

(No Model.)

A. BEYER.
ANNEALING BOX.

No. 479,345.

Patented July 19, 1892.

Fig. 1.

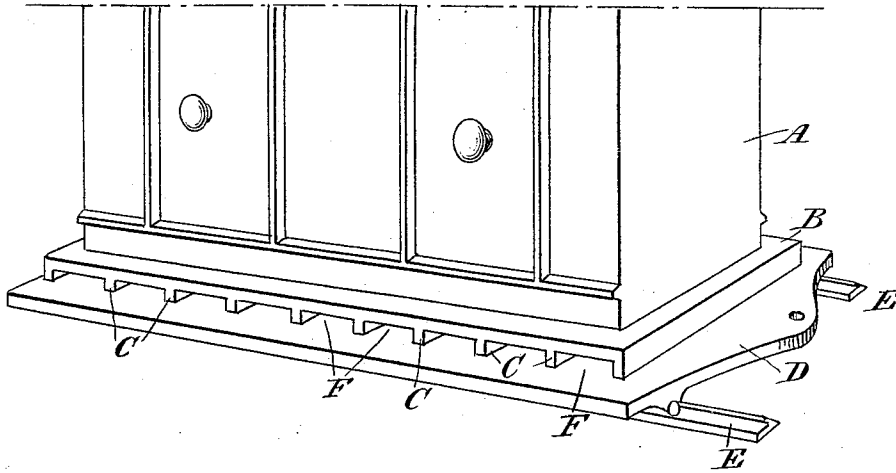


Fig. 2.

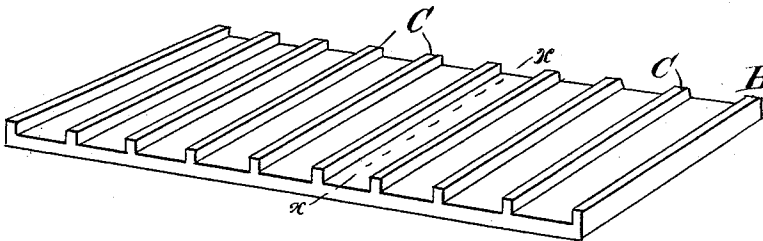
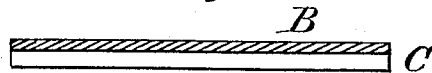


Fig. 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

AUGUSTUS BEYER, OF NEW PHILADELPHIA, OHIO, ASSIGNOR TO HIMSELF
AND A. W. BROWN, OF SAME PLACE.

ANNEALING-BOX.

SPECIFICATION forming part of Letters Patent No. 479,345, dated July 19, 1892.

Application filed December 1, 1891. Serial No. 413,671. (No model.)

To all whom it may concern:

Be it known that I, AUGUSTUS BEYER, of New Philadelphia, in the county of Tuscarawas and State of Ohio, have invented certain new and useful Improvements in Annealing-Boxes, of which the following is a full, clear, and exact description.

The object of the invention is to provide certain new and useful improvements in annealing-boxes, whereby a uniform heating of the boxes and the sheets contained therein is obtained, so as to prevent uneven coloring of the sheets.

The invention consists of an annealing-box bottom plate formed on its under side with ribs resting on the carrier and forming with the latter passages for the heat, thereby saving time and fuel.

The invention also consists of certain parts and details and combinations of the same, as will be described hereinafter, and then pointed out in the claim.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of the improvement. Fig. 2 is an inverted perspective view of the bottom plate; and Fig. 3 is a transverse section of the same, on the line *xx* of Fig. 2.

The improved annealing-box is formed with the usual box proper A, adapted to be set with its lower open side on the bottom plate B, formed on its under side with parallel ribs C, resting on top of the carrier D, mounted to travel in the usual manner on the track-rails

E. As shown in the drawings, the ribs C are arranged transversely and when the bottom plate B is set on the carrier D the said ribs form, with the carrier, passages F, through which the heat can circulate. The sheets or other articles to be annealed are placed in the box proper A in the usual manner. The bottom plate B is usually about one inch thick and made of a suitable metal—for instance, cast-iron—and of a suitable size for any-sized box. By the use of this plate B the sheets in the bottom of the box, as well as those nearer the top, are annealed uniformly, so that the several sheets receive an even color throughout the box and are of even toughness and ductility, requiring less time and fuel.

In annealing-boxes such as are now employed the sheets in the top of the box usually have a blue color, while those nearer the bottom are black. The ribs C materially strengthen the bottom plate B, so that it remains perfectly level and is not liable to crack.

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

An annealing-box open at its bottom and provided with the usual carrier or bottom plate D and the auxiliary bottom plate B, having a series of transverse ribs C C, resting on upper side of the carrier or bottom plate D and forming air-passages F between said two bottoms or plates, substantially as set forth.

AUGUSTUS BEYER.

Witnesses:

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