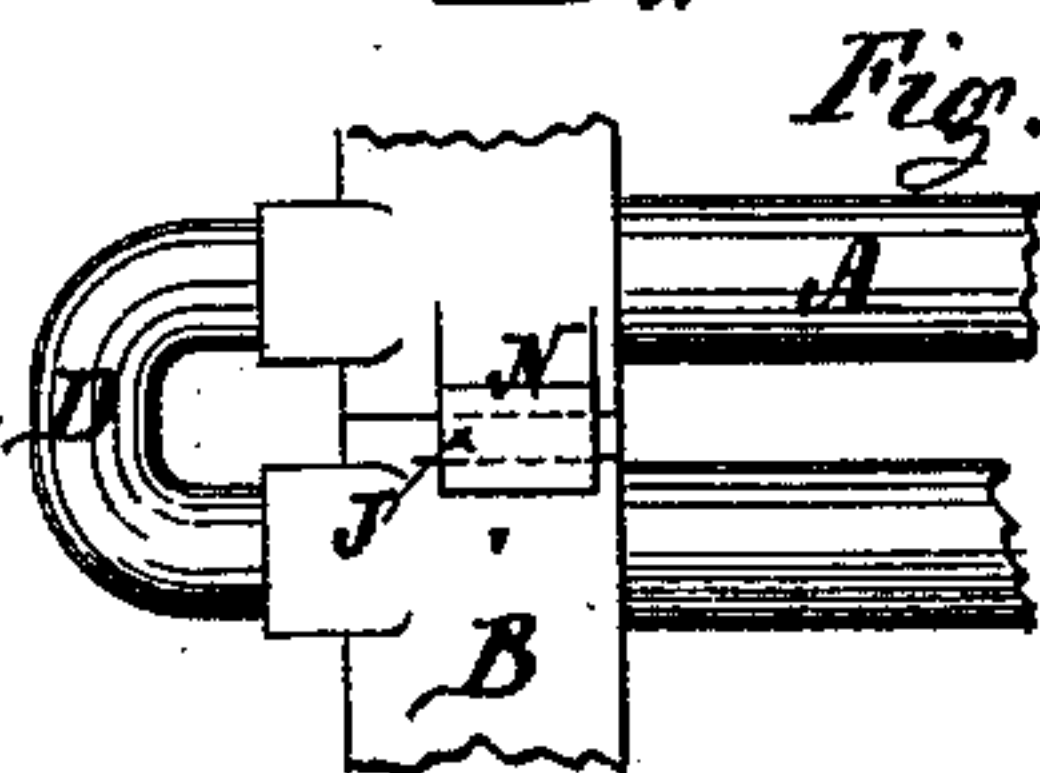
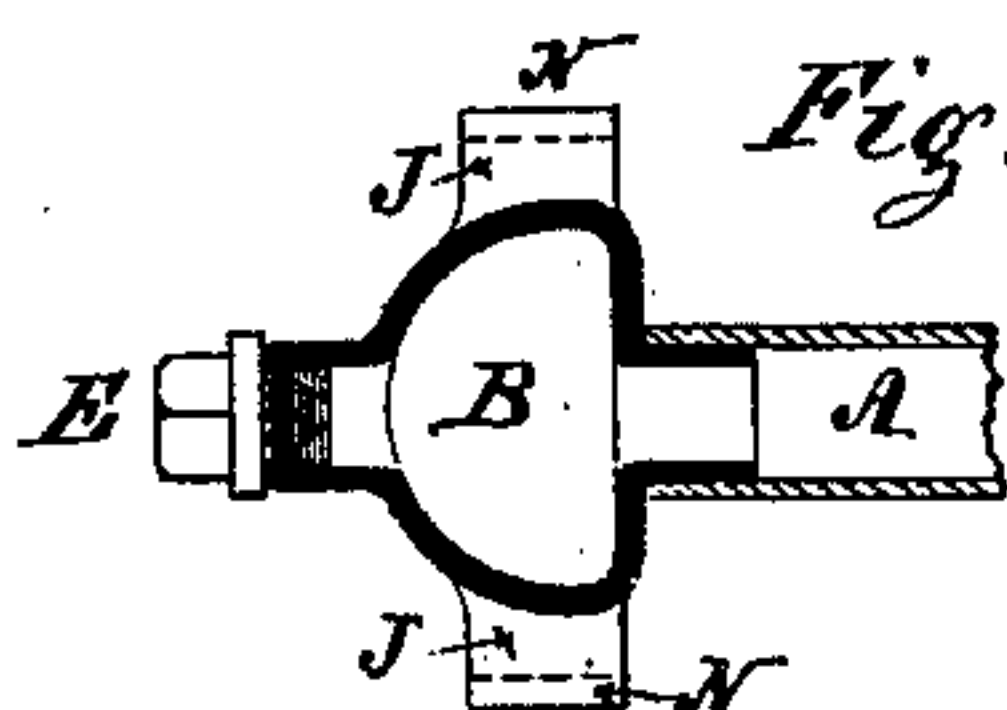
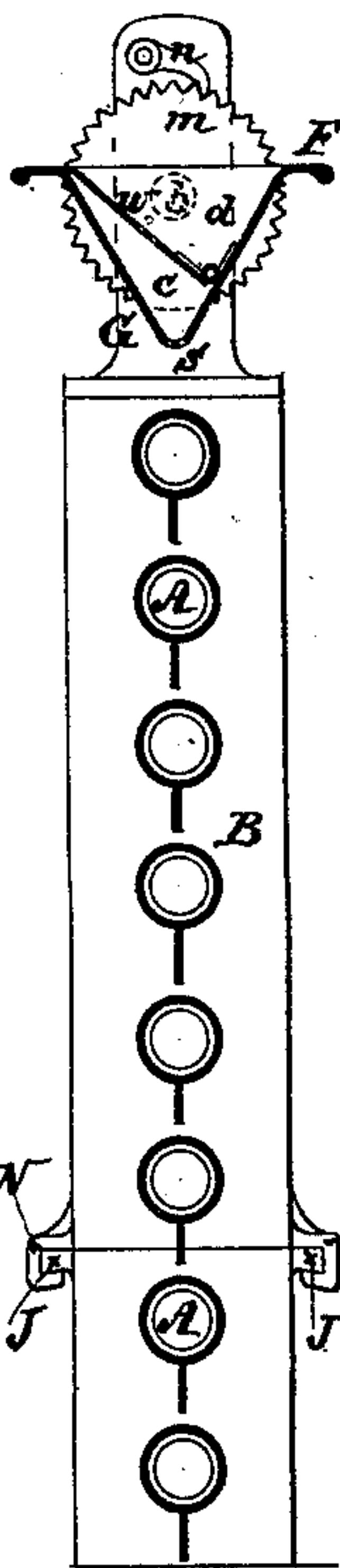
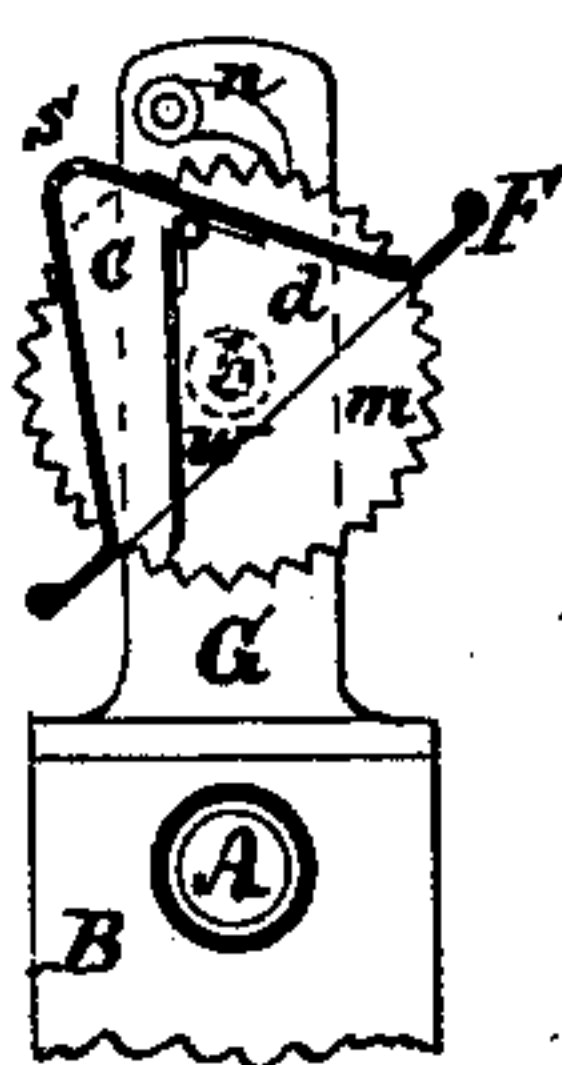
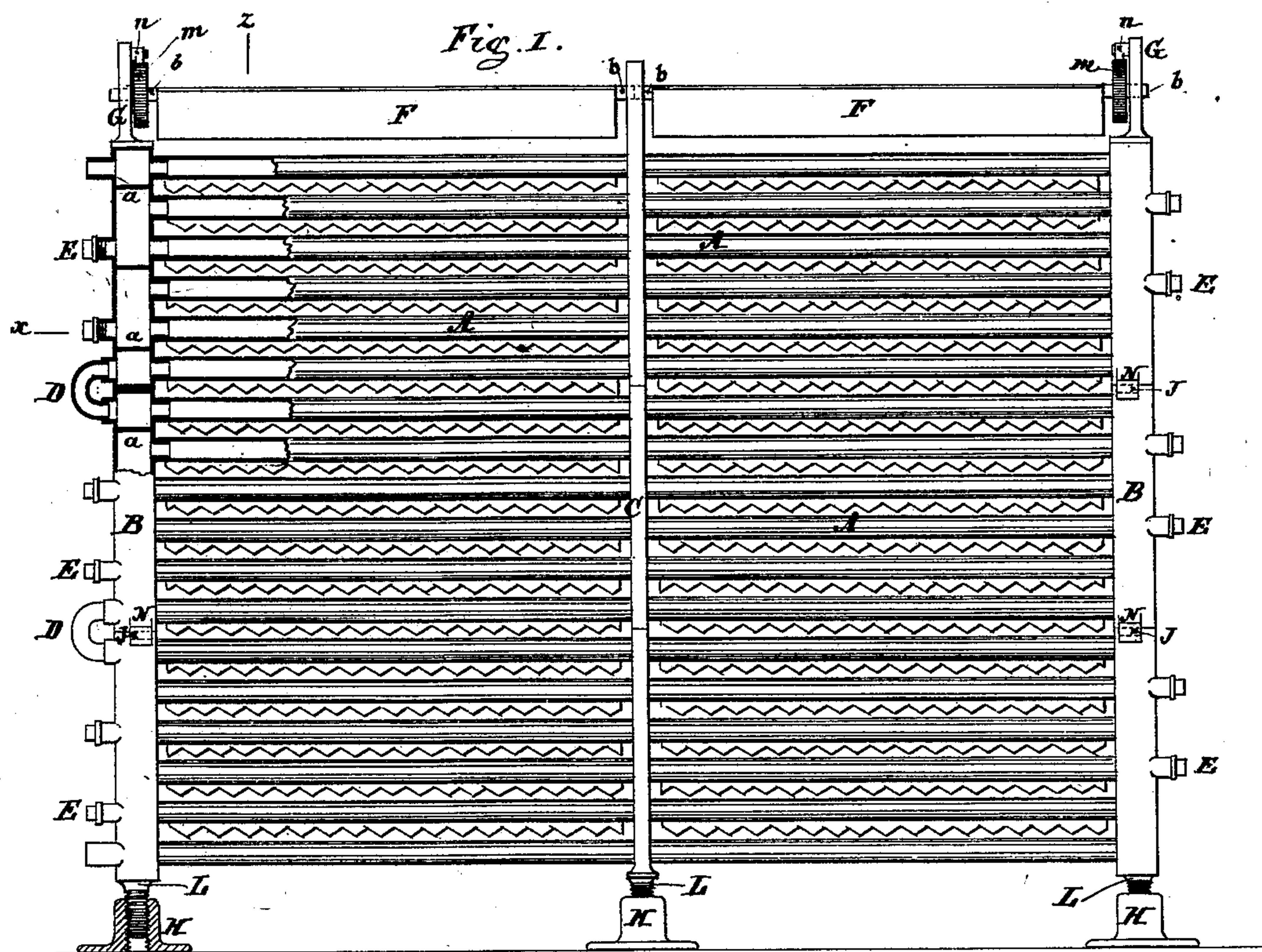


(No Model.)

A. REISERT.  
Beer Cooler.

No. 235,292.

Patented Dec. 7, 1880.



Witnesses.

Edward P. Suter

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# UNITED STATES PATENT OFFICE.

ANTONY REISERT, OF NEW YORK, N. Y.

## BEER-COOLER.

SPECIFICATION forming part of Letters Patent No. 235,292, dated December 7, 1880.

Application filed August 30, 1880. (No model.)

*To all whom it may concern:*

Be it known that I, ANTONY REISERT, of New York, in the State of New York, have invented new and useful Improvements in Beer-Coolers, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure I represents a front view, partly in section. Fig. II is a cross-section at line *z*, Fig. I. Fig. III is a cross-section showing the gutter or distributing-trough in a different position. Fig. IV is a horizontal section of the end column at line *x*, Fig. I; and Fig. V is a front view of the column at the joint of the section.

Similar letters represent similar parts in all the figures.

My invention relates to certain improvements in that class of beer-coolers in which a series of horizontal pipes are used, placed one above the other in a vertical plane, and through which the cooling medium—such as water—is conducted, while the beer or other liquid to be cooled trickles down over the outside of said pipes.

The object of my invention is to so construct the apparatus that the different sections can easily expand independent of each other, subject to the different degrees of temperatures of their respective pipes, and to this end I unite the sections forming the end columns by a sliding or slip joint; secondly, to facilitate the cleaning of the gutters or distributing-troughs, I construct the same with a hinged partition and end trunnions, on which the same may be turned around when desired; and, further, in the arrangement of movable feet or supports under the end columns and central supporting-frames, to regulate and insure the horizontal position of the cooler or pipes in all cases independent of the nature of the floor upon which the same rests.

In the drawings, the letters A A designate a series of horizontal pipes arranged one above the other, attached to end columns, B B, and supported by one or more central frames, C, in the usual manner. The columns B B are cast in sections of convenient size for transportation, and at the same time to be able to

increase the capacity of the cooler by uniting any desired number. Suitable partitions, *a*, are arranged in the interior of these sections, to cause the fluid to flow through the pipes A A in a zigzag course. The fluid is conducted from one section into the other by means of suitable elbow-pipes, D.

Suitable sockets or nipples, E, are arranged opposite the pipes A, closed by screw-plugs or other suitable means, so that easy access can be had to the interior of the pipes for the purpose of cleaning.

When the cooler is in operation the upper tier of the pipes A obtain a considerably higher degree of temperature than the lower tier of said pipes. In consequence of this difference in temperature, when the end columns, B, are made in one piece, or if made in sections, when these sections are united together by means of flanges and bolts, the upper tier of pipes bend and twist out of the straight line, and destroy, thereby, the effective operation of the cooler. To prevent this difficulty I arrange on one section straight projections, J, at front and back, and on the other section clamp-shaped projections, N, fitting over the projections J, forming a sliding or slip joint, which allows each section to move endwise corresponding with the natural expansion of its respective pipes, and thus keeps the pipes A always vertically above each other in a straight line.

It will readily be understood that this sliding or slip joint may be constructed in various ways—such as straight projections may be arranged on both sections and a separate clamp made to fit over both projections.

F are the gutters or distributing-troughs, provided with end trunnions, *b*, supported in suitable standards, G G, attached to the upper ends of the columns B B, and in the central frames, C, capable of turning freely in the same. A ratchet-wheel, *m*, is attached to the trunnions *b*, into which a pawl, *n*, is made to engage, for the purpose of holding the gutter in any desired position. The gutter is made V-shaped, and is divided in two compartments *c* and *d*, (see Fig. II,) by a hinged partition plate, *w*. Part of this partition-plate is made



foraminous, to distribute the liquid through its entire length before passing into the lower compartment. From the lower compartment, *c*, the beer or other liquid will trickle through  
5 holes *s* over the surface of the pipes *A*.

The advantage of this arrangement and construction of the gutter or gutters *F* is, that when the same requires cleaning or washing out, the gutter can be turned around on its  
o trunnions, as shown in Fig. III, when the division-plate *w* is readily turned in either direction on its hinges, and the same, as well as either compartment, are readily cleaned and washed out, without the necessity of lifting the  
5 gutters out of their places or otherwise handling the same, whereby always more or less damage is done to the gutters.

At the lower end of the columns *B B* and central frames, *C*, bolts *L* (preferably screw-  
o bolts) are arranged, upon which the feet *H* are placed, capable of being lengthened or shortened, to accommodate the same to any unevenness of the floor which supports the cooler, and thus insure, under all circumstances, the  
5 perfect horizontal position of the pipes *A*.

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

1. In a beer-cooler consisting of horizontal tubes *A* and sectional columns *B*, the sliding or slip joint consisting of projections *J* on  
30 one sectional part and the clamp-shaped projections *N* on the adjoining sectional part of the columns or their equivalent, substantially in the manner and for the purpose described.

2. In a beer-cooler, the distributing-trough  
35 *F*, provided with end trunnions, *b*, capable of turning in its bearings, in combination with a hinged division-plate, *w*, constructed and arranged to operate substantially as and for the purpose set forth.

3. In combination with a beer-cooler con-  
40 sisting of horizontal pipes *A* and end columns, *B*, with central frames, *C*, the movable feet *H*, arranged to operate substantially as and for the purpose described.

ANTONY REISERT.

Witnesses:

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