

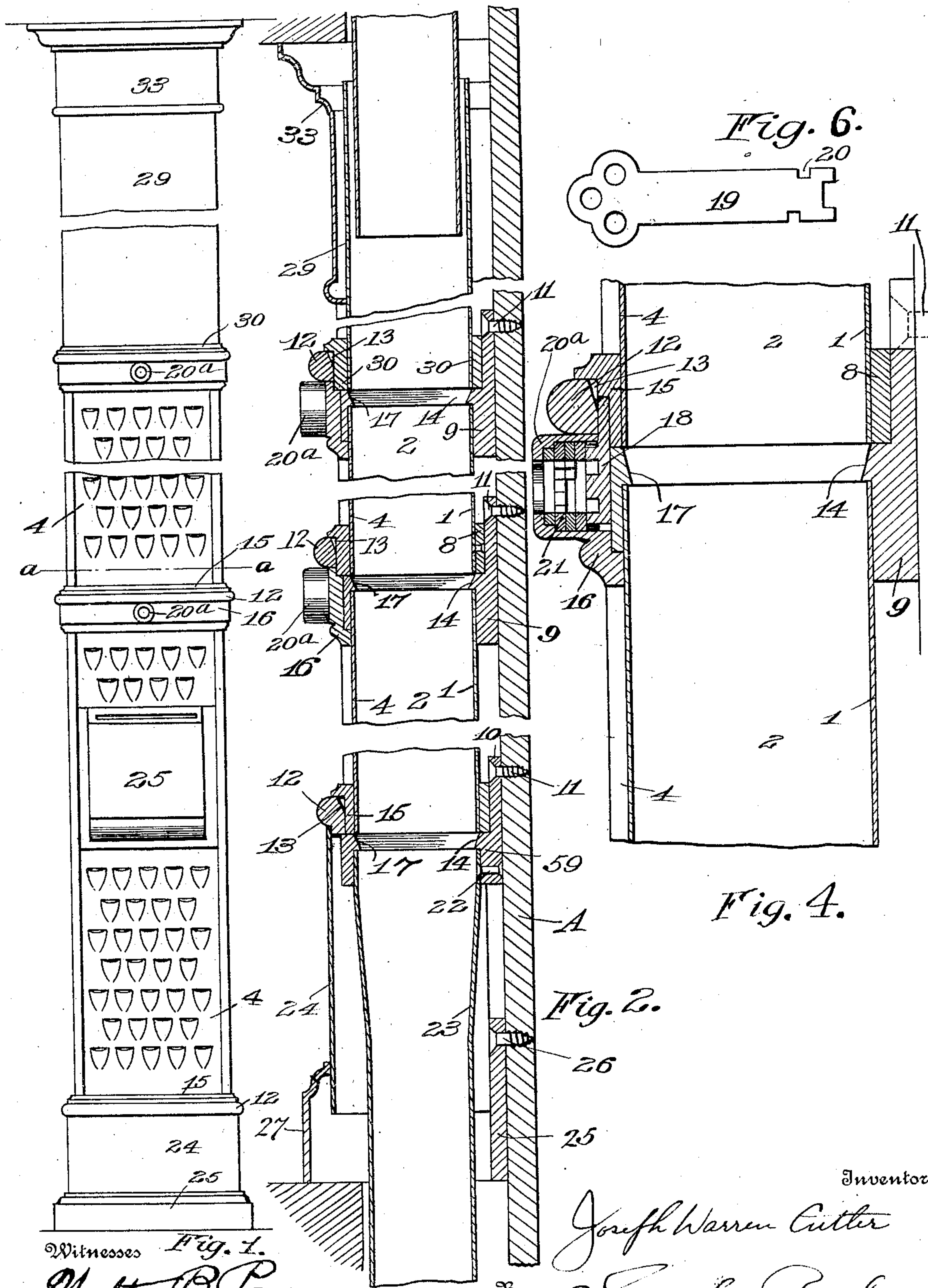
No. 881,111.

PATENTED MAR. 10, 1908.

J. W. CUTLER.
MAIL CHUTE.

APPLICATION FILED OCT. 1, 1906.

2 SHEETS—SHEET 1.



Witnesses
Walter B. Payne.
Florence E. Frank

Inventor
Joseph Warren Cutler
By Church & Rich
his Attorneys

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2 SHEETS—SHEET 2.

Fig. 3.

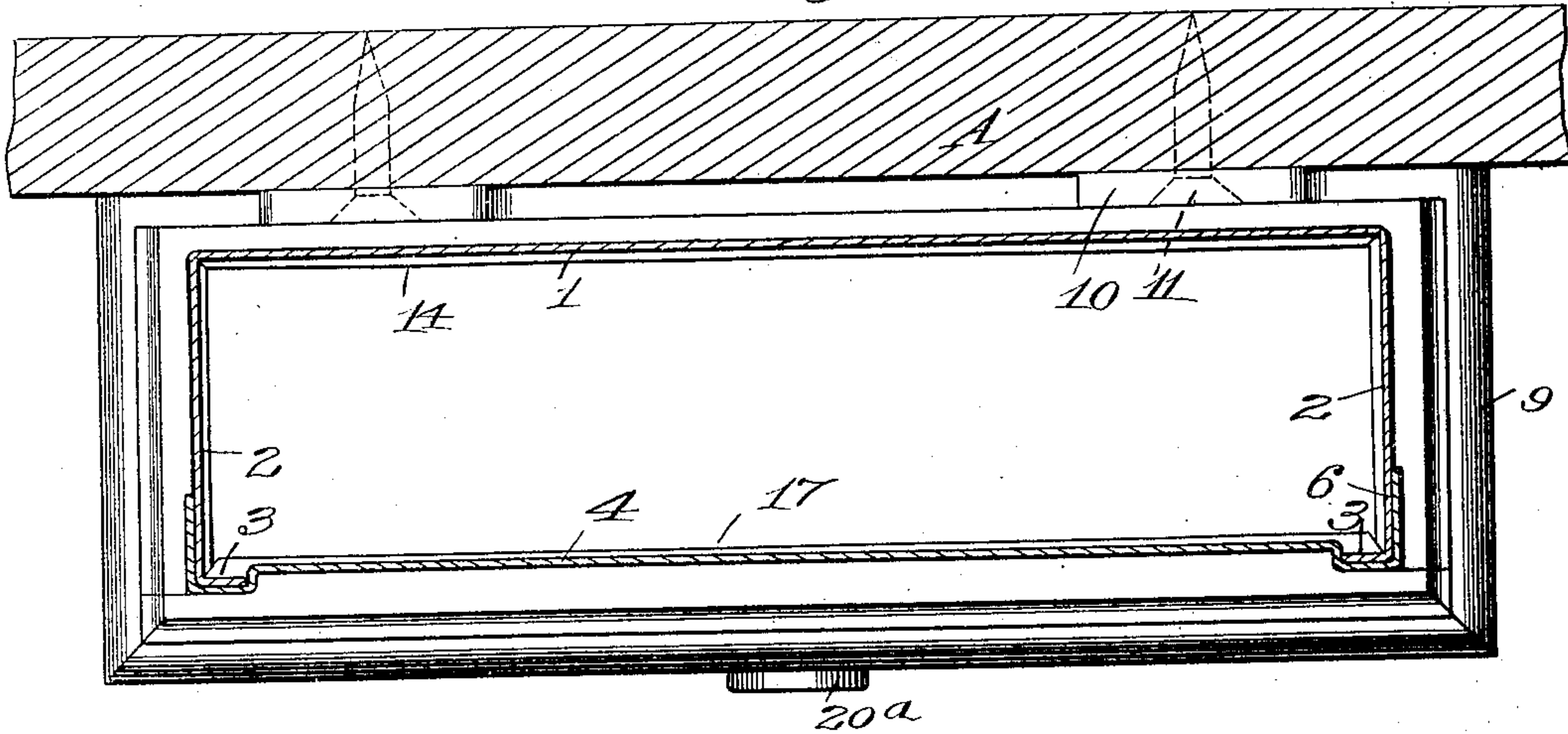
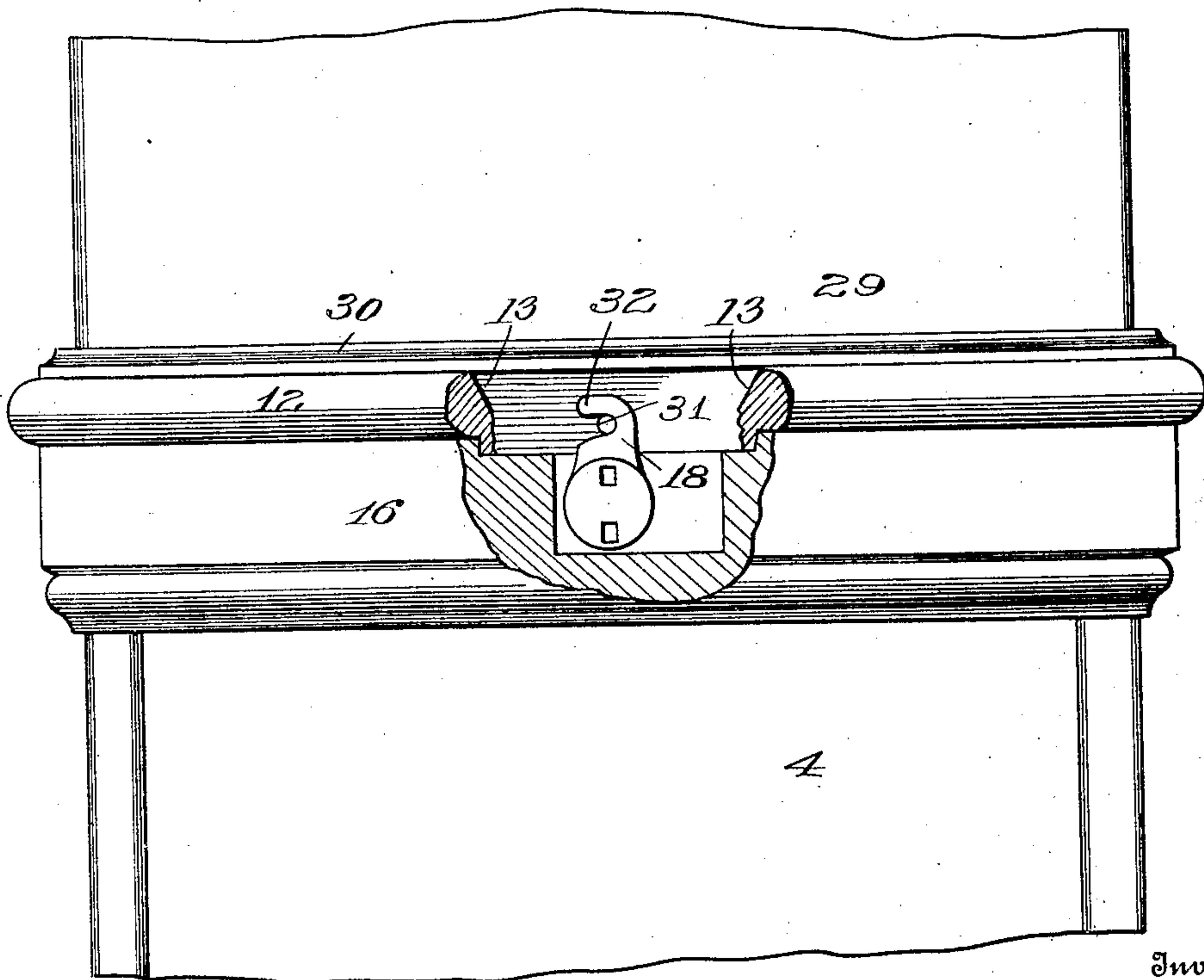


Fig. 5.



Inventor

Joseph Warren Cutler

Witnesses

Walter B. Payne
Elmer E. French

By

Church & Rich
Attorneys

UNITED STATES PATENT OFFICE.

JOSEPH WARREN CUTLER, OF ROCHESTER, NEW YORK, ASSIGNOR TO CUTLER MANUFACTURING COMPANY, OF ROCHESTER, NEW YORK, A CORPORATION OF NEW YORK.

MAIL-CHUTE.

No. 881,111.

Specification of Letters Patent.

Patented March 10, 1908.

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To all whom it may concern:

Be it known that I, JOSEPH WARREN CUTLER, of Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Mail-Chutes; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings forming a part of the specification and to the reference-numerals marked thereon.

My present invention relates to mail chutes, and has for its object to provide an improved chute readily and cheaply constructed and assembled, and in which the interior is readily accessible for the purpose of cleansing or dislodging mail matter, or for other purposes, and it embodies generally in a chute provided with a panel or portion adapted to cover an opening, preferably the front of the chute, which may be readily placed in position and secured by a locking device under the control of an authorized person only.

It further consists in certain improvements and combinations of parts, all as will be hereinafter more fully described, the novel features being pointed out in the claims at the end of the specification.

In the drawings: Figure 1 is a front view of a mail chute provided with my improvements. Fig. 2 is a vertical sectional view of the same. Fig. 3 is a horizontal sectional view on the line *a-a* of Fig. 1. Fig. 4 is a vertical sectional view, enlarged, showing the locking mechanism. Fig. 5 is front view with the casing broken away to show the catch and, Fig. 6 is a view of the key.

Similar reference numerals in the several figures indicate similar parts.

As usual in devices of this description, the chute is preferably made up of a plurality of superposed sections, extending from the upper floors to the mail box or receptacle at the lower end, two or more of said sections being located at each floor of the building preferably removably secured to a support indicated by A which may be a separate structure or form a part of the walls of the building.

In the present embodiment the chute sections are each composed of a rear channel or part made of sheet metal and embodying the back portion 1, and the sides 2, upon the forward edges of which latter are the in-

wardly-projecting flanges 3, and in connection with this a removable front panel 4, recessed at the sides for the reception of the flanges 3 on the rear channel, said flanges 3, when the panel is in position, being located forwardly of the rear face of the panel, thus protecting the joints between the edges so that the edges or corners of descending mail matter will not catch therein. As shown, the side flanges 6 of the panel extend slightly in rear of the forward edges of the rear channel and this construction I prefer in practice to employ though it is not absolutely necessary if the panel is made of sufficiently heavy material.

The channels constituting the rear portions of the chute sections, are reinforced or braced at their lower ends by the bands 8 extending around three sides thereof, said bands being riveted or otherwise secured thereto, and the upper ends of said channels are preferably only of the thickness of the sheet metal so as to fit within the recessed lower sides of the supporting brackets 9 secured at intervals to the support or backing A. These brackets 9 are preferably of cast metal in the form of an open frame having at the rear the upwardly-extending lugs 10 through which the headed screws or attaching devices 11 are passed, the heads of said screws being covered by the chute when in place, so that access cannot be obtained to remove them without removing the former. The upper sides of these brackets are recessed to receive the reinforced lower ends of the sections, and are provided with the front cross bar or ledge 12 slightly beveled at 13 forming a recess or socket, and at a lower level with the downwardly-beveled flange 14 extending on three sides, the upper edge of this flange being slightly narrower than the reinforced lower end of the channel to prevent the formation of a ledge on which mail matter could lodge. Beneath this flange is a recess adapted to receive the upper end of the channel of the lower chute section as shown in Fig. 2. One of these brackets is arranged at the end of each section and it forms the connecting means between them. In the embodiment shown two of the sections are provided with the removable panels at the front, and as I have shown the form of chute contained in my Patent No. 642,586, and made entirely of perforated sheet metal, the removable front panel is made of this material, but it will be understood that the panel

could be provided with one or more panes of glass to permit more complete inspection of the interior if desired. The removable panels of whatever construction are preferably thickened at their lower ends or provided with a flange 15 adapted when the panel is in position, to project downwardly into the socket or recess behind the cross bar 12 of the bracket and at the end of the opening in the front of the chute which is closed by the panel, and the upper ends are provided with bars 16 secured by rivets or otherwise and formed with the inwardly-extending downwardly-beveled flange 17 corresponding, when the panel is in place, with the beveled flange 14 on the bracket.

Formed upon or secured to the bar 16 is a locking device adapted to cooperate with the cross bar 12 for the purpose of securing the panel in place, said locking device in the present instance consisting of a pivoted button or catch 18 pivotally mounted on the inner side of said bar and having a disk secured thereto provided with recesses or projections adapted to be engaged by the end of a removable key 19 having wards or notches 20 therein.

20^a indicates a casing secured to the bar in which are arranged circular wards or tumblers 21, with which the wards or notches in the key cooperate to prevent the operation of the locking device otherwise than by a key of appropriate configuration in the hands of an authorized person, said key and wards being preferably similar to those shown in my prior patent No. 788,709.

In order to remove the panel it is only necessary to disengage the lock, then tilt the panel forward to remove its upper end from beneath the cross bar of the upper bracket which constitutes a stop, this being permitted by the beveled portion 13 on the bar 12, and then to lift the panel upwardly, as will be understood.

The mailing apertures for the chute are arranged in the panel of the lower section at each floor being preferably located in a casing or frame indicated by 25 and secured to or in said panel in any desired manner, but I prefer to employ such an arrangement as is shown and described in my prior patent No. 795,107, but the details thereof are not shown herein.

The bracket 59 nearest the floor has secured to it by rivets 22, a tapered sheet metal tubular section 23 adapted to extend through the floor and enter the end of the upper section or part below, this inner tube being covered by an outer tube or base 24 cooperating with the under side of the bracket 59 and extending down into a sub-base or bracket 25 fastened to the backing A by screws 26 and having the molding or part 27 at the front and sides resting on the floor.

The portion of the chute next the ceiling is composed of a tubular section 29 adapted to

receive the lower end of the bottom section extending down from the floor above and is provided at its lower end with the reinforcing band or casting 30 fitting into the upper portion of the upper bracket 9, and provided at the front with a pin or projection 31 with which the locking catch 18 on the upper removable panel is adapted to engage when in position, this catch being provided with a hooked end 32 as shown in Fig. 5. As this catch extends upwardly behind the front bar of the upper bracket it serves not only to secure said panel in position but locks the upper tubular section to the bracket so that but one fastening device is required.

33 indicates a top finishing molding vertically movable on the section 29, and secured thereto or to the support A in any suitable manner.

The chute as a whole is cheap in construction, the parts being readily assembled and applied, but the principal feature is the provision of the removable panels or parts readily secured in position by locking devices controlled by a key so that not only may the interior of the chute be inspected, and cleaned or obstructions removed, but these same securing devices prevent the dismantling of the chute or removal of any part excepting by an authorized person.

I claim as my invention:

1. A mail chute having an opening therein, and a vertically opening socket located at one end of said opening, in combination with a removable panel for covering said opening having one end adapted to enter said socket and a locking device for securing the opposite end.

2. A mail chute having an opening therein, a vertically opening socket located at one end of said opening and an opposing stop at the opposite end of said opening, in combination with a removable panel for covering said opening having one end arranged to cooperate with the socket and the other to cooperate with the stop and a locking device for holding said panel in position over the opening.

3. A mail chute having an opening therein, in combination with a removable panel for covering said opening, cooperating projections and recesses between the panel and a relatively stationary portion at the ends of of the panel adapted to be engaged and disengaged by a vertical tilting and longitudinal movement of the panel, and a locking device for preventing the tilting movement of the panel thereby securing said panel in position over the opening.

4. A mail chute having the open front and ledges at opposite ends thereof, in combination with a removable panel for closing said opening and extending behind and cooperating with a ledge at one end and having its rear face located in rear of the ledge at the

other end when in position and locking devices for securing the last mentioned end in position.

5. In a mail chute, the combination with a support, a bracket therein, having a recess, of a chute section open at the front and supported in said bracket, and a removable panel for closing said opening having at one end a portion adapted to enter the recess in the bracket and a locking device for securing the other end of said panel in position.

6. In a mail chute, the combination with a support, a bracket thereon having a recess, of a chute section open at the front and supported in said bracket, a removable panel adapted to cover the opening having the portion at one end adapted to enter the recess in the bracket and a key-operated lock on the other end adapted to secure the panel in position.

7. In a mail chute, the combination with a support and brackets thereon, of a chute section open at the front and held by the brackets at opposite ends, a removable panel for covering said opening having a detachable swinging or tilting connection with one of said brackets and a locking device for securing the free end of the panel to the other bracket.

8. In a mail chute, the combination with the support and the bracket thereon having the recessed upper portion, of a chute section open at the front and engaging the recessed portion of the bracket, a removable panel for closing the opening and having a detachable swinging or tilting connection with the bracket and means for detachably securing the opposite end of said panel.

9. A supporting bracket for mail chutes having the recessed upper and lower ends, a cross bar at the front and the beveled flange extending around three sides of the interior of said bracket between the recessed portions.

10. In a mail chute, the combination with two supporting brackets, of a mail chute section open at the front and supported in said brackets, a removable panel for covering said opening and having a detachable swinging or tilting connection with one of said brackets and a key lock at the opposite end of said panel adapted to engage the other bracket to lock the panel in position.

11. In a mail chute, the combination with

two supporting brackets having recesses in their proximate sides, and bars at the front, of a mail chute section open at the front having its ends held in the recesses in the brackets, a removable panel for closing the open side of the chute section, one end of said panel extending behind the cross bar on one bracket and adapted to be disengaged therefrom by a vertical tilting movement, and a locking device on the other end of said panel adapted to engage behind the cross bar on the other bracket.

12. In a mail chute, the combination with a bracket having a recess in its side, of a chute section having its end extending into said recess, a chute section located on the opposite side of the bracket, a removable panel therefor and a locking device on the panel engaging the bracket and also the first-mentioned section and securing the parts in position.

13. In a mail chute, the combination with a bracket, of a tubular chute section located on one side of the bracket, a second chute section on the other side of the bracket, a removable panel for the latter and a locking device engaging the bracket, panel and the first-mentioned section for securing the parts together.

14. In a mail chute, the combination with a bracket, of a tubular chute section located on one side of the bracket, a second chute section on the other side of the bracket, a removable panel for the latter and a locking device on the panel adapted to engage the bracket and the first-mentioned section for securing the parts together.

15. In a mail chute, the combination with a support, a bracket, means for securing it to the support, a removable chute section engaging the bracket and covering the bracket-securing means when in position, of a tubular chute section secured to the lower side of the said bracket, the sub-base and means for securing it to the support located in rear of the last-mentioned section, and a tubular base secured to the bracket covering the front and sides of said section and engaging the sub-base.

JOSEPH WARREN CUTLER.

Witnesses:

R. G. FLACK,

RUSSELL B. GRIFFITH.