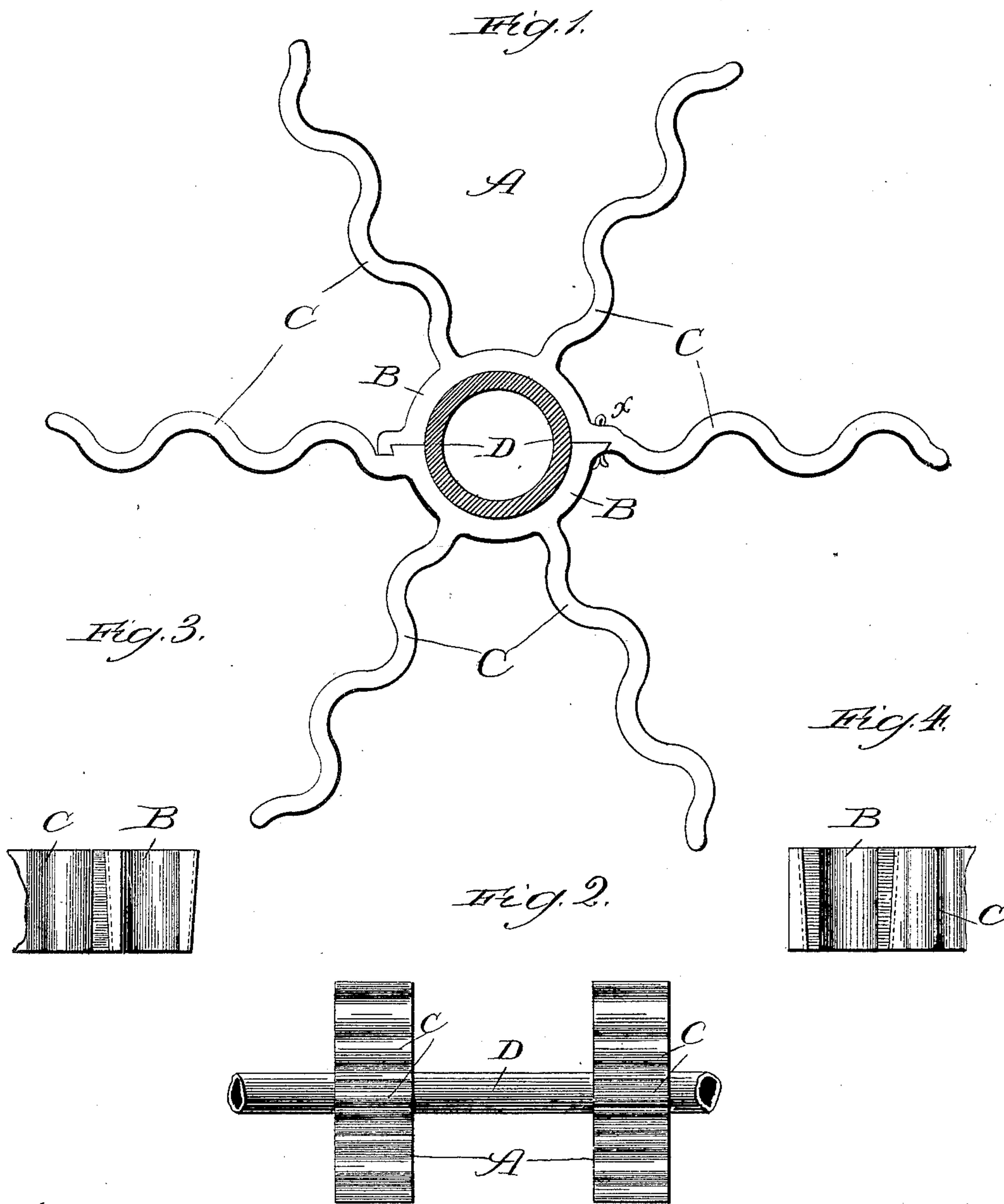


(No Model.)

F. W. WOLF.
ATTACHMENT FOR REFRIGERATOR PIPES.

No. 424,748.

Patented Apr. 1, 1890.



Witnesses:
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UNITED STATES PATENT OFFICE.

FREDERICK W. WOLF, OF CHICAGO, ILLINOIS.

ATTACHMENT FOR REFRIGERATOR-PIPES.

SPECIFICATION forming part of Letters Patent No. 424,748, dated April 1, 1890.

Application filed May 25, 1889. Serial No. 312,120. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK W. WOLF, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Surface-Increasing Attachment for Refrigerator-Pipes, of which the following is a specification.

My invention relates to improvements in the class of attachments employed upon the circulating-pipes of ice or refrigerating machines for increasing the extent of cooling-surface of the pipes; and my object is to provide such an attachment of generally-improved construction which shall be thoroughly effective in its operation, comparatively inexpensive to manufacture, and easily adjustable in its operative position.

My invention consists in the general construction of my improved attachment for refrigerating-pipes; and it further consists in details of its construction and combinations of parts, all as hereinafter set forth and claimed.

In the drawings, Figure 1 is a view in side elevation of my improved attachment adjusted upon a pipe, the pipe being shown in section; Fig. 2, a view in front elevation and on a reduced scale of a broken section of pipe provided with my improved attachment; and Figs. 3 and 4 are broken face views, respectively, of the male and female sections in which the device is preferably formed.

A is the attachment, which is formed of metal and comprises a hub B, having wings C extending from it. The hub is arranged to fit snugly around the pipe D, through which the refrigerant (gas or brine) circulates, and it is formed, preferably, in two separable sections and arranged to be interlocked by dovetailing together, as by means of the tapering dovetail joints shown in Figs. 3 and 4, to render them substantially integral when adjusted in operative position. The wings C are thin in proportion to their width to afford a large area of exposed surface to the amount of material used and they project in various directions from the hub, by preference radially, as illustrated, being about equidistant apart. I prefer in practice to provide six wings C, each about four to six inches wide and extending outward about from twelve to

sixteen inches, and they may be corrugated transversely, as shown, or otherwise to increase the area of the exposed surface.

The attachments are placed at any desired distance apart along the pipe, and when made in the sections described may be more readily be adjusted and removed.

The operation of adjusting the two sections together is performed by pressing them, respectively, against opposite sides of the pipe and sliding them toward each other to cause the taper dovetailed tongue on one section to slide into the similar dovetailed groove in the other, whereby the sections are wedged together in place on the pipe and rendered tight in position without requiring the castings forming the sections to be accurately fitted and thus expensively finished, as they would have to be were the dovetail joint not made tapering. If desired, the sections may then be additionally secured against separation by means of a pin *x*.

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

1. An attachment for increasing the cooling-surface of the circulating-pipes of ice or refrigerating machines, comprising a hub B to surround the pipe, formed in separable sections, and wings C, diverging in various directions immediately from about the hub and formed with their flat surfaces extending transversely lengthwise of the hub, substantially as described.

2. An attachment for increasing the cooling-surface of the circulating-pipes of ice or refrigerating machines, comprising a hub B to surround the pipe, formed in separable interlocking sections, and wings C, diverging in various directions immediately from about the hub, substantially as described.

3. An attachment for increasing the cooling-surface of the circulating-pipes of ice or refrigerating machines, comprising a hub B to surround the pipe, and made in separable sections and having a tapering dovetailed interlocking joint, and a series of divergent wings C, extending from the hub, substantially as described.

FREDERICK W. WOLF.

In presence of—

J. W. DYRENFORTH,
H. J. BOWERS.