

No. 702,134.

Patented June 10, 1902.

W. L. HALEY.

MILK COOLER.

(Application filed Feb. 12, 1902.)

(No Model.)

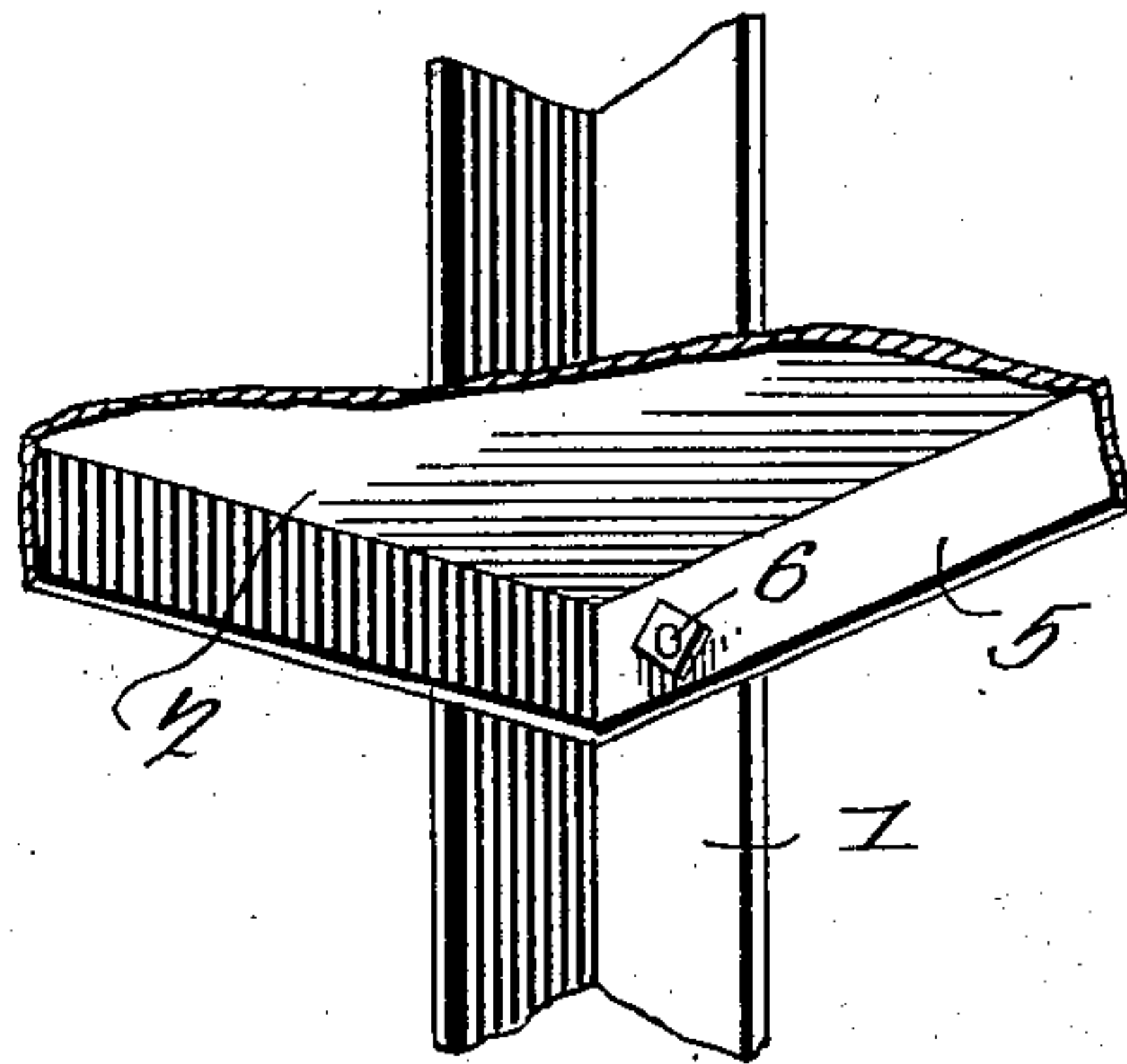
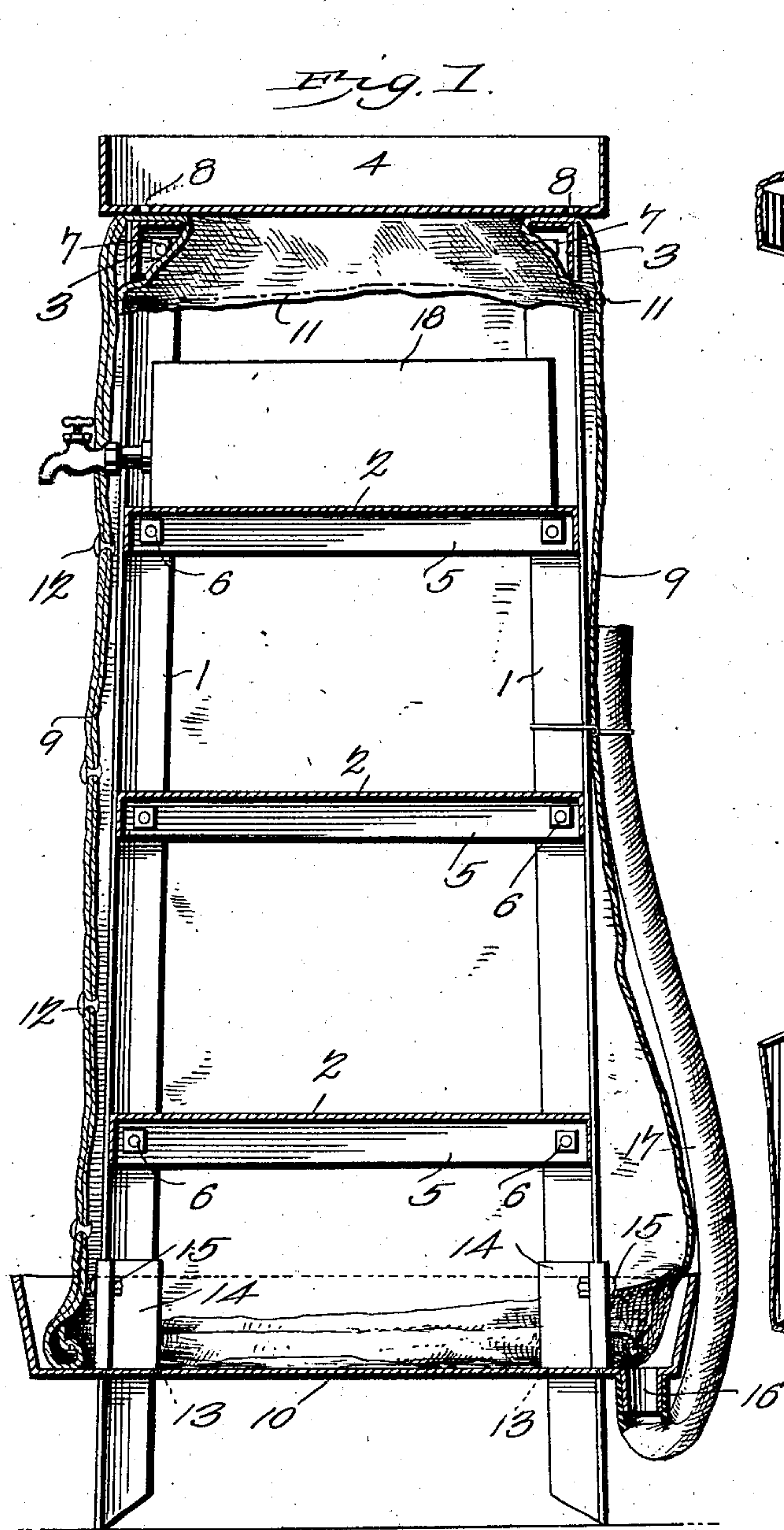
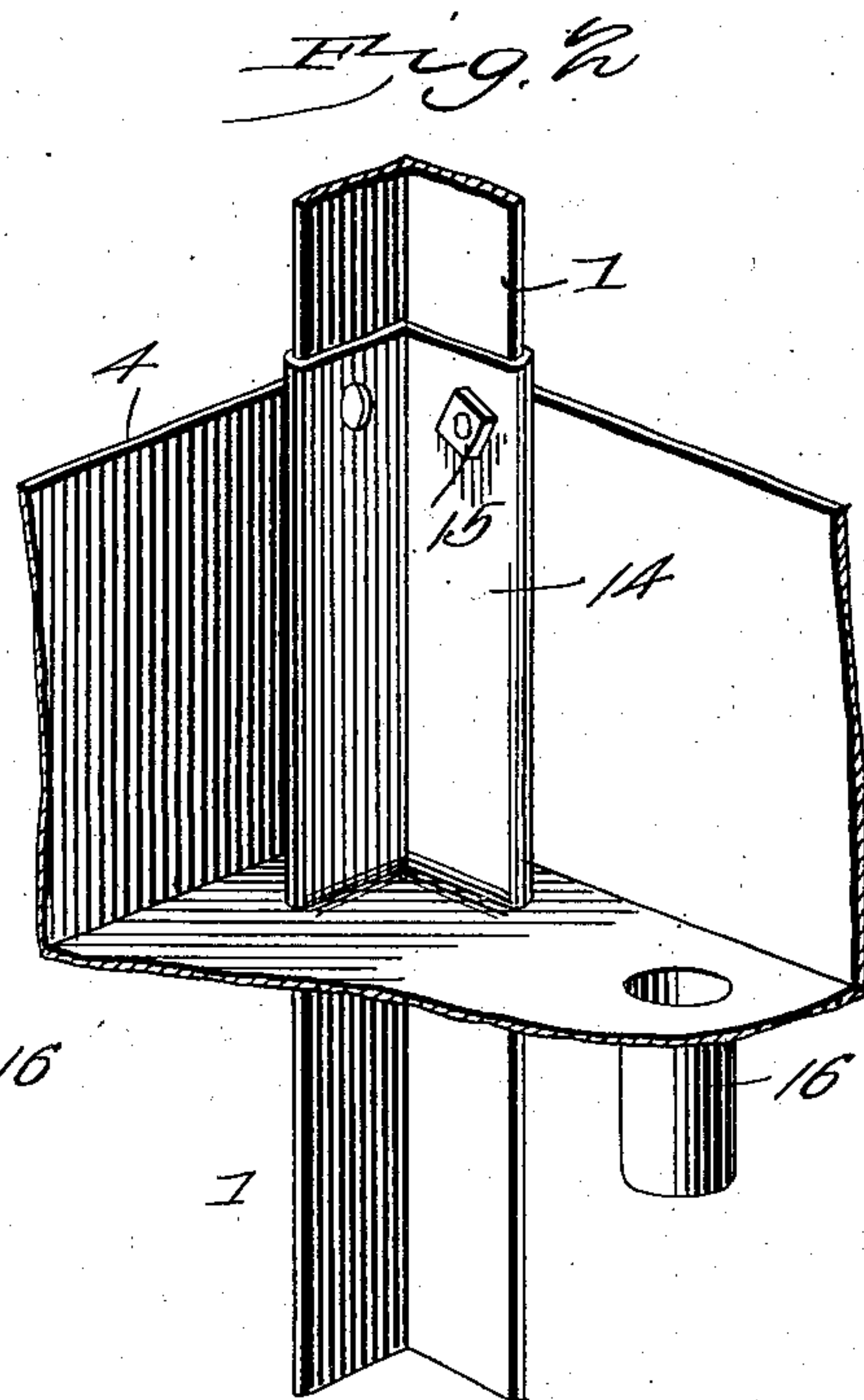


Fig. 3.



Witnesses
E. J. Stewart
H. J. Riley

William L. Haley, Inventor.
by *C. Snow & Co.*
Attorneys

UNITED STATES PATENT OFFICE.

WILLIAM L. HALEY, OF ALVIN, TEXAS.

MILK-COOLER.

SPECIFICATION forming part of Letters Patent No. 702,134, dated June 10, 1902.

* Application filed February 12, 1902. Serial No. 93,741. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM L. HALEY, a citizen of the United States, residing at Alvin, in the county of Brazoria and State of Texas, have invented a new and useful Milk-Cooler, of which the following is a specification.

The invention relates to improvements in milk-coolers.

The object of the present invention is to improve the construction of milk-coolers which require the evaporation of water for reducing the temperature of the milk and to provide a simple, inexpensive, and efficient one adapted to be readily taken apart and compactly arranged for convenient shipping and capable when arranged for use of effectually preventing ants from ascending the frame to the milk-receptacle.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a vertical sectional view of a milk-cooler constructed in accordance with this invention. Fig. 2 is an enlarged detail perspective view of a portion of the bottom pan or receptacle and one of the standards or uprights, illustrating the arrangement of the sockets. Fig. 3 is a similar view illustrating the manner of securing the shelves to the corner posts or uprights.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates angle-iron corner posts or uprights which are connected by a series of shelves 2 at points between their ends and by top pieces 3 at their upper ends, and these horizontal top pieces are constructed of angle-iron and have vertical flanges which are secured to the corner posts or uprights. The horizontal flanges of the angle-iron top pieces form a support for a water pan or receptacle 4. The shelves, which are adapted to support milk-receptacles, are provided with depending flanges 5, which are secured to the angle-iron corner-posts by bolts 6, and the said top pieces are also secured by bolts 7, the bolts permitting the parts to be readily separated and assembled, so that the milk-cooler can be taken down and arranged com-

pactly for shipping or storing. This construction will also enable the frame of the milk-cooler to be quickly set up and arranged for use when desired.

The water pan or receptacle, which rests upon the top of the frame, is provided adjacent to its side walls with perforations 8, adapted to permit the water to flow from the receptacle to a fabric covering 9, which surrounds the frame of the milk-cooler and which extends downward from the water pan or receptacle to a bottom pan or receptacle 10. The fabric covering, which is adapted to feed water throughout its entire area by the capillary action of the material, causes the water to evaporate, and the evaporation of the moisture greatly reduces the temperature within the apparatus, and thereby cools the milk or other contents of the shelves. The fabric covering has its upper edges wrapped around the top connection-bars 3, and it may be stitched or otherwise secured at 11, and the covering is adapted to be open at the front, being provided thereat with overlapped edges secured together by suitable fastening devices 12, which may consist of buttons and buttonholes or any other suitable fastening device. The lower portion or edge of the fabric covering is arranged within the bottom pan or receptacle, which is extended a considerable distance beyond the corner-posts and which is adapted to receive and collect the superfluous water; but the flow of the water is retarded and prevented from being excessive by the arrangement of the perforations 8 over the horizontal flanges of the top connecting-pieces and by the upper portion of the fabric covering, which is interposed between the perforated portion of the water pan or receptacle and the horizontal flanges of the top bars of the frame.

The bottom pan or receptacle is provided at its bottom with openings 13, and it has sleeves 14, extending upward from the bottom of the pan at points adjacent to the corners thereof and forming sockets for the reception of the angle-iron corner-bars. The upwardly-extending sleeves project slightly above the upper edges of the bottom pan, and the openings of the sleeves are approximately L-shaped in horizontal section to conform to the configuration of the angle-iron corner

posts or uprights. The lower portions of the posts or uprights extend through the sleeves and through the openings of the bottom pan and project below the latter to form feet or
 5 legs for supporting the pan above the supporting-surface. The sleeves are secured to the angle-iron corner posts or uprights by bolts 15, and they provide a detachable connection between the bottom pan and the corner-posts that is water-tight, so that the parts
 10 may be readily separated and assembled without causing any leakage at the points where the corner-posts are secured to the bottom pan or receptacle. The lower depending portions of the corner posts or uprights are offset from the side walls of the bottom pan or receptacle, and the arrangement is such that ants are effectually prevented from crawling up the frame to the milk-receptacles.
 20 The bottom pan is provided at one side with a drain pipe or spout 16, which forms a convenient nipple for the attachment of a rubber tube 17, which is adapted to be secured in an upright position at a point above the
 25 pan or receptacle 10 to prevent the escape of water through the drain-opening; but any other suitable means may be employed for this purpose. The flexible tube or pipe 17 is adapted to be readily detached from the upper portion of the frame to enable it to be arranged for draining off the water of the bottom pan or receptacle. The flexible tube or pipe may also be used for siphoning off the water should this be necessary.
 30 It will be seen that the milk-cooler is exceedingly simple and inexpensive in construction, that it is strong and durable and is adapted to be readily taken down or set up for use without liability of causing any leakage of the
 35 parts.
 The milk-cooler is also adapted for cooling water, and it may when not employed for cooling milk be employed for any other purpose to which an ordinary refrigerator may
 5 be put, and a water receptacle or tank 18 is preferably arranged upon the top shelf, as in-

indicated in Fig. 1. The water-tank is provided with a spigot which extends through the fabric covering at the buttoned vertical edges thereof.

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What I claim is—

1. A device of the class described comprising a removable bottom pan having openings, sockets or sleeves extending upward from the bottom of the pan at the said openings, posts
 55 or uprights extending through the sockets or sleeves and the openings of the bottom of the pan and projecting below the latter to form legs, shelves supported by the posts or uprights, a fabric covering extending into the
 60 bottom pan, and a water-receptacle, substantially as described.

2. A device of the class described comprising a bottom pan having openings, L-shaped sleeves extending upward from the bottom
 65 of the pan at the openings and forming sockets, angle-iron posts extending through the sleeves and through the openings of the bottom pan and extending below the same to form feet, shelves provided with flanges secured
 70 to the posts or uprights, a fabric covering extending into the bottom pan, and a water-receptacle, substantially as described.

3. A device of the class described comprising a frame composed of angle-iron corner-
 75 posts, shelves secured to the same, and the angle-iron top connecting-pieces having horizontal flanges, a fabric covering arranged on the frame and extending over the upper faces of the horizontal flanges of the top connecting-pieces, a water pan or receptacle having perforations arranged directly over the said
 80 horizontal flanges, and a bottom pan or receptacle supported by the frame, substantially as described.

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In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

WILLIAM L. HALEY.

Witnesses:

L. H. ROWAN,
 W. A. ROWAN.