H. C. Dart,

Beer Cooler.

No. 90,242. Patented May 18. 1869.

Fig. 2

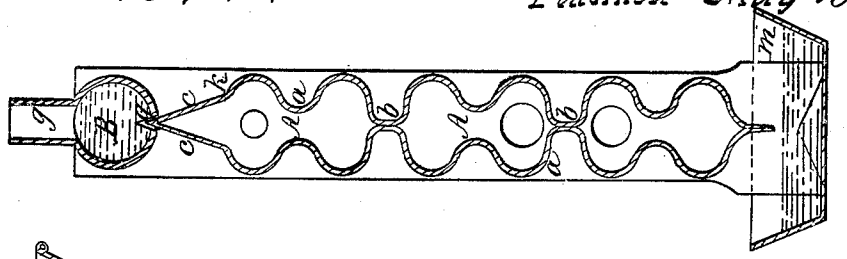


Fig. 3

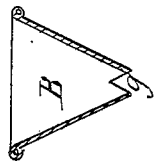
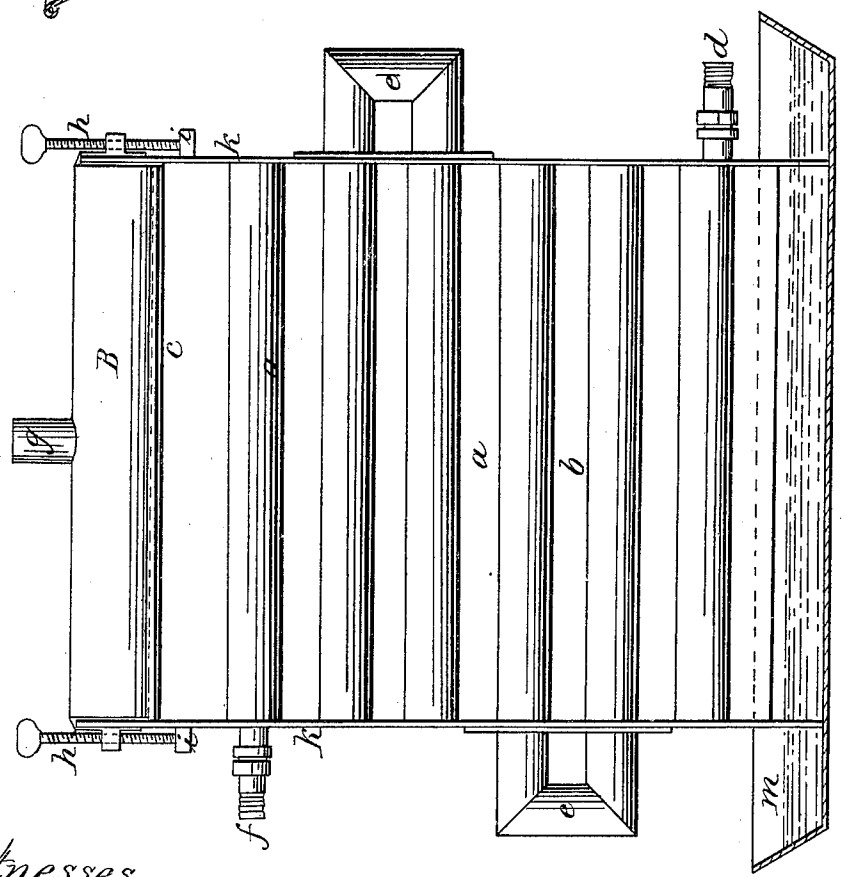


Fig. 1



Witnesses

J. M. Coombs

Fred'k Haynes.

Inventor

Henry C. Dart

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United States Patent Office.

HENRY C. DART, OF NEW YORK, N. Y.

Letters Patent No. 90,242, *dated May* 18, 1869.

IMPROVEMENT IN BEER-COOLERS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, HENRY C. DART, of the city, county, and State of New York, have invented a new and useful Improvement in Beer-Coolers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, forming part of this specification, and in which—

Figure 1 represents a side or face view of a beer-cooler constructed in accordance with my invention;

Figure 2, a transverse vertical section thereof; and

Figure 3, a transverse section of a modified form of receiver or distributer for the beer, to the cooling-surfaces.

Similar letters of reference indicate corresponding parts in the several figures.

This invention consists in a certain combination of an adjustable distributer with a cooler, made up of corrugated plates, and constructed with an inverted V-shaped top, for the purpose of regulating the supply of liquid to be cooled over the corrugated surfaces of the cooler, which is made with circulating passages through it, and constructed to present a continuity of exterior cooling-surfaces, as hereinafter described.

Referring to the accompanying drawing, A A represent a series of hollow corrugated chambers, arranged one above the other, and formed of plates *a a*, in sections or otherwise, meeting, as at *b b*, so as to make continuous surfaces on both or opposite sides of the entire structure or cooler.

The upper chamber A is extended at its top, to form a double-inclined outer-conducting or distributing-surface, *c c*.

The cooling-liquid is introduced by a pipe, *d*, below, to the lower chamber A, and, by means of reversely-arranged elbows *e e*, made to circulate in opposite directions successively, throughout the several corrugated chambers, and ultimately caused to escape from an upper outlet or pipe, *f*.

The beer or liquid to be cooled is first passed, by any suitable inlet or pipe, *g*, into or within a distributer, B, which may either be of pipe, hopper, or other suitable form, figs. 1 and 2 representing it of a circular-pipe shape, and fig. 3 of open-hopper form.

In the bottom of such distributer a longitudinal slot, *g*, is cut, the same receiving within it, in valve-like fashion, the double incline *c c*, formed by the plates which constitute the upper chamber A, and being adjustable in relation thereto, so as to give more or less discharge-opening to the liquid from the distributer B.

This adjustment may be effected through screws *h h*, arranged in the ends of the distributer, and serving to support the latter on projections *i i*, from the sides of the uprights *k k*, which form the stand for the cooler, and may rest in a receiving-vat, *m*.

From this description, it will be seen that by adjusting the distributer B relatively to the double incline *c c* of the cooler, the discharge from the former may be regulated to the greatest nicety without any special or independent valve being employed, and that the discharge is not at separated points, as through perforations, but continuous, in conformity to the cooling outside surfaces of the chambers, which surfaces are also continuous, thus presenting a most extended cooling action to the beer, as, flowing out of the distributer B, through the longitudinal slot *g*, it trickles in a continuous, but thinly-spread stream, down either side of the cooler formed by the chambers A A, the continuous character of the corrugated plates of which the cooler is composed, serving to prevent break in the stream, and to keep it in constant contact with the cooler, as it runs down either side of the same.

What is here claimed, and desired to be secured by Letters Patent, is—

The corrugated cooler, having its sides inclined at their top, to form an apex, in combination with a slotted distributer, made adjustable relatively to said cooler, substantially as specified.

HENRY C. DART.

Witnesses:

FRED. HAYNES,

J. M. DIXON.