

JOHN M. OTTO.

Improvement in Beer-Coolers.

No. 127,639.

Patented June 4, 1872.

Fig. 1.

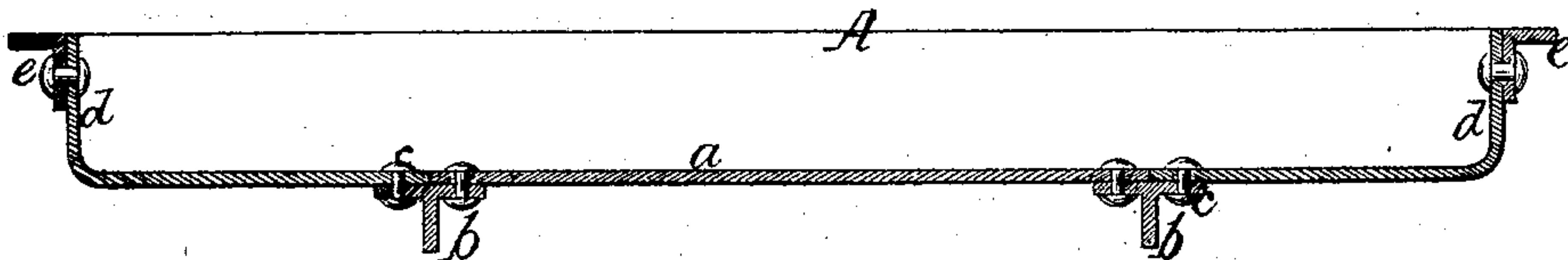
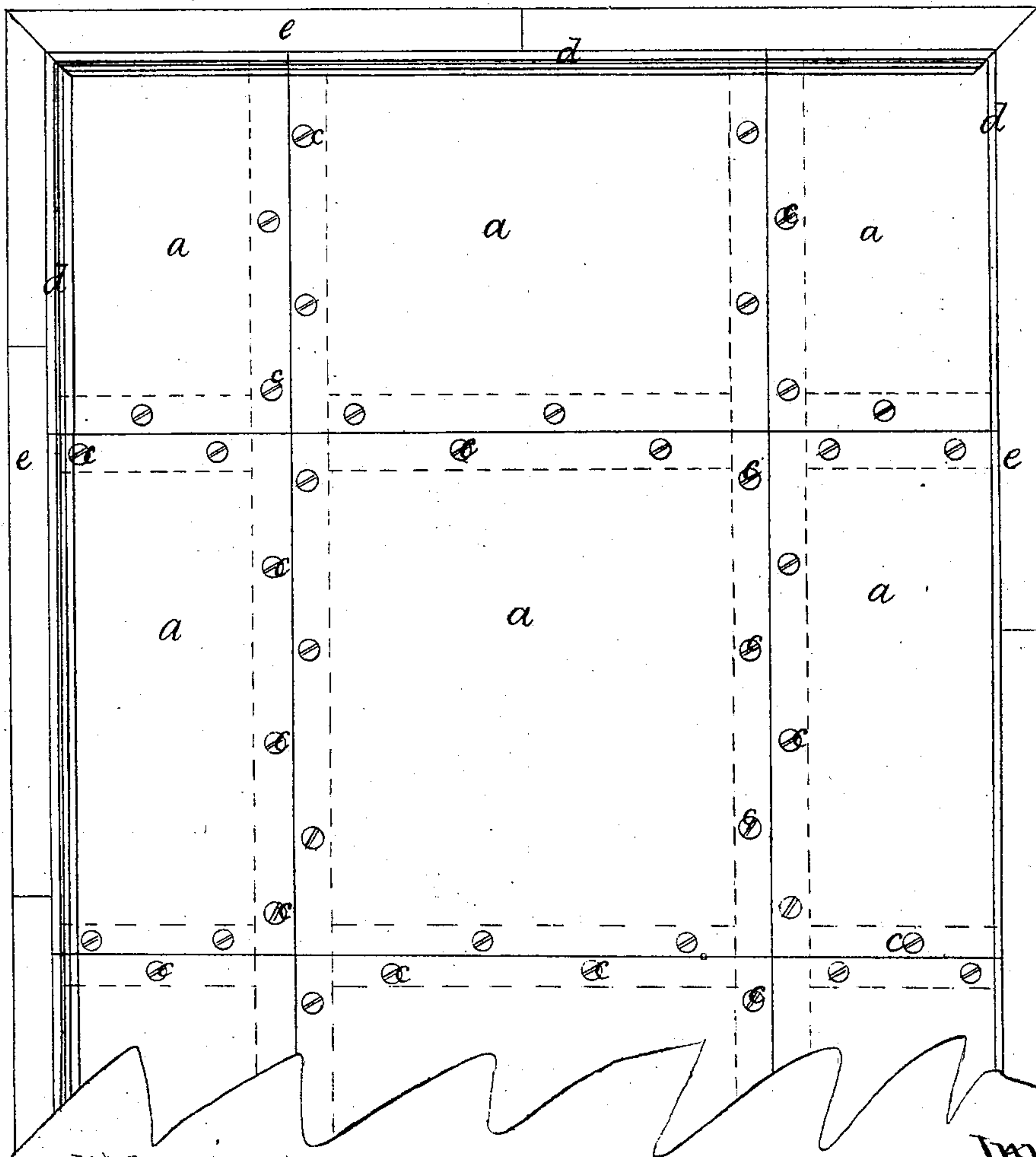


Fig. 2.



Witnesses
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JOHN MARTIN OTTO, OF BROOKLYN, E. D., NEW YORK.

IMPROVEMENT IN BEER-COOLERS.

Specification forming part of Letters Patent No. 127,639, dated June 4, 1872.

To all whom it may concern:

Be it known that I, JOHN MARTIN OTTO, of Brooklyn, E. D., in the county of Kings and State of New York, have invented a new and useful Improvement in Beer-Coolers; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, and in which drawing—

Figure 1 represents a transverse vertical section of my invention. Fig. 2 is a plan or top view of the same.

Similar letters indicate corresponding parts.

This invention relates to an improvement in the construction of the ordinary shallow cooling-pan generally used in breweries; said improvement consisting in the arrangement of T-irons under the joints between the several sheets of iron which constitute the bottom of said pan, in such a manner that by such T-irons the bottom is strengthened and the edges of the sheets of iron are prevented from bulging up, thereby producing a flat and even bottom, which is a great desideratum in cooling-pans. The rim of my pan is formed by bending the extreme edges of the outer sheets upward to the desired height; and said rim is strengthened by angle-irons, which are riveted to it, extending throughout its entire length and width.

In the drawing, the letter A designates a cooling-pan, which is constructed of a series of iron plates or sheets, *a*, of suitable length and width, the length of such sheets being generally eight feet and their width three feet. These sheets are placed edge to edge, and they are secured by means of T-irons *b*, which are fastened to the sheets by rivets *c*, as shown in Fig. 1.

By means of these T-irons the joints between the several sheets are rendered tight and perfectly flat, the sheets being effectually prevented from bulging up, so that a cooling-pan is obtained which is durable and in which the operation of cooling can be carried on with ease and facility.

The T-irons which I use are generally eighteen feet long, so that the same extend beyond the length of two sheets, whereby the strength of the pan is materially increased. For the cross-seams I cut the T-irons in pieces of suitable length. The rim *d* of my pan is formed by bending the extreme edges of the sheets upward to the height of about six inches; and in order to strengthen this rim I secure to its edges the angle-irons *e*, which extend all round the rim.

By these means a cooling-pan is obtained which is superior in strength and durability to cooling-pans as heretofore constructed; and, by applying to the bottom plates of my pan the T-irons *b*, said plates are firmly retained in position, and they are effectually prevented from bulging up.

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

1. The arrangement of T-irons *b* under the joints of the metal plates *a*, which constitute the bottom of a cooling-pan, A, substantially as described.

2. The angle-irons *e*, in combination with the rim *d* of the pan A, substantially as set forth.

Dated New York, May 4, 1872.

J. MARTIN OTTO.

Witnesses:

W. HAUFF,
E. F. KASTENHUBER.