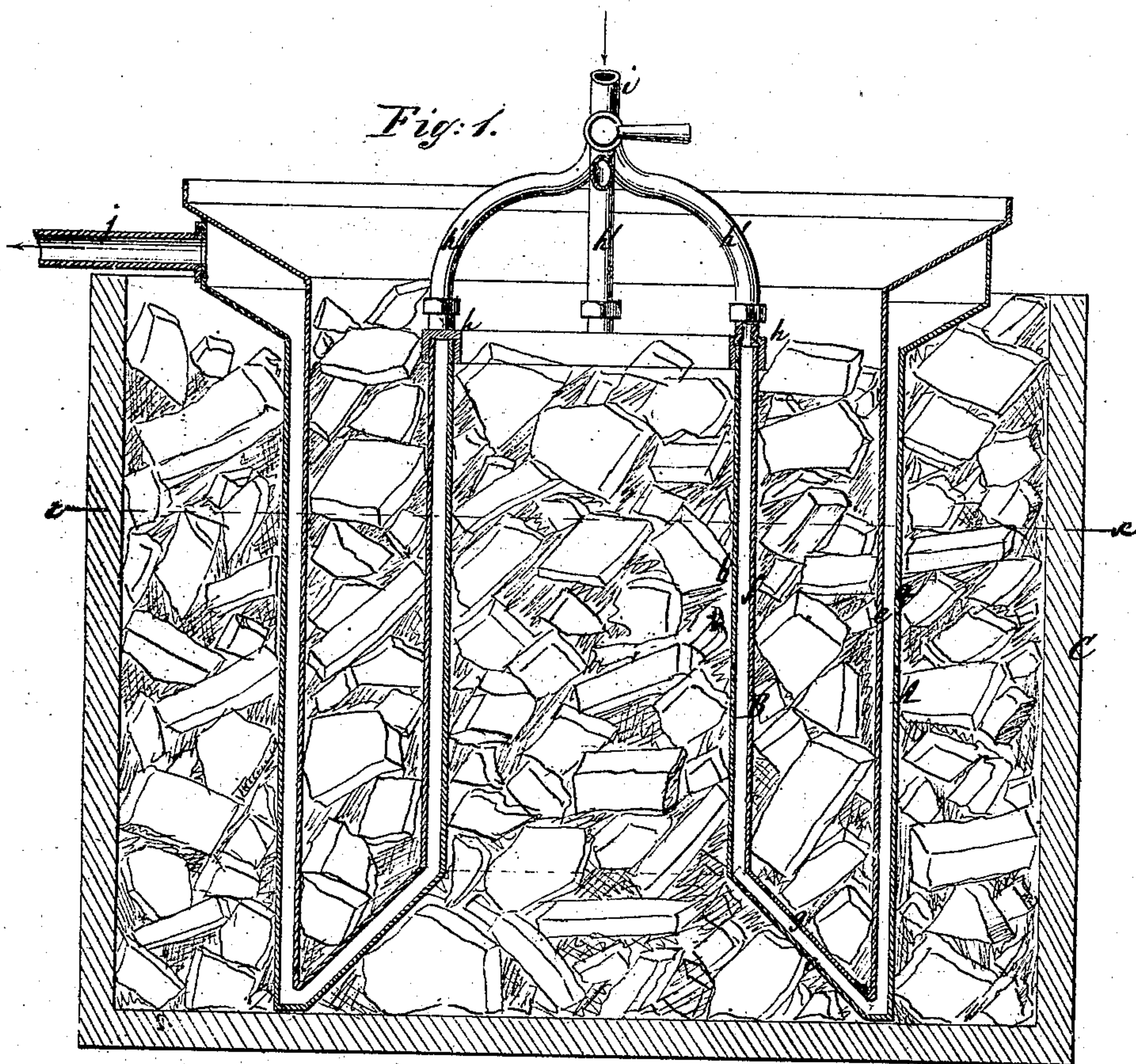


*C. W. Haug,*

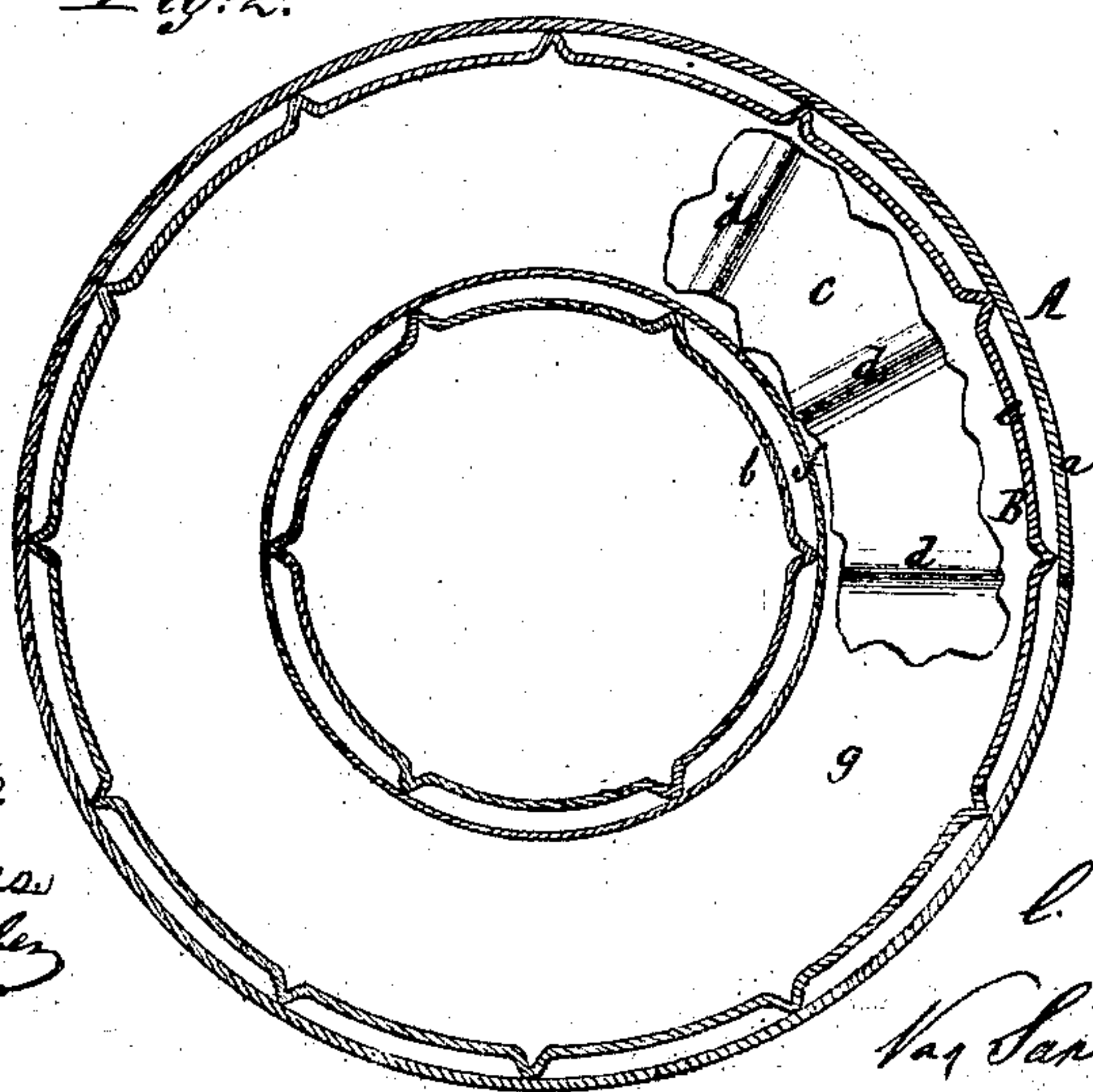
*Beer Cooler.*

*No. 111,203.*

*Patented Jan. 24, 1871.*



*Fig. 2.*



*Witnessed:*  
*C. W. Haug*  
*E. F. Kastenhuber*

*Inventor:*  
*C. W. Haug*  
*per*  
*Wm. S. Sargent & Haug*  
*attys*



# United States Patent Office.

CARL W. HAUG, OF NEW YORK, N. Y., ASSIGNOR TO HIMSELF AND HENRY BUNZ, OF SAME PLACE.

Letters Patent No. 111,203, dated January 24, 1871.

## 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, CARL W. HAUG, of the city, county 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, in which drawing—

Figure 1 represents a vertical central section of this invention.

Figure 2 is a horizontal section of the same, the line *x x*, fig. 1, indicating the plane of section.

Similar letters indicate corresponding parts.

This invention relates to a beer-cooler, which is composed of two vessels, fitting one within the other, the outer vessel being composed of an outer cylinder and an internal polygon, connected to the outer cylinder by an inclined bottom provided with ridges or projections, while the inner vessel consists of an external polygon fitting into the cylinder of the outer vessel, and of an internal cylinder fitting over the polygon of the outer vessel, the polygon and cylinder of the inner vessel being connected to each other by a flat inclined bottom, which, when the inner vessel is inserted into the outer vessel, bears on the ridges of the inclined bottom of the outer vessel, in combination with an annular cap fitting over the edges of the internal polygon of the outer and the internal cylinder of the inner vessel, and connected, by one or more branches, with the supply-pipe and with a discharge-pipe, extending from the enlarged top of the outer vessel in such a manner that the beer admitted to the supply-pipe is caused to spread in the narrow spaces between the inner polygonal and cylindrical parts of the outer and inner vessel, whence it flows down between the bottoms and then up through the narrow spaces between the external polygon of the inner and the external cylinder of the outer vessel, before it reaches the discharge-pipe; and if the spaces between and round the two vessels are packed with ice, the beer, in passing through the various spaces, is rapidly cooled.

In the drawing—

The letter A designates a vessel, by preference made of sheet metal, and composed of an external cylinder, *a*, and an internal polygon, *b*, which is connected to the external cylinder by an inclined bottom, *c*, which is provided with a series of radial ridges, *d*.

Into this vessel A is fitted an inner vessel, B, which is composed of an external polygon, *e*, and an internal cylinder, *f*, connected to said polygon by an inclined bottom, *g*.

The diameter of the polygon *e* is such that the same fits nicely in the external cylinder *a* of the

outer vessel, (see fig. 2,) and the diameter of the cylinder *f* is such that the same fits closely over the internal polygon *b* of the outer vessel; and if the inner vessel is set down into the outer vessel, the flat inclined bottom *g* of said inner vessel bears upon the ridges *d* of the outer vessel.

The polygons *e* and *b* are either made with flat or with rounded sides, and they may be provided with ridges at their corners, as shown in fig. 2 of the drawing.

When the vessel B is placed in the vessel A a series of narrow channels is formed between the cylinder *a* and polygon *e*, and also between the cylinder *f* and polygon *b*, and these channels communicate with each other through the spaces between the ridges *d* of the bottom *c*.

Over the top edges of the polygon *b* and cylinder *f* is fitted an annular cap, *h*, which connects, by branch-pipes *k*, with the supply-pipe *i*, four (more or less) branch-pipes being used to spread the beer uniformly over the spaces between the polygon *b* and cylinder *f*. The beer admitted to said spaces passes down between the polygon *b* and cylinder *f*, then through the spaces between the bottoms *c* and *g*, and up through the polygon *e* and cylinder *a*.

The top of the cylinder *a* is enlarged and provided with a discharge-pipe, *j*, (see fig. 1,) through which the beer, after having passed through the cooler, flows off.

My cooler is intended to be placed in a tub, C, and ice is packed round the outer cylinder *a*, between the polygon *e* and the cylinder *f*, and into the interior of the polygon *b*, as indicated in fig. 1 of the drawing, so that all the narrow channels, through which the beer passes, are in contact with the ice from both sides, and the beer, while passing through the apparatus, is cooled down to the required degree.

Instead of ice, however, any other cooling medium may be used, such as a current of water passing through and round the vessels A B.

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

A cooler for beer or other liquids, composed of two vessels, A B, the outer vessel A being composed of a cylinder, *a*, and polygon *b*, connected by a bottom, *c*, with ridges *d*, and the inner vessel being composed of a polygon, *e*, and cylinder *f*, connected by a bottom, *g*, in combination with an annular cap, *h*, and with a supply and discharge-pipe, substantially as herein shown and described.

This specification signed by me this 4th day of January, 1871.

Witnesses:

CARL WILH. HAUG.

W. HAUFF,

E. F. KASTENHUBER.