

No. 773,533.

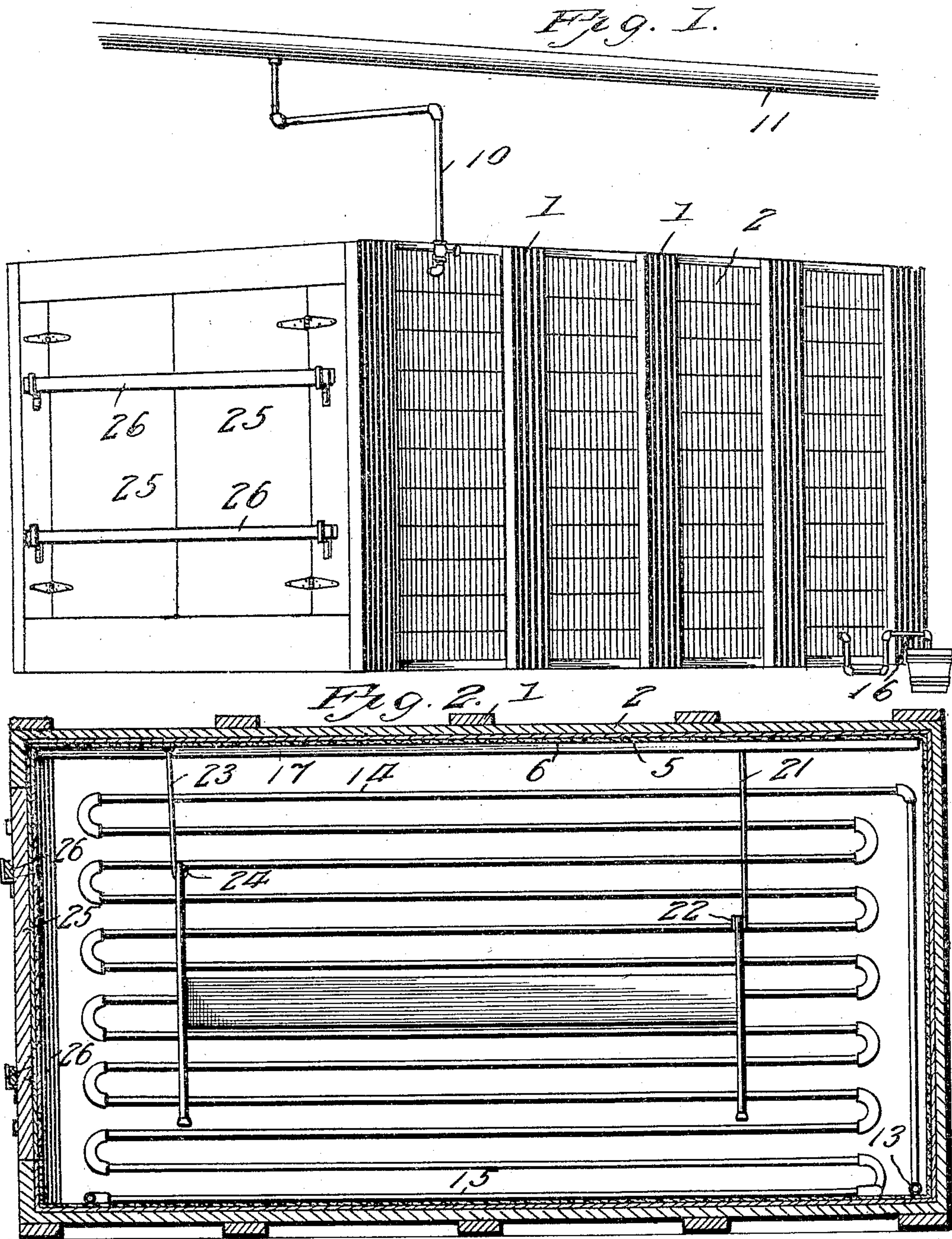
PATENTED NOV. 1, 1904.

R. ALLEN.  
STERILIZER.

APPLICATION FILED JAN. 24, 1903.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses

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By

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2 SHEETS--SHEET 2.

Fig. 3.

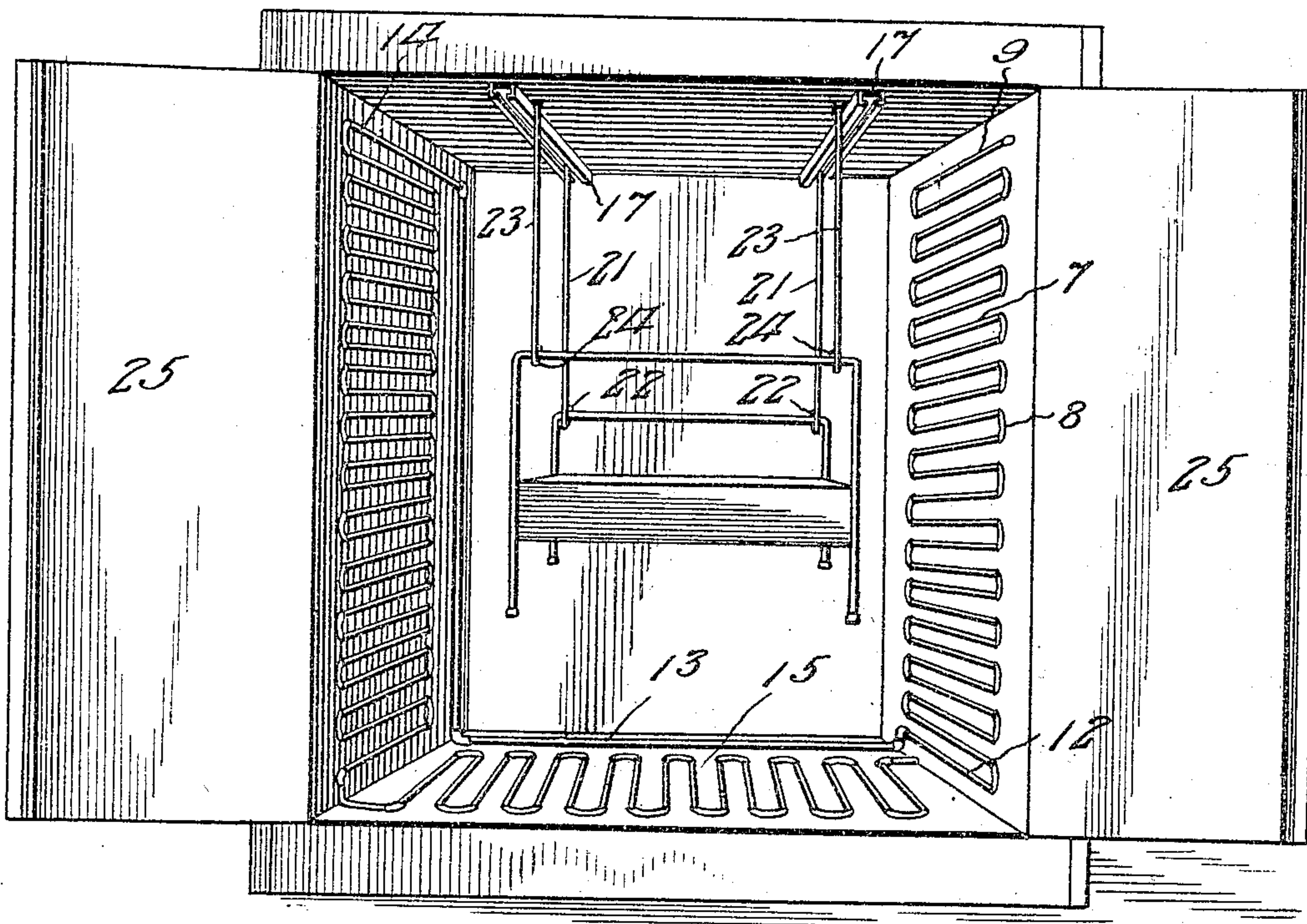


Fig. 4.

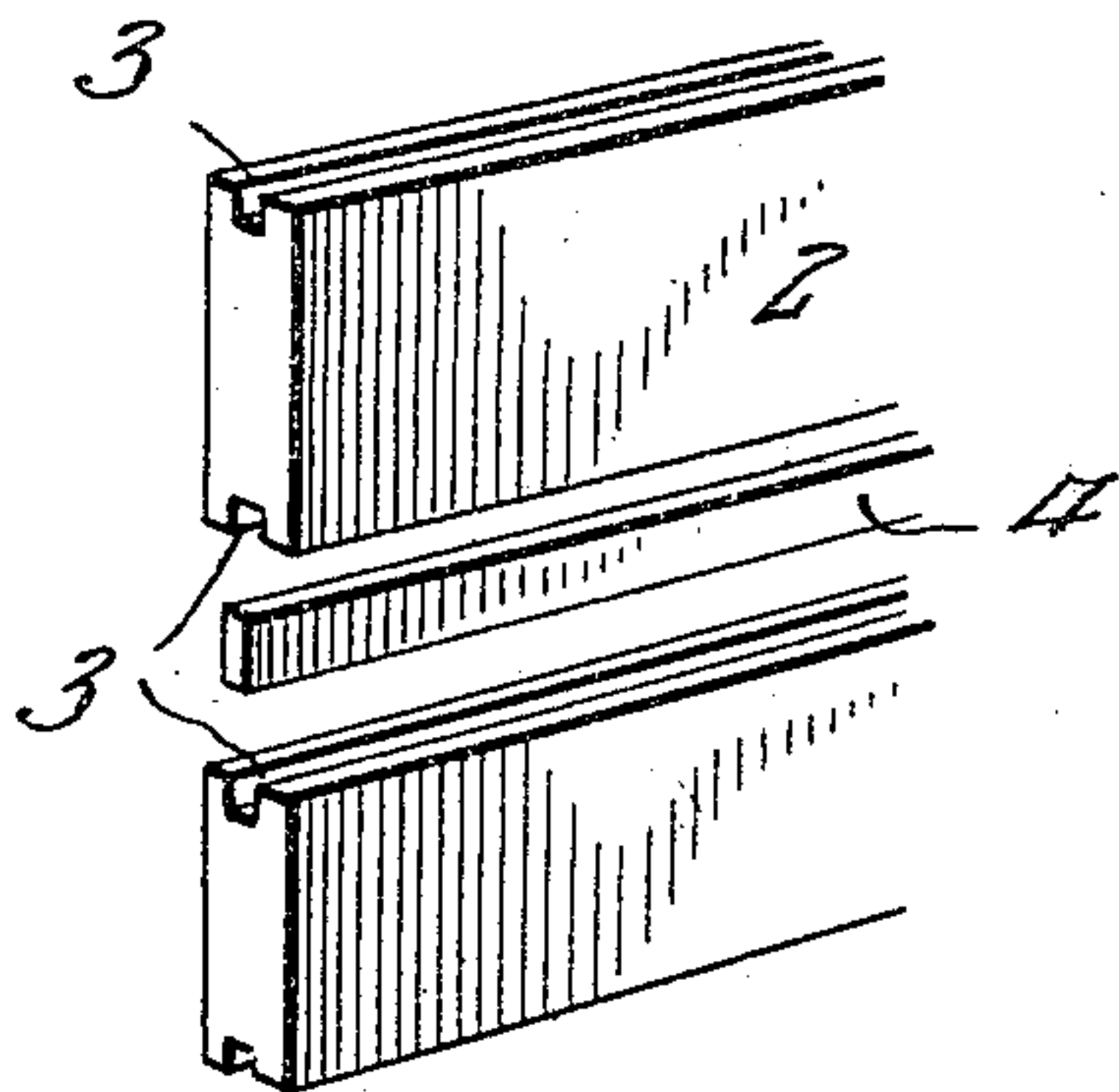


Fig. 6.

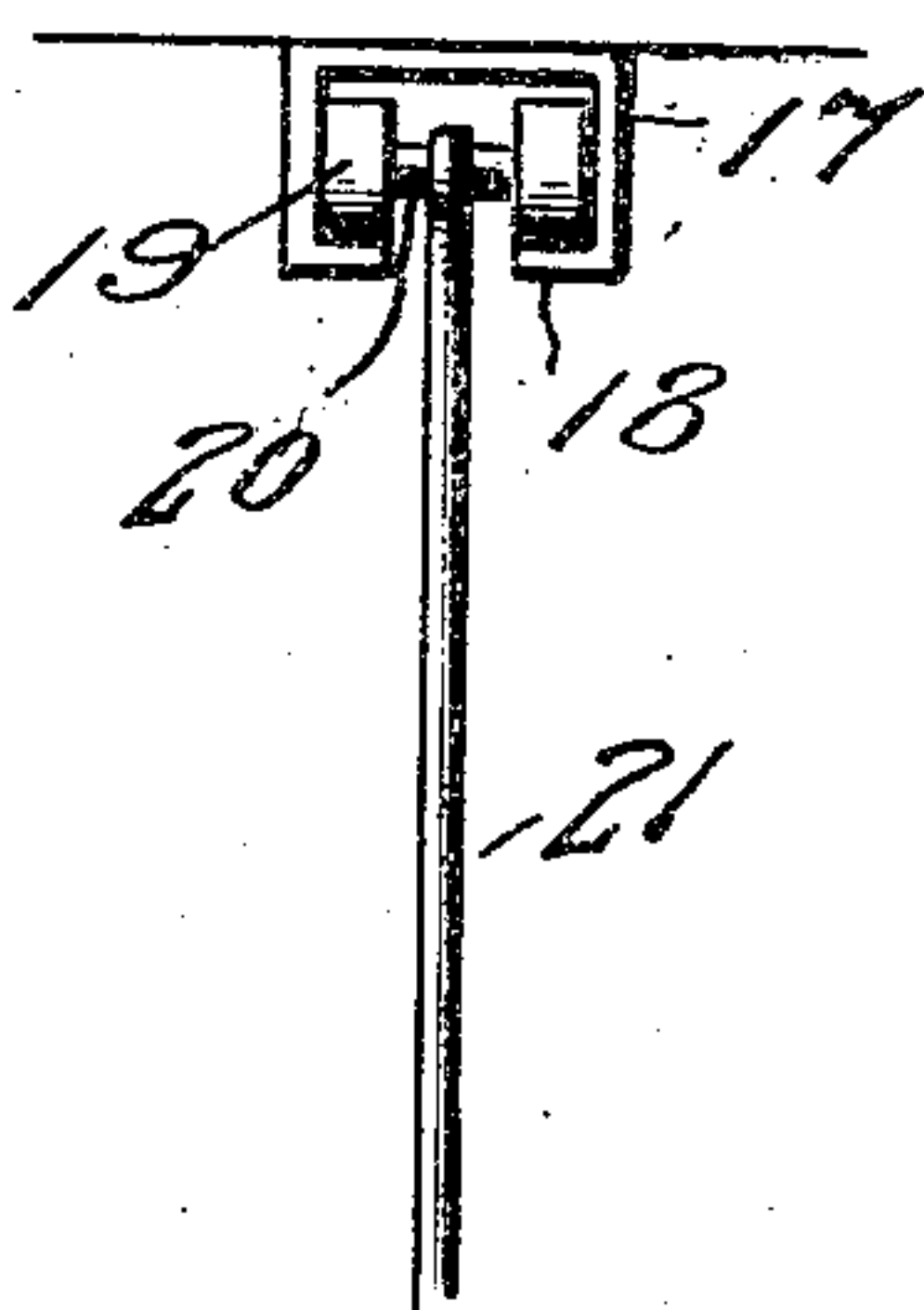
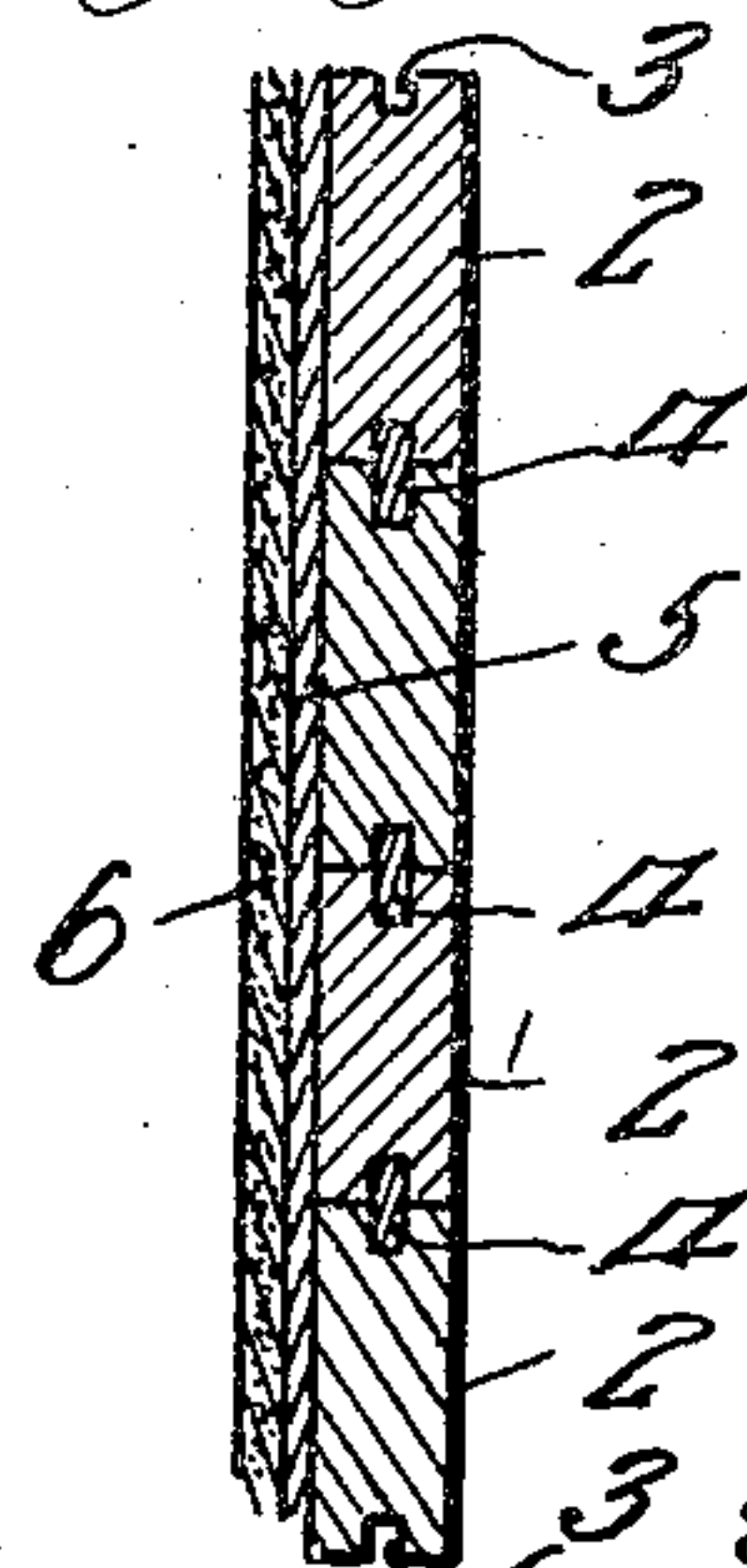


Fig. 3



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# UNITED STATES PATENT OFFICE.

ROBERT ALLEN, OF CHATTANOOGA, TENNESSEE.

## STERILIZER.

SPECIFICATION forming part of Letters Patent No. 773,533, dated November 1, 1904.

Application filed January 24, 1903. Serial No. 140,414. (No model.)

*To all whom it may concern:*

Be it known that I, ROBERT ALLEN, a citizen of the United States, residing at Chattanooga, in the county of Hamilton and State of Tennessee, have invented new and useful Improvements in Sterilizers, of which the following is a specification.

My invention relates to new and useful improvements in sterilizing apparatus; and its object is to provide a device of simple and inexpensive construction which is especially adapted for sterilizing beds.

The invention consists in providing a receptacle preferably open at one end and provided with tracks upon the lower surface of the top thereof, within which are mounted hangers adapted to be secured to one end of a bed, while the other end thereof is adapted to be supported by means of holding devices secured to the top of the receptacle.

The invention also consists in providing a novel arrangement of heating-pipes within the receptacle, through which steam or hot water is adapted to be admitted, whereby the temperature within the receptacle may be raised to any desired degree.

The invention also consists in the further novel construction and combination of parts hereinafter more fully described and claimed, and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the apparatus closed. Fig. 2 is a vertical longitudinal section therethrough, showing a bed in position therein. Fig. 3 is a front perspective view of the apparatus opened. Fig. 4 is a view showing in detail some of the strips constituting a portion of one of the walls of the apparatus. Fig. 5 is a vertical section through a portion of one of the walls; and Fig. 6 is a detail view of the hanger, the same being shown in position within a track.

Referring to the figures by numerals of reference, 1 1 are beams forming the framework of the apparatus, and to the inner surfaces thereof are secured longitudinally-extending strips 2, having grooves 3 formed in the edges thereof. These strips are adapted to rest one upon the other, and when in such position the adjoining grooves 3 register and serve to hold

in position keys 4, which extend longitudinally of the strips and effectually seal the points of connection between said strips. The inner surfaces of the strips 2 are preferably covered with galvanized iron 5 or other suitable material, and over this is arranged a layer 6 of asbestos.

A series of parallel pipes 7 are arranged upon the inner surface of one of the side walls and are connected together by elbows 8, as shown. The upper pipe 9 of this series extends through the side wall and is connected in any suitable manner, as by means of a valve-pipe 10, with a suitable supply-pipe 11. The lower pipe 12 of the series is connected by means of a pipe 13 with the upper one of a series of parallel pipes 14, arranged upon the inner surface of the opposite wall, and the lower one of this series of pipes is also connected to one end of a series of parallel pipes 15, arranged upon the bottom of the apparatus and having an outlet 16.

Parallel tracks 17 are located upon the lower surface of the top of the device and are provided with inwardly-extending flanges 18, upon which are adapted to bear rollers 19, connected together by means of a short shaft 20. Depending from each of these shafts is a rod 21, having a hook 22 at the lower end thereof. Rods 23, having hooks 24 at their lower ends, are immovably suspended from determinate points of the lower surface of the top of the device near the front ends thereof and at points adjacent to the outer ends of the tracks 17. Doors 25 are suitably secured to the front end of the casing of the device and are adapted to be locked in closed position in any suitable manner, as by means of bars 26.

The rods 23 are preferably disposed close to the tracks and adjacent to the inner sides of the latter to have the lower hooks 24 in proper position for engagement with one end of a bed and to permit the rods 21 to have a clearance during the movement of the bed into the sterilizing-inclosure. This arrangement is particularly advantageous in that no adjustment of the rods 23 is necessary, the said rods being always in position for convenient application to one end of the bed.

When it is desired to sterilize a bed, the



hooked rods 21 are placed in engagement with the foot or head thereof, and said rods are then moved longitudinally of the tracks 17 until the opposite end of the bed is brought in position  
 5 under rods 23, when said rods are also placed in engagement therewith. The bed is thus held suspended within the receptacle at a point adjacent to the center thereof. The doors 25 are then closed and secured and hot water or  
 10 steam is admitted to the pipes 7, 14, and 15 from the supply-pipe 11, and the temperature within the apparatus can thus be raised to a desired degree. After the bed has been thoroughly heated for a desired period the same  
 15 is readily removed by first detaching it from the hooked rods 23 and then drawing rods 21 outward to the front ends of tracks 17 and detaching the hooks 22 from the bed.

It will be seen that the device is extremely  
 20 simple and inexpensive in construction and is especially adapted for use in hospitals or other places where it is necessary to thoroughly sterilize articles of furniture. It will of course be understood that it is not necessary to ar-  
 25 range the heating-pipes of each series so as to be parallel with each other. I have merely illustrated and described them as arranged in this manner, because I find that when so lo-  
 30 cated a greater amount of heating-surface can be contained within the apparatus than by any other means that can be employed.

In the foregoing description I have shown the preferred form of my invention; but I do not limit myself thereto, as I am aware that  
 35 modifications may be made therein without departing from the spirit or sacrificing the advantages thereof, and I therefore reserve the right to make such changes as fairly fall within the scope of my invention.

40 Having thus described the invention, what is claimed as new is—

1. A sterilizer comprising a receptacle, heating means arranged within the receptacle, means slidably suspended within the recepta-

cle to be moved back and forth therein and 45 adapted to support one end of an article that may be placed within and withdrawn from the receptacle, and means immovably suspended within the receptacle at points inwardly from the first-named means and close to the planes 50 of movement of the latter, the immovable means being arranged to engage the opposite end of the article when in the receptacle.

2. A sterilizing apparatus comprising a casing having an opening at its front closed by 55 a door, means located in the casing for heating the interior of the latter, tracks fixed to the under side of the top of the casing in parallel relation and having hangers movably mounted therein, rods depending from said 60 hangers and formed with lower hooked terminals, and other rods immovably depending from the top of the casing and arranged close to the inner opposing sides of the tracks and provided with lower hooked terminals, the 65 movable and immovable rods being adapted to engage opposite extremities of the article disposed in the casing.

3. In an apparatus of the character set forth, the combination of a casing composed of lon- 70 gitudinally-extending strips having opposite grooved registering edges, keys fitted in the grooves of the adjacent strips having opposite grooved registering edges, keys fitted in the grooves of the adjacent strips, a covering of 75 non-corrosive sheet metal applied over the inner surface of the casing, a second covering of asbestos secured over the covering of sheet metal, heating-pipes disposed against the sides and on the bottom of the interior of the cas- 80 ing, and holding means depending from the top portion of the interior of the casing.

In testimony whereof I affix my signature in presence of two witnesses.

ROBERT ALLEN.

Witnesses:

WM. H. D. VALENTINE,  
 E. A. DENTON.