

No. 677,186.

Patented June 25, 1901.

G. B. DONAVIN.
COMBINED RANGE AND MESS CHEST.

(No Model.)

(Application filed Apr. 2, 1900.)

2 Sheets—Sheet 1.

Fig. 1

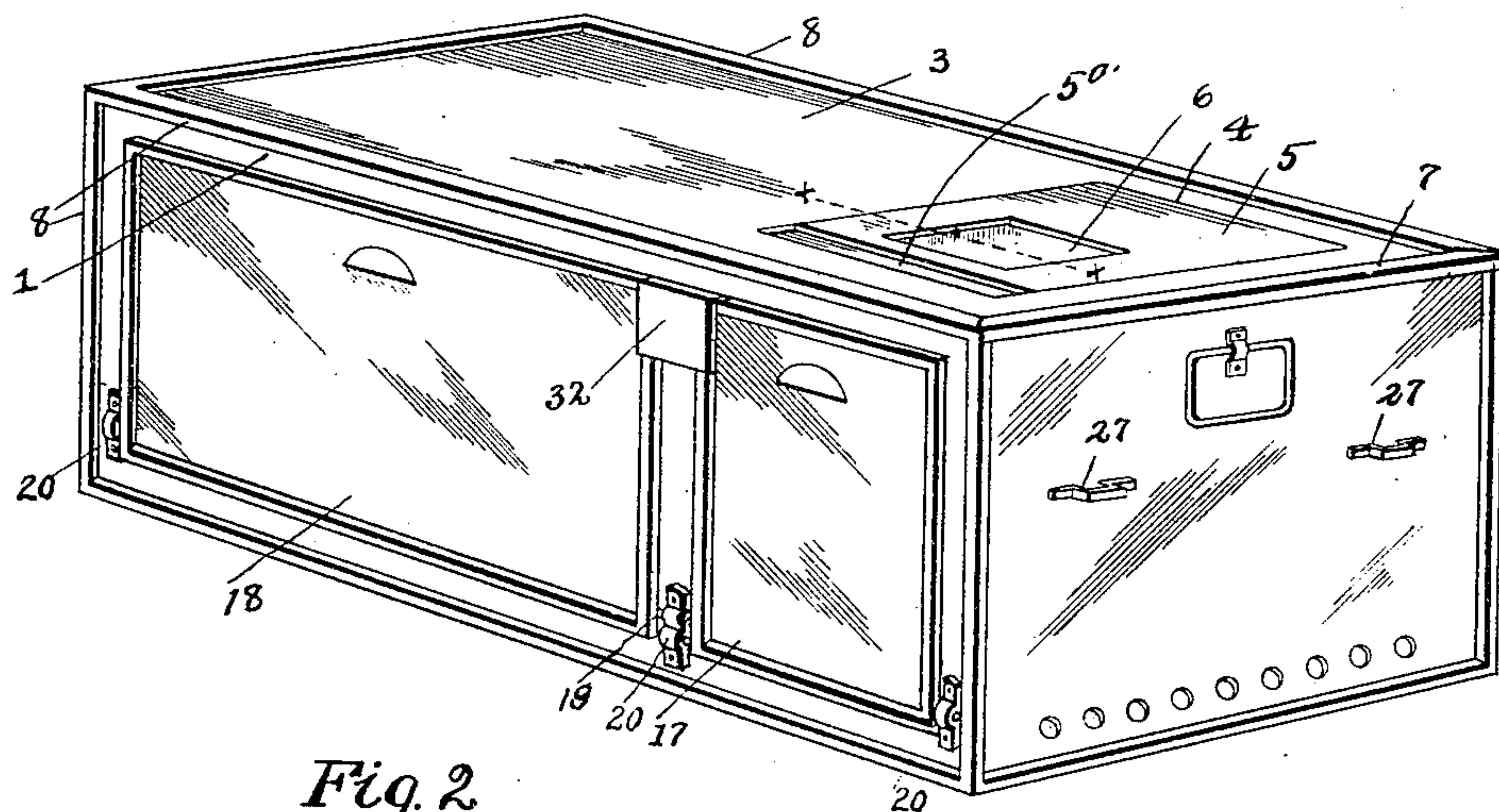


Fig. 2

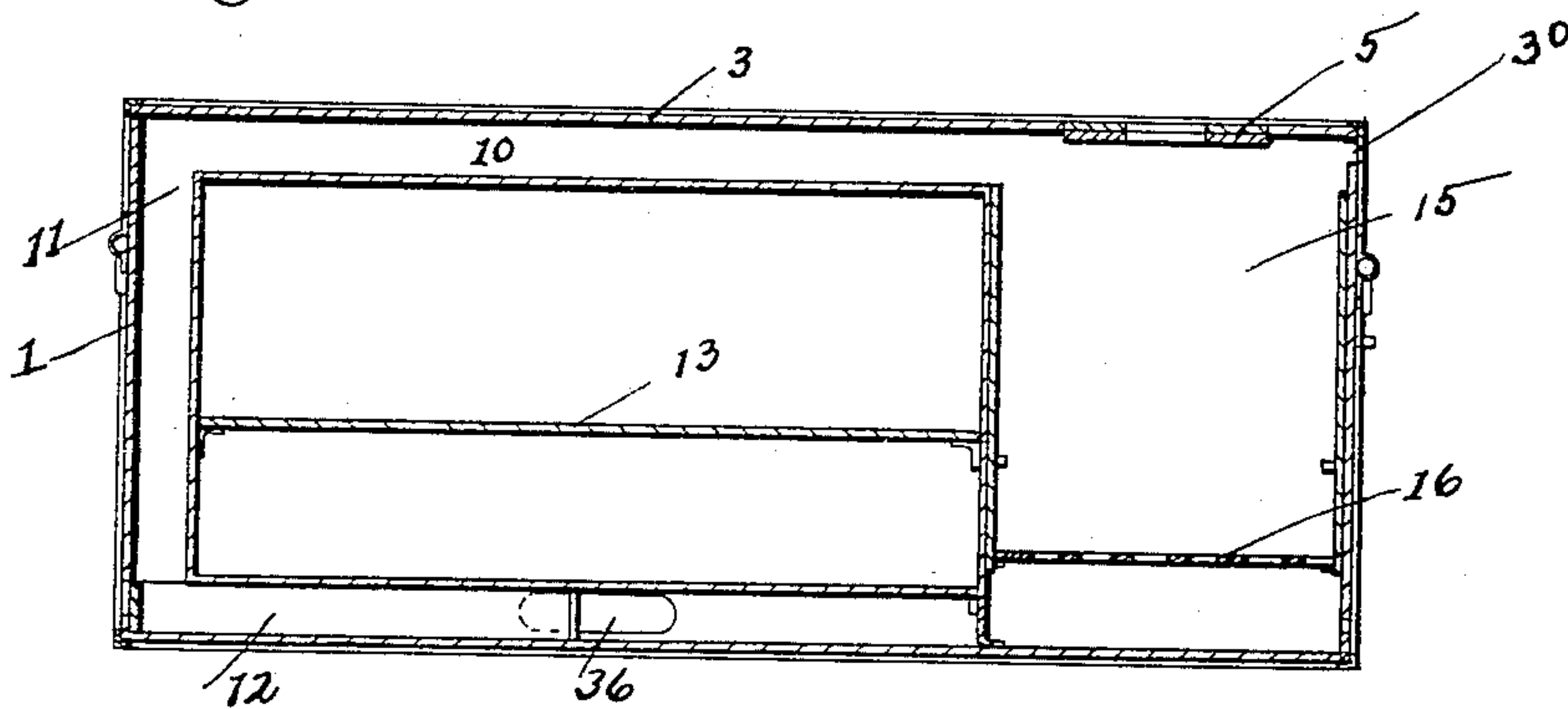
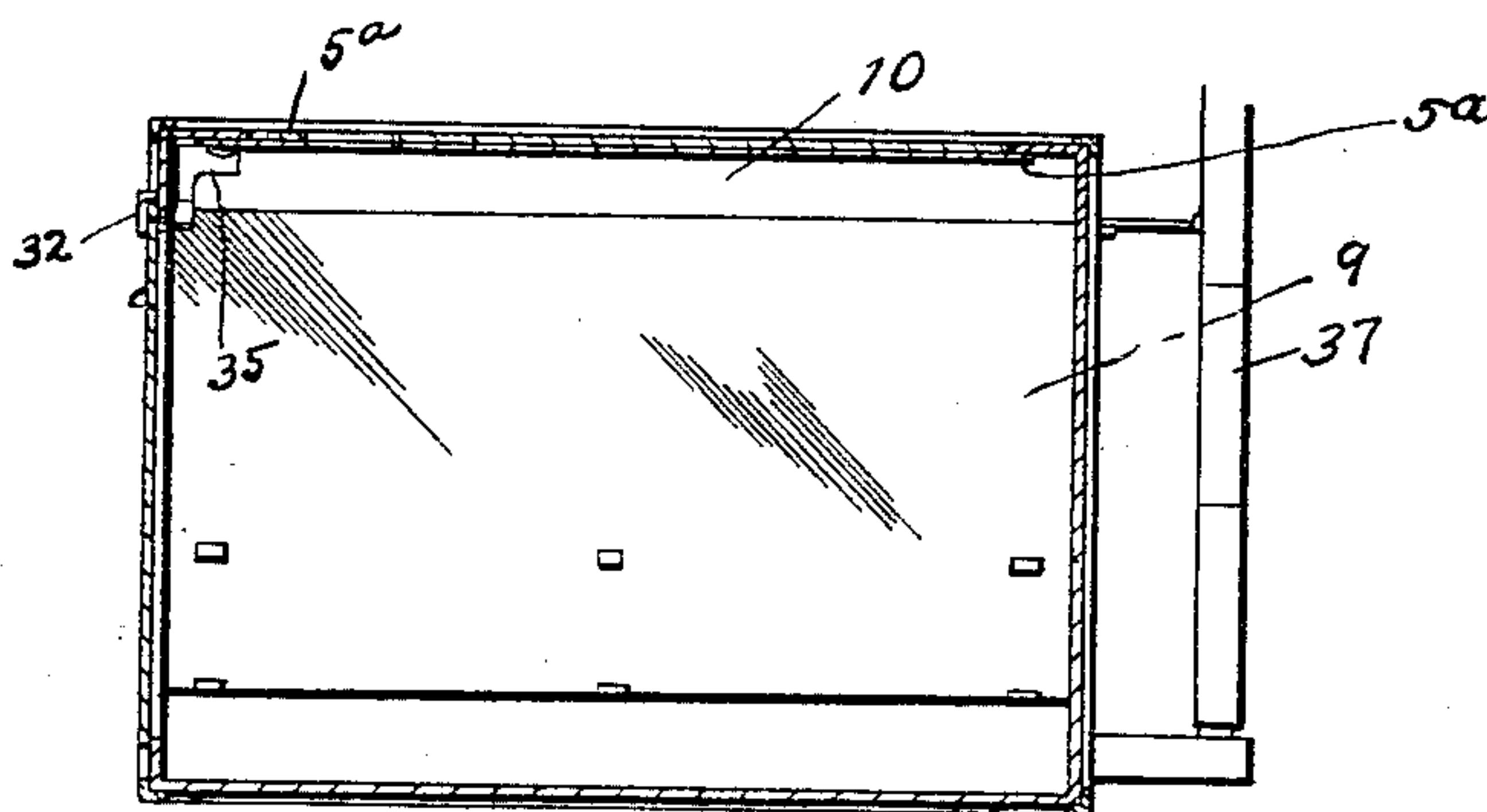


Fig. 3



WITNESSES:

R. L. Hessong.
A. L. Phelps

INVENTOR

George B. Donavin
BY
C. C. Shepherd
ATTORNEY

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2 Sheets—Sheet 2.

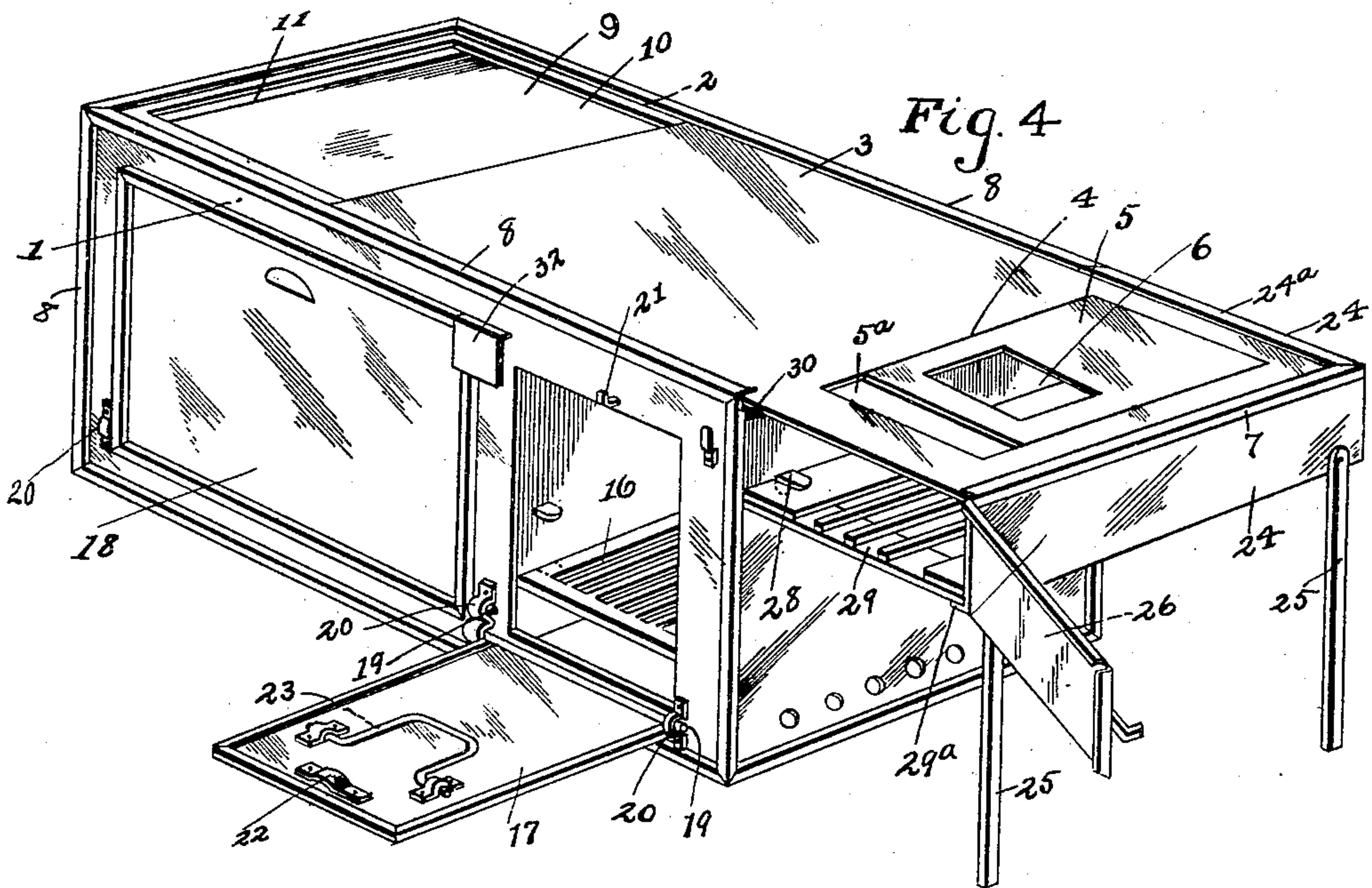


Fig. 7

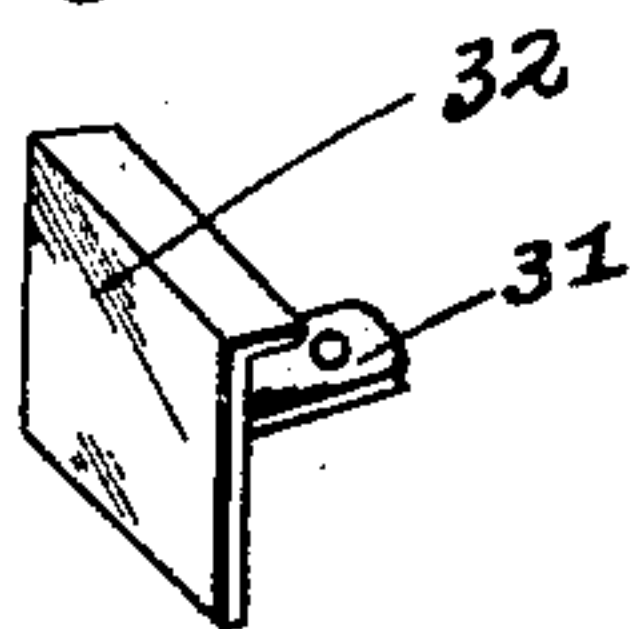


Fig. 5

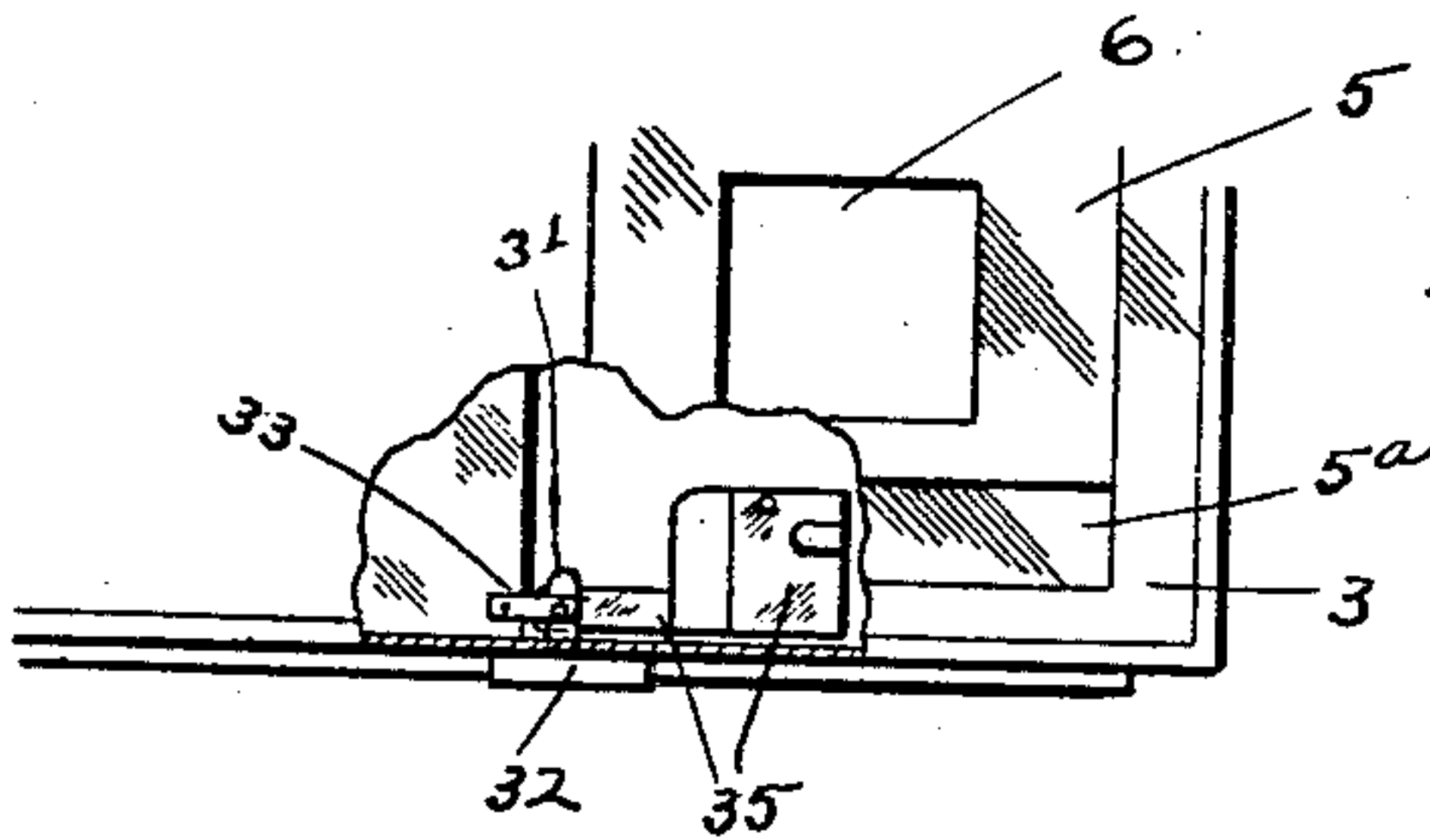
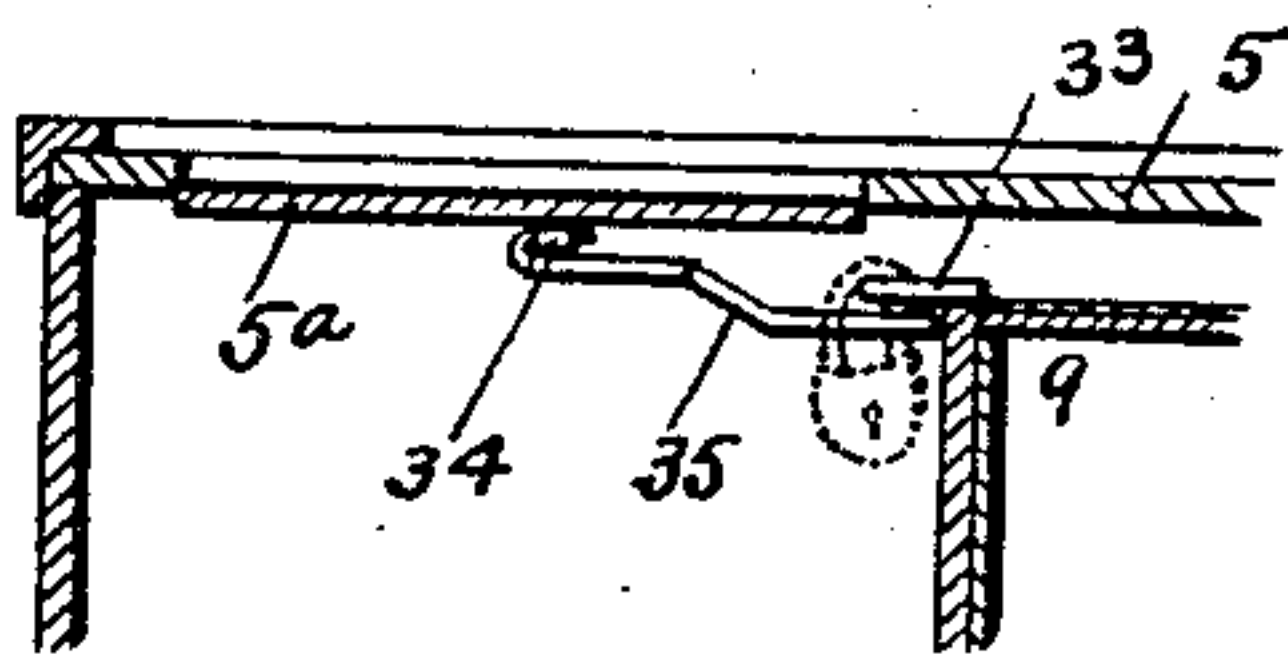


Fig. 6



WITNESSES.

R. L. Hessong.
A. L. Phelps

INVENTOR

George B. Donavin
BY
C. C. Shepherd
ATTORNEY

UNITED STATES PATENT OFFICE.

GEORGE B. DONAVIN, OF COLUMBUS, OHIO.

COMBINED RANGE AND MESS-CHEST.

SPECIFICATION forming part of Letters Patent No. 677,186, dated June 25, 1901.

Application filed April 2, 1900. Serial No. 11,122. (No model.)

To all whom it may concern:

Be it known that I, GEORGE B. DONAVIN, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented a certain new and useful Improvement in a Combined Range and Mess-Chest, of which the following is a specification.

My invention relates to the improvement of stoves or ranges of that class which are particularly adapted for army use; and the objects of my invention are to provide a range of this class of superior construction and arrangement of parts, to so construct said range as to admit of its being extended lengthwise to provide a substantial increase in cooking and heating surface, to provide improved means for retaining the doors of the range or stove in a partially-closed position, to provide improved means for locking the oven and fire-box doors and for locking other parts of the stove in connection therewith, and to produce other improvements, the details of construction and arrangement of parts of which will be more fully pointed out hereinafter. These objects I accomplish in the manner illustrated in the accompanying drawings, in which—

Figure 1 is a view in perspective of my improved stove or range, showing the doors closed and the top thereof in its normal position. Fig. 2 is a central longitudinal section of the same. Fig. 3 is a transverse section through the fire-box. Fig. 4 is a view in perspective of my improved stove, showing the same extended to gain increased cooking and heating surface. Fig. 5 is a partial plan view of the stove, showing, for the sake of clearness in illustration, a portion of one side and a portion of the top of said stove broken away. Fig. 6 is a detail view in section taken on the dotted line *xx* of Fig. 1 and looking toward the door side of the stove-body, and Fig. 7 is a detail view in perspective of a lock which I employ in the manner hereinafter described.

Similar numerals refer to similar parts throughout the several views.

As in my former application for patent, filed April 14, 1899, for a combined range and mess-chest, Serial No. 713,014, the main body of my stove or range is in the form of an oblong casing 1, the upper portion of the side thereof

being formed with parallel guideways 2, within which is adapted to slide a movable top plate 3. The forward end portion of this top plate is provided with an oblong transverse opening 4, which is adapted to be filled by a detachable filling-plate 5, formed of a double thickness of metal of such form as to produce tongue-like projections 5^a at the ends thereof, these tongue projections being adapted to engage the under side edges of the opening 4. The plate 5 is provided with a permanent opening 6 of suitable size. The outer or forward end of the stove top plate 3 has secured thereto an angular binding-strip 7, which corresponds in form with the binder-strips 8 of the top and bottom edges and corners of the stove-body. Within the stove-body, formed as above described, I provide a casing 9, the space between the upper side of the latter and the top plate 3 forming a top flue 10, and the space between the rear end of the casing 9 and the rear end of the outer casing 1 forming a vertical flue 11, which communicates with a bottom flue 12 beneath said internal casing. The casing 9 forms an oven, which extends between the sides of the stove-body and which may be provided with suitable shelving 13. The space between the forward end of the casing 9 and the forward end of the stove-body forms a fire-box, as indicated at 15, the latter having detachably supported therein a grate-bar 16. On one side of the stove-casing I form doorways leading into the fire-box and oven, these doorways being adapted to be closed, respectively, by doors 17 and 18. As shown for the door 17, these doors are provided at their lower ends with laterally-projecting hinge-pins 19, which have a journal-bearing in keeper-like bearing projections 20 on the sides of the stove-body adjacent to the doorways. The bearing portions of these bearing projections 20 are sufficiently large with relation to the size of the hinge-pins 19 to permit of a desirable play of the hinge-pins within their bearings for the purpose hereinafter described. Above each of the doorways I provide an outwardly-projecting angular door-catch hook 21, and on the inner face of each of the doors adjacent to its outer end I provide a keeper-like projection 22, which when said door is turned to the closed position and elevated until its hinge-pins are in

the upper side of their bearings may engage said hook 21 in the natural downward drop of the door. I also journal or pivot on the inner side of each of the doors 17 and 18 a yoke-shaped catch or hanger 23, which by engagement with the catch-hooks 21 will serve to hold said doors partly open.

In order to provide an extended cooking and heating surface for my improved range, the top plate 3 is drawn outward beyond the forward end of the stove in the manner shown in Fig. 4 of the drawings. This being accomplished, I employ an angular plate 24, one wing of which is provided with an inturned flange, as indicated at 24^a, which embraces the outwardly-extended side portion of the top plate 3 and the remaining or end wing of which engages the under side of the downturned wings of the angular binding-strip 7. This end wing of the plate 24 is provided with supporting-legs 25, the upper ends of which are pivoted to said plate and adapted to be folded against the latter when not in use. The remaining side of the projecting portion of the plate 3 is adapted to be inclosed by a door 26, which is hinged to the end wing of the angular plate 24. On the front end of the stove body or casing I form suitable keepers or socket-pieces 27, with which are adapted to engage the downturned portions of fingers 28, which are secured to the inner edge of a grate-bar frame 29, the outer edge of the latter resting on an inturned flange 29^a of the end wing of the angular plate 4. The downturned lip or flange of the binding-strip 7 when the top plate 3 is in its inner or normal position serves to close a transverse opening 30, which is at the top of the forward end of the stove-body; but when said top plate is pulled outward to the position shown in Fig. 4 it will be observed that this opening will communicate with the upper portion of the fire-box.

In order to lock both the doors 17 and 18 in closed positions for the purpose of transportation or when the stove is not in use and at the same time lock the plate 5 in its position in the opening 4, I have provided a locking mechanism, which I will now describe. In the side of the stove in which the doorways are formed, above the line of said doorways and between the same, I form an opening through which is adapted to be inserted the tongue portion 31 of an angular lock-plate 32, said tongue projecting from the rear side of said lock-plate at right angles therewith and said lock-plate being adapted to embrace the upper and adjacent corners of the said doors. For convenience in illustration this lock-plate is shown in its place in Fig. 4 of the drawings, although it is obvious that it must necessarily be withdrawn before the closing of the door 17. As shown more clearly in Fig. 5 of the drawings, the tongue portion 31 of the lock-plate projects within the stove-body immediately beneath a short bar 33, which extends outward from the

top of the oven-casing 9, an opening being formed in the outer end of said bar 33, above said tongue, and a corresponding opening being formed in the latter. Hooked into engagement with a hook or keeper 34 (see Fig. 6) on the under side of the tongue portion 5^a of the plate 5 is a locking-strip 35, one end of which is provided with an opening there-through and extends beneath the lock-tongue 31. As indicated in dotted lines, the hasp of a padlock may be passed through the openings of the bar 33, lock-tongue 31, and lock-strip 35, and said parts thus locked firmly together, access to these parts being gained by inserting an arm through the opening 6 of the plate 5. It will thus be seen that one padlock will serve to lock both the doors firmly in connection with the body of the range or stove and at the same time lock the plate 5 in its position in the opening 4.

In utilizing the stove or range above described it is obvious that the plate 5 may be removed and the boiler or other suitable cooking utensil supported over the opening 4 and that when the top plate 3 is drawn outward to the position indicated in Fig. 4 the uncovered portion of the top flue 10 may be covered by a suitable cooking utensil or boiler.

It will be observed that by employing the character of door-fastenings which are herein described no projections are formed on the outer sides of the doors which will be likely to be knocked off or broken in handling.

By extending the top plate and employing the angular side plate 24 and grate-bar 29 in the manner described and shown in Fig. 4 it is obvious that a suitable increase in the cooking and heating capacity of the stove will be attained, inasmuch as a fire may be maintained on the grate-bar 9 and the products of combustion may pass through the opening 30 into the fire-box, thence through the flues 10, 11, and 12, and out through the smoke-outlet 36. This smoke-outlet is preferably arranged at that side of the stove which is opposite the side having the doorways and communicates with a suitable vertical smoke-pipe 37 on the outer side of said stove-body.

Prior to locking the doors of the stove it will be observed that the legs and door of the angular plate 24 may be folded into a compact form against said plate and the same inserted within the fire-box or oven of the stove, together with such other loose parts or cooking utensils as it may be desirable to carry. When locked within the stove, it is obvious that access thereto will be prevented, inasmuch as the opening 6 of the plate 5 is not sufficiently large to permit the withdrawal of the articles above mentioned through the same.

Having now fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a range and mess-chest the combination of the range body or casing, an oven and fire-box therein, a sliding top plate for said

range-body, an angular plate 24 having legs pivotally connected therewith and adapted to embrace one side and the end of said top plate when the latter is extended, a grate-bar adapted to be detachably supported between the angle-plate 24 and end of the stove-body, substantially as specified.

2. In a range and mess-chest, the combination with a stove body or casing having a fire-box and oven and communicating flues above and below said oven, hook projections 21 on said stove-body above the doorways thereof, doors hinged in the lower portions of said doorways and having vertically-movable hinge-pins, projections on the inner faces of said doors adapted to engage said hooks 21 when the hinge-pins of said doors are slightly raised and yokes 23 having their ends journaled on the inner sides of said doors, substantially as specified.

3. In a range and mess-chest, the combination with the stove-body having a fire-box and oven and doors therefor, said stove-body having a side opening between said doors, of a lock-plate 32 having a tongue 31 adapted to be inserted inside said opening and an opening in

said tongue, a bar 33 projecting from the oven on the inner side of said stove-body and having an opening registering with the opening in said lock-tongue, said openings adapted to receive the hasp of a padlock or similar locking device, substantially as specified.

4. In a range and mess-chest, the combination with the stove-body having a fire-box and oven and doors therefor, the top plate of said stove-body having an opening 4 therein and a detachable plate adapted to fill said opening, of a lock-plate 32 having a tongue 31 projecting at right angles therewith, said tongue having an opening therethrough and adapted to be inserted into said opening in the stove-body, a lock-strip 35, having one of its ends adapted to be detachably connected with the under side of the plate 5 and its remaining end provided with an opening and projecting beneath the tongue of said lock, substantially as specified.

GEORGE B. DONAVIN.

In presence of—

C. C. SHEPHERD,
W. L. MORROW.