F. E. ANDERSON.

MAIL CHUTE.

APPLICATION FILED JAN. 16, 1908.

962,489.

Patented June 28, 1910.

4 SHEETS—SHEET 1.

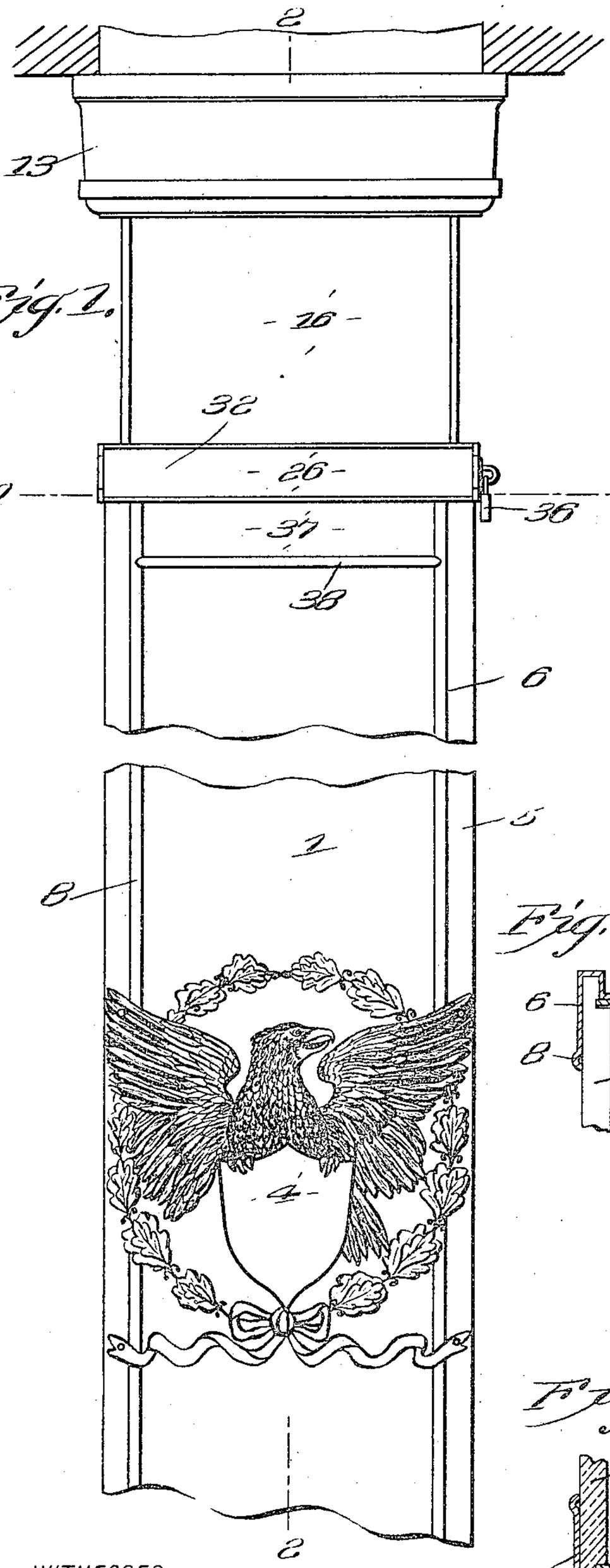


Fig. 1.

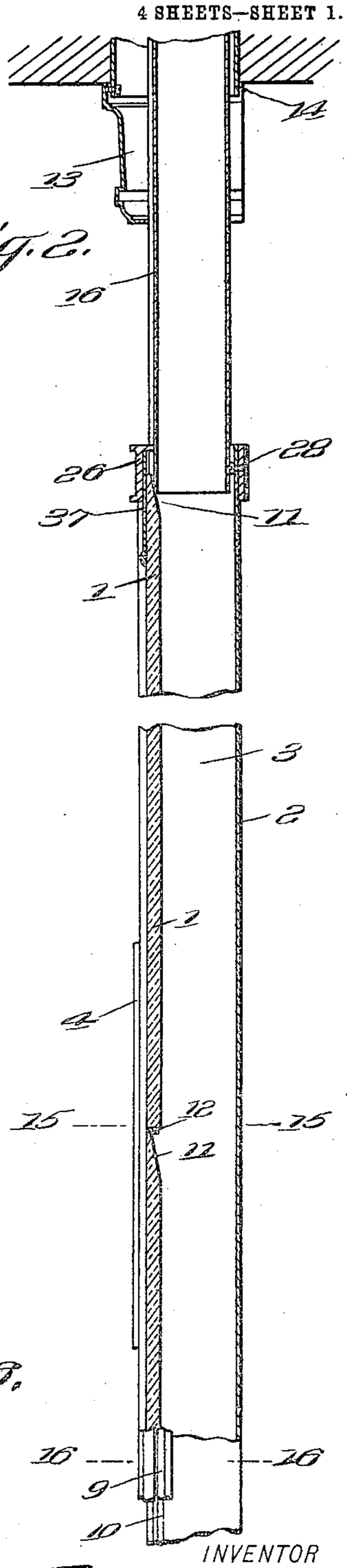


Fig. 2.

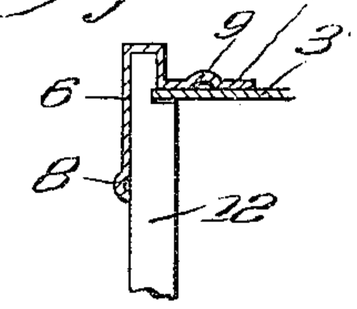


Fig. 15.

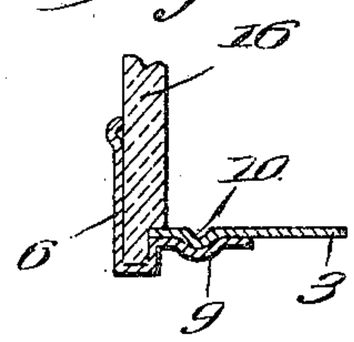


Fig. 10.

WITNESSES

David Rumsey

Joseph S. Sheppard Jr.

INVENTOR

Frank E. Anderson

BY

Joseph A. Stetson

ATTORNEY

F. E. ANDERSON.

MAIL CHUTE.

APPLICATION FILED JAN. 16, 1908.

962,489.

Patented June 28, 1910.

4 SHEETS—SHEET 2.

Fig. 3.

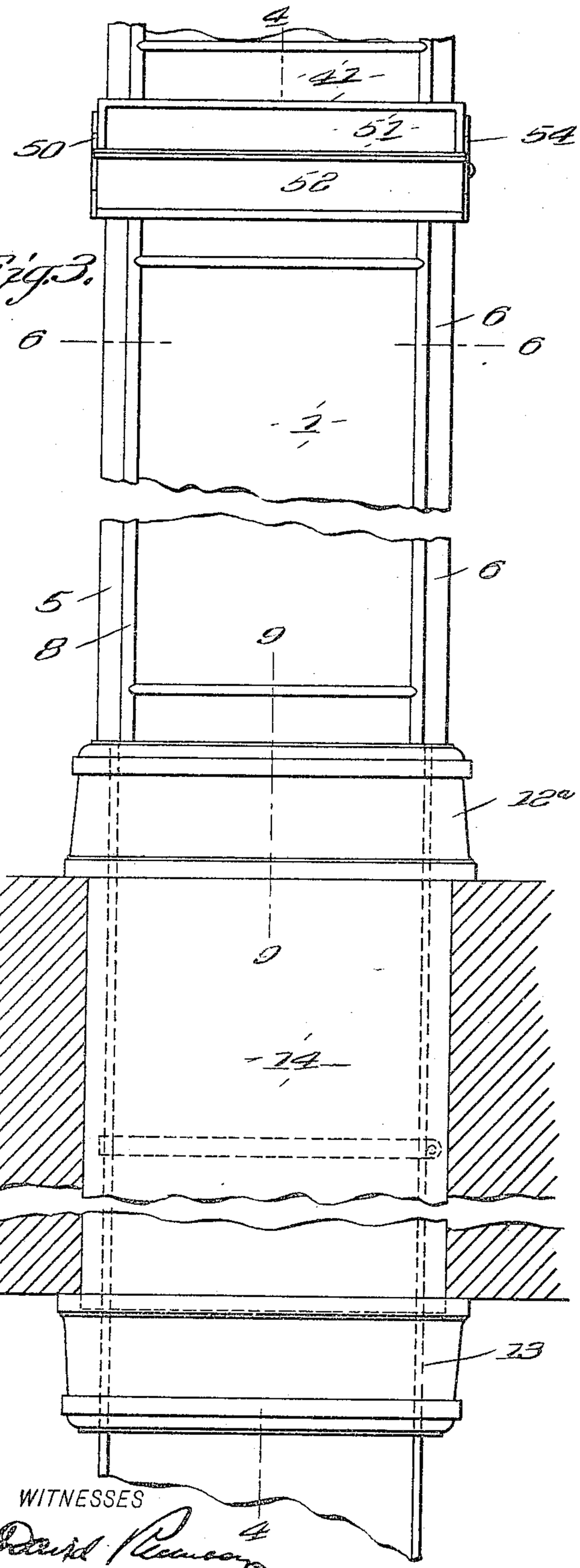
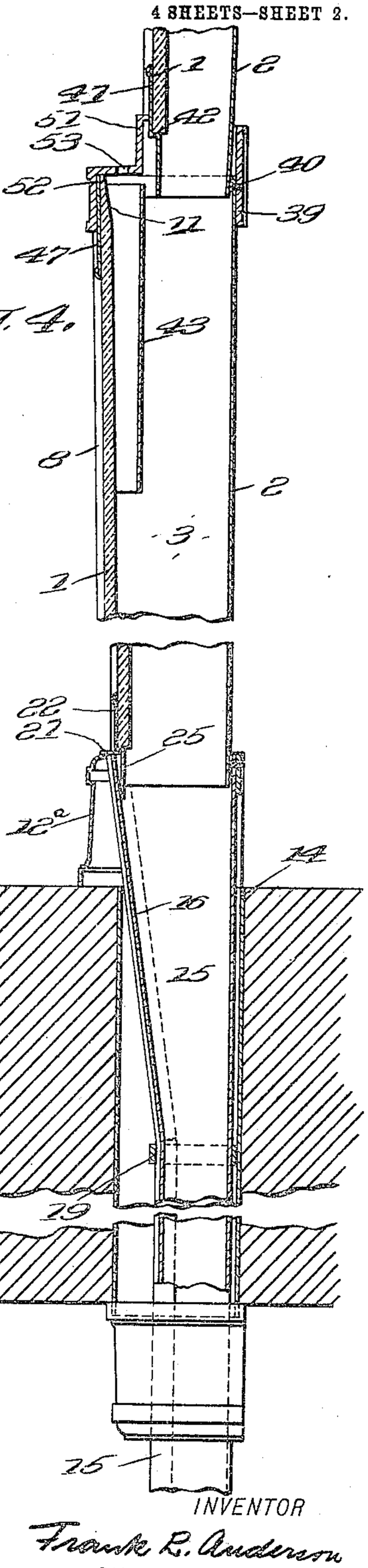


Fig. 4.



WITNESSES

David Rawson

John S. Sheffield

INVENTOR

Frank E. Anderson

BY

Joseph R. Stetson

ATTORNEY

F. E. ANDERSON.

MAIL CHUTE.

APPLICATION FILED JAN. 16, 1908.

962,489.

Patented June 28, 1910.

4 SHEETS—SHEET 3.

Fig. 5.

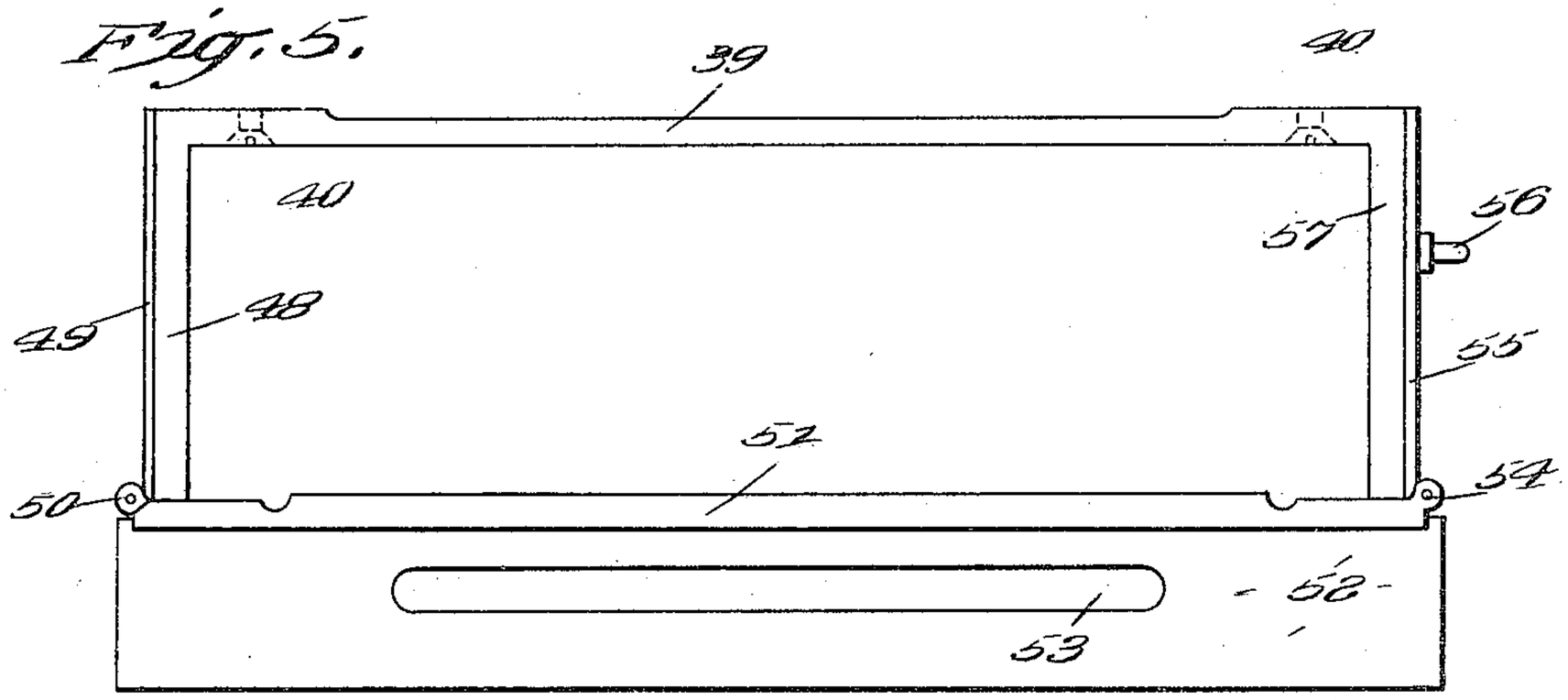


Fig. 6.

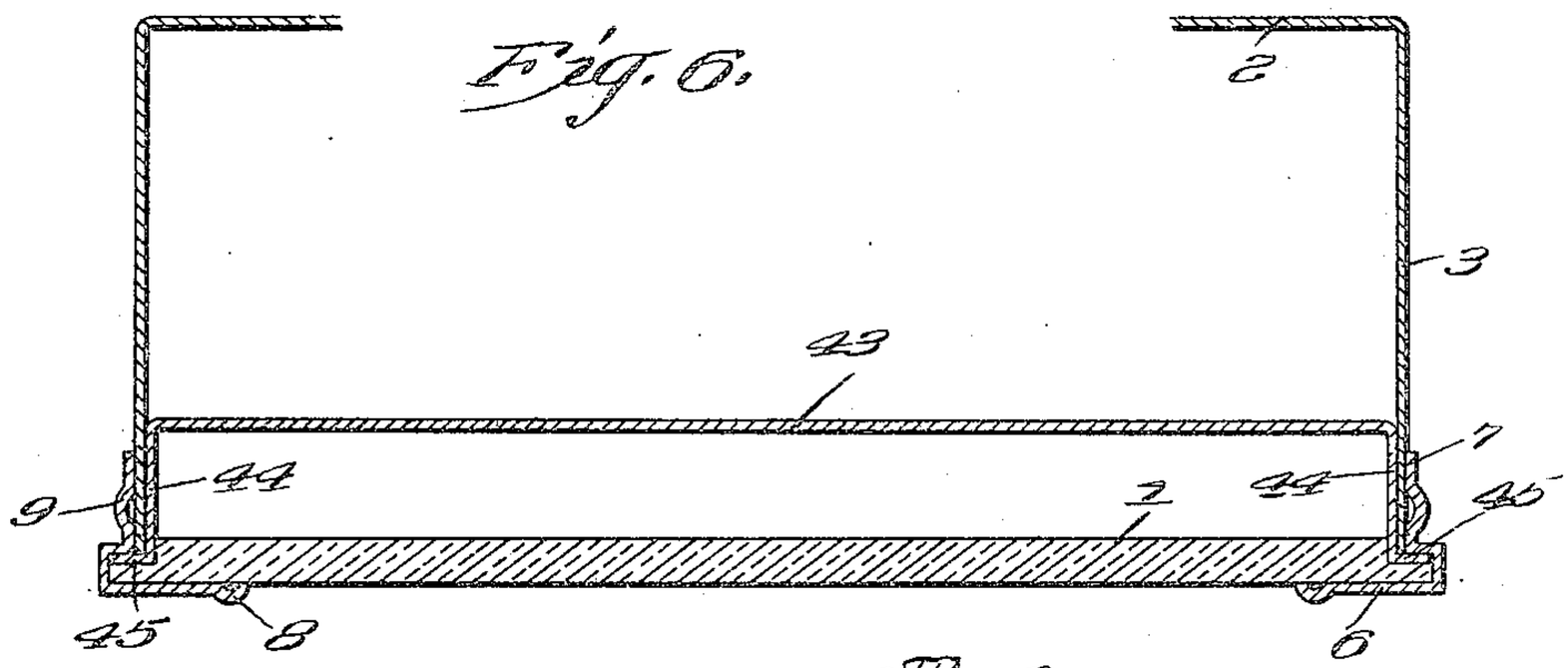


Fig. 7.

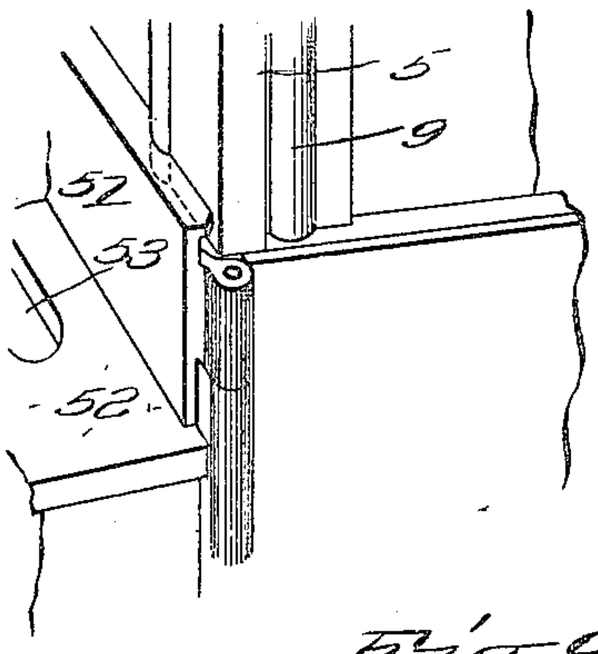


Fig. 9.

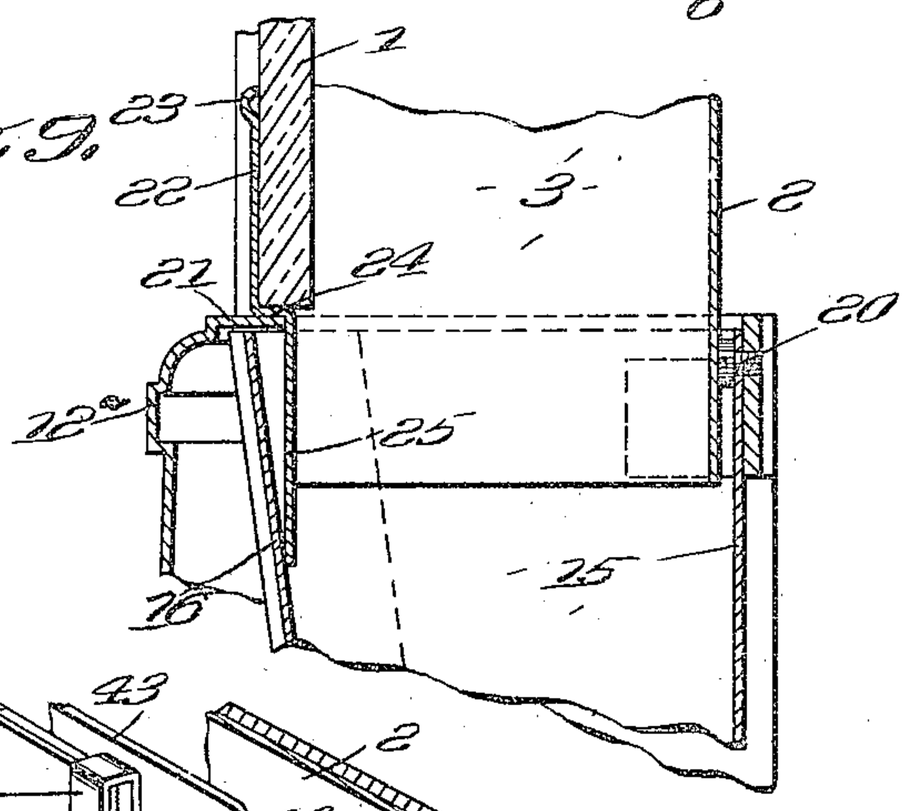
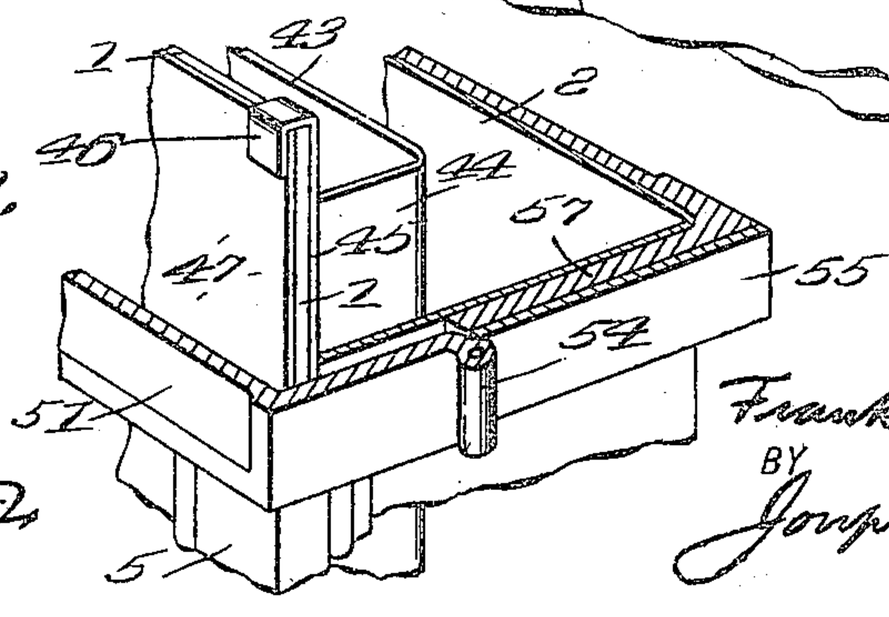


Fig. 8.



WITNESSES

David Ramsay

John S. Sheffield Jr.

INVENTOR

Frank E. Anderson

BY

Joseph A. Stetson

ATTORNEY

F. E. ANDERSON.

MAIL CHUTE.

APPLICATION FILED JAN. 16, 1908.

962,489.

Patented June 28, 1910.

4 SHEETS—SHEET 4.

Fig. 10.

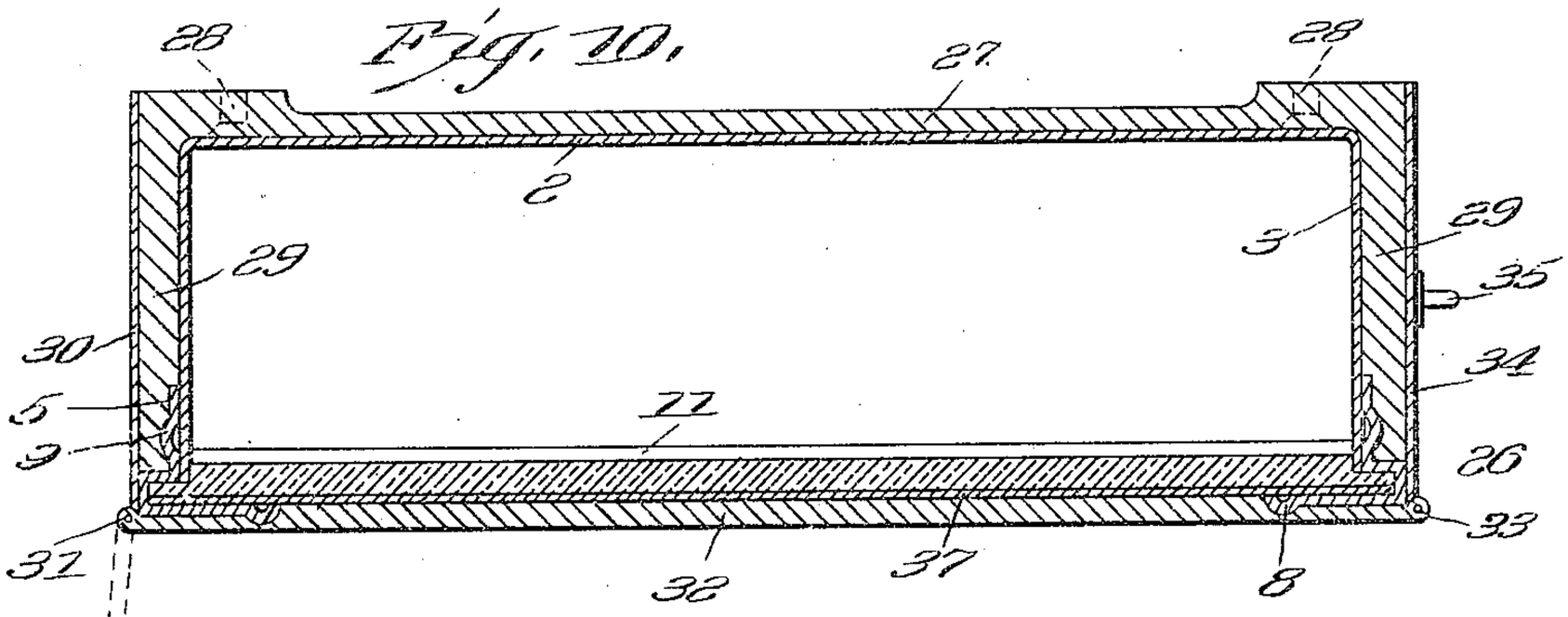


Fig. 11.

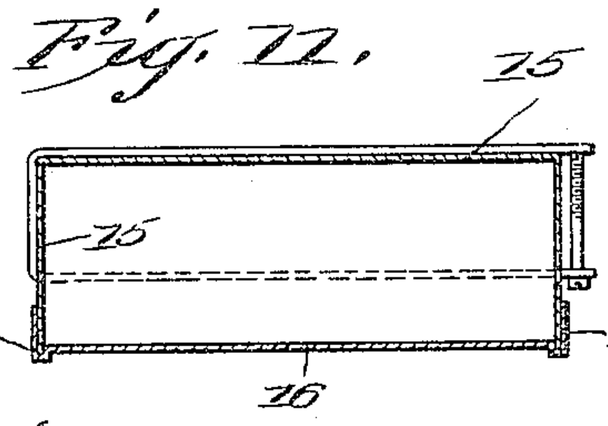


Fig. 12.

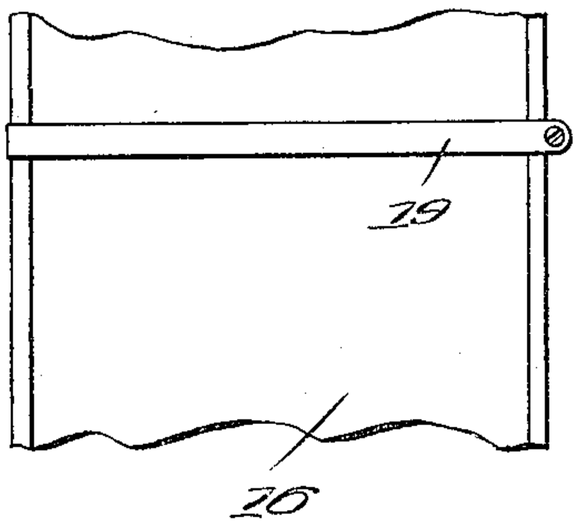


Fig. 13.

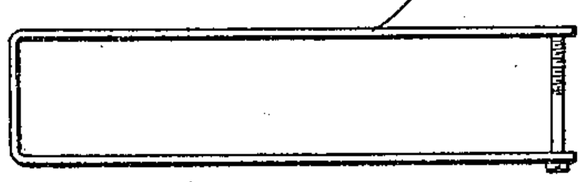
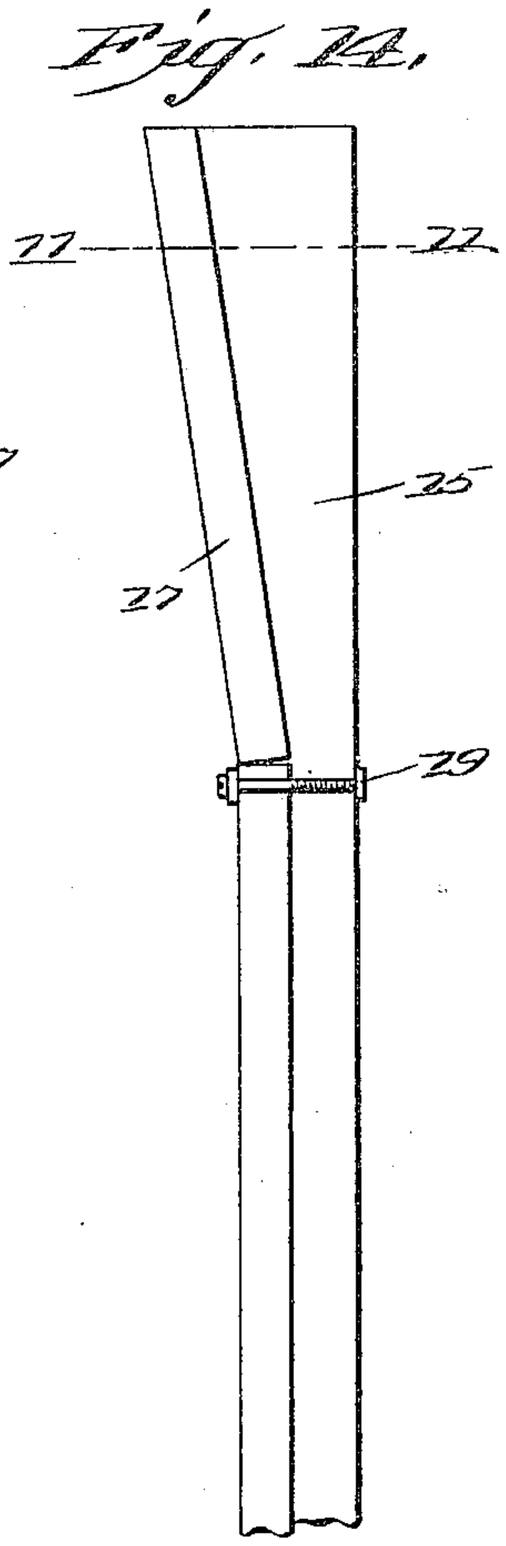


Fig. 14.



WITNESSES

David Ramsay

John S. Sheppard

INVENTOR

Frank E. Anderson

BY

Joseph B. Stetson

ATTORNEY

UNITED STATES PATENT OFFICE.

FRANK E. ANDERSON, OF NEW YORK, N. Y., ASSIGNOR TO CUTLER MAIL CHUTE COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

MAIL-CHUTE.

962,489. Specification of Letters Patent. **Patented June 28, 1910.**

Application filed January 16, 1908. Serial No. 411,101.

To all whom it may concern:

Be it known that I, FRANK E. ANDERSON, a citizen of the United States, residing in the borough of Manhattan, New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Mail-Chutes, of which the following is a specification.

My invention relates to mail chutes designed to receive mail matter at different floors of a building and transmit it, under the influence of gravity, to a receptacle on a lower floor from which the collector removes the mail at stated intervals.

The object of my invention is to provide a mail chute of simple and inexpensive construction, the interior of which will be readily accessible to the proper officials; a further object is to provide means whereby the chute may be readily placed in position at points where it passes through the floors of the building; further purposes of my invention will be set forth in detail in the specification and claims.

Referring to the accompanying drawings, Figure 1 is a front elevation of an upper portion of my improved mail chute extending from the ceiling downward. Fig. 2 is a sectional view on the line 2—2 of Fig. 1. Fig. 3 is a front elevation of a lower portion of my mail chute showing a mailing aperture and the construction where the chute passes through the floor. Fig. 4 is a sectional view on the line 4—4 of Fig. 3. Fig. 5 is a plan view of an inclosing band embodying a mailing aperture. Fig. 6 is a horizontal sectional view on the line 6—6 of Fig. 3. Fig. 7 is a perspective corner view of the mail chute at a mailing aperture. Fig. 8 is a view similar to Fig. 7, the outer parts being partially broken away to show interior construction. Fig. 9 is a vertical sectional view on the line 9—9 of Fig. 3. Fig. 10 is a horizontal sectional view on the line 10—10 of Fig. 1. Fig. 11 is a horizontal sectional view on the line 11—11 of Fig. 14. Fig. 12 is a front detail view of a portion of the chute where it passes through a floor. Fig. 13 is a detail plan view of the metal strap employed where the chute passes through a floor. Fig. 14 is a side view of the chute where it passes through a floor. Fig. 15 is a detail horizontal sectional view on the line 15—15 of Fig. 2. Fig. 16 is a view similar to Fig. 15 on the line 16—16 of Fig. 2.

Referring to the drawings, 1 is the glass front of the chute with the metal back 2 and sides 3. About midway between a mailing aperture and the ceiling is located on each floor the conventional eagle connecting piece 4 which is secured by rivets to the cornices 5 which have the front flanges 6 and side flanges 7. The front flanges of the cornices have an inner finishing rib 8 while the side flanges 7 have the ribs 9 providing an inner groove (Fig. 16) adapted to be engaged by a vertically extending rib 10 in the metal sides 3. The upper edge of each piece of the glass front 1 is beveled at 11. Where the front glass plate 1 rests upon a similar plate below (Fig. 2) a wooden cross piece 12 is interposed.

The floor bases 12ª and ceiling caps 13 correspond in shape and design (Figs. 3 and 4). Extending through each floor and closely fitting the aperture made therein is the metallic thimble 14. Extending through and above and below the thimble 14 is the sleeve 15 (Figs. 4, 11 and 14) constituting the floor section of the chute. Said sleeve 15 has an integral back and sides as indicated in Fig. 11 and a metal front 16 with side flanges 17. At the front corners of the sleeve 15 between the front 16 and the side flanges 17 are the grooves 18 adapted to receive and be closely fitted by the forwardly extending ends of the sides as best shown in Fig. 11. Within the floor the front 16 of sleeve 15 is held in engagement with the sides by the metal strap 19 best shown in Figs. 11, 12, 13 and 14. At each floor the sleeve 15 extends upward into a base 12ª as best indicated in Figs. 4 and 9 and at the rear is secured to said base by the screw 20 which is covered by the downwardly extending and telescoping back 2 of the section above. Each base 12ª (Figs. 4 and 9) has a front upper ledge 21 upon which rests the metal plate 22 having the upper molding 23, the bent portion 24 and the downwardly extending lip 25 which overlies the upper portion of the front 16 of sleeve 15. The sleeve 15 extends downward through the ceiling cap 13 as best indicated in Figs. 2 and 4 until it reaches the inclosing band 26 best shown in Figs. 1, 2 and 10, which has a back

27 adapted to be secured to the wall by means of the screws 28 which are protected interiorly by the downwardly extending sleeve 15 as best indicated in Fig. 2. The inclosing band 26 has forwardly extending sides 29 to one of which is secured the plate 30 having the hinge 31 connecting the same to the front band 32. To the other end of front band 32 is hinged at 33 the plate 34 provided with a slot for the staple 35 adapted to receive the padlock 36. The metal plate 37 provided with the molding 38 extends downward from inclosing band 26 and overlies the front glass plate 1 as best indicated in Fig. 2.

The parts adjacent to the mailing apertures are best indicated in Figs. 3, 4, 5, 6, 7 and 8. They consist in a rigid inclosing band having the back 39 adapted to be secured to the wall by the screws 40 protected interiorly by the downwardly extending telescoping back 2 (Fig. 4). The metal plate 41 provided with the ledge 42 supports the upper front plate glass 1 and extends downwardly slightly beyond the upper edge of the plate 43 (Figs. 4, 6 and 8) having the sides 44 with outwardly extending flanges 45 (Fig. 6) which extend upward and at 46 hook over the top of front glass plate 1 and metal plate 47. The forwardly projecting side 48 of the inclosing band situated at a mailing slot has secured thereto the plate 49 having the hinge 50 to which is secured the front plate 51 having the step 52 with its mailing slot 53. At the other end of front plate 51 is the hinge 54 to which is secured the plate 55 having an aperture for the staple 56 projecting from the forwardly extended fixed side 57.

It will be seen that my improved mail chute follows to a certain extent the features embodied in my Patents, No. 746,233, dated December 8th, 1903, and No. 791,995, dated June 13, 1905, and my application for patent, Serial No. 322,809, filed June 22nd, 1906. As indicated in Fig. 4, at each mailing aperture the size of my mail chute is increased from front to rear but is gradually reduced in size from front to rear below each mailing aperture. Furthermore, the different sections of my chute telescope an upper section into a lower so as to provide a downward path for mail matter free from obstructions or ledges in the interior of the chute and so as to allow for slight variations in the building, or in the chute, due to settling of the building or changes in temperature.

According to my present improvements, I dispense with a lattice front along the front glass plates. The sides of the chute are retained in position and alinement by the forwardly extending sides of the inclosing bands and by the bases and ceiling caps. Between a retaining band located at a mailing aperture as illustrated in Figs. 4 and 5 and an upper retaining band as illustrated in Figs. 2 and 10 in an ordinary building a considerable distance, say about seven feet intervenes. I, therefore, place about midway between said two bands a conventional ornamental device 4 to serve as a connecting means. This is secured to the front flanges 6 of the cornices by means of rivets, which, of course, do not project into the interior of the chute but are shielded therefrom by the front glass plates 1. Where any story of a building is unusually high I employ two of such connecting pieces 4 so as to retain the structure in proper position and alinement between the inclosing bands.

It will be seen that my construction where the chute passes through a floor is especially convenient because the floor apertures may be formed without careful precision. The floor apertures are lined by a metallic thimble 14 through which the sleeve 15 extends constituting the floor section of the mail chute proper. This sleeve is supported by the screws 20 connecting the same to the base 12^a as indicated in Figs. 4 and 9 while the telescoping back of an upper section protects the same so that they do not protrude into the chute proper. At each base the ledge 21 supports the section of the chute just above, as best indicated in Figs. 2 and 9.

While it is desirable to have the greater part of the front of a mail chute made of glass plates, the portions of the front just below the ceiling cap, just above the base and just below a retaining band need not be of glass. It will be seen, therefore, that the downwardly extending front of the sleeve 15 passes through the floor and through the ceiling cap as indicated in Fig. 2 until it reaches an upper inclosing band as best indicated in Figs. 1 and 2. Just above each base a metallic plate 22 is located at the front and arranged as best shown in Fig. 9, while above and below each mailing aperture is likewise located a metallic plate at the front.

The plate 43 which is designed to form a detention pocket just below each mailing aperture, as explained in my prior application, Serial No. 322,809, filed June 22, 1906, is retained in position not entirely by friction but by engagement of the hook piece 46 with the top of the front glass plate 1 as best shown in Fig. 8.

While the retaining bands serve to hold the front and cornices of my mail chute firmly in position and in engagement with the sides thereof, I provide between such inclosing bands an additional device shown in

Fig. 16 in which in the sides of the chute a vertical rib 10 is formed adapted to engage the groove or molding 9 in the rearwardly projecting flanges 7 of the cornices. When the glass plates and cornices are placed in position the side flanges 7 will slip over the ribs 10 in the sides of the chute because of their resiliency and form a secure engagement.

Where it is expedient to employ two glass plates at the front one above the other, I interpose a wooden strip as best indicated in Figs. 2 and 15 so that glass will not rest upon glass to occasion damage at any changes in the position of the building or mail chute. Such wooden strips 12 are engaged by the side flanges and by the forwardly projecting ends of the sides of the chute as best indicated in Fig. 15. They are somewhat narrower than the thickness of the upper plate of glass 1 as best indicated in Fig. 2 and the lower plate of glass is beveled at its top as indicated at 11 (Fig. 2). The ceiling caps 13 are employed merely to give an ornamental finish. They support no other parts and are retained in position by screws or rivets as indicated in Fig. 2 to secure the ceiling cap to the thimble 14 which projects downward a slight distance through the floor and into the ceiling cap.

At each mailing slot inclosing band the corner cornices are supported on a side ledge, as best indicated in Fig. 7. The metal plates 41 (Figs. 3 and 4) extend on each side beneath the front flanges 6 of the cornices 5 and are securely soldered to said flanges and thereby retained in position. The metal plates 37 (Figs. 1 and 2) and 47 (Fig. 4) are similarly secured by solder to and beneath flanges 6 of cornices 5.

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

1. In a mail chute, the combination with a rear section embodying the rear and forwardly projecting sides, of the panel embodying side moldings or cornices, a plurality of glass plates with their edges located and held within the moldings and a strip of relatively softer material arranged between the glass plates, narrower than the lower edge of the upper plate and having its ends arranged in the moldings.

2. In a mail chute, a downwardly extending plate immediately below a mailing aperture, having sides contacting with the sides of the chute and outwardly extending flanges and a forwardly extending member engaging the upper edge of a front plate to retain the parts in position.

3. In a mail chute, the combination with the rear chute section having the forwardly extending sides, of the panel embodying glass plates, the side moldings embracing the edges of the glass and the sides of the rear section, and the plate at the lower end of the glass engaging the moldings at its ends having the upwardly extending portion at the front, the shoulder narrower than the glass and the depending flange.

Signed at New York city in the county of New York and State of New York this 14th day of January A. D. 1908.

FRANK E. ANDERSON.

Witnesses:
M. A. REILLY,
J. W. GRAINGER.