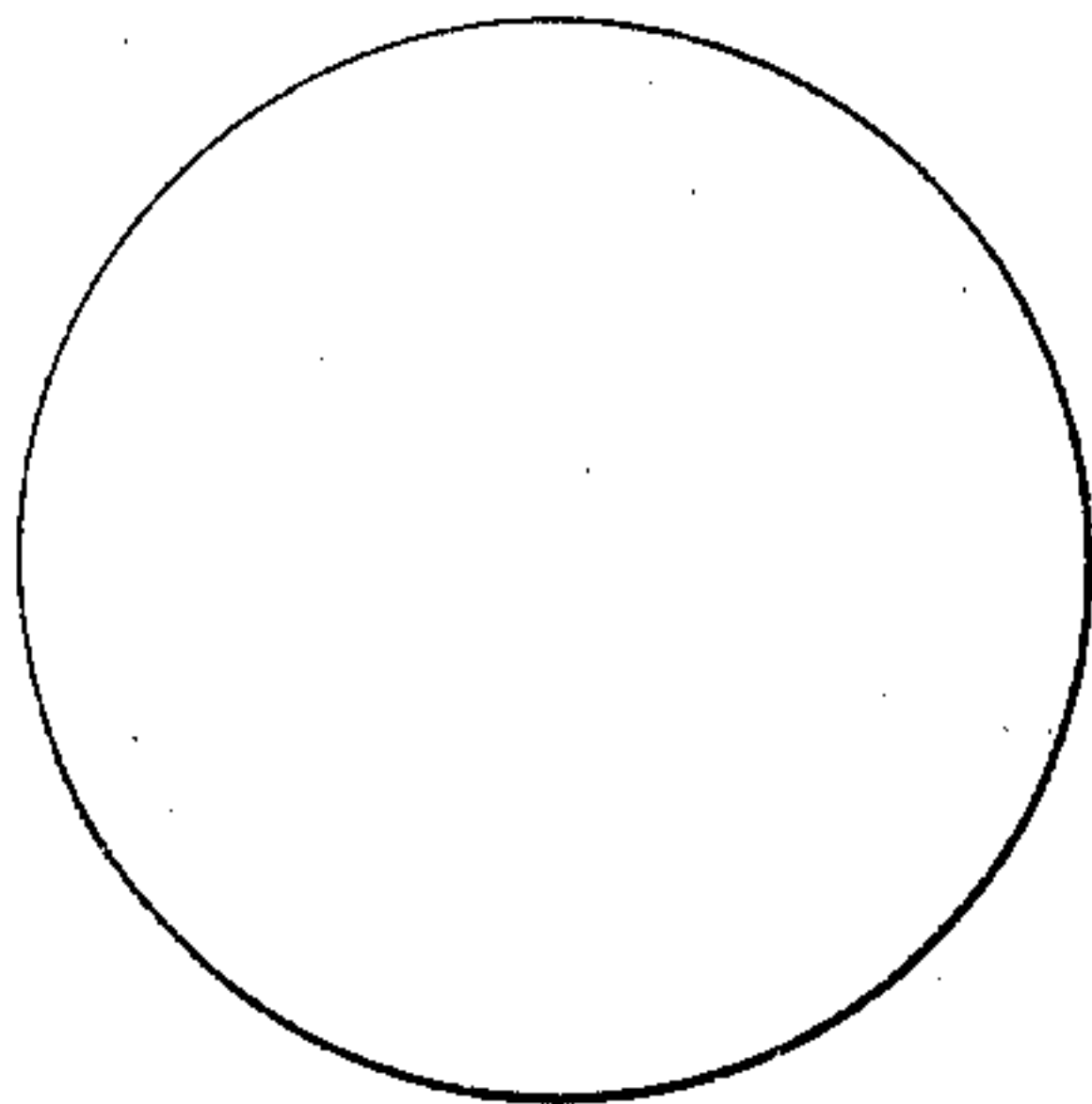


J. L. Kite.

Making Metal Boxes.

N^o 38,585.

Patented May 19, 1863.



Witnesses.

*Charles Houston
H. Albert Steel.*

Inventor.

*Henry Houston
J. L. Kite*

UNITED STATES PATENT OFFICE.

JOHN L. KITE, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO JAMES S. MASON & CO., OF SAME PLACE.

IMPROVEMENT IN METAL BOXES.

Specification forming part of Letters Patent No. 38,585, dated May 19, 1863.

To all whom it may concern:

Be it known that I, JOHN L. KITE, of Philadelphia, Pennsylvania, have invented an Improvement in the Manufacture of Metal Boxes; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention relates to the manufacture of the cheap tin boxes used for containing blacking and other materials; and my invention consists in connecting together the ends of the metal strip which forms the side of the box by fitting a tongue made on one end of the strip into a staple-like projection formed on the opposite end of the strip, substantially as described hereinafter, so that a perfectly secure joint may be made without resorting to the usual process of soldering the two ends of the strip together.

In order to enable others to practice my invention, I will now proceed to describe the manner of carrying it into effect.

On reference to the accompanying drawings, which form a part of this specification, Figure 1 represents the strip of tin to be formed into the side of the box; Fig. 2, the same with its ends cut and punched preparatory to being secured to each other; Fig. 3, an edge view in section of Fig. 2. Fig. 4 illustrates the strip as bent preparatory to the fastening together of the ends; Fig. 5, the same with the ends secured. Fig. 6 represents the strip as secured to the bottom of the box; Fig. 7, an exterior view of box and lid; Fig. 8, a perspective view illustrating the mode of fastening the ends of the strip.

Similar letters refer to similar parts throughout the several views.

I take a strip, A, of tin, so long that when bent to form a circle with one end overlapping the other, as seen in Fig. 4, it will be of the desired diameter of the box. I then cut the strip throughout about two-thirds of its width at *a*, Fig. 2, so as to form at one end a tongue, *b*, which is bent down to the position best observed on reference to Fig. 3, both cutting and bending being accomplished by suitable im-

plements or apparatus at one operation. At the other end of the strip I make two cuts, *x*, and by a suitable instrument depress the metal between the cuts, so as to form on one side of the strip the staple-like projection *d*. I then bend the strip round, so as to form a circle of the desired diameter. Then, holding the opposite ends (one overlapping the other) in the position shown in Figs. 4 and 8, I cause the tongue *b* to enter the staple-like projection *d* and force the said tongue through the projection until the edges of the overlapping portions of the strip coincide with each other. The joint is then made secure by pressure or impact on the projection *d*, which is flattened and thereby tightened to the tongue *b*. After this the lower edge of the circular strip is bent outward so as to form a flange, which takes its place within the turned-up edge of the bottom B of the box, the junction of the strip to the bottom being rendered secure by pressure applied to the turned-up edge by suitable machinery. An annular projection, *e*, may be formed on the strip for the edge of the lid C to rest against. This lid may be made by simply turning down the edge of a metal disk; or it may be made in a manner precisely the same as that described in reference to the box.

It will be evident that by the aid of suitable apparatus the above-described junction of the two ends of the metal strip can be accomplished with the greatest rapidity; that the usual application of solder is dispensed with, and that the joint is perfectly secure.

I claim as my invention and desire to secure by Letters Patent—

Connecting together the ends of the metal strip A by a tongue, *b*, formed at one end of the strip into a staple-like projection, *d*, formed on the opposite end of the strip, substantially as and for the purpose herein set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN L. KITE.

Witnesses:

HENRY HOWSON,
JOHN WHITE.