

No. 628,828.

Patented July 11, 1899.

G. W. MENTZER.

COMBINED CELLAR CUPBOARD AND DUMB WAITER.

(Application filed Oct. 7, 1898.)

(No Model.)

2 Sheets—Sheet 1.

Fig. 1

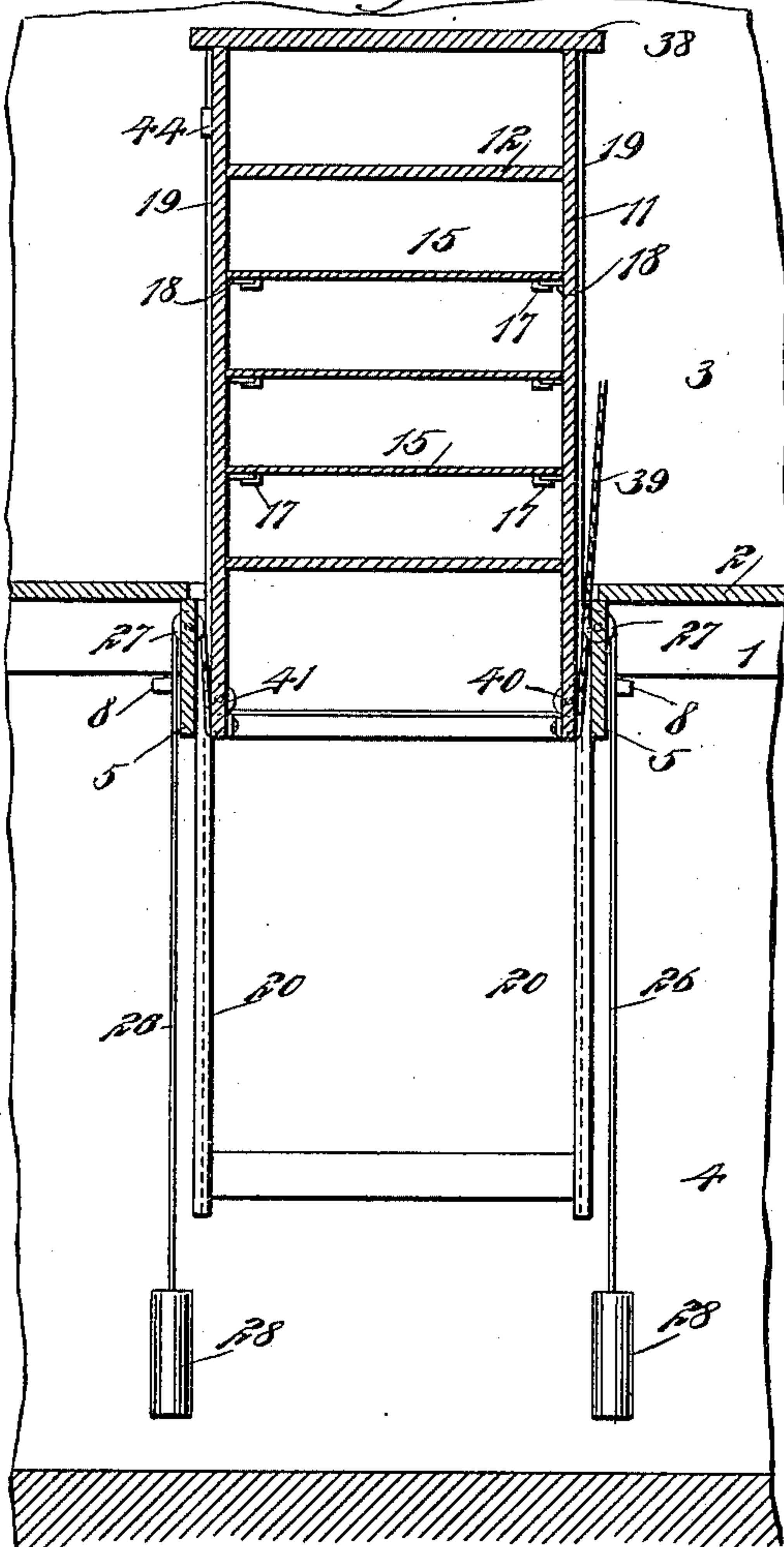


Fig. 2

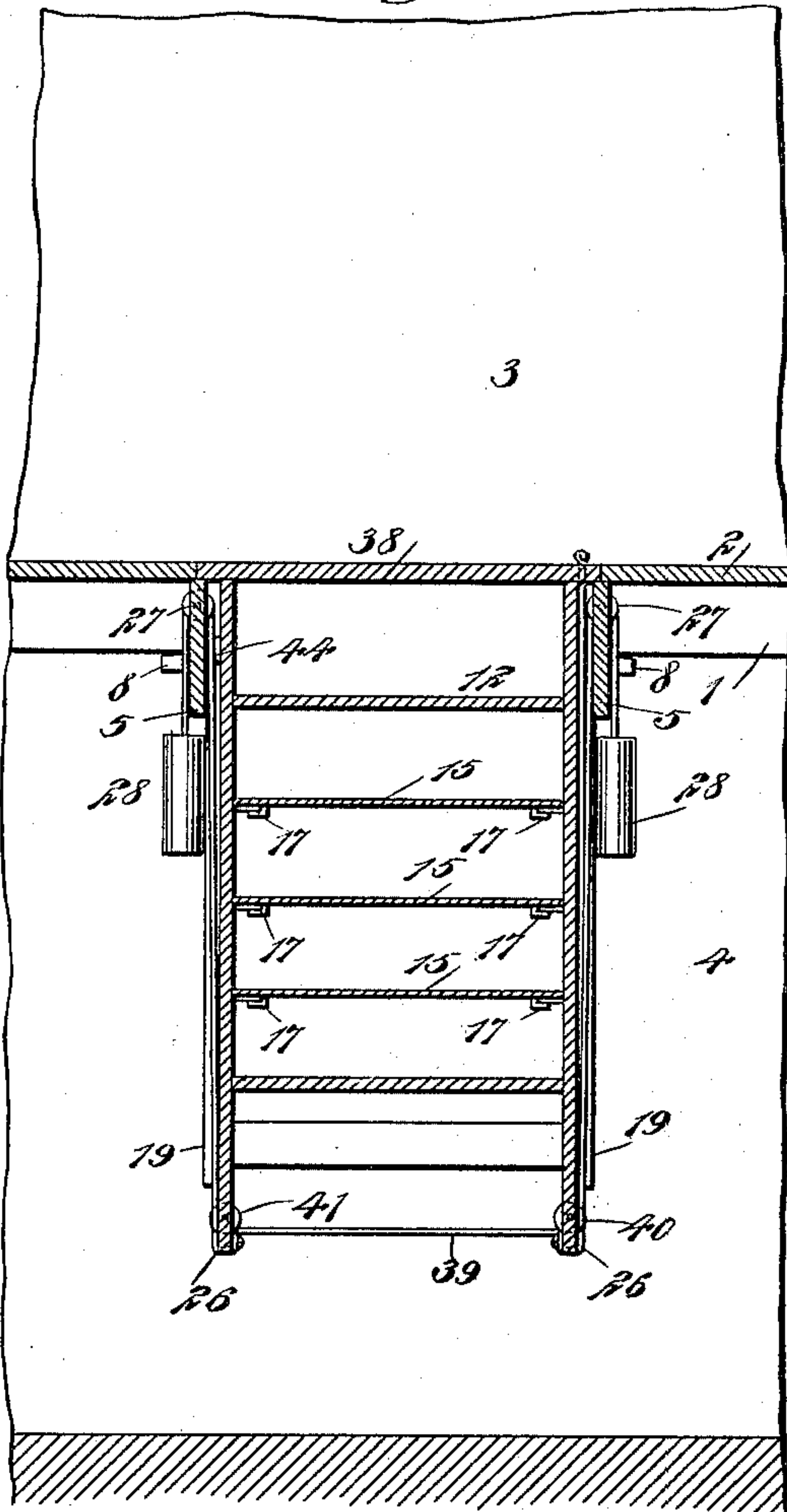
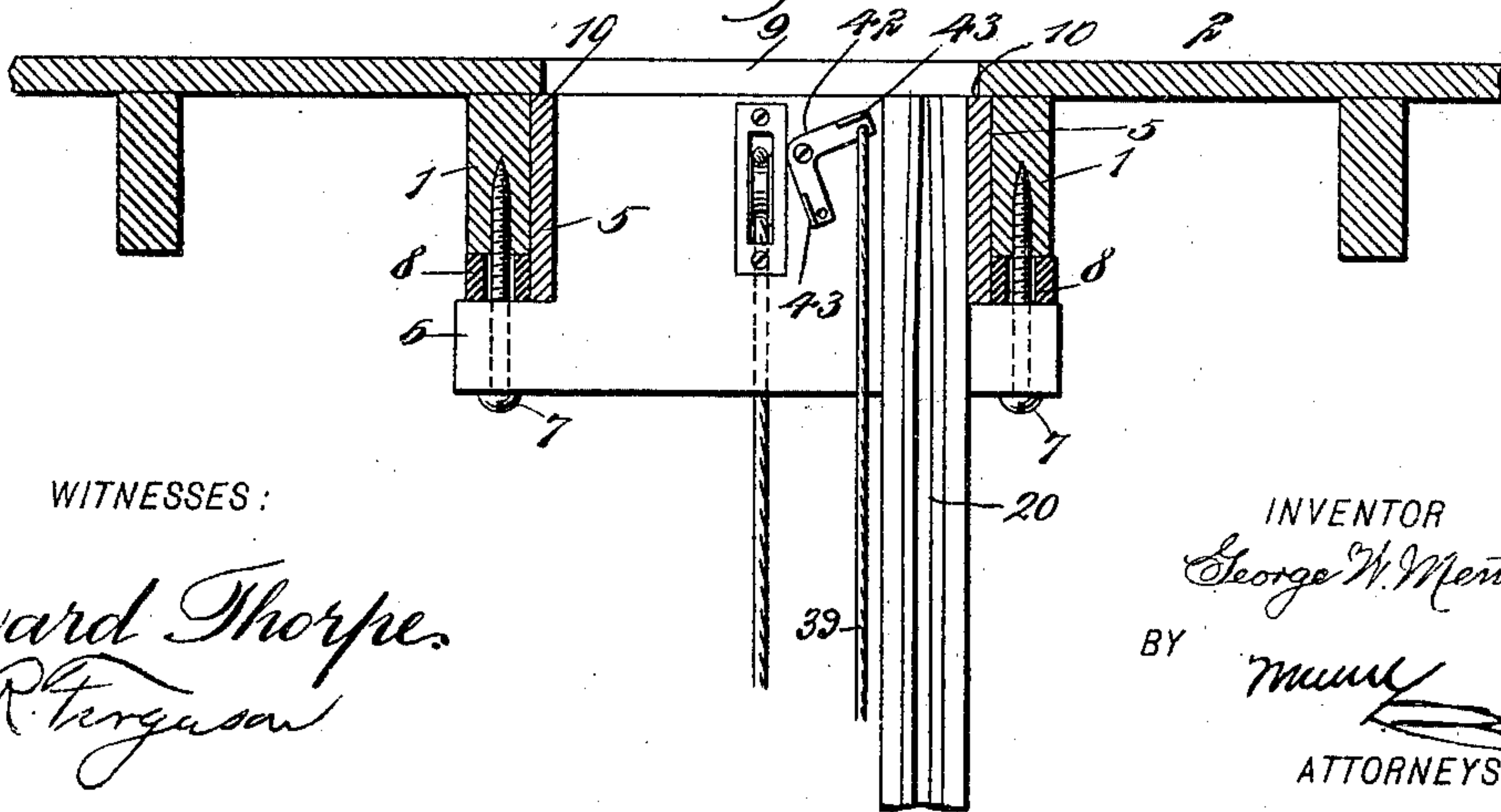


Fig. 3



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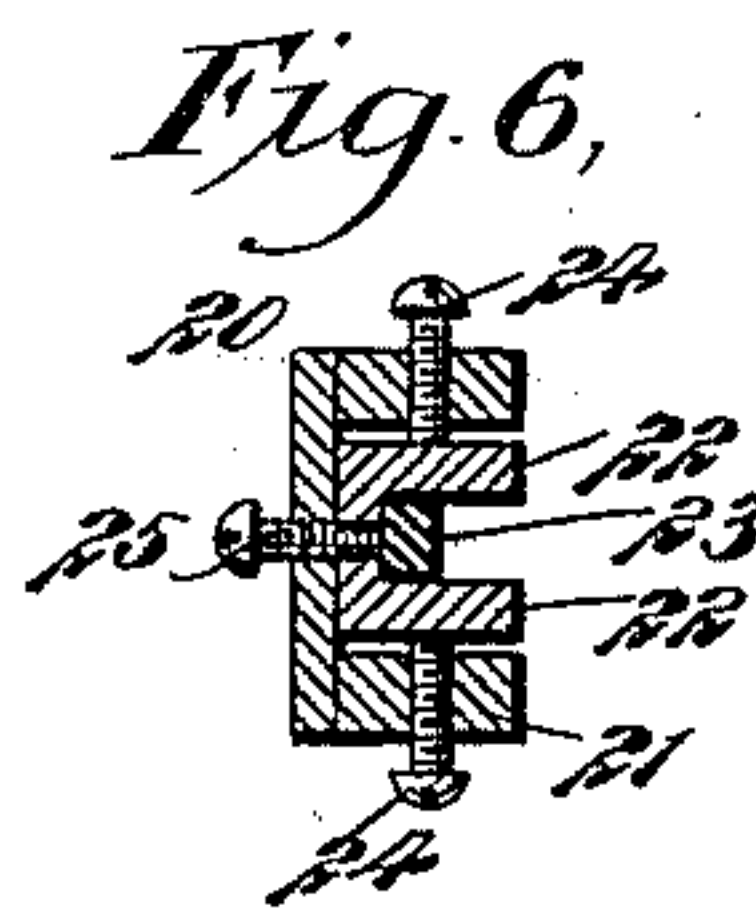
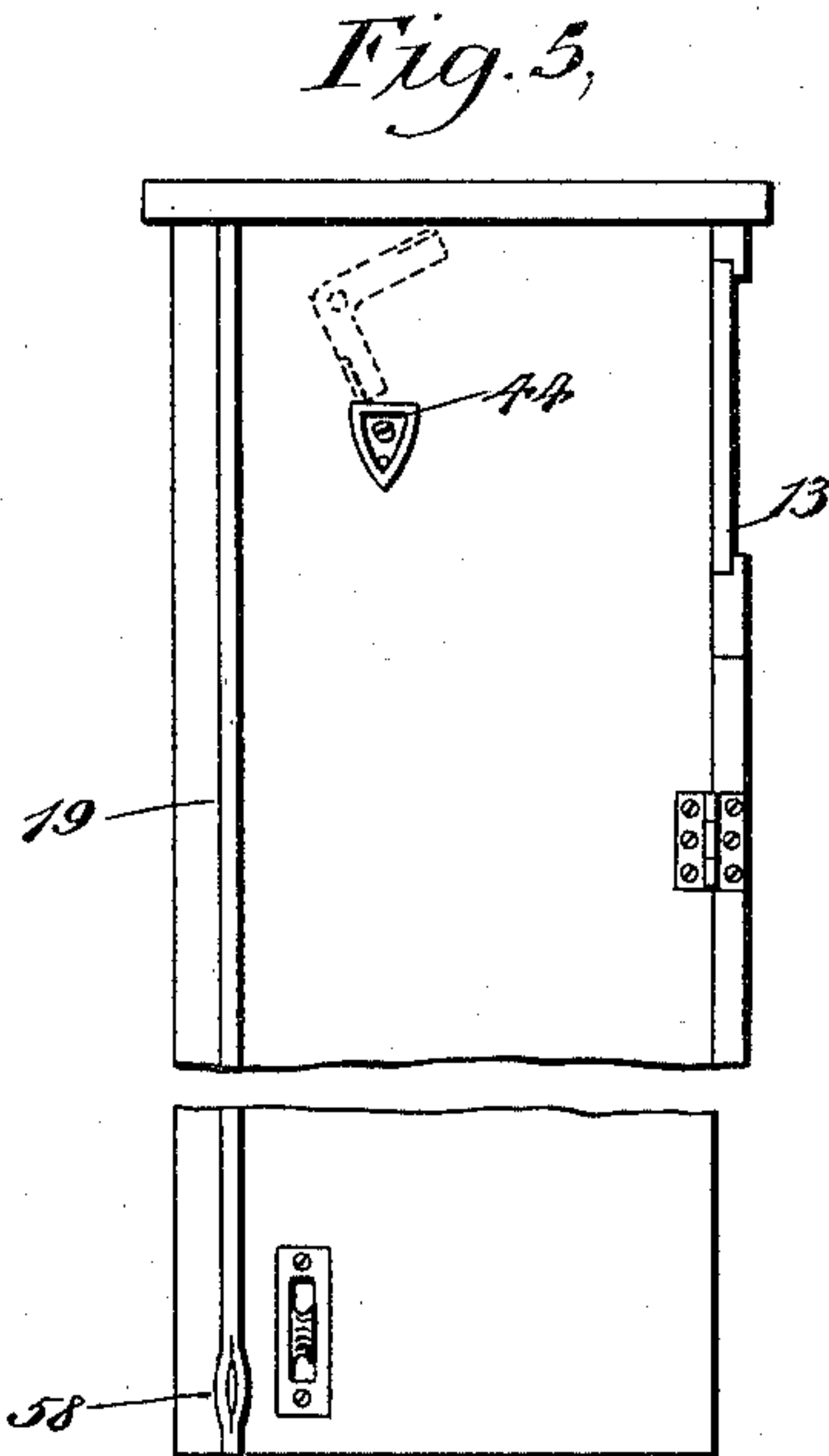
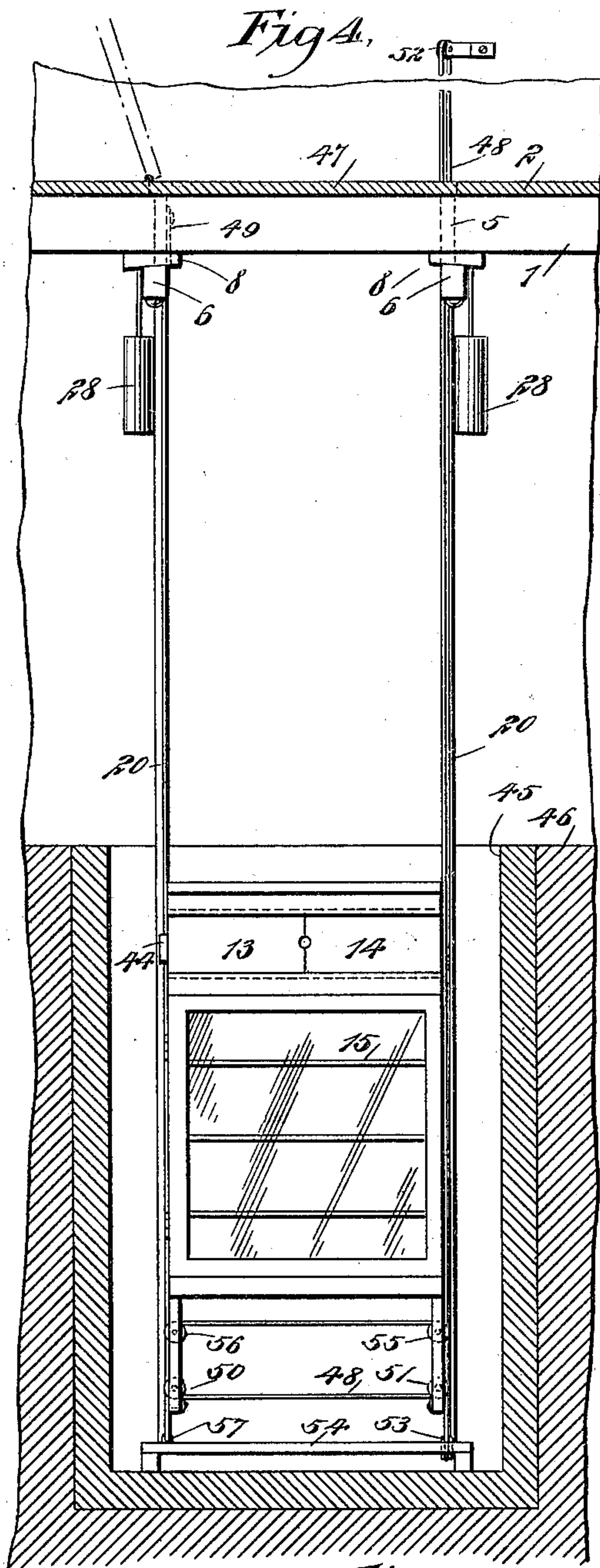
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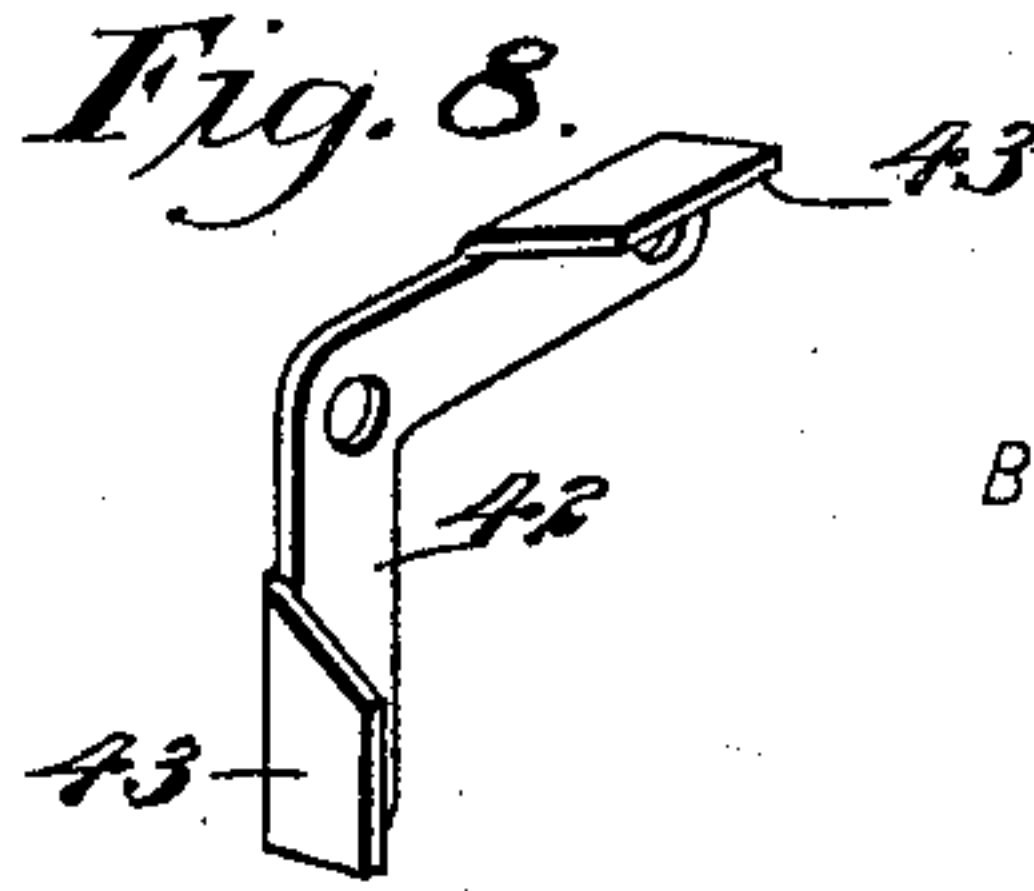
(No Model.)

2 Sheets—Sheet 2.



WITNESSES: *Fig. 7.*

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UNITED STATES PATENT OFFICE.

GEORGE W. MENTZER, OF ELGIN, ILLINOIS.

COMBINED CELLAR-CUPBOARD AND DUMB-WAITER.

SPECIFICATION forming part of Letters Patent No. 628,828, dated July 11, 1899.

Application filed October 7, 1898. Serial No. 692,883. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. MENTZER, of Elgin, in the county of Kane and State of Illinois, have invented a new and Improved
5 Combined Cellar - Cupboard and Dumb-Waiter, of which the following is a full, clear, and exact description.

The object of this invention is to provide a simple and comparatively inexpensive cellar-cupboard and dumb-waiter so arranged that
10 it may be easily and quickly elevated from a cellar to a pantry or kitchen above and again lowered into the cellar to keep cool the articles contained therein.

I will describe a combined cellar-cupboard and dumb-waiter embodying my invention, and point out the novel features in the appended claims.

Reference is to be had to the accompanying
20 drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a sectional elevation of a cupboard and dumb-waiter embodying my invention, showing the same in its elevated position. Fig. 2 is a similar section, but showing the device in its lowered position. Fig. 3 is a sectional detail illustrating the manner of securing the hoistway - frame to the floor-joists. Fig. 4 is a sectional elevation of a modification in which a well or cooling-chamber is made in the cellar to receive the combined cupboard and dumb-waiter. Fig. 5 is a side elevation of the combined cupboard
30 and dumb-waiter. Fig. 6 is a cross-section of an adjustable guide employed. Fig. 7 is a bottom plan view of a portion of a shelf, showing a means for engaging and supporting it in the cupboard; and Fig. 8 is a perspective
40 view of a locking-latch employed.

Referring to the drawings, 1 designates the joists for supporting the floor 2 of a room—such, for instance, as a kitchen or pantry 3—above the cellar-floor. Secured to opposite
45 joists is a hoistway-frame 5, made with four closed sides and open at the top and bottom. Extended outward from each of its corners at the lower end is a lug 6, which is beveled on its upper side and has openings through
50 which fastening screws or bolts 7 pass into the joists. These screws or bolts also pass through slots formed longitudinally in wedges

8, arranged between the lugs 6 and the lower edges of the joists. The object of beveling the upper sides of the lugs and employing the
55 slotted wedges and portable hoistway is to accommodate the frame to different widths of joists and uneven floors for ease of plumbing.

The floor 2 has an opening 9, which is somewhat larger than the opening through the
60 frame 5, so that when the top of the frame 5 engages closely against the under side of the floor around the opening 9 shoulders 10 will be formed by said upper ends, for a purpose to be hereinafter described. 65

The dumb-waiter or cupboard 11 has a partition 12 across it near its top, forming the floor of a compartment in which bread or the like may be conveniently kept. The front of this compartment is preferably provided with
70 laterally-sliding doors 13 14. When the device is in its lowermost position, the portion of the cupboard or dumb-waiter containing the bread-compartment will be within the frame 5, so that the bread contained in the
75 compartment will be somewhat protected from dampness in the cellar.

Arranged within the combined cupboard and dumb-waiter are a number of shelves 15. These shelves will preferably be adjustable, 80 so as to provide for different heights or spaces between the shelves to accommodate them for different articles. As a means for holding the shelves as adjusted I have shown, particularly in Fig. 7, shafts 16, arranged at the
85 ends of the shelves and adapted to rock in keepers 17. At the ends of the shafts there are outwardly-extended fingers 18, which when the shelf is in position will project beyond the end of the shelf and into holes
90 formed in the side walls of the combined cupboard and dumb-waiter. In placing a shelf in position the fingers 18 will be swung downward somewhat on a vertical plane with the
95 ends of the shelf. Then by placing them in line with the holes formed in the side walls the shelf may be lowered and the fingers thus projected into the holes.

Attached to the outer side of the side walls of the combined cupboard and dumb-waiter
100 are strips 19, which move in guides 20, depending from the frame 5 near the side of the combined cupboard and dumb-waiter. As clearly shown in Fig. 6, these guides 20 con-

sist of a fixed trough 21, with the open side toward the combined cupboard and dumb-waiter, and arranged within the trough and movable transversely thereof are side guide-strips 22, which are shown as L-shaped in cross-section, and arranged within these side guide-pieces is an outer side guide-strip 23. The pieces 22 may be adjusted laterally of the trough by means of screws 24, and the strip 23 may be adjusted inward and outward by the screw 25. The object of these several adjustments is to compensate for the swelling or contraction of the guides or strips 19, due to the temperature of the cellar and to irregularities in the guides. The guides are placed at the rear of the framework, so that they may at any time be extended and braced.

Hoisting-ropes 26 are connected to the sides of the combined cupboard and dumb-waiter at its lower end and extend over pulleys 27, mounted in opposite side walls of the frame 5. Attached to the outer end of each hoisting-rope is a weight 28.

It will be noted in Figs. 1 and 2 that the top 38 of the combined cupboard and dumb-waiter projects beyond the sides thereof and is designed to fit snugly in the opening 9 in the floor and rest upon the top of the frame 5. This top 38 when the combined cupboard and dumb-waiter is in its lowermost position will have its top surface flush with the upper surface of the floor 2 and practically form a portion of said floor. A draw-rope 39 passes through an opening formed at one edge of the top 38, thence downward at one side of the combined cupboard and dumb-waiter, thence around pulleys 40 41, mounted in the lower portion of the sides of the combined cupboard and dumb-waiter, and thence up the opposite side and connects with one end of a latch 42, made in the form of an angle-lever and pivoted at its center to the inner side of the frame 5. This latch at each of its ends has inwardly-projecting lugs 43, one of which is designed to engage with the upper side of a stop 44, secured to the side of the combined cupboard and dumb-waiter. This stop 44 is made wedge-shaped, with the smaller end downward. The object in making the locking-latch 42 in the form of an angle-lever and making the stop 44 wedge-shaped is to provide for the placing of said parts either to the right or the left alongside of the frame 5, as the convenience of the drawing-rope may require.

In the operation of the device above described by drawing upward on the rope 39 the locking-latch 42 will be rocked to move its lug 43 out of engagement with the stop 44. Then by still pulling on the rope 39 the combined cupboard and dumb-waiter will be moved upward by the weights 28. It is obvious that the strain upon the rope 39 need be but very slight, as the weights are intended to do the lifting. When the device is in its lowermost position, the locking-latch will prevent an upward movement of the device under the influ-

ence of the weights should such weights be made heavier than the combined cupboard and dumb-waiter by the removal of some of its contents.

In Fig. 4 I have shown a well 45, formed in the ground 46 of the cellar and in which the combined cupboard and dumb-waiter may be placed for the sake of the coolness of said well. In this construction of course the guides 20 will be extended to the bottom of said well and secured in any desired manner, and of course as the combined cupboard and dumb-waiter shown in this modification is not intended to have its top form a portion of the floor a trap-door 47 must be provided for the opening 9. The operation of this device (shown in Fig. 4) is substantially the same as above described, excepting that the draw-rope is differently arranged. In this example the draw-rope 48 is secured at one end within the frame 5, as at 49, then passed downward and around the pulley 50, then around the opposite pulley 51, and then up and around a pulley 52, supported at any convenient distance above the floor 2. Then the rope is carried down and around a pulley 53 in a fixed base 54, then around the pulley 55, and the opposite pulley 56, and the end fastened to the base. In order to prevent swinging motion of the cupboard when in its uppermost position, the strips 19 are expanded at the lower end, as at 58. The parts 58 are just sufficiently expanded to move easily in the guides; but in practice the upper ends of the guides are slightly contracted, so as to engage snugly with the expanded portions for the purpose mentioned. The guides 20 (shown in Fig. 4) may be supported or braced by any desired number of braces, according to the depth of the well.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A combined cupboard and dumb-waiter, designed for movement from a lower room to an upper room and from said upper room to the lower room, consisting of a cupboard movable through an opening in the floor of the upper room, a hoistway-frame adjustably secured to the floor-joists, guides extended downward from said frame and receiving strips on the combined cupboard and dumb-waiter, ropes extended from the lower end of said combined cupboard and dumb-waiter over pulleys mounted in the hoistway-frame, weights on the outer ends of said ropes, a locking-latch for holding the device in its lowermost position, and means for operating said latch from above the floor of the upper room, substantially as specified.

2. A combined cupboard and dumb-waiter movable through an opening in a floor, a hoistway-frame adjustably secured to the floor-joists, guides extended from said frame, the space between the guides at the upper end being contracted, strips on the combined cupboard and dumb-waiter movable in the guides

and expanded at the lower end, and means for raising the combined cupboard and dumb-waiter, substantially as described.

3. The combination, with a cupboard movable through a floor from a lower to an upper room, of a hoistway-frame secured to opposite joists supporting the floor and at the sides of the opening through said floor, lugs extended outward from the corners of said frame and
10 having beveled upper sides, slotted wedges

arranged between said lugs and the lower edges of the joists, and screws or bolts passing through openings in the lugs and through the slots in the wedges and into the joists, substantially as specified.

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Witnesses:

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