

H. J. FLOTRON & J. J. HAMILTON.
 DOOR FOR COLD STORAGE ROOMS.
 APPLICATION FILED JULY 17, 1908.

955,782.

Patented Apr. 19, 1910.

Fig. 1.

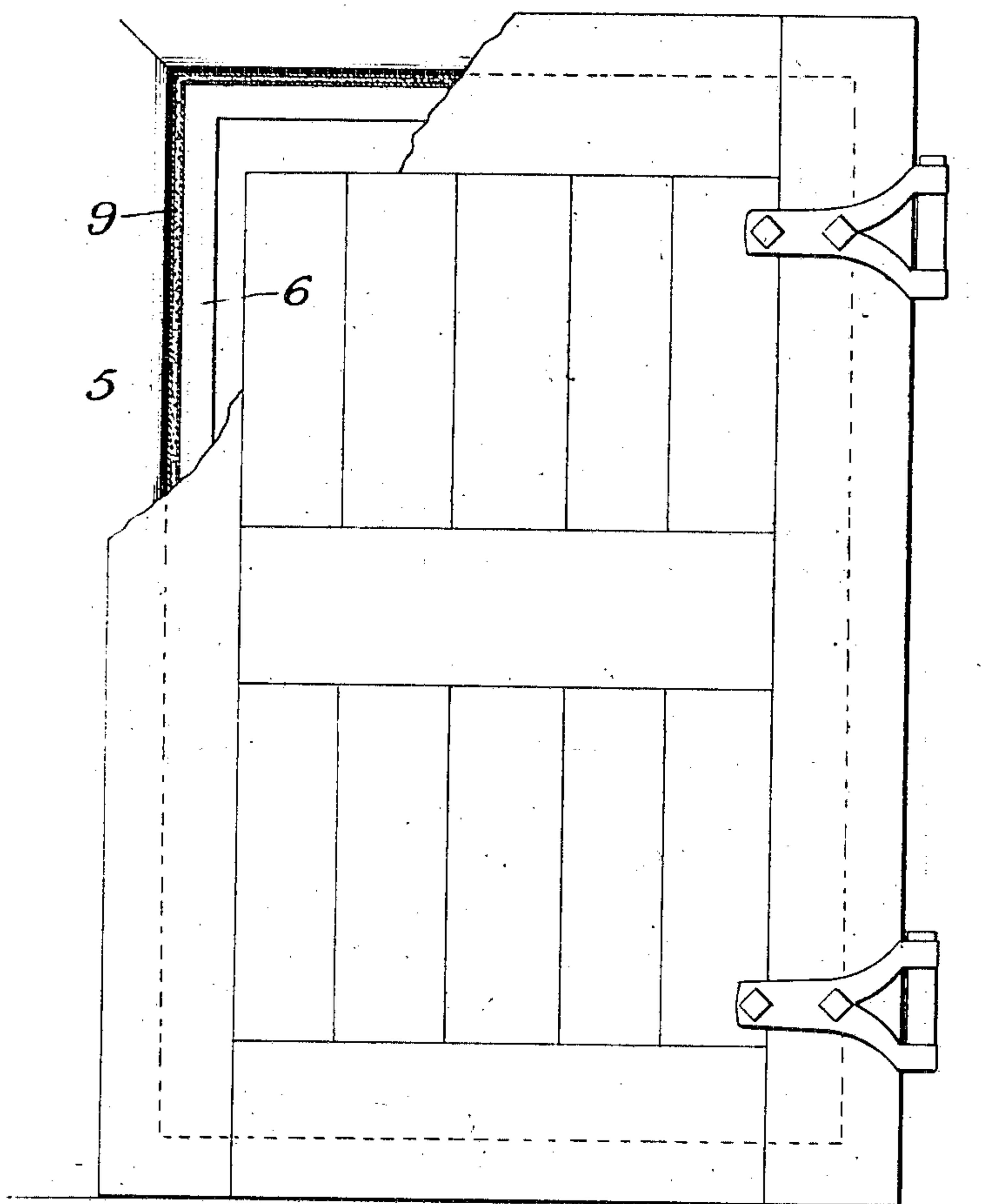
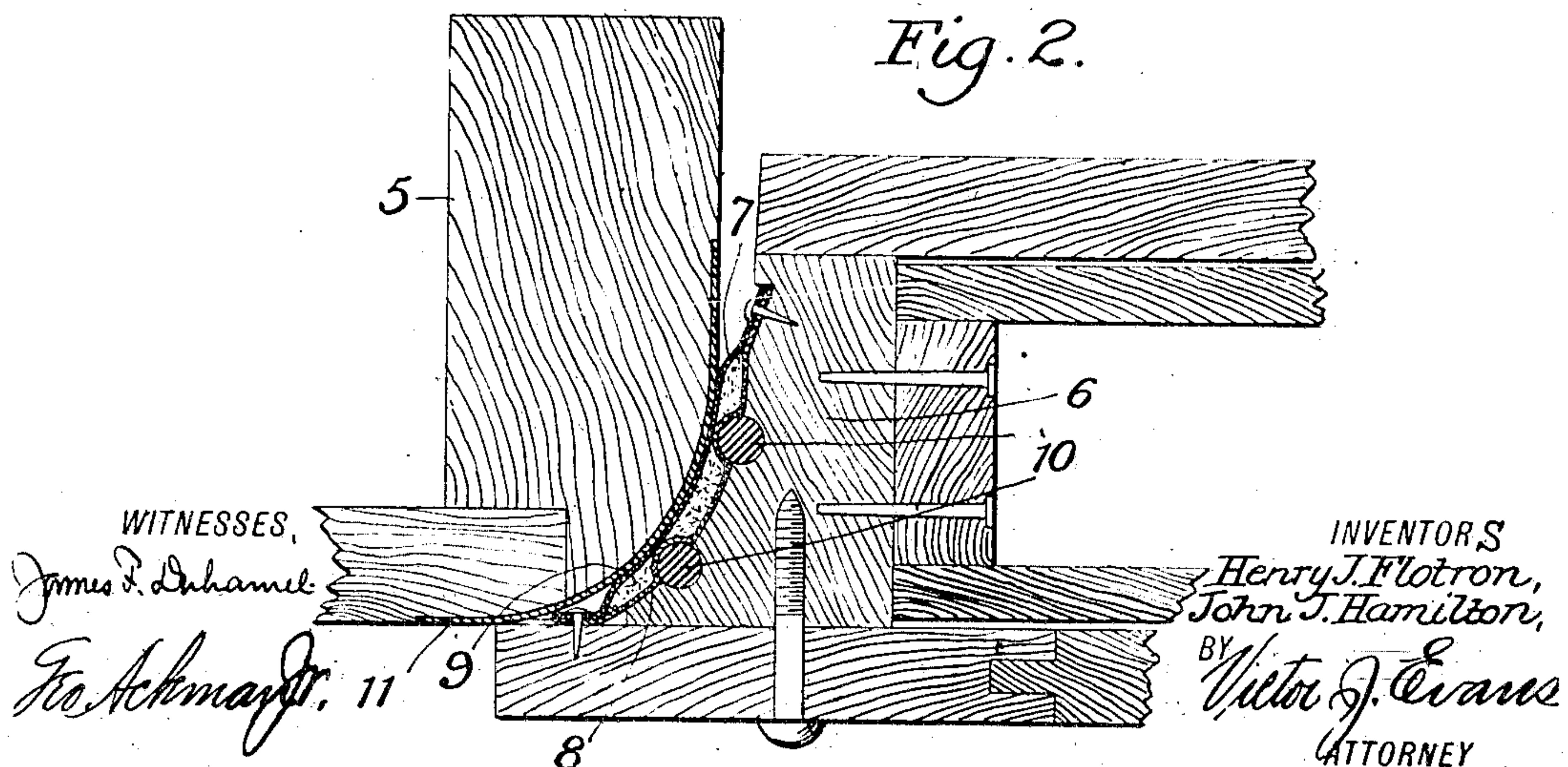


Fig. 2.



UNITED STATES PATENT OFFICE.

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DOOR FOR COLD-STORAGE ROOMS.

955,782.

Specification of Letters Patent.

Patented Apr. 19, 1910.

Application filed July 17, 1908. Serial No. 444,073.

To all whom it may concern:

Be it known that we, HENRY J. FLOTRON and JOHN J. HAMILTON, citizens of the United States, residing at New York, in the county of New York and State of New York, have invented new and useful Improvements in Doors for Cold-Storage Rooms, of which the following is a specification.

This invention relates to doors for cold storage rooms and apartments where it is necessary to securely inclose same to retain an abnormal temperature or prevent the entrance or egress of air and to attain this object the jamb of the frame is rounded or beveled while the edges of the door are provided with a suitable cushion to engage the jamb and be forced therein as the door closes to form a packing between the door and jamb and prevent the passage of air, as will be more fully explained in the following specification, set forth in the claims and illustrated in the drawings, where:

Figure 1 is the outside view of a door partly broken away to show its construction and part of the door frame. Fig. 2 is a cross sectional view through the frame and one edge of the door.

The difficulty encountered heretofore in the use of insulating doors to hermetically close apartment doors has been the tendency of the door to sag and disarrange the cooperating closure faces, and the force necessary to cause the engagement of the door and the jamb when the packing has been secured to the side of the door.

The present invention provides for the gradual closing of the door and the engaging of the packing as the door moves into the jamb and this is accomplished by rounding the outer edge of the jamb 5 to a convex face and channeling the inner edge 6 of the door to correspond with the convex jamb. By this arrangement the complete door is set into the aperture when closed and supported against sagging as these doors are generally of heavy construction.

In order to completely seal the space between the door and the jamb the former is provided with a packing consisting of the two layers of leather or canvas 7 and 8 attached to the concave edges of the door and filled with a compressible material such as hair or sponge 9. This packing readily

yields while the door closes yet completely fills that part of the opening the door fails to fit and the latter may be so forced into the opening until the packing prevents any further movement.

In order to insure a more perfect closure, gaskets 10 of rubber or leather are fitted into the edge of the door and bear upon the packing to force it out against the convex jamb and at the same time the gaskets themselves act as a packing to prevent the movement of air past the door. A door thus constructed will center itself when closed and is supported within the frame. The concavo-convex joint also affords a ready means for applying a packing and it is obvious that inclined or beveled faces may be used to produce the same effect.

The facing of the jamb may be protected by sheet metal 11 which will in consequence of the polish given it by the movement of the packing further insure its close fitting and effective closure.

This means may be useful in closing apartments which are to be fumigated or for similar purposes when the rooms are to be hermetically sealed.

What we claim as new and desire to secure by Letters Patent is:

1. In a door for cold storage rooms, the combination with a frame, of a door having edges adapted to be wedged into the frame, a metal covering for the jamb of the frame and upon which the door is adapted to impinge, a packing on the edges of the door, a longitudinally placed flexible strip behind the packing and fitting in the edges of the door.

2. In a door for cold storage rooms, the combination with a frame having convexed jambs, of a door with concave edges having longitudinal grooves, metal facing on the jambs, leather packing inclosing a flexible material and rubber strips in the grooves and bearing on the inner side of the packing.

In testimony whereof we affix our signatures in presence of two witnesses.

HENRY J. FLOTRON.

JOHN J. HAMILTON.

Witnesses:

THOS. F. BURKE,

H. G. BLACK.