

(No Model.)

R. G. CHASE.
DOOR FOR REFRIGERATORS.

No. 479,973.

Patented Aug. 2, 1892.

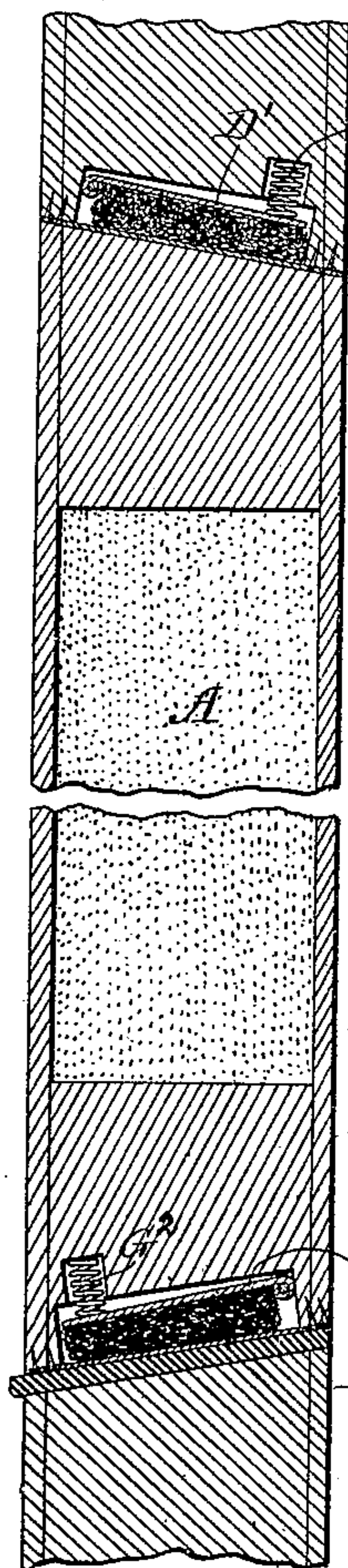
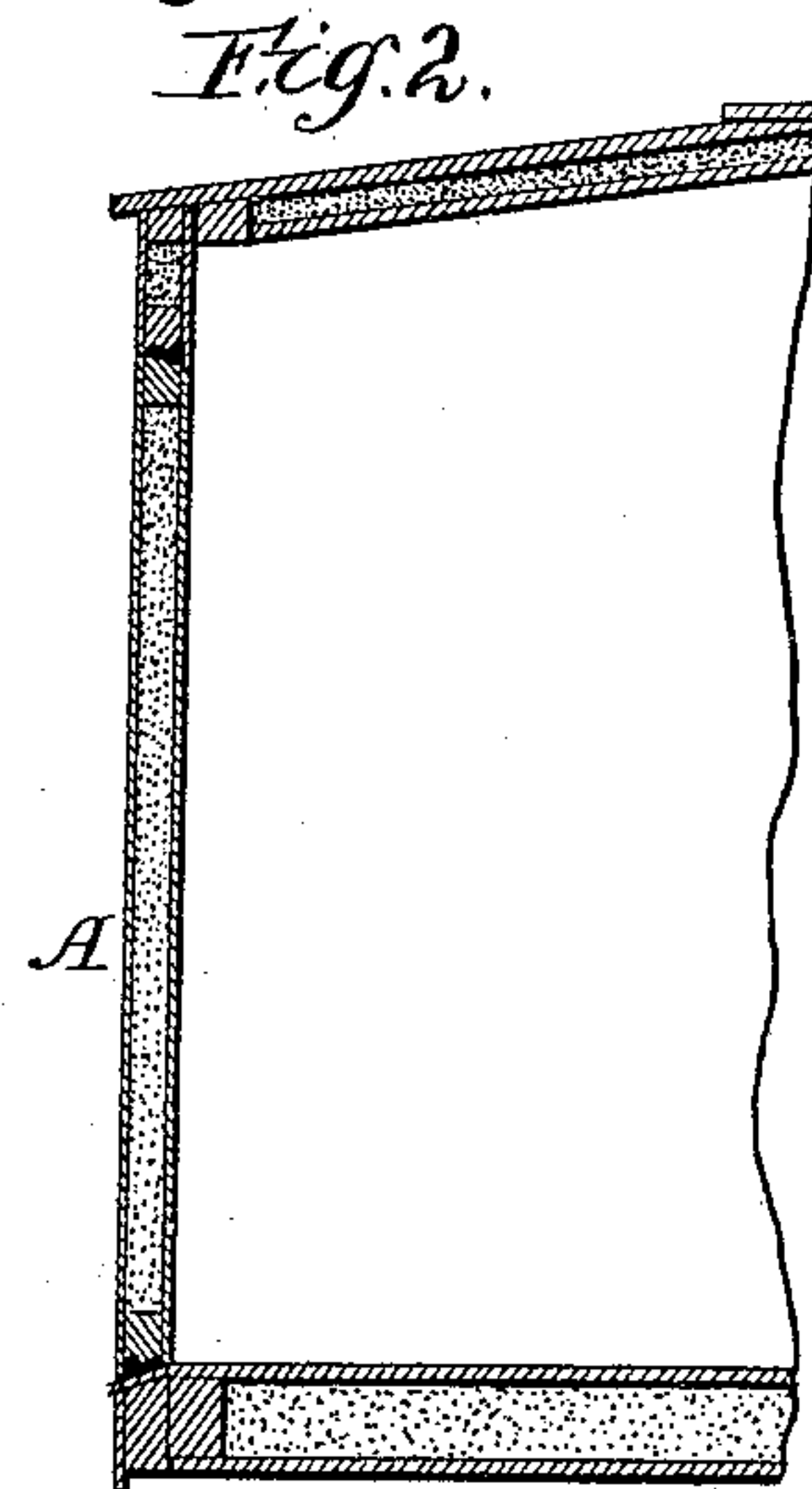
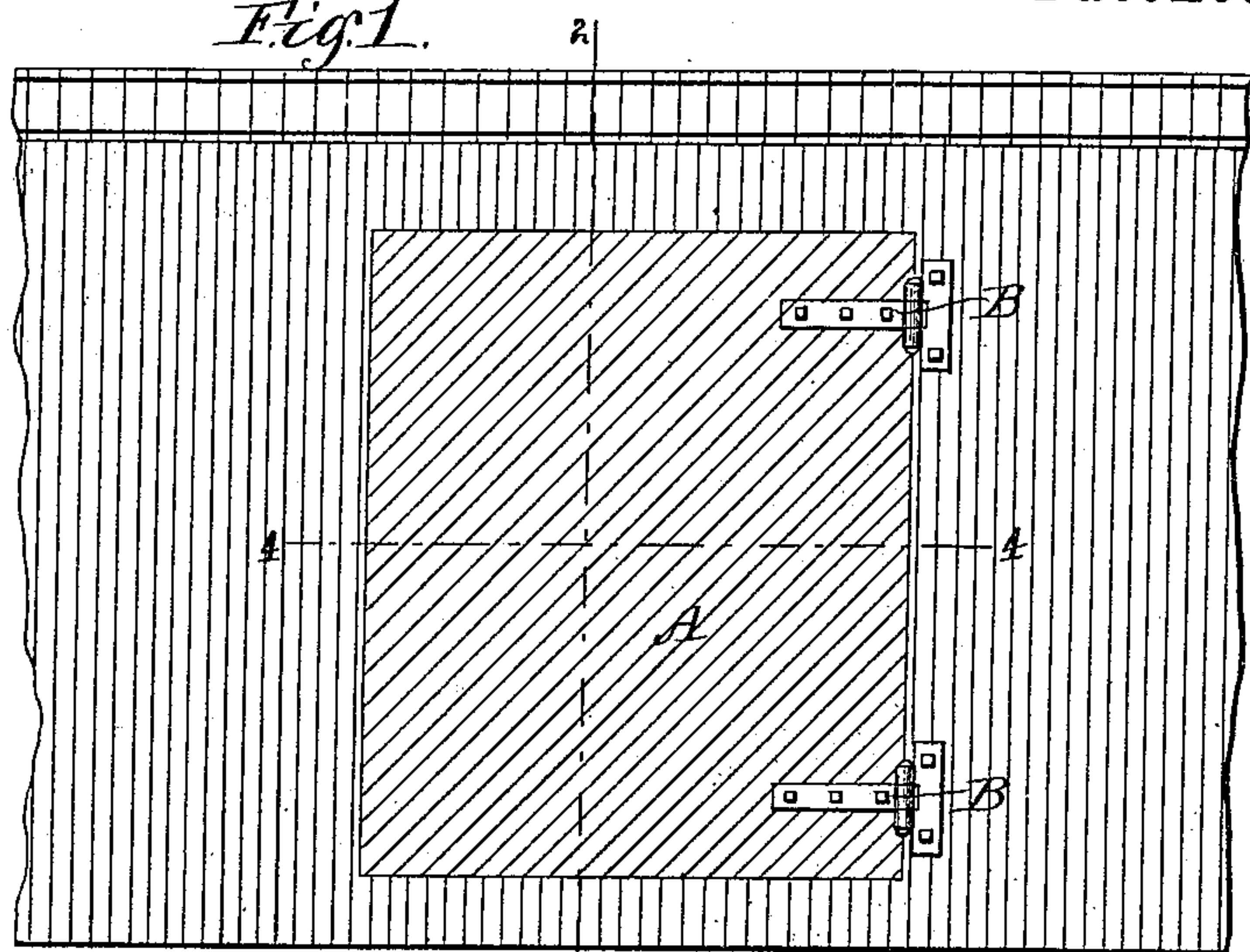


Fig. 3.

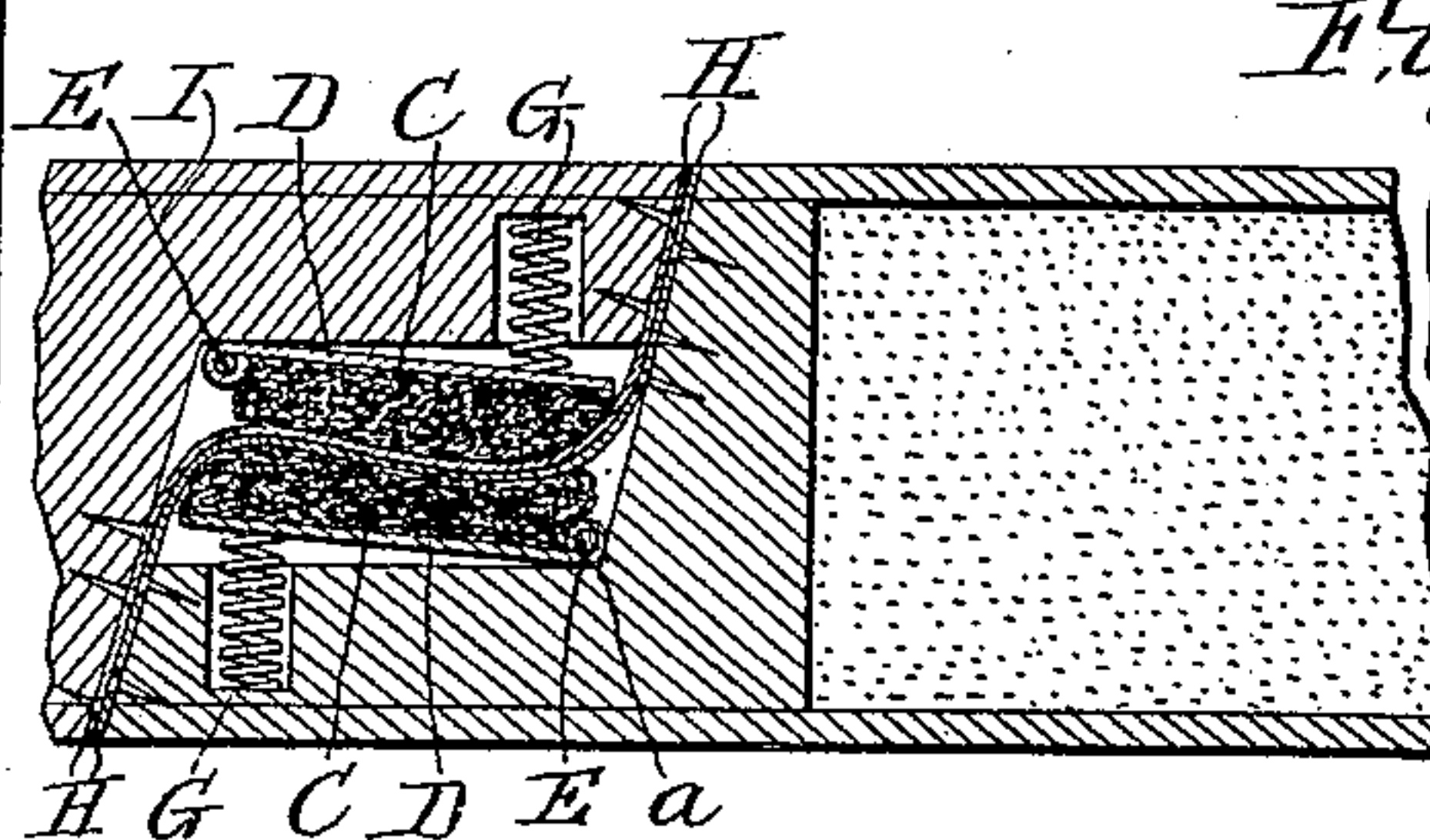


Fig. 4.

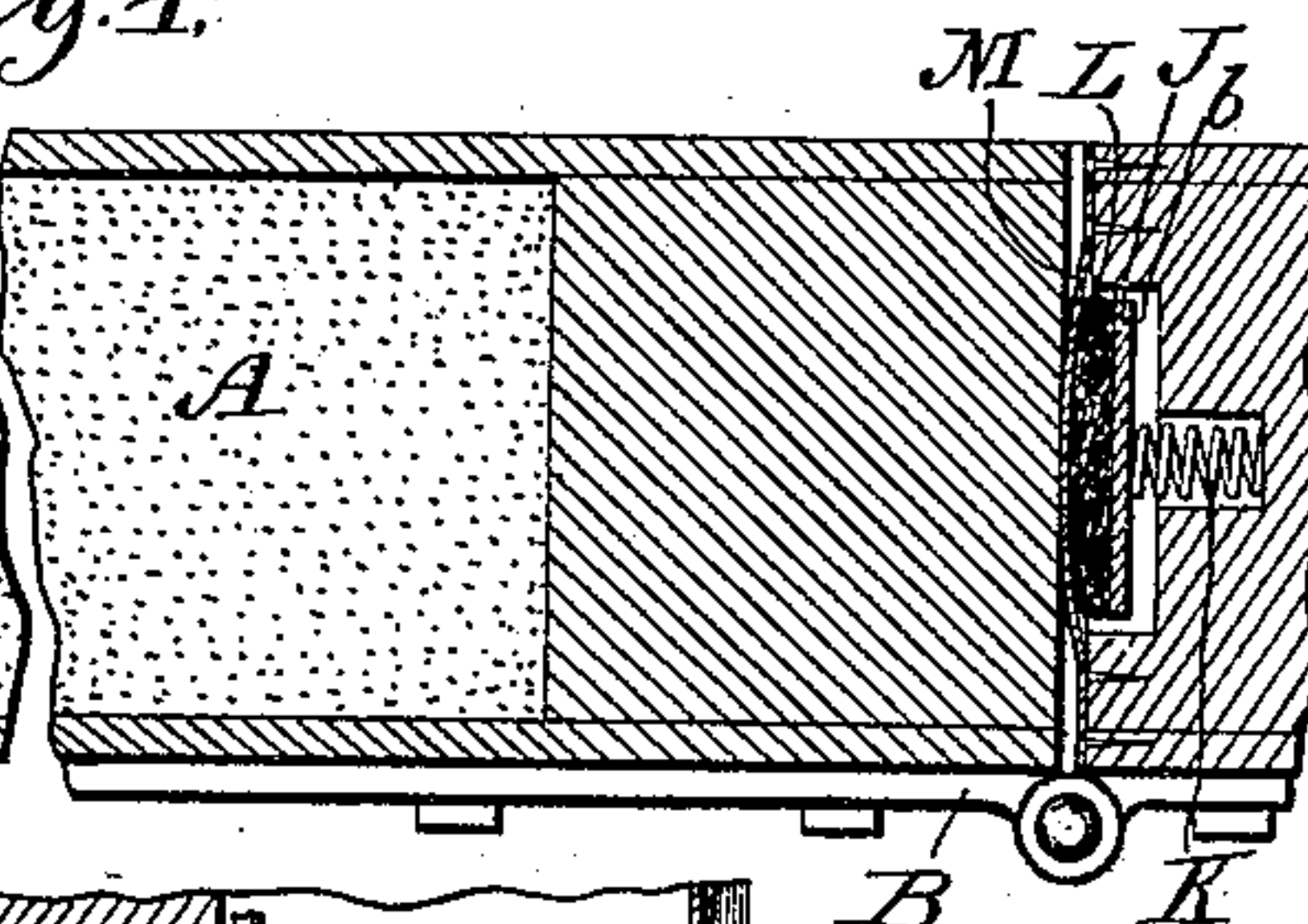


Fig. 5.

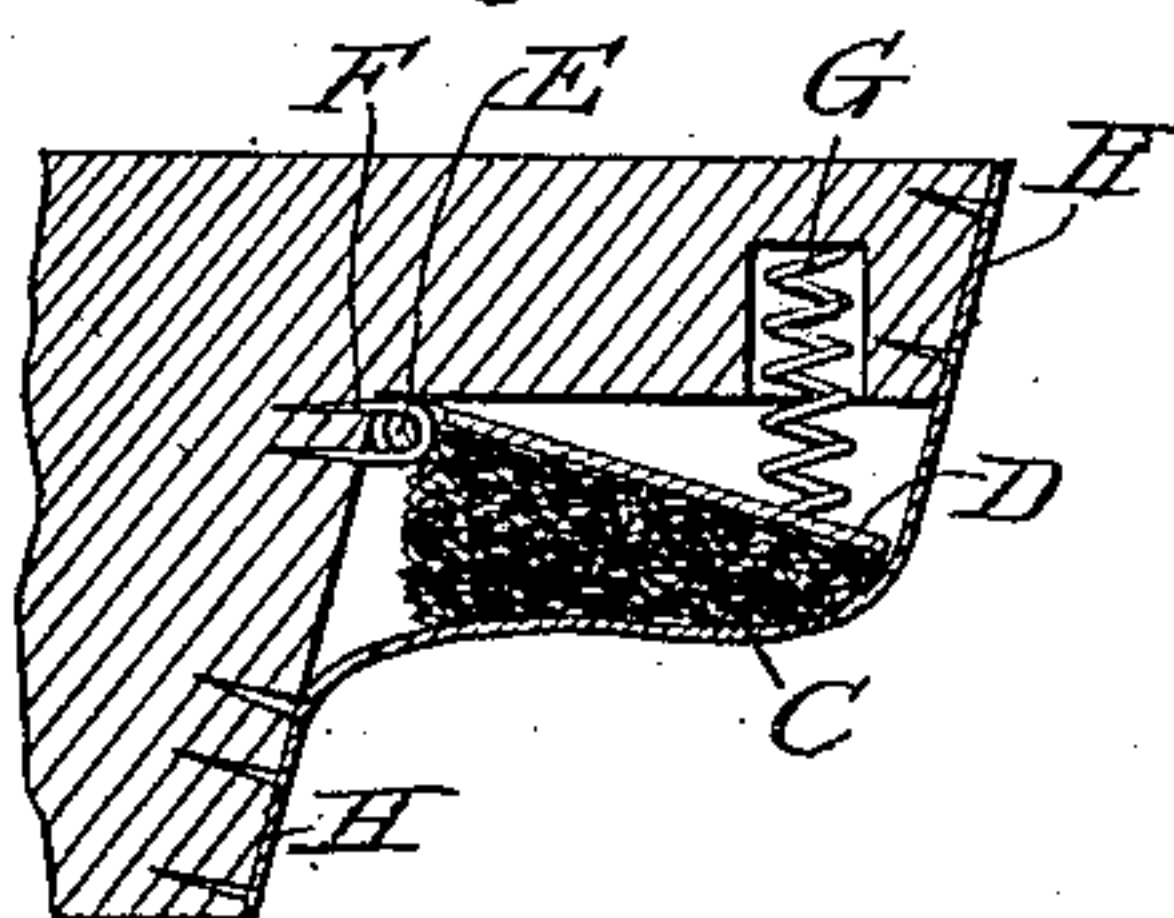
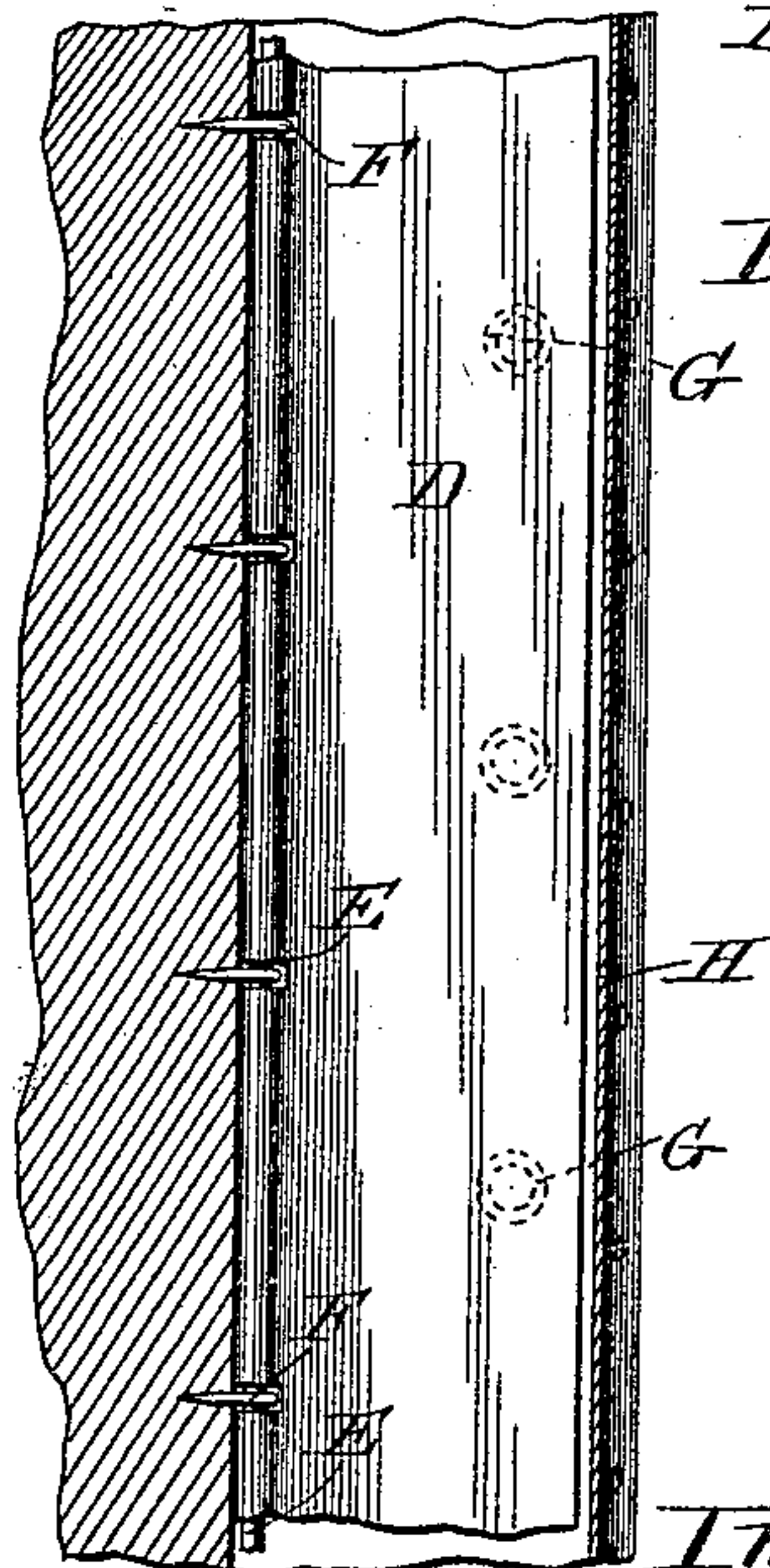


Fig. 6.



Witnesses.
Wm. M. Rheem
Wm. J. Hemming

Inventor.
Rodney G. Chase
By Raymond & Peeder Attys.

UNITED STATES PATENT OFFICE.

RODNEY G. CHASE, OF ELSDON, ILLINOIS.

DOOR FOR REFRIGERATORS.

SPECIFICATION forming part of Letters Patent No. 479,973, dated August 2, 1892.

Application filed April 30, 1892. Serial No. 431,373. (No model.)

To all whom it may concern:

Be it known that I, RODNEY G. CHASE, a citizen of the United States, residing at Elsdon, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Doors for Refrigerators, of which the following is a specification, reference being had to the accompanying drawings.

My invention is illustrated in connection with a refrigerator-car, but is applicable to any refrigerator or any situation where a tight door is desirable.

The object of my invention is to increase the durability of the door by diminishing the wear of the surfaces which come in contact and by making the door easy to open and shut, so that it will not become battered and destroyed by hard usage.

In the accompanying drawings, Figure 1 is a side elevation of the door and the adjacent portion of the car side. Fig. 2 is a vertical section on line 2 2, Fig. 1. Fig. 3 is a vertical section, on a larger scale, of the door, showing the construction of the top and bottom packing. Fig. 4 is a horizontal section on line 4 4, Fig. 1, showing the packings at the vertical edges of the door. Fig. 5 is a section showing the position of the packing at the edge of the door when the latter is open. Fig. 6 shows a portion of the strip which supports the soft packing forming the joint.

In the illustration I have shown the opening in the car as closed with a single door. It is of course to be understood, however, that my invention might be applied to a double door without material alteration.

A is the car-door, which is swung on any suitable hinges, as B B. Any suitable means may be employed for holding the door shut and any mode of construction may be employed for the door, my invention not being concerned therewith. The outer edge of the door is recessed, as shown at the section in Fig. 4, and in this recess is placed the packing C, which consists of any suitable yielding material, such as felt. This packing rests upon a plate D, which is hinged at one edge within the recess *a*. The hinge for the plate D consists of a wire E, held within the folded

edge of the plate D, and staples F, Fig. 6, driven over the wire or rod E into the door, suitable notches being cut in the edge of the plate D for the reception of such staples. At the back of the plate D are a number of springs G, fitted into pockets in the door, as shown in Fig. 4 and as indicated by dotted lines in Fig. 6. To confine the packing, a strip of canvas H is tacked to the edge of the door, as shown. The car side I is recessed in the same manner as the door A, and packing C, plate D, and canvas H are secured thereto in like manner.

The packing just described is suitable for the outer edge of the door or for the meeting edges of double doors; but its form is somewhat modified for the hinged edge. The construction of packing for the latter is shown at the right of Fig. 4. A recess *b* is cut in the door-jamb, and therein is inserted a strip J, which may be a thin board. Springs K are inserted behind the strip and a strip of felt or packing L is secured to its front face. The whole is secured in place by a strip of canvas N.

The packing for the top and bottom of the door is in construction substantially the same as the packing for the outer edge, the packing for the top edge being inserted in the doorway, while the packing for the bottom edge is secured in the door itself. Both these packings are shown in Fig. 3. The plate D', backed by springs G', is hinged within the recess at the top edge of the doorway, the hinge being at the outer side, so that the beveled edge of the door will meet with no obstruction upon its closure, the contact between the door and the packing taking place only when the former is nearly closed. For a like reason the plate D² on the bottom of the door is hinged at the inner edge thereof. In a door of this construction there is no necessity for a close fit between the rigid parts of the door and the frame, and room may be left to allow for the swelling of the door, which often occurs from moisture within the refrigerator. There is very little friction between the surfaces of the packing, so that the wear is slight.

Owing to the freedom with which the door may be operated, there is but slight strain upon the fastenings and the door is not sub-

jected to violent usage in attempting to open and close it.

I claim—

1. The packing for a door, consisting of a
5 rigid strip faced with a yielding material, springs at the back of said strip, said strip and springs being located in a recess at the meeting edges of the door or jamb, and a strip of canvas or like flexible material covering over
10 said recess, substantially as described.

2. The packing for a door, consisting of a strip hinged at one edge and faced with a yielding material, springs at the back of said strip, said strip and springs being located in
15 a recess at the meeting edges of the door or jamb, and a strip of canvas or like flexible

material covering over said recess, substantially as described.

3. The packing for a door, consisting of a strip having a hinge consisting of a wire 20 folded in to one edge and staples driven over said wire, said strip being faced with a yielding material, springs at the back of said strip, said strip and springs being located in a recess at the meeting edges of the door or jamb, 25 and a strip of canvas or like flexible material covering over said recess, substantially as described.

RODNEY G. CHASE.

Witnesses:

IRWIN VEEDER,
V. HUGO.