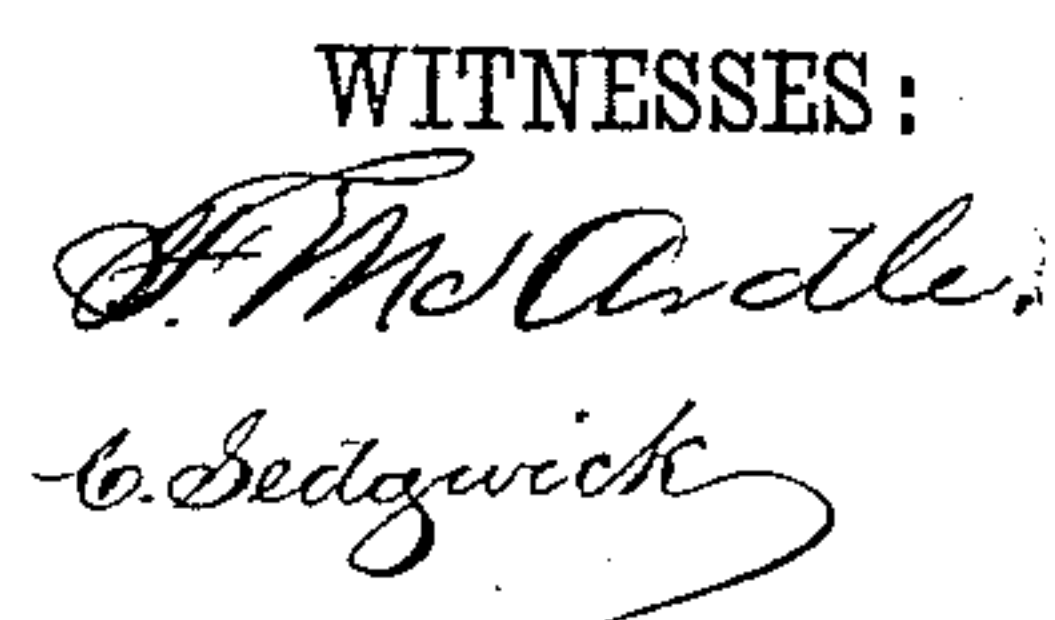


2 Sheets—Sheet 1.

Patented May 10, 1887.

No. 362,720.



INVENTOR:

U. S. Collins
BY Munn & Co
ATTORNEYS.

(No Model.)

2 Sheets—Sheet 2.

U. L. COLLINS.
FOLDING SEAT.

No. 362,720.

Patented May 10, 1887.

Fig. 4

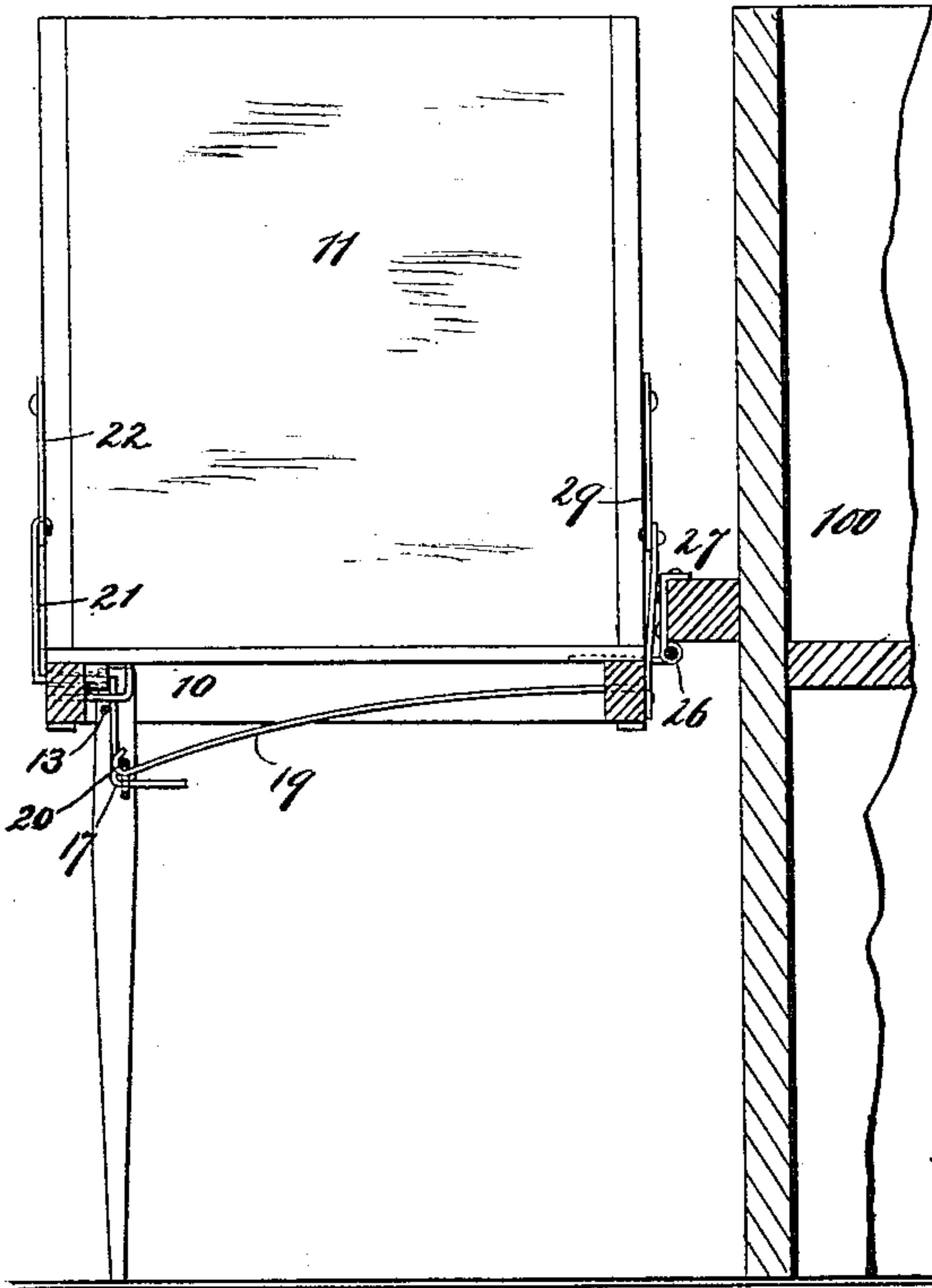


Fig. 6

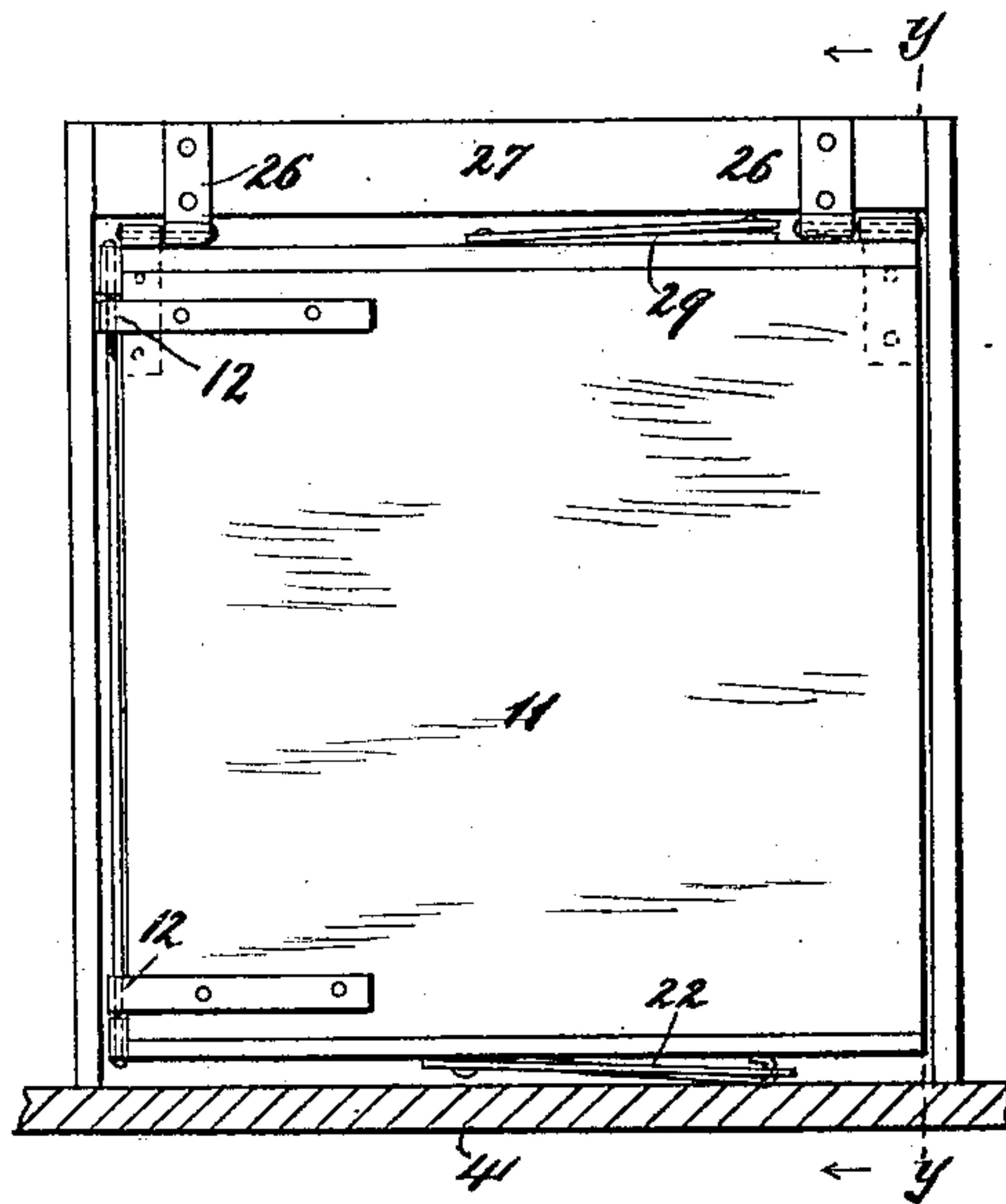


Fig. 5

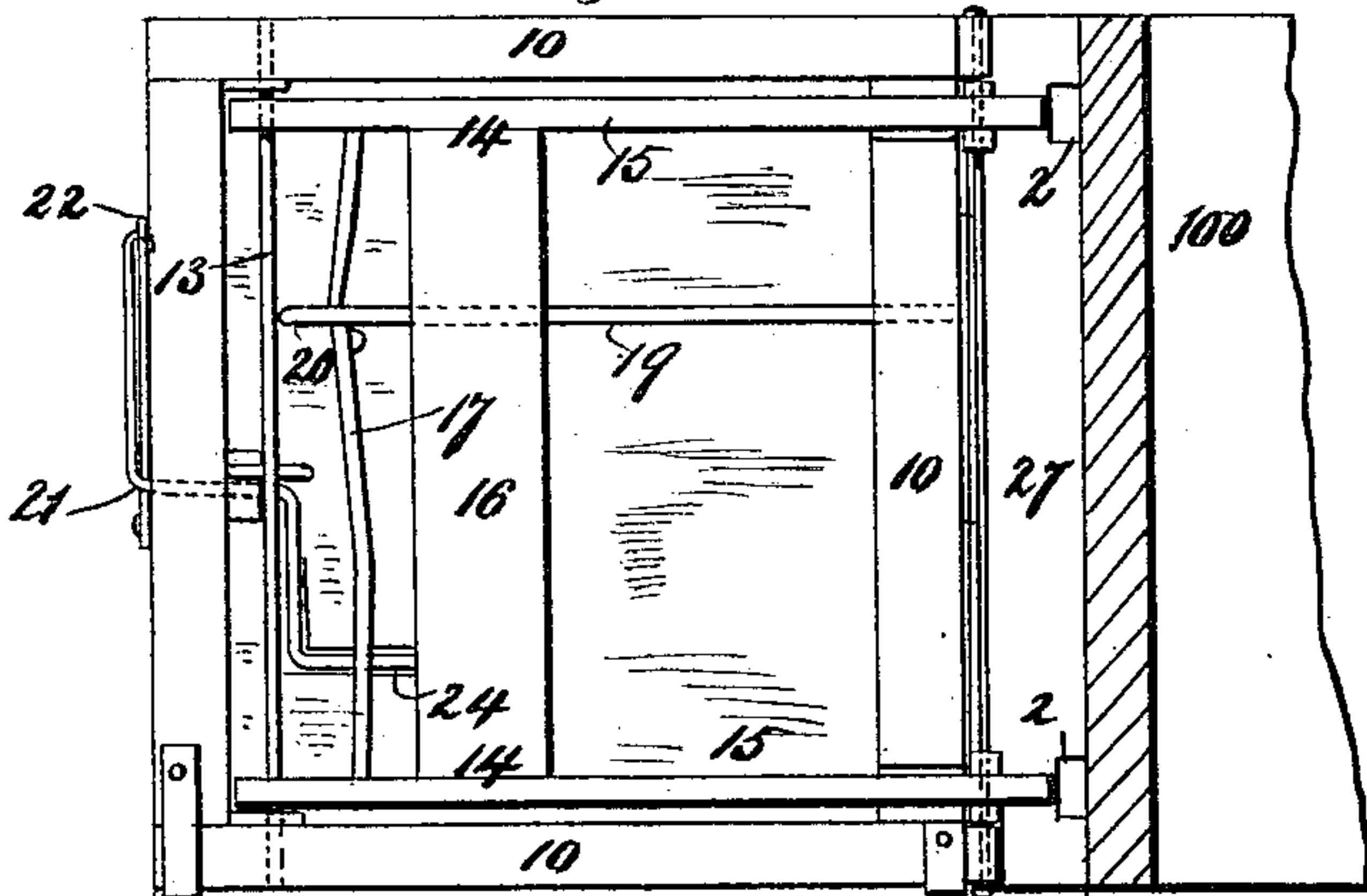
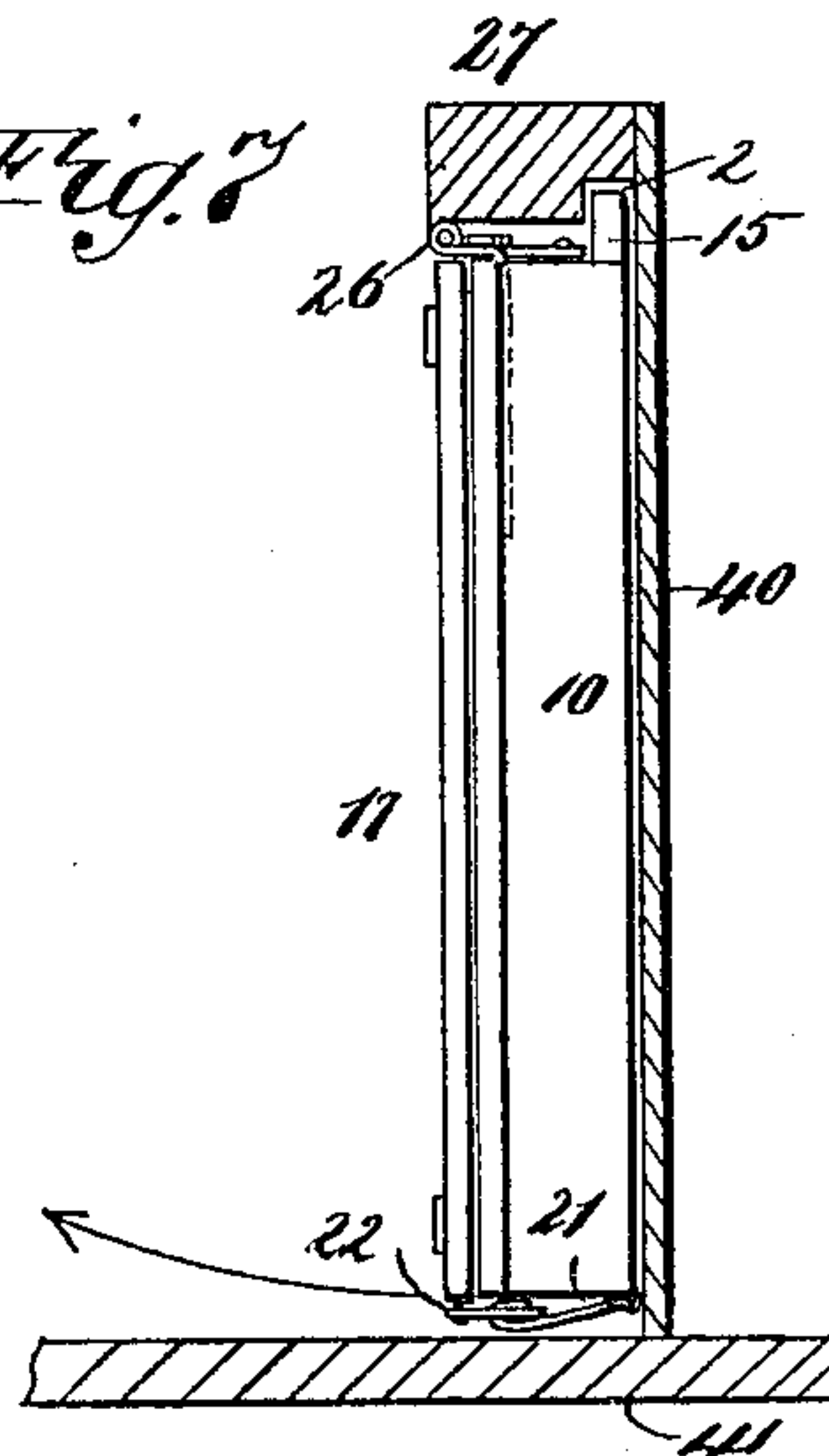


Fig. 7



WITNESSES:

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UNITED STATES PATENT OFFICE.

ULYSSES L. COLLINS, OF SPARTA, ILLINOIS.

FOLDING SEAT.

SPECIFICATION forming part of Letters Patent No. 362,720, dated May 10, 1887.

Application filed January 3, 1887. Serial No. 223,223. (No model.)

To all whom it may concern:

Be it known that I, ULYSSES L. COLLINS, of Sparta, in the county of Randolph and State of Illinois, have invented a new and Improved Folding Seat, of which the following is a full, clear, and exact description.

This invention relates to folding seats, the object of the invention being to provide a cheap, durable, and convenient seat that may be attached to any vertical standard, wall, or to a stationary device of any kind, provided only that said stationary device is formed with a substantially vertical side face. The invention, however, is more especially applicable for use in connection with church-pews, or for use in connection with plain vertical standards that are secured to the flooring of a hall or other auditorium, the invention consisting of certain combinations and sub-combinations of parts, as illustrated in the drawings, and to be hereinafter more fully explained, and specifically pointed out in the claims.

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

Figure 1 is a perspective view of a portion of a pew provided with my improved form of folding seat, the seat being represented as it appears when not in use. Fig. 2 is a similar view representing the seat as it appears when moved outward so that it occupies a horizontal position, the parts being represented as they appear prior to the raising of the back. Fig. 3 is an end view of the seat, representing the parts as they appear when the back has been raised and the legs moved downward to support the extending end of the seat proper, the pew in this figure not being shown. Fig. 4 is a sectional view taken upon a line corresponding to that indicated by the line *x x* of Fig. 3. Fig. 5 is an inverted plan view of the seat and its connections when the parts are in the position in which they are represented in Fig. 2. Fig. 6 is a side view of the seat as it appears when folded within its casing; and Fig. 7 is a sectional view taken on the line *y y* of Fig. 6, Figs. 6 and 7 representing the seat as being arranged in connection with a vertical standard or case.

In constructing such a seat as the one illustrated in the drawings above referred to, I

provide a main seat-frame, 10, which may be rectangular, oval, or of any proper form, and to the rear end of this seat-frame I connect a back, 11, connection between the back and the frame being established by means of hinges 12.

Across the outer end of the frame, and beneath the seat proper, I pass a leg-supporting rod, 13, which said rod is held by the front and rear strips of the frame 10, and this rod serves as the support for the folding frame 14, said frame consisting of legs 15, that are united by a cross-bar, 16, the upper ends of the legs being apertured in order to permit of the passage of the rod 13.

Above the cross-bar 15, I arrange a rod, 17, upon the under side of which there presses a spring-bar, 19, that is formed with a hooked end, 20, the inner end of this bar 19 being fixed to the inner cross-bar of the frame 10.

In the outer cross-bar of the frame 10, I mount a double crank-arm, 21, which said crank-arm passes through its supporting cross-bar and engages upon the outer side of the cross-bar with a link, 22, that is pivotally connected to the back 11, while upon the inner side of the outer cross-bar, which serves to support the double crank 21, said crank is bent downward and again inward, so that its extending arm will bear upon the upper side of the rod 17, the arrangement being such that as the back 11 is moved upward from the seat supporting frame the crank 21 will be drawn in the direction of the arrow shown in connection therewith in Fig. 2, and the arm 24 will press upon the rod 17, thus forcing the frame 14 downward, so that it will extend at right angles from the frame 10.

The frame 10 is connected to a bar, 27, by means of hinges 26, and this bar may be secured to the end of a pew, as 100, or to any other proper support.

In order that the back 11 may not be moved too far backward, I arrange folding safety-links 29, which are connected to each other, while one of the links is connected to the inner edge of the back and the other to the inner face of the inner cross-bar of the frame 10, as best shown in Figs. 4 and 6.

Such being the general construction of the seat, the operation is as follows: When the bar 27 has been secured to the pew 100, as indi-

cated in Fig. 1, the seat may be folded so that it will occupy the position in which it is shown in said figure; but if it is desired to move the seat to a position so that it may be occupied the frame 10 is first grasped and moved outward to the position in which it is shown in Fig. 2. The back 11 is then moved upward in the direction of the arrow shown in connection therewith in said last-named figure, which movement of the back will force the frame 14 downward, so that the extending end of the frame 10 will be supported, the links 29 preventing any undue backward movement of the back.

When it is desired to return the seat to the position in which it is shown in Fig. 1, the back 11 is moved in the direction of the arrow α , (shown in Fig. 3,) and as the back so moves the crank 21 will be freed from engagement with the cross-rod 17, and the spring 19 will act to return the frame 14 to the position in which it is shown in Fig. 5—that is, to a position so that it will occupy a plane parallel with that occupied by the frame 10, and when the parts are in the position just described, which is the position illustrated in Fig. 2, the whole device may be dropped to the position in which the parts are shown in Fig. 1, the ends of the legs 15 at this time entering the recesses 2, that are formed in the bar 17.

When it is desired to supply an auditorium with such seats as have been described, a vertical case or standard, 40, is secured to the floor 41 of the hall or auditorium, and the bar 27 is secured to place within the upper portion of the case, as clearly shown in Figs. 6 and 7; and by such an arrangement as has been described an audience will be able to quickly fold the seats within their cases, so that the floor of the hall will be left comparatively free, thus providing for the rapid dismissal of the audience.

In order that the crank 21 may not be caught on a dead-center, I place a stop, s , on the rod 17, as best shown in Fig. 3.

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

1. The combination, with a seat, of a strip hinged thereto at one side, a back hinged to the rear edge, and a leg-frame hinged to the side of the seat opposite the strip and at right angles to the back, and a crank-arm in connection with the outer edge of the back and with the folding leg-frame, substantially as set forth.

2. The combination, with a frame, of a strip hinged thereto, a back-piece hinged to the frame, a frame pivotally connected to fold downward below the first-named frame, a rod carried by the second frame, a crank carried by the first-named frame, and a connection between the back and the crank, substantially as described.

3. The combination, with a frame, 10, and a means for connecting said frame to a proper support, of a back, 11, hinged to the frame, a frame, 14, pivotally connected to the frame 10, a rod, 17, carried by the frame 14, a double crank, 21, arranged to bear upon said rod 17, a spring-strip, 19, and a link connecting the crank 21 and the back 11, substantially as described.

4. The combination, with a proper support, of a strip or bar, 27, a frame, 10, hinged to said strip 27, a back, 11, hinged to the frame 10, a frame, 14, pivotally connected to the frame 10, a rod, 17, carried by the frame 14, a hooked spring-rod, 19, carried by the frame 10 and arranged to bear upon the rod 17, a crank-arm, 21, and a link, 22, connecting the crank-arm with the back 11, substantially as described.

ULYSSES L. COLLINS.

Witnesses:

J. M. NICKLES,
S. B. HOOD.