A. K. SMITH.

MAIL CHUTE.

APPLICATION FILED APR. 9, 1909.

961,813. Patented June 21, 1910.

FIG. 2.

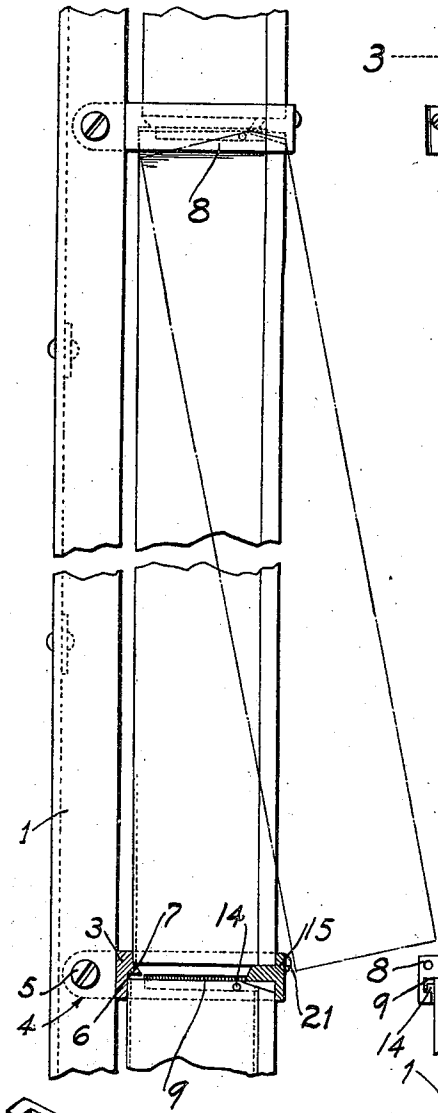


FIG. 1.

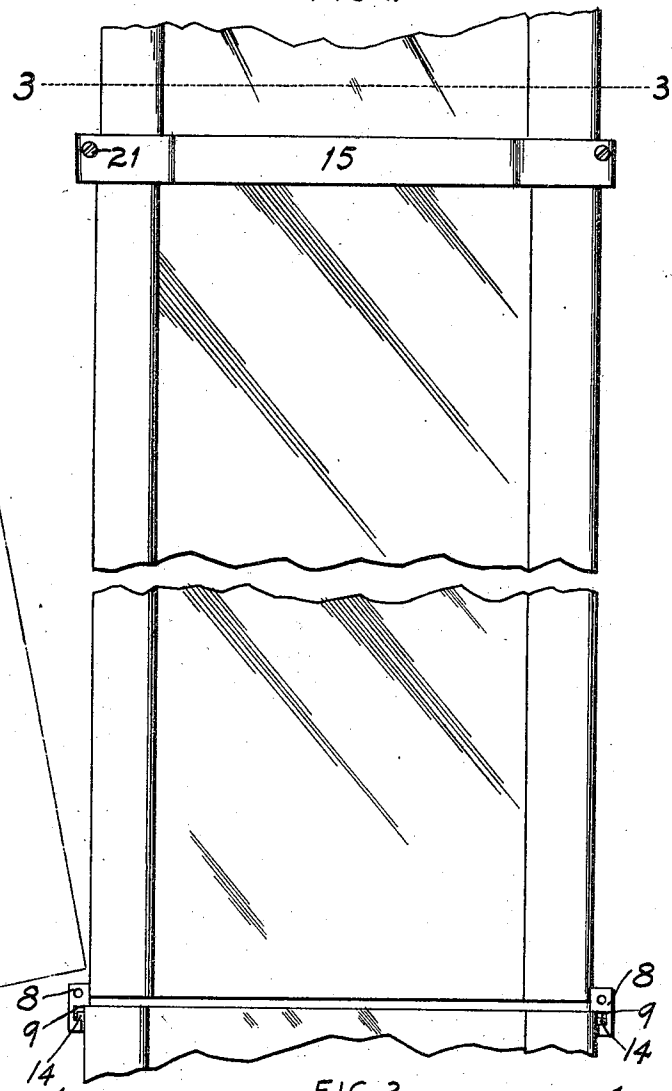


FIG. 4.

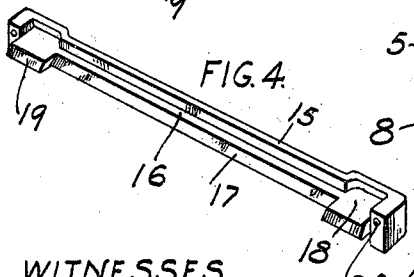
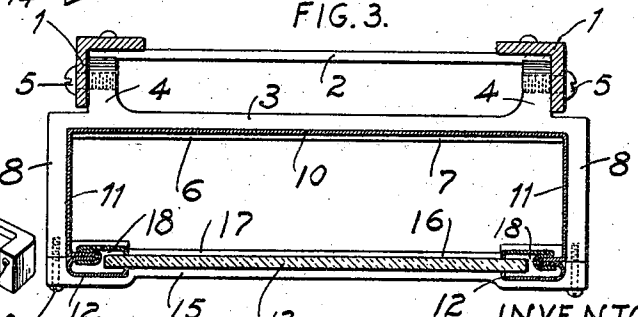


FIG. 3.



WITNESSES

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UNITED STATES PATENT OFFICE.

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MAIL-CHUTE.

961,813. Specification of Letters Patent. Patented June 21, 1910.

Application filed April 9, 1909. Serial No. 488,905.

To all whom it may concern:

Be it known that I, ARTHUR K. SMITH, a citizen of the United States, residing at St. Louis, Missouri, have invented a certain new and useful Improvement in Mail-Chutes, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a front elevation of a portion of my improved mail chute; Fig. 2 is a side elevation, partly in section, of a portion of the chute; Fig. 3 is a horizontal section taken on a line 3—3 of Fig. 1; Fig. 4 is a perspective view of a detachable bar or strip which is arranged between the meeting ends of the sections of the chute.

My invention relates to new and useful improvements in mail chutes, my object being to construct a simple, inexpensive chute, in sections, in order that access may be readily gained to the interior of the chute for the purpose of repair or for releasing mail matter in the event that the same is caught in the chute thereby tending to choke the passage-way therethrough.

Referring by numerals to the accompanying drawings, 1 indicates uprights in the form of angle bars which form the supporting frame for the chute, said bars being united by suitable cross-pieces or spacing strips 2 arranged at a suitable distance apart and rigidly fixed to the uprights 1 in any suitable manner. The frames or brackets which are arranged at the meeting ends of the chute sections comprise horizontally disposed body portions 3, provided with lugs 4, which are disposed immediately against the forwardly projecting flanges of the uprights 1, said lugs being fixed to these flanges by means of screws or pins 5.

Formed integral with the outer face of each member 3 is a longitudinally extending flange or rib 6, the top face of which is beveled or inclined, as designated by 7.

Formed integral with and projecting from the ends of the members 3 are side arms 8, on the inner faces of which are formed horizontally disposed grooves 9, the forward ends of which are open.

Each of the chute sections comprises a back wall 10 and side walls 11, which latter are preferably formed integral with the back wall. Arranged between the forward ends of the side walls 11 and held rigidly in position by means of molding strips 12 is a section 13 of glass or analogous transparent material. The body of each chute section tapers to a slight degree from top to bottom, and thus the lower end of each section is slightly smaller in size than the upper end of the next adjacent section, and this arrangement effectually prevents the lodging of mail matter between the meeting ends of the sections when the same are properly assembled.

Formed on or fixed to the side walls 11 of each chute section and adjacent the top thereof are pins 14 which are seated in the respective grooves 9 formed in arms 8. The rail or cross-piece which is removably arranged between the ends of the front walls of the chute sections comprises a body section 15, on the inner face of which is arranged a longitudinally disposed flange 16 having an inclined or beveled face 17. The ends of the member 15 are widened, as designated by 18, in order to accommodate the adjacent ends of the molding strips 12, and the inner faces of these widened end portions are inclined or beveled, as designated by 19.

Formed through the ends of the member 15 are apertures 20 which receive screws 21 which enter corresponding apertures formed in the ends of the arms 8 when the parts are assembled. When the chute sections are assembled the lower end of the rear wall 10 of each section rests directly upon the beveled face 7 of the corresponding flange or rib 6, and the lower ends of the section of glass 13 and the molding strips 12 rest on top of the corresponding flange or rib 16. The beveled faces 7 and 17 readily deflect all mail matter away from the front and rear walls of the chute, and therefore effectually prevent said mail matter from being caught at the joint between two of the sections, and as the lower end of each section is slightly smaller than the upper end of the next adjacent section, the side walls at the upper end of each section occupy positions outside the corresponding side walls at the lower end of the next adjacent section, caught in the joints between the side walls of the chute sections.

If it becomes necessary to detach one of the chute sections for the purpose of repair or to remove mail matter which may be

caught in the chute, the screws 21 are loosened, which permits the ready removal of the corresponding bar or member 15, and the lower end of the corresponding chute section is now engaged and swung outward into the position shown by dotted lines in Fig. 2, during which movement the pins 14 act as pivots. The upper edge of the chute is cut away to permit this swinging movement. When it is desired to entirely remove one of the chute sections from the chute structure, the members 15 at both ends of the section are removed and said section is now free to be bodily detached from the chute structure, during which action the pins 14 pass through the open forward ends of the grooves 9.

A chute of my improved construction comprises a minimum number of parts, is therefore very simple and inexpensive in construction, can be readily assembled or taken apart, and is so constructed as to minimize the danger of clogging of the passage-way through the chute by the mail matter deposited therein.

I am aware that minor changes in the construction, arrangement and combination of the several parts of the chute can be made and substituted for those herein shown and described without departing from the nature and principle of my invention.

I claim:

1. In a mail chute, a support, frames fixed thereon, chute sections arranged between the frames, removable members connected to the frames and arranged between the front walls of the chute sections, and flanges formed on the inner faces of said frames and members, the inner edges of which flanges are beveled.

2. In a mail chute, a support, frames fixed thereon, chute sections arranged between the frames, removable members connected to the frames and arranged between the front walls of the chute sections, projecting flanges formed on the inner faces of the frames and removable members, which flanges occupy positions between the front and rear walls of the chute sections, and serve as supports for the upper one of the chute sections.

3. In a mail chute, a support, frames fixed thereon, chute sections arranged between the frames, removable members connected to the frames and arranged between the front walls of the chute sections, inwardly projecting flanges formed on the inner faces of the frames and removable members, and which flanges support the chute sections and are provided with beveled faces.

4. In a mail chute, a support, frames fixed thereon, chute sections removably arranged between the frames, there being a pivoted connection between the upper end of each chute section and the corresponding frame, and the upper front corner of each chute section being cut away in order to permit the lower ends of said sections to swing outward.

5. In a mail chute, a support, frames fixed thereon, chute sections removably arranged between the frames, there being a pivoted connection between the upper end of each chute section and the corresponding frame, and a removable member secured to each frame between the front walls of the chute sections.

6. In a mail chute, a support, separable frames fixed thereon, removable chute sections arranged between the frames, and having a pivoted sliding connection therewith, which chute sections taper gradually from top to bottom.

7. In a mail chute, a support, separable frames fixed thereon, removable chute sections arranged between the frames and having pivoted sliding connection therewith, which chute sections taper gradually from top to bottom, and removable members arranged on the frames between the front walls of the chute sections.

8. In a mail chute, a support, separable frames fixed thereon, removable chute sections arranged between the frames and having a pivoted sliding connection therewith, which chute sections taper gradually from top to bottom, removable members arranged on the frames between the front walls of the chute sections, and inwardly projecting flanges on the inner faces of the frames and removable members.

9. In a mail chute, a support, separable frames fixed thereon, removable chute sections arranged between the frames and having a pivoted sliding connection therewith, which chute sections taper gradually from top to bottom, removable members arranged on the frames between the front walls of the chute sections, inwardly projecting flanges on the inner faces of the frames and removable members, and which flanges are provided with beveled faces.

10. In a mail chute, a support, a series of separable frames arranged on the support, chute sections arranged between said frames, which chute sections taper gradually from top to bottom, there being sliding pivotal connections between the upper ends of the chute sections and the frames.

11. In a mail chute, a support, separable frames arranged on said support, and chute sections having a hinged sliding connection with said frames.

12. In a mail chute, a support, separable frames arranged on said support, chute sections having a hinged sliding connection with said frames, which chute sections taper gradually from top to bottom.

13. In a mail chute, a support, separable frames arranged on said support, chute sections having a hinged sliding connection with said frames, inwardly projecting flanges on the frames, which flanges occupy

positions between the front and rear walls of the chute sections.

14. In a mail chute, a support, separable frames arranged on said support, chute sections having a hinged sliding connection with said frames, inwardly projecting flanges on the frames, which flanges are provided with beveled faces.

15. In a mail chute, a support, separable frames arranged on said support, chute sections arranged between said separable frames, inwardly projecting flanges on the frames, which flanges receive the lower ends of the chute sections, and a hinged sliding connection between the upper end of each chute section and the corresponding frame.

16. In a mail chute, a support, separable frames arranged on said support, chute sections arranged between said separable frames, inwardly projecting flanges on the frames, which flanges receive the lower ends of the chute sections, said flanges being provided with beveled faces, and a hinged sliding connection between the upper end of each chute section and the corresponding frame.

17. In a mail chute, horizontally disposed supports, chute sections arranged between said supports, and the upper end of each chute section having a hinged sliding connection with the corresponding support.

18. In a mail chute, horizontally disposed supports, chute sections arranged between said supports, the lower ends of which chute sections are adapted to be swung outward to give access to the chute, and the upper front corner of each chute section being cut away to permit the lower portion of said section to be swung outward.

In testimony whereof I hereunto affix my signature in the presence of two witnesses, this 30th day of March, 1909.

ARTHUR K. SMITH.

Witnesses:

ALMA GEBHART,

LENORE CLARK.