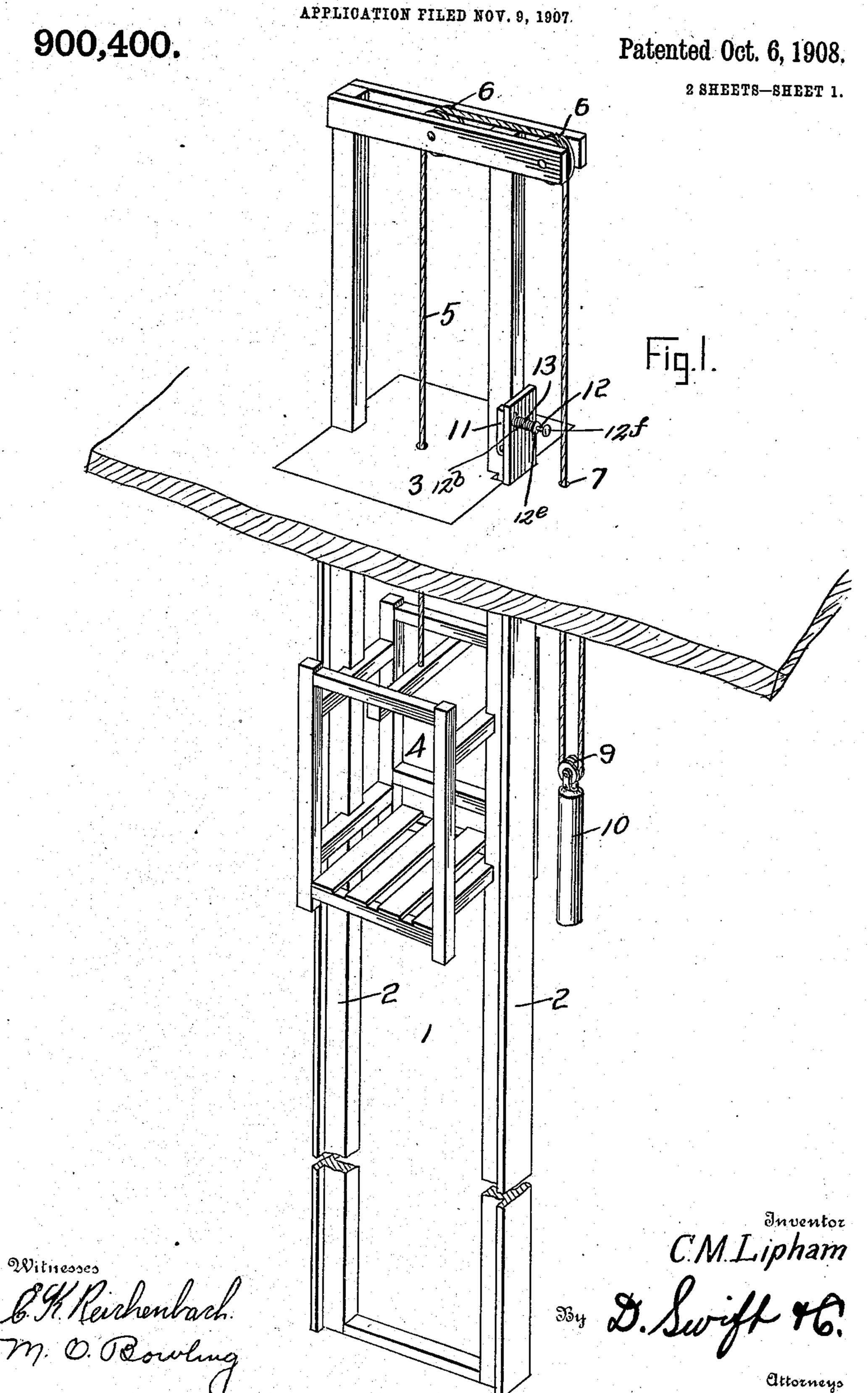
C. M. LIPHAM.
ICELESS REFRIGERATOR.
APPLICATION FILED NOV. 9, 1907

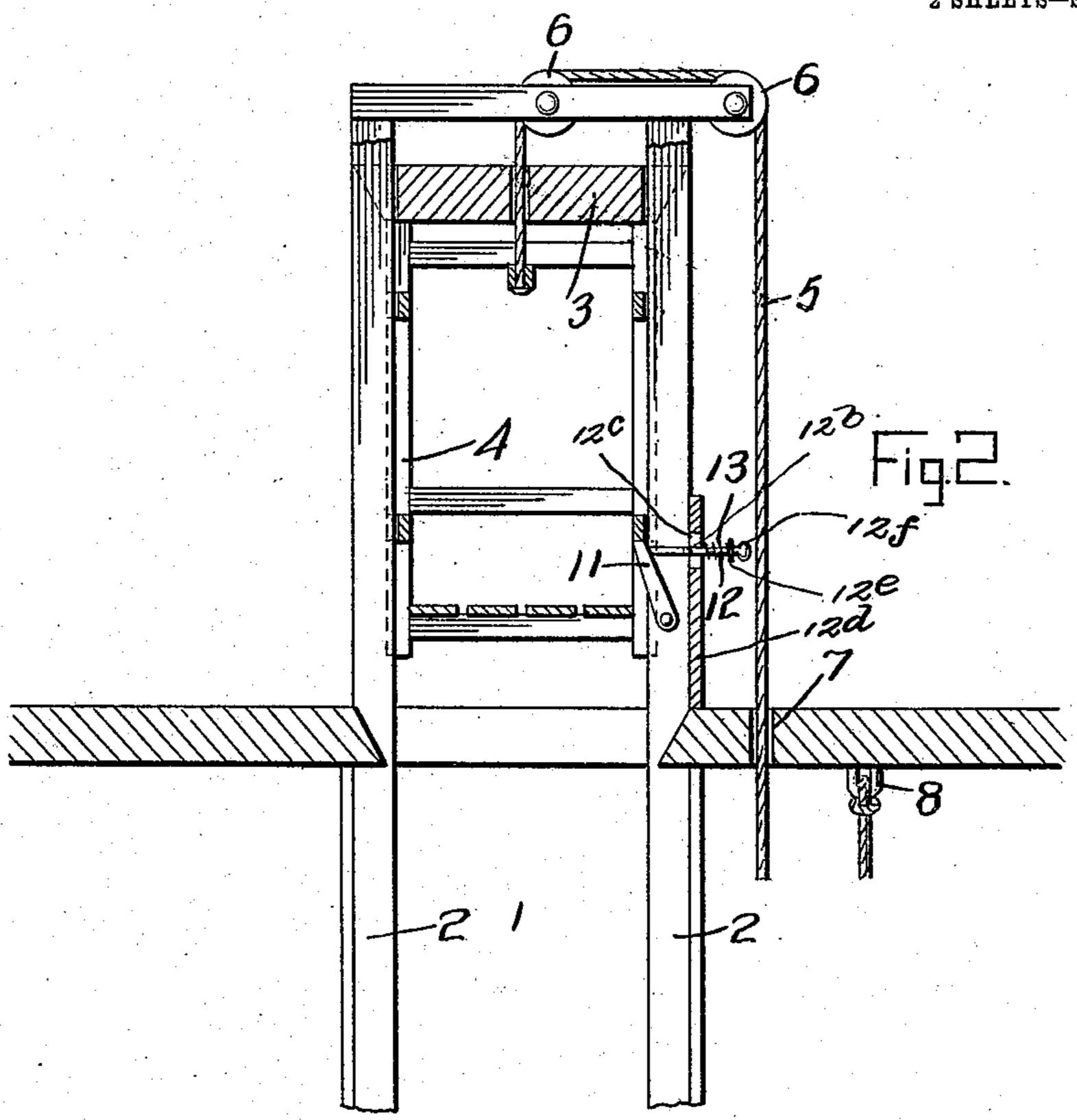


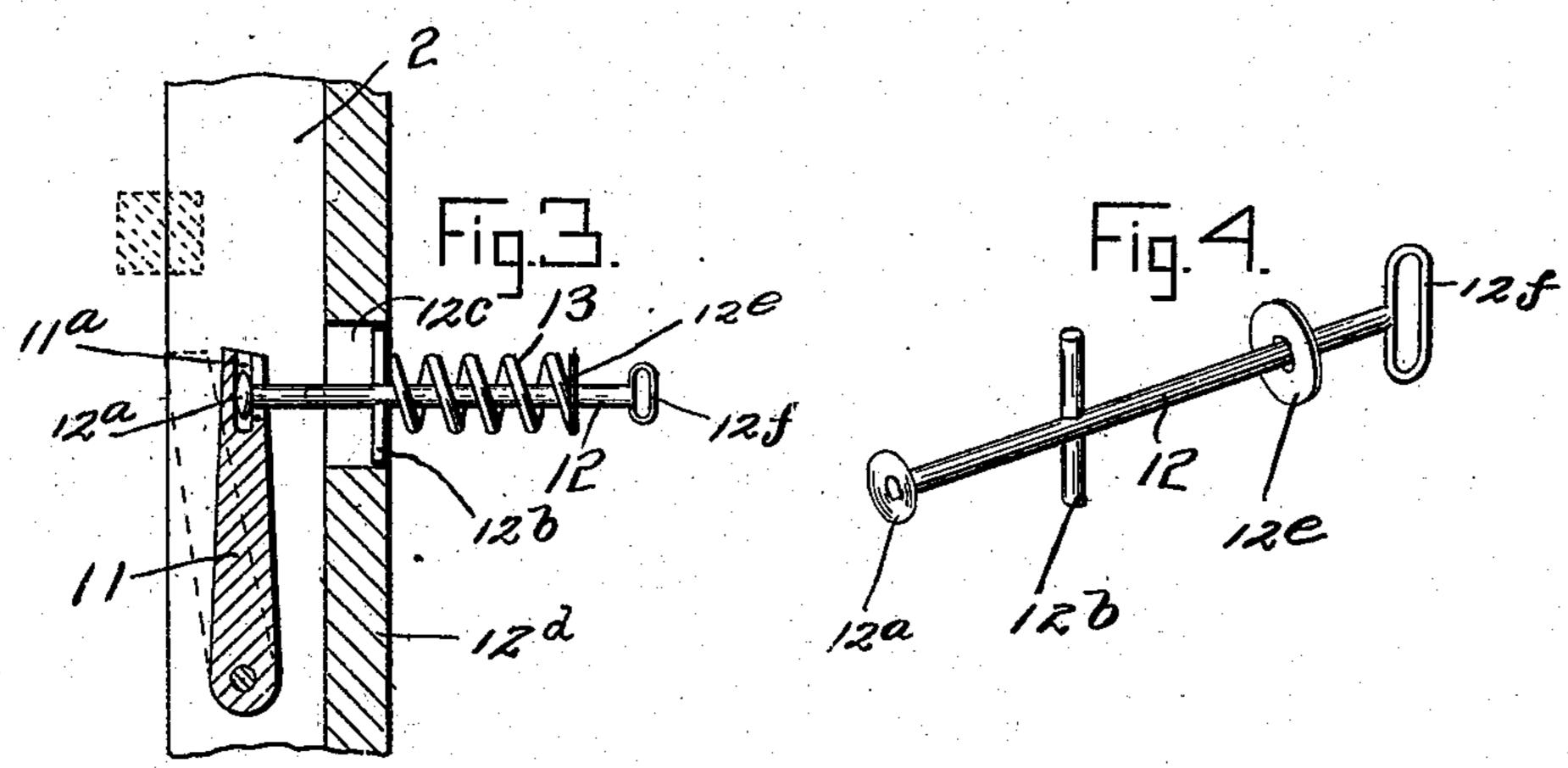
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900,400.

Patented Oct. 6, 1908.

2 SHEETS—SHEET 2.





Witnesses B. K. Kirchenbarh M. O. Bowling C.M. Lipham

Swift 46.

attorneys

UNITED STATES PATENT OFFICE.

CHARLES MERRILL LIPHAM, OF FAIRBURN, GEORGIA.

ICELESS REFRIGERATOR.

No. 900,400.

Specification of Letters Patent.

Patented Oct. 6, 1908.

Application filed November 9, 1907. Serial No. 401,424.

To all whom it may concern:

Be it known that I, Charles Merrill Lipham, a citizen of the United States, residing at Fairburn, in the county of Campbell and State of Georgia, have invented a new and useful Iceless Refrigerator; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements, in what may be termed refrigerators of that class or type, wherein is employed a carrier or refrigerator proper, capable of being lowered into a pit below the floor of a room.

It has for its object to provide for readily and conveniently obtaining access to the contents of the carrier or refrigerator for their removal when required for use and the replacement of the same thereafter; also to effect the aforesaid purposes in a simple and expeditious manner. Said invention therefore, consists of certain instrumentalities or features substantially as hereafter fully described and pointed out by the claims.

In the accompanying drawings, illustrating the preferred embodiment of my invention, Figure 1 is a perspective view. Fig. 2 is a vertical sectional view. Fig. 3 is an enlarged detail sectional view of the means for holding the carrier or refrigerator in the upper portion of the guide frame and above the level of the floor. Fig. 4 is a detail perspective view of the operating push rod, shown in Fig. 3.

In carrying out my invention, I suitably erect in position, an upright frame 1, with its vertical or lateral members 2 reaching 40 down through a trap-door covered opening in a floor, the bottom floor of a dwelling, or inclosure, into a pit or excavation in the ground below the plane of said floor, and suitably secure said vertical members or 45 frame therein, the trap-door being designated by the reference numeral or character 3. Said vertical frame members 2, extend a short distance above the floor for the purpose suggested by the disclosure and arranged to have a sliding vertical movement within said frame, is a suitable carrier or refrigerator proper 4, which may be of any preferred construction and provided with any number of shelves, the vertical members of said ⁵⁵ frame serving as guides for the latter.

A rope or cable 5 is employed for suitably

raising and lowering the carrier or refrigerator as occasion may require in obtaining access to the contents of the latter, said rope or cable being secured to said carrier at one 60 end and passing upwardly freely through a central hole in the trapdoor 3, and thence over pulleys 6 hung in the upper cross piece of the frame 1, said rope or cable being returned and passed through an opening 7 in 65 the floor and finally secured to its opposite end in any suitable manner to the under side of the floor as by a staple or other fastening 8 driven thereinto. Intermediate of the floor opening 7 and the staple or fastening 8, said 70 rope or cable has suspended therefrom by a pulley 9, a counterbalancing weight 10 for equalizing the preponderant weight of the carrier and the trap-door and for facility of movement thereof, it being noted that as the 75 carrier ascends through the floor opening, it will automatically engage and lift said trapdoor with it, thus carrying the latter to its open or elevated position as the carrier is raised above the floor. The trap-door thus 80 resting upon the carrier when the latter is in its elevated position, it will also be observed that as the carrier descends below the floor the trap-door will, by force of gravity, or its weight seat itself in the floor opening 85 and thus close the same automatically.

One of the vertical members of the guide frame has pivoted thereto a pivoted member 11, to which is swiveled a horizontally disposed push rod or member 12, by means of 90 a head 12a of the said rod and a recess 11a in the said pivoted member 11, as will be seen clearly in Fig. 3 of the drawings. The said pivoted member 11 is provided with a slot communicating with said recess and through 95 which a portion of the rod passes; this is for the purpose of allowing the head 12a to. be inserted in said recess. Said push rod is provided with a transverse bar or pin 12b, which is received by a slot 12° of a short 100 standard 12d, which is parallel with the said guide frame, as also seen in Fig. 3.

The push rod 12 is provided with a disk 12°, between which and the bar or pin 12° a spring 13 is interposed, which spring en-105 gages the surface or face of the standard 12°, and causes the said rod to be outwardly pushed, that is, normally, and by pushing upon said rod, by taking hold of the handle 12°, the said pivoted member 11 is caused 110 to engage the carrier or refrigerator, as seen clearly in Fig. 2 of the drawings,

as will be readily manifest. When the said push rod is pushed inward, the same is imparted a slight rotary movement so as to cause the said transverse bar or pin 5 12b to engage the inner face of the standard 12^d so as to cause the said pivoted member to be held in locked engagement with the carrier.

What I claim is,

1. The combination of a floor having an opening therein, a movable carrier, a guiding frame extending through said opening, and below and above the floor, means for locking or holding the carrier in the upper 15 portion of the guiding frame, comprising a pivoted latch member adapted to engage the said carrier, a push rod having swiveled connections with said pivoted member, said guiding frame having a standard provided 20 with an elongated aperture through which said push rod extends, said rod having a disk, a spring interposed between the face of the standard and said disk, whereby the rod is held normally in an outward position, 25 a transverse bar or pin on said rod to engage the inner face of said standard, that is, when the said push rod is pushed inward so as to cause the locking member to engage the said carrier and to be held in locked engagement 30 therewith.

2. The combination of a floor having an opening therein, a movable carrier, a guiding frame extending through said opening, and below and above the floor, means for

locking or holding the carrier in the upper 35 portion of the guiding frame, comprising a pivoted latch member adapted to engage the said carrier, a push rod having swiveled connections with said pivoted member, said guiding frame having a standard provided 40 with an elongated aperture through which said push rod extends, said rod having a disk, a spring interposed between the face of the standard and said disk, whereby the rod is held normally in an outward position, a 45 transverse bar or pin on said rod to engage the inner face of said standard, that is, when the said push rod is pushed inward so as to cause the locking member to engage the said carrier and to be held in locked engage- 13 ment therewith, a closure for said floor opening, pulleys mounted on the upper crop piece of said frame, a cable or rope mounted on said pulleys and fastened to said carrier and passing freely through an opening in said (3) closure and thence over said pulleys, said rope or cable being next passed through an aperture in said floor, and secured to the under side of the latter and a counterbalancing weight movably suspended upon a looped portion of said cable or rope.

In testimony whereof I have signed my name to this specification in the presence of

two subscribing witnesses.

CHARLES MERRILL LIPHAM.

Witnesses:

J. J. Patton, HENRY McCurry.