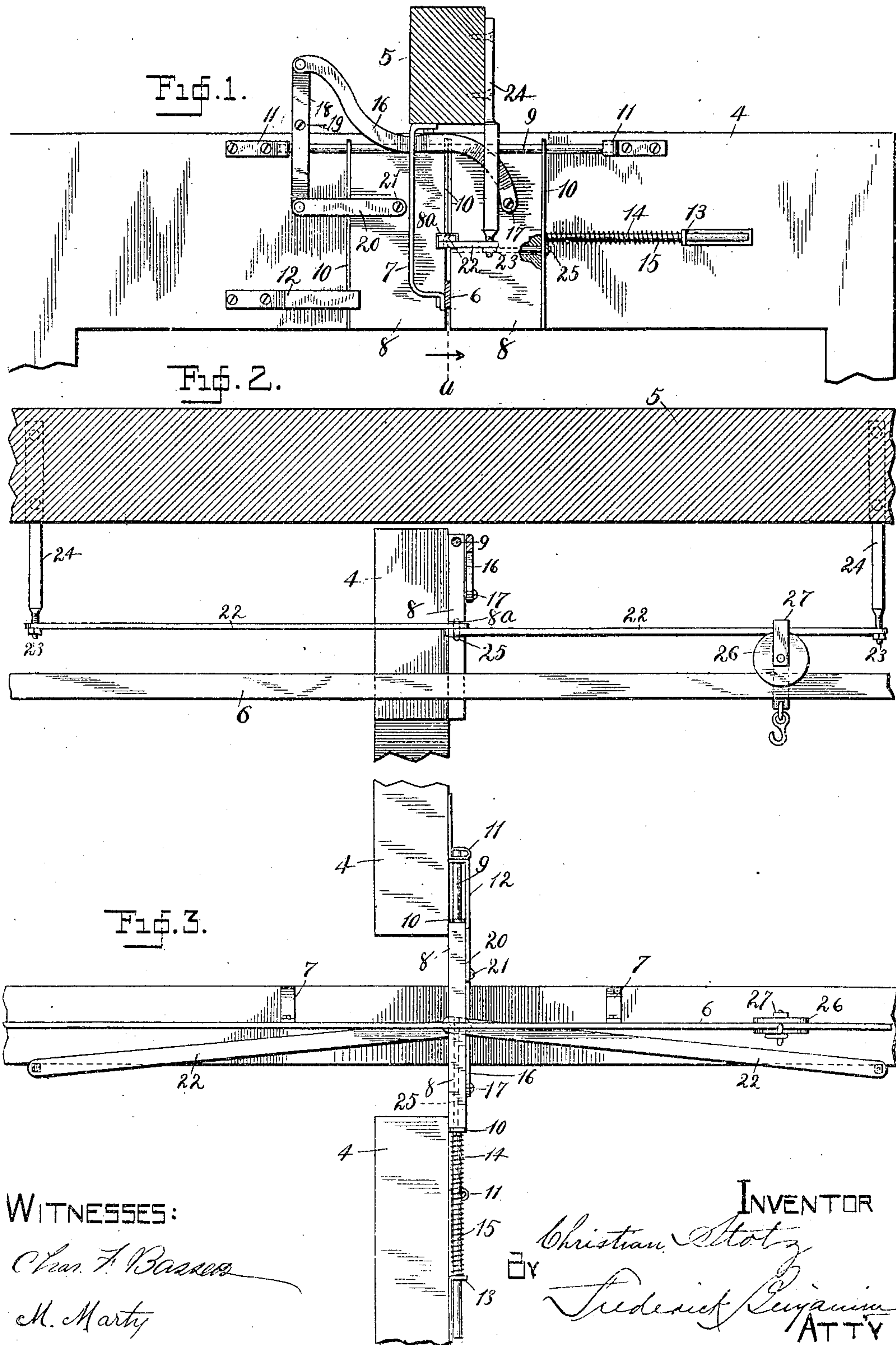


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PATENTED FEB. 19, 1907.

C. STOTZ.
REFRIGERATOR DOOR.
APPLICATION FILED AUG. 31, 1906.



UNITED STATES PATENT OFFICE.

CHRISTIAN STOTZ, OF BELLEVUE, OHIO.

REFRIGERATOR-DOOR.

No. 844,698.

Specification of Letters Patent.

Patented Feb. 19, 1907.

Application filed August 31, 1906. Serial No. 332,858.

To all whom it may concern:

Be it known that I, CHRISTIAN STOTZ, a citizen of the United States, residing at Bellevue, in the county of Huron and State of Ohio, have invented certain new and useful Improvements in Refrigerator-Doors, of which the following is a specification.

This invention relates to improvements in means for automatically opening and closing slidable doors or like devices, and the especial object of the improvements which form the subject-matter of this application is to provide in conjunction with a refrigerator or cold-storage room means whereby large pieces of meat, sheep, hogs, and other products may be run into the storage-room or removed therefrom while suspended from a trolley-wheel traveling on an overhead track, and in which the doors for the opening made necessary by the track and the passage of the wheel-hanger and attachment are automatically opened through the action of the hanger and closed as soon as the hanger has passed.

In the accompanying drawings I have shown a preferred embodiment of my invention in the following views.

Figure 1 shows in front elevation the upper part or head of a door-frame equipped with my invention. Fig. 2 is a view on the section-line *a a* of Fig. 1. Fig. 3 is a bottom plan view of the apparatus shown in Fig. 2.

Referring to the drawings in detail, 4 4 represent the head timbers or sections of a door-frame erected around the doorway of a refrigerator adapted to hold large pieces of meat suspended from an overhead track. Between the inner ends of the frame-sections is an opening, through which extend the overhead track 6 and other parts of the apparatus, to be described. Above the center of the door-frame opening and at right angles to the frame and extending exteriorly and interiorly of the refrigerator is a beam 5, which may be secured in any suitable manner. Below the beam a convenient distance and running longitudinally therewith is a trolley track or rail 6, which is supported by any of the well-known means, such as the hangers 7, the upper ends of which are secured to the beam and the lower ends to the track or rail.

Two doors 8 8, having flat metal bars 10 secured to their vertical edges, are slidably hung on a rod 9, the ends of which are held in brackets 11, secured to the face of the head-sections 4, suitable holes in the bars 10 re-

ceiving said rod. A stop 12, secured to one head-section, is provided for one of the doors and a stop 13 on the opposite section for the other door. A rod 14, secured to the rear edge of one of the doors, has a sliding engagement with the stop 13 and is surrounded for a portion of its length by an expansion coil-spring 15, one end of which abuts against said stop and the other end against the rear edge of the door, so that the tension of the spring is normally exerted to hold the door in its closed position.

A curved strap 16 is connected at one end by pivot 17 with the right-hand door and at its opposite end is pivoted to the upper end of a lever 18, which is mounted on a pivot 19, and has its lower end pivoted to one end of a link 20, the other end of said link being connected by pivot 21 with the other or left-hand door, so that any movement of the right-hand door is communicated to the complementary door.

From the beam 5 depend two hanger-rods 24, the lower ends of which are threaded, as at 23, and supplied with nuts. Bars 22 22 have their outer ends mounted on the threaded portions of the rods and their inner ends inclined outwardly to overhang the track 6 and overlapped and pivotally connected together by a hook 25, which passes through a suitable horizontal opening in the right-hand door, as shown in Fig. 1. At the point opposite where the bars overlap and are connected together the inner edges of the doors are cut away, as at 8^a, to receive said portions of the bars and permit their inward movement, resulting from the action of the hanger-wheel, as will be described.

The operation of the apparatus is as follows: Assuming that the refrigerator-door is open and that a quarter of beef is suspended from the hanger 27 on the outside of the refrigerator, the operator by pushing along the hanger on its track 6 will cause the side of the hanger to press against the edge of the outside bar 22, and thereby push it inwardly, and thus slide the right-hand door 8 on its supporting-rod 9 to its open position, and said movement will be communicated from the right-hand door to the left-hand door through the parts 16, 18, and 20 in a manner readily understood. The doors will remain open until the hanger has traveled to a point on its track where the inner bar ceases to intersect or overhang the track, whereupon the pressure on the bar being removed the ex-

pansive action of the spring 15 will push the right-hand door closed, a reverse movement of the parts 16, 18, and 20 will take place, and the left-hand door will be likewise closed.

5 Upon removing the piece of beef from the refrigerator the return of the hanger operates on the bars 22 in the manner described, and the movements of the parts are repeated. It will thus be seen that the doors 8 8 are nor-
10 mally held in a closed position except when articles are being carried into or removed from the refrigerator on the hanger.

It will be understood that the weight of the articles suspended from the hanger, coupled
15 with the fact that the trolley-wheel 26 has wide flanges on each side of the track, will prevent the displacement of the wheel on the track from the resistance of the door and the spring 15.

20 Having thus described my invention, what I claim is—

1. In means for opening a pair of sliding doors, a track, a hanger slidably mounted on

said track, pivoted bars arranged to over-
hang said track at one point, means connect- 25
ing said bars with one of said doors, means
connecting the doors together whereby any
movement of one will be transmitted to the
other, and means automatically closing said
doors. 30

2. In means for opening a pair of sliding
doors, a track, a hanger slidably mounted on
said track, pivotally-connected bars ar-
ranged to intersect said track at one point,
means connecting said bars with one of said 35
doors, means connecting the doors together
whereby the movements of one door will be
simultaneously transmitted to the other,
and a spring adapted to close said doors.

In testimony whereof I affix my signature 40
in presence of two witnesses.

CHRISTIAN STOTZ.

Witnesses:

J. P. VICKERY,

R. R. PARKHURST.