

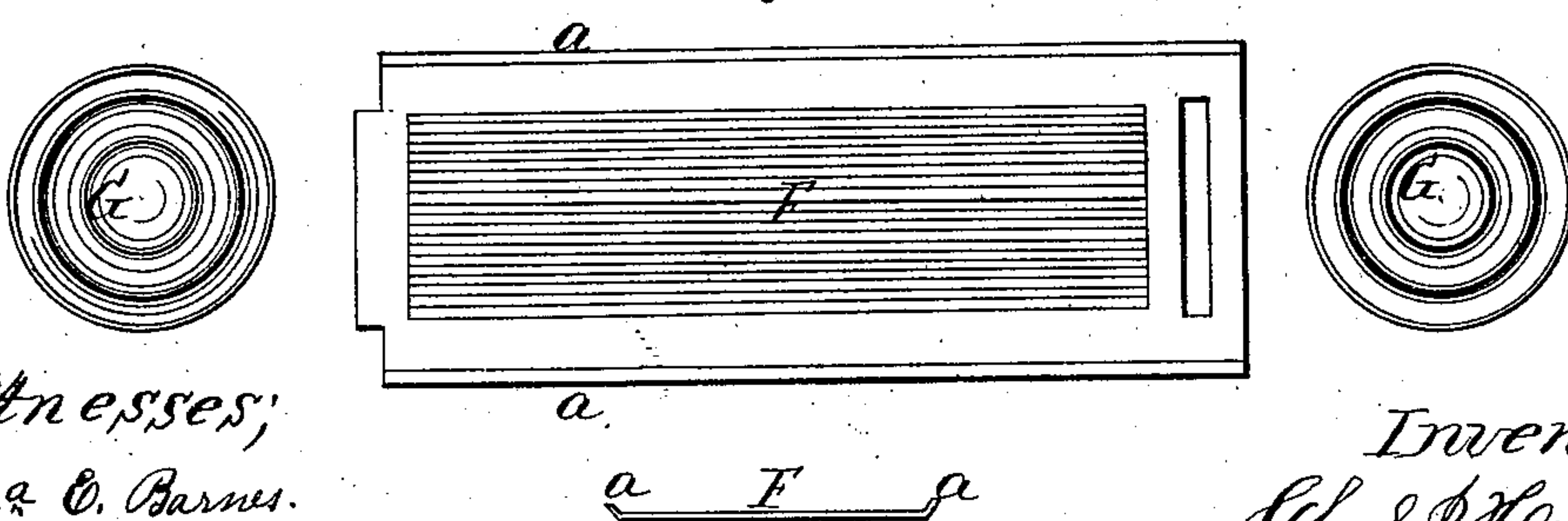
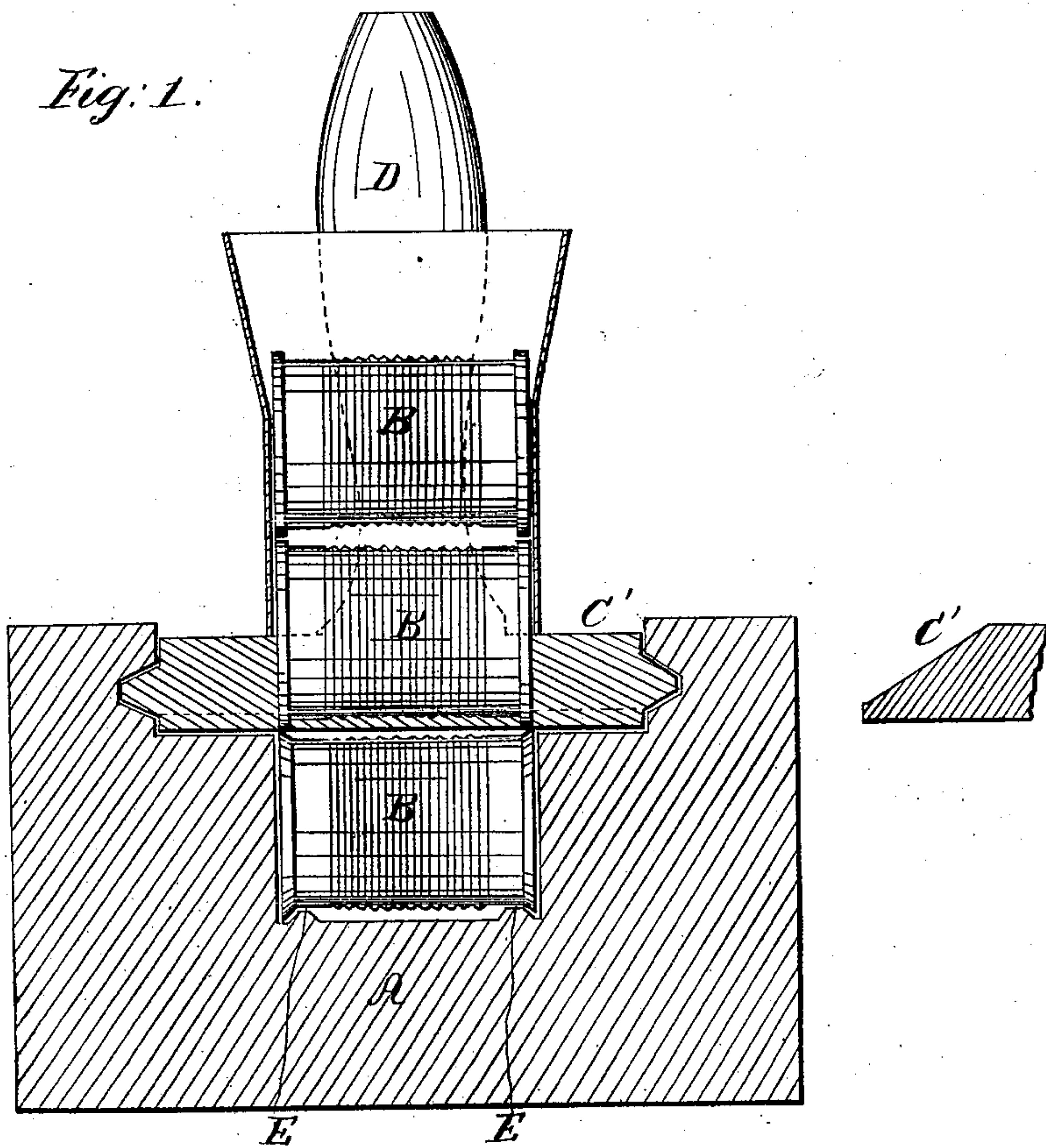
C. J. Haywood,

Making Sheet-Metal Vessels.

N^o 28,634.

Patented June 5, 1860.

Fig: 1.



Witnesses;

*Jon^a C. Barnes.
Jonathan Barney.*

Inventor;

Chas J Haywood

UNITED STATES PATENT - OFFICE

C. J. HAYWOOD, OF DURHAM, CONNECTICUT, ASSIGNOR TO MERRIAM MANUFACTURING COMPANY, OF SAME PLACE.

IMPROVEMENT IN MAKING TIN BOXES.

Specification forming part of Letters Patent No. 28,634, dated June 5, 1860.

To all whom it may concern:

Be it known that I, CHAS. J. HAYWOOD, of Durham, county of Middlesex, and State of Connecticut, have invented a certain new and useful process or method of producing a certain result in the manufacture of an old article of trade—viz., the fastening of the bottom or head onto a tin box; and I do hereby declare that the said method or process is described and represented in the following specification and drawings in such a manner that I fully believe will enable others skilled in the art to make and use the same.

I will proceed to describe the process and the mode of operation, referring to the drawings, in which the same letters indicate like parts in each of the figures.

This invention relates to the making of tin boxes, &c.—such as are used for rattle-boxes, medicine, spices, &c.—without the use of soldering or other fastenings.

The nature of this invention consists in a new process or method of producing a certain result in the manufacture of an old article of trade; or, in other words, the invention consists in the production of an old manufacture by means of a new process or mode of operation in the making of tin boxes, &c.

In the accompanying drawings, Figure 1 shows a sectional end view of a friction apparatus or die, A, into which the box B is placed, (after having been prepared in a proper or in the ordinary way in readiness to be secured together,) and a sliding plate, C, is moved forward by means of a handle, D, or other mechanical means, rolling or revolving in its movement the box B therewith over suitable or properly-made ridges, E, thereby (by the friction thus produced) securing the flange edge of the bottom or head of the box smoothly and firmly over the raised edge *a*, (see Fig. 2,) prepared for its reception.

In Fig. 2, F is a blank first pushed through a die in the ordinary way. G is the head or bottom of a box, also punched in the usual way. Both the blanks F and G are struck up in a die (after they are punched) having any desirable ornamental figure. The edges *a* of the blank F are raised, so that when the flange edge of the head or bottom G is turned down by the friction over the ridges E it will be firmly and smoothly secured thereon without

the use of solder, thereby dispensing with the use of solder, except in such cases where they are required to be made water or air tight. After a suitable quantity of the blanks F (or bodies) and bottoms G are prepared the blanks are turned or bent and locked together, so as to prevent the yielding thereof, while the flange edge of the head or bottom is being turned down over the edge *a* of the blank or body F.

I propose sometimes to use a funnel secured directly over the channel or ridges E, into which the boxes B may be placed in any desirable number that the said funnel may be made to contain, thus feeding themselves into the said channel over the ridges as fast as one is discharged therefrom. Now, it will be seen that when the box B is placed or fed into the channel over the ridges E, or between the plate C and the ridges E, and motion is given to the plate C, the box B will move forward therewith over the said ridges E, thereby firmly and smoothly turning down the flange edge of the head or bottom G of one box each motion of the plate C.

Heretofore it has been found necessary in order to secure the head or bottom firmly (so as not to turn or remain loose on the body) to solder them to the body F. By this process of manufacturing (now speaking particularly of the accompanying sample and drawings as shown by B) I can secure fifty gross per day, and save in the cost of solder at least four dollars. In making the same in the old way four gross per day is all I could solder. Thus it will be seen that by my new process or method of manufacturing I make a great saving of labor and stock, and at the same time secure the parts together in a thorough and perfect manner without the use of solder, (except in certain cases, as when they are required to be water or air tight,) and having this additional advantage that one head or bottom can be more readily removed than when soldered.

I have thus endeavored to show the nature, mode of operation, and the advantage to be derived therefrom, or by the use of my new method or process in the manufacture of tin boxes, so as to enable a person skilled to use the same.

What I claim, therefore, and desire to secure by Letters Patent, is—

1. A properly constructed and arranged friction device, substantially such as described, for securing a head or bottom of a tin box, &c., as the recess-die A, ridges E, friction sliding plate C.

2. A new manufacture of an old article—a tin box for various purposes—by a new process, substantially in the manner as described.

In testimony whereof I have hereunto set my hand and affixed my seal this 27th day of March, 1860.

CHAS. J. HAYWOOD. [L. S.]

In presence of—

JONA. E. BARNES,
JONATHAN BARNES.