

No. 880,625.

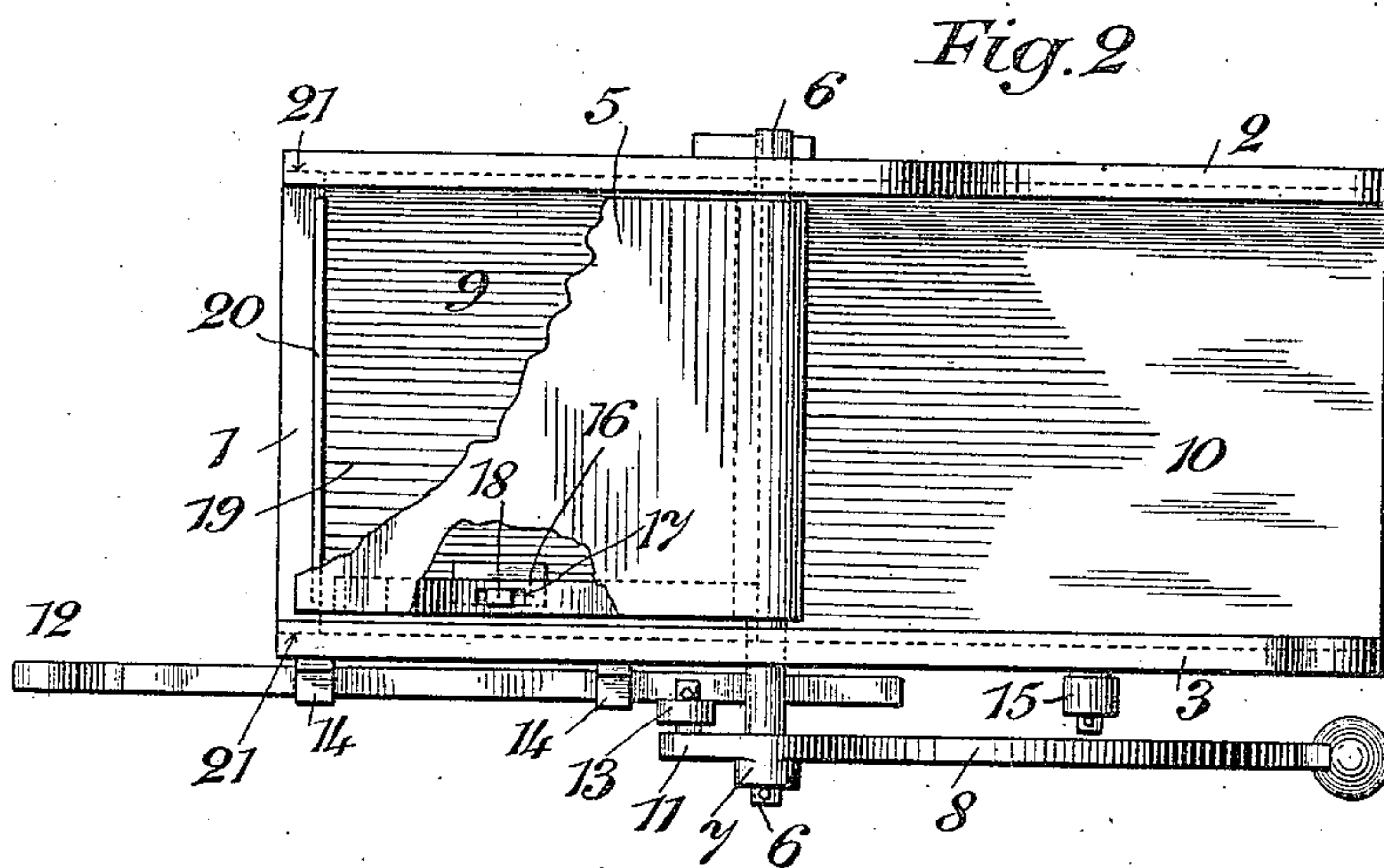
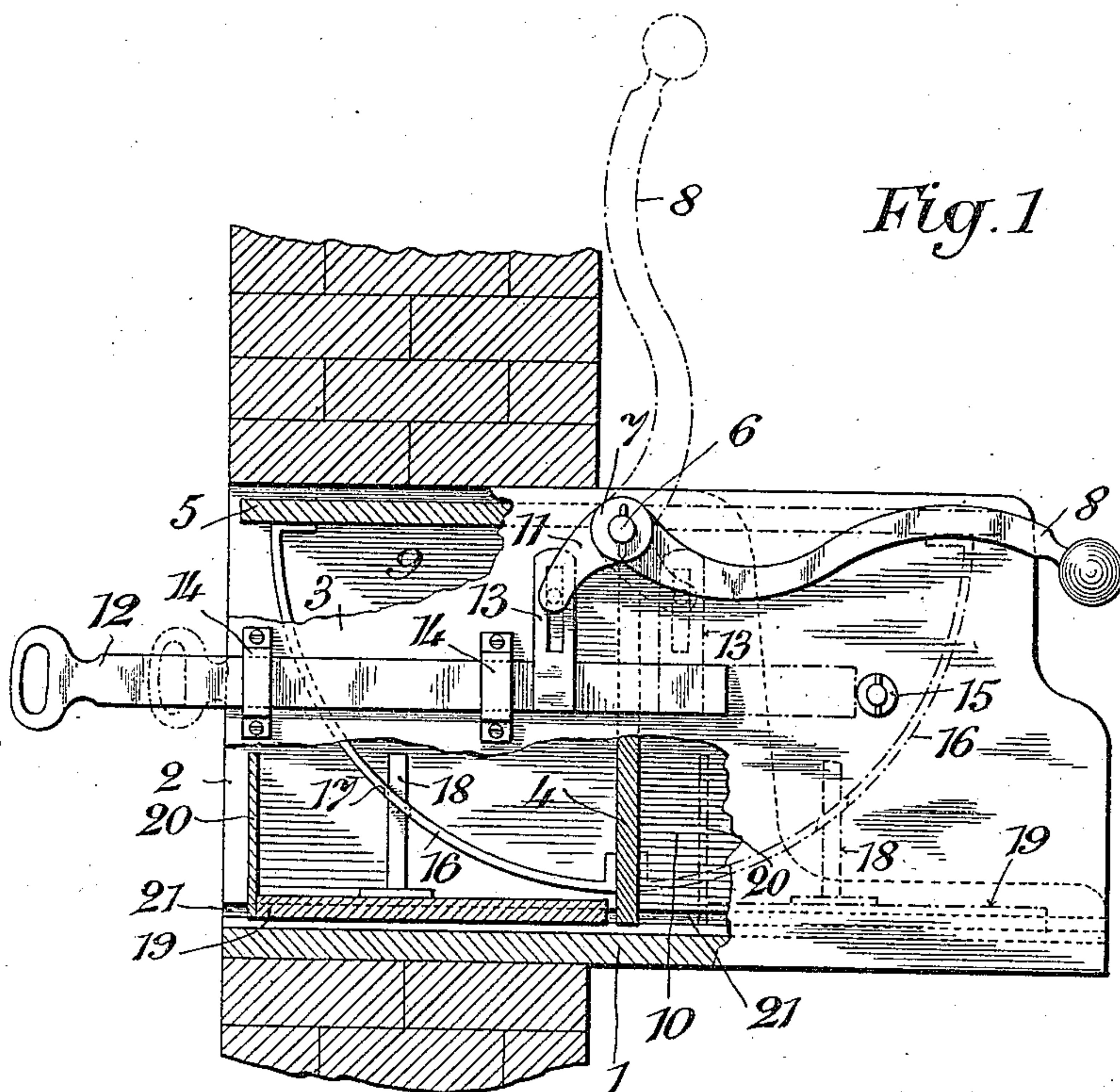
PATENTED MAR. 3, 1908.

H. A. BRUGGER.

DUMB WAITER FOR BOOTS AND THE LIKE.

APPLICATION FILED MAR. 4, 1907.

2 SHEETS—SHEET 1.



Witnesses:

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Jesse K. Lutton

Inventor:

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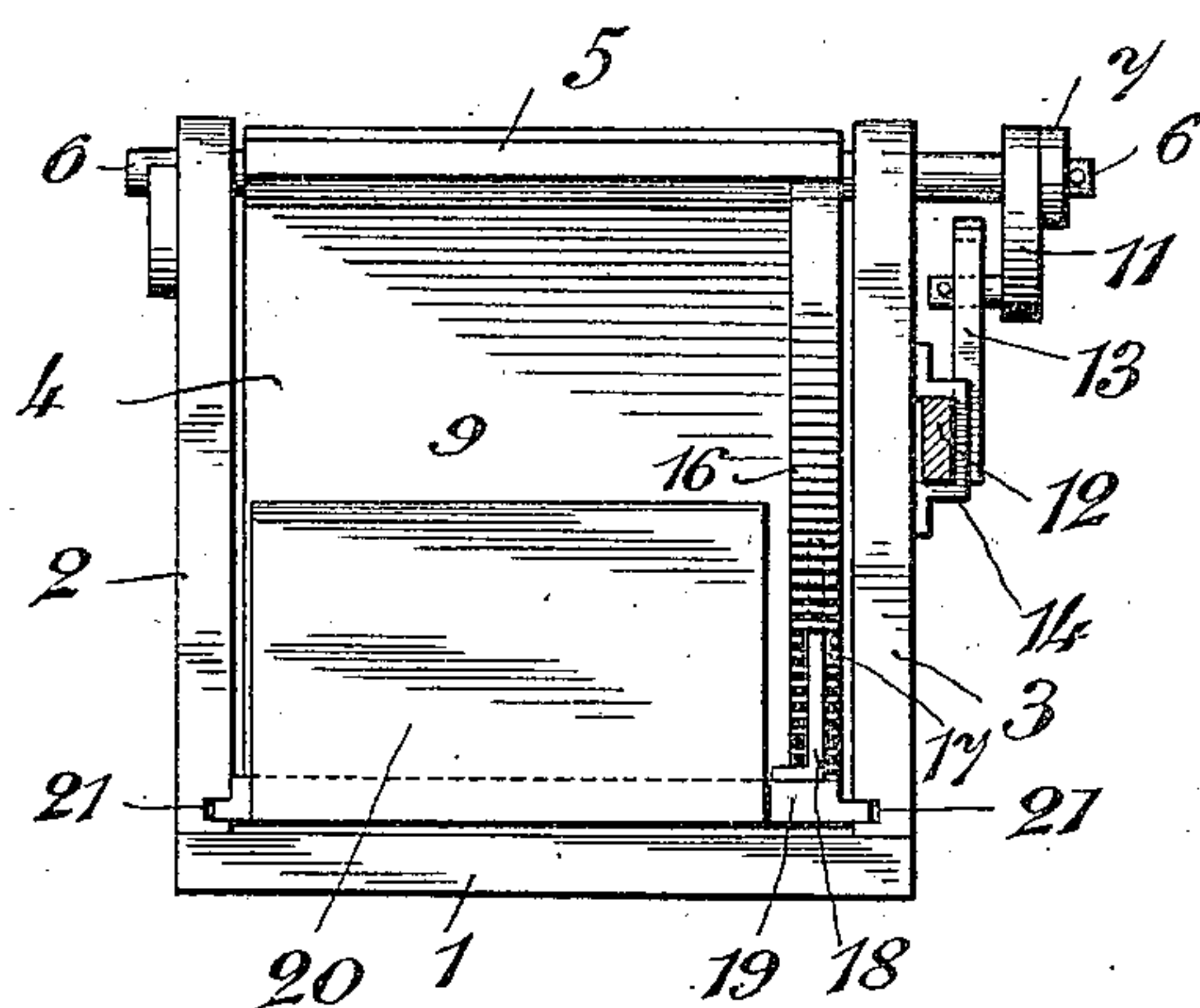


Fig. 3

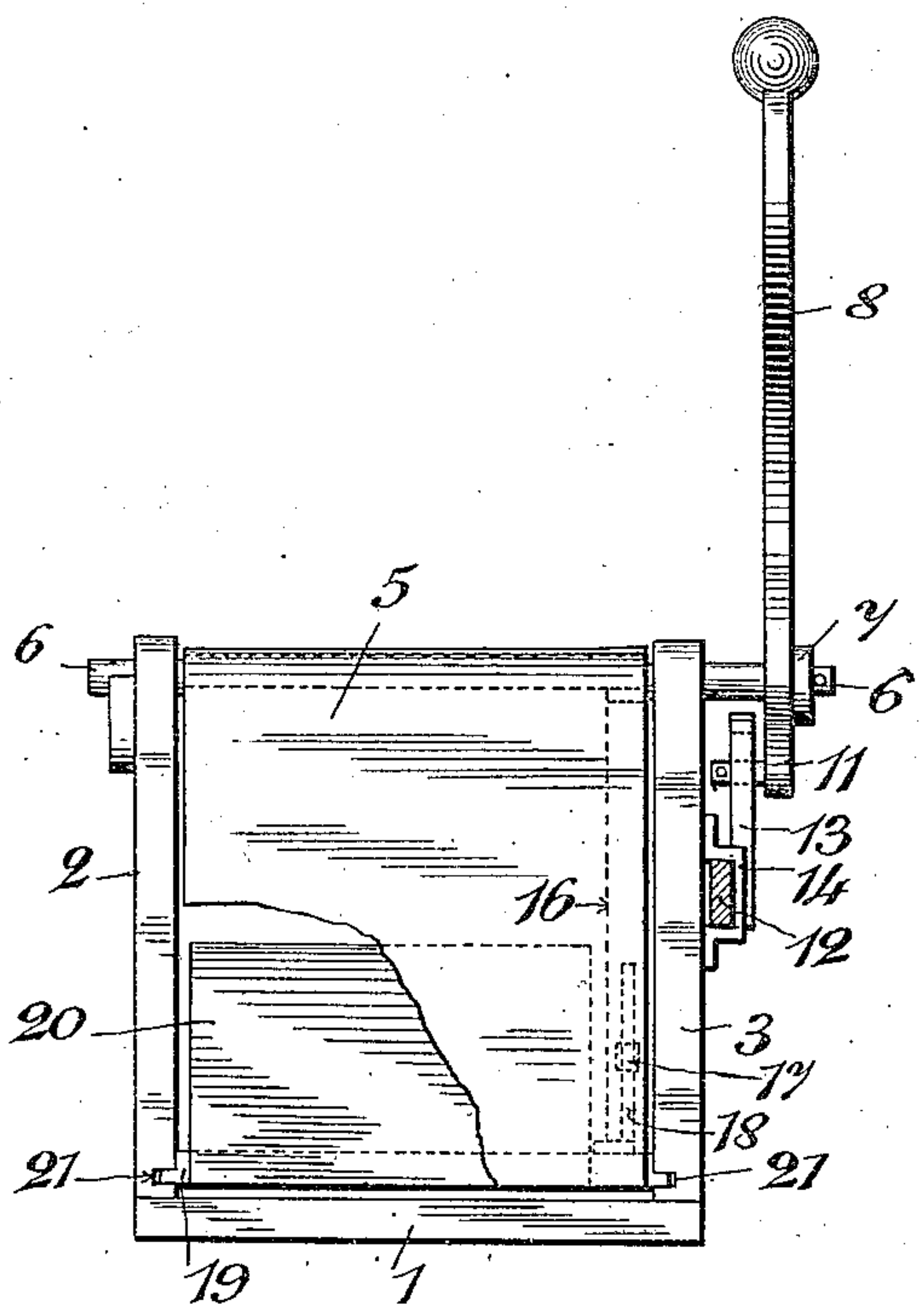


Fig. 4

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UNITED STATES PATENT OFFICE.

HEINRICH ALFRED BRUGGER, OF RADOLFZELL, GERMANY.

DUMB-WAITER FOR BOOTS AND THE LIKE.

No. 880,625.

Specification of Letters Patent.

Patented March 3, 1908.

Application filed March 4, 1907. Serial No. 360,410.

To all whom it may concern:

Be it known that I, HEINRICH ALFRED BRUGGER, a citizen of the Republic of Switzerland, residing at Radolfzell, Germany, have invented certain new and useful Improvements in Dumb-Waiters for Boots and the Like; and I do hereby declare the following to be a full, clear, and exact description of the invention, 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, and to letters or figures of reference marked thereon, which form a part of this specification.

The occupants of bedrooms, especially in hotels and the like, often find it inconvenient during dressing or undressing to put their shoes at night outside the bedroom door, in the passage, or to remove the same from the passage into the room in the morning, inasmuch as they are obliged to open the door in a partially undressed condition. Moreover it is inconvenient to handle dirty shoes until clean collars and other easily soiled articles of clothing have been put on or taken off.

The subject of the present application is a dumb-waiter, that is a device for the delivery of shoes and other articles from a room into an adjacent space and back again, whereby the above-indicated inconveniences are obviated.

According to this invention there is provided in an opening in the wall dividing the two spaces a transporting mechanism adapted for the reception of the article in question. This mechanism can be pushed from each space towards the other space and is always accessible from that space to which it has been pushed; and the opening in the wall is closed in each terminal position of the said mechanism.

The apparatus is illustrated in the accompanying drawing as follows: Figure 1 shows the apparatus in elevation, and partial section. Fig. 2 shows the same in plan view, partially broken off. Figs. 3 and 4 show the apparatus in front elevation, with parts in two different positions.

The apparatus consists of a box 1, open at both ends and on the top, built into the opening in the party wall between two adjacent spaces. In the side walls 2 and 3 of the said box is secured a shaft 6 having flaps 4 and 5 fixed at a right angle to one another. Upon the shaft 6, outside the box 1, is secured the angle-lever 7, by means of the projecting

arm 8 of which from one space, for instance a bedroom, the shaft 6 can be turned and thereby the wings 4, 5 alternately brought into the vertical position, whereby the box 1 is divided into two chambers 9, 10. The arm 11 of the lever 7 is connected with the pusher rod 12 by means of the slotted piece 13. The pusher rod 12 is supported in eyes 14 on the side wall 3 of the box 1, and is limited on its inward motion by the stop 15 on the box 1. The front end of the pusher rod, provided with a handle, projects into the other space, in this case into the passage. The shaft 6 can thus be turned from the bedroom by means of the arm 8 and from the passage by means of the pusher rod 12. To the wings 4, 5 is secured an arc 16, in the slot 17 of which engages the pin 18 of a sliding tray 19. When the shaft 6 is turned, the arc 16 forces the tray 19 by means of the pin 18 to and fro between the chambers 9 and 10. The tray has a low front wall 20 and is guided in grooves 21 on the side walls 2, 3 of the box.

The operation of the apparatus is as follows. Assume that in the position illustrated in full lines in Fig. 1 the objects to be moved, for instance boots, stand in the chamber 9 upon the tray 19, where the servant after having cleaned them has placed them. The chamber 9 is separated from the chamber 10, communicating with the bedroom by the wing 4, which at the same time closes the opening in the wall. The inmate, in order to obtain the boots, raises the arm 8 into the position indicated in dotted lines. This brings the wing 4 into a horizontal and the wing 5 into a vertical position, while the tray 19 and pusher rod 12 assume the positions indicated in dotted lines. The chambers 9, 10 are now separated from one another by means of the wing 5 and the opening in the party wall is closed thereby. The occupant now has the boots inside his chamber; he can, instead of them, place upon the tray 19 any other objects, in order to deliver the same, by moving back the arm 8 into the position indicated in full lines, to the chamber 9 and thus to the passage. The servant can recognize by the in or out position of the pusher rod 12, whether the guest requires attendance. If the guest has placed anything upon the tray 19, but has omitted to deliver it into the proper position by horizontal adjustment of the lever 8, the servant, by drawing out the pusher rod 12, can him-

self move the tray 19 and thereby withdraw the objects lying upon it from the room. He can deliver them again by pushing in the pusher rod 12.

5 By means of the above-described device, therefore, boots, shoes, or other objects, can be mechanically conveyed from a room into a passage or other adjacent space and be again delivered from the same back into the room,
10 without necessitating the opening of the room-door for the purpose, whereby the person in the room is saved from inconvenience.

Delivery devices of this kind are also capable of application with advantage in
15 hospitals, in order to provide for delivery of articles from and to the sick-chamber with as little noise as possible and in order to prevent the frequently injurious drafts caused by opening the doors.

20 Having now particularly described and ascertained the nature of the said invention and in what manner the same is to be performed I declare that what I claim is:

1. A dumb-waiter, comprising in combination an open ended box adapted to be
25 fixed in an opening in a partition, a tray slidable in the box, a pair of flaps making an angle with one another and mounted to revolve about the apex of the angle, means to
30 revolve the flaps, and mechanism to simultaneously move the tray when the flaps are revolved.

2. A dumb-waiter, comprising in combination an open ended box adapted to be
35 fixed in an opening in a partition, a tray slidable in the box, a pair of flaps in angular relation and mounted on an axis in the box, means on each side of the box to actuate the flaps to close the opening, and a slidable connection between the tray and flaps whereby
40 said tray will be caused to slide in the box between the flaps during the positioning of the latter to close the opening.

3. A dumb-waiter, comprising in combination, an open-ended casing adapted to be
45 fixed in a perforated partition; a waiter sliding therein; two closing devices, each closing the aperture in one end-position of the waiter and at right angles to each other
50 and means at each side of the partition for revolving the said closing devices, said two actuating-means being coupled, whereby as one device exposes the aperture the other device closes the latter; substantially as described.
55

4. A dumb-waiter, comprising in combination, an open-ended casing adapted to be fixed in a perforated partition; a transverse rocking shaft mounted in the
60 casing; a waiter sliding in the latter below the shaft; waiter reciprocating means actuated by the shaft; two devices each closing the aperture in one end-position of the waiter; and means at each side of the aper-

ture for actuating the said closing-devices, 65 said two actuating-means being coupled, whereby as one device exposes the aperture the other device closes the latter; substantially as described.

5. A dumb-waiter, comprising in combination, an open-ended casing adapted to be fixed in a perforated partition; a transverse rocking shaft mounted in the casing; a waiter sliding in the latter; waiter reciprocating means actuated by the shaft; two
75 wings secured at right angles to each other on the shaft, each closing the aperture in one end-position of the waiter; and means at each side of the aperture for actuating the shaft; substantially as described. 80

6. A dumb-waiter, comprising in combination, an open-ended casing adapted to be fixed in a perforated partition; a transverse rocking shaft mounted in the casing; a waiter, having a pin, sliding in the latter; 85 a slotted arc embracing the pin; arc operating means actuated by the shaft; two wings secured at right angles to each other on the shaft, each closing the aperture in one end-position of the waiter; and means at each
90 side of the aperture for actuating the shaft; substantially as described.

7. A dumb-waiter, comprising in combination, an open-ended casing adapted to be fixed in a perforated partition; a transverse rocking shaft mounted in the casing; a waiter having a pin, sliding in the latter; a slotted arc embracing the pin; arc operating means actuated by the shaft; two
95 wings secured at right angles to each other on the shaft, each closing the aperture in one end-position of the waiter; a double armed lever, secured to the shaft, whose outer arm extends toward the one end of the casing; and a bar sliding on the casing wall
105 and jointed to the inner arm of said lever and extending to the opposite end of the casing; substantially as described.

8. A dumb-waiter, comprising in combination, an open-ended casing adapted to be fixed in a perforated partition; a transverse rocking shaft mounted in the casing; a waiter sliding in the latter and having a front wall partially closing the partition
110 aperture; waiter reciprocating means actuated by the shaft; two wings secured at right angles to each other on the shaft, each closing the aperture in one end-position of the waiter; and means at each side of the aperture for actuating the shaft; substantially as described. 120

In testimony that I claim the foregoing as my invention, I have signed my name in presence of two subscribing witnesses.

HEINRICH ALFRED BRUGGER.

Witnesses:

ERNST FISCHER,
JOSEPH SIMON.