

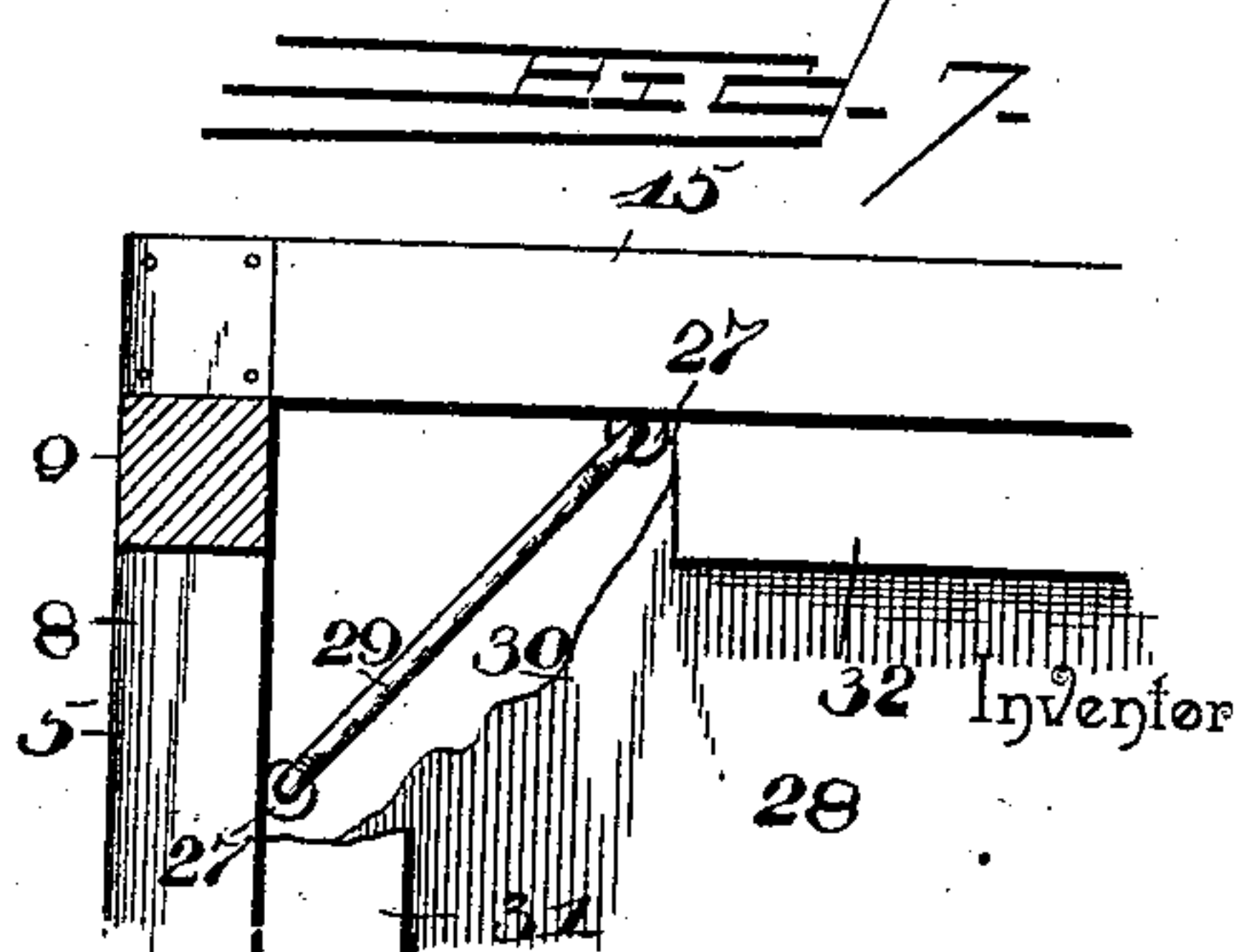
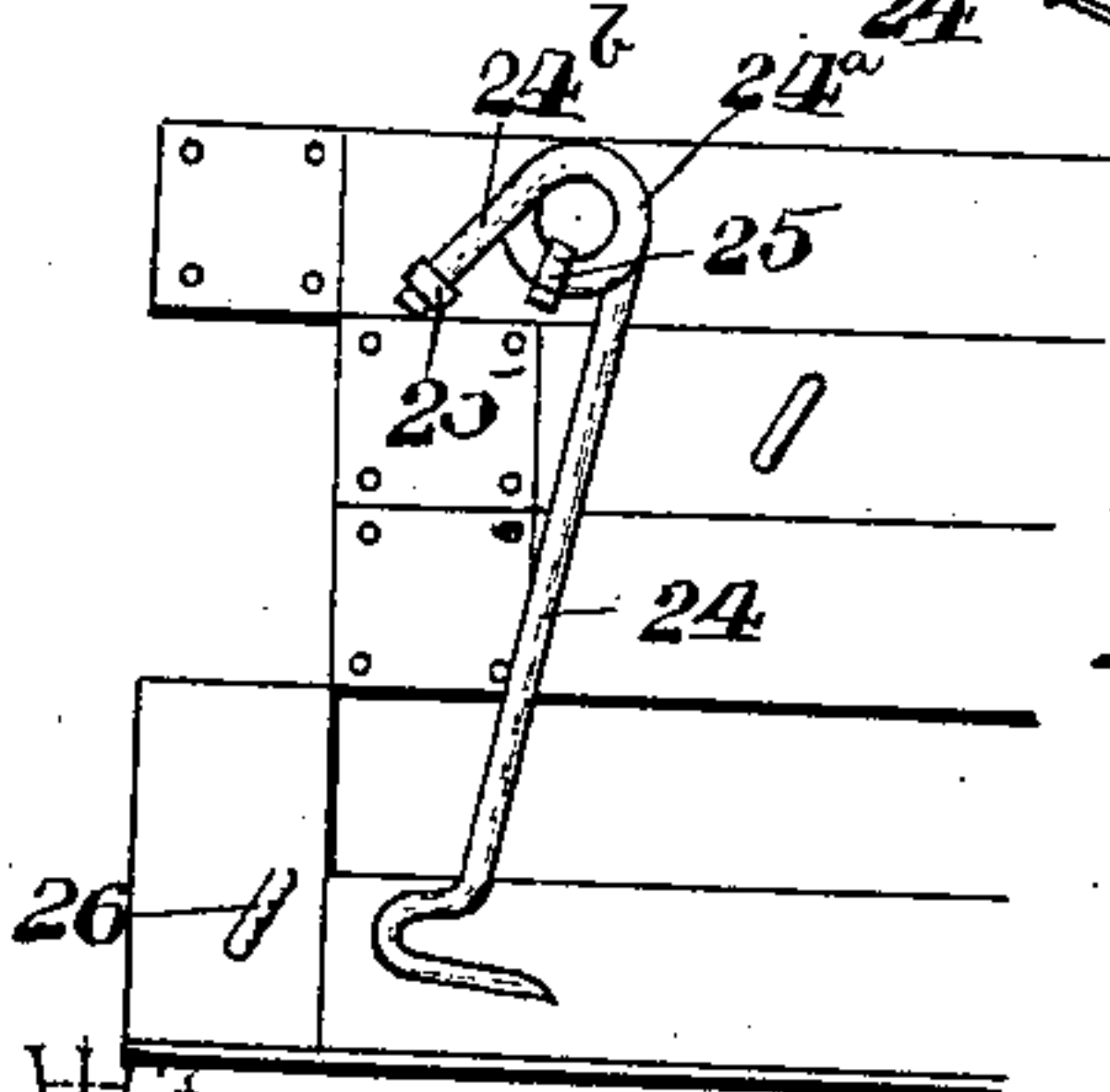
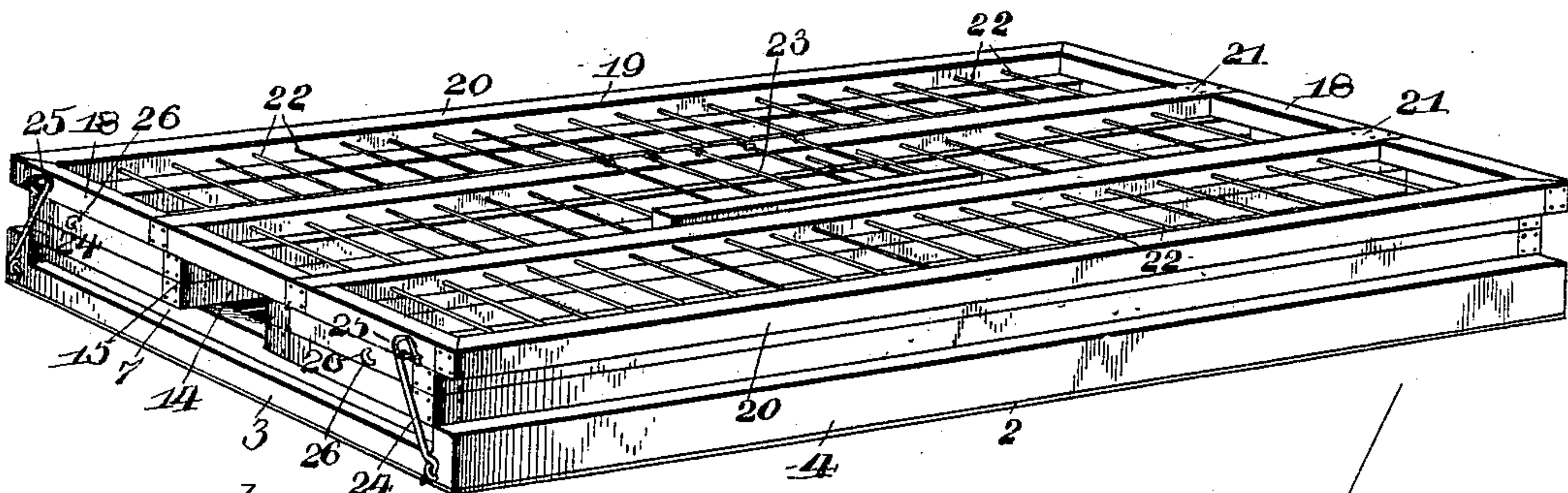
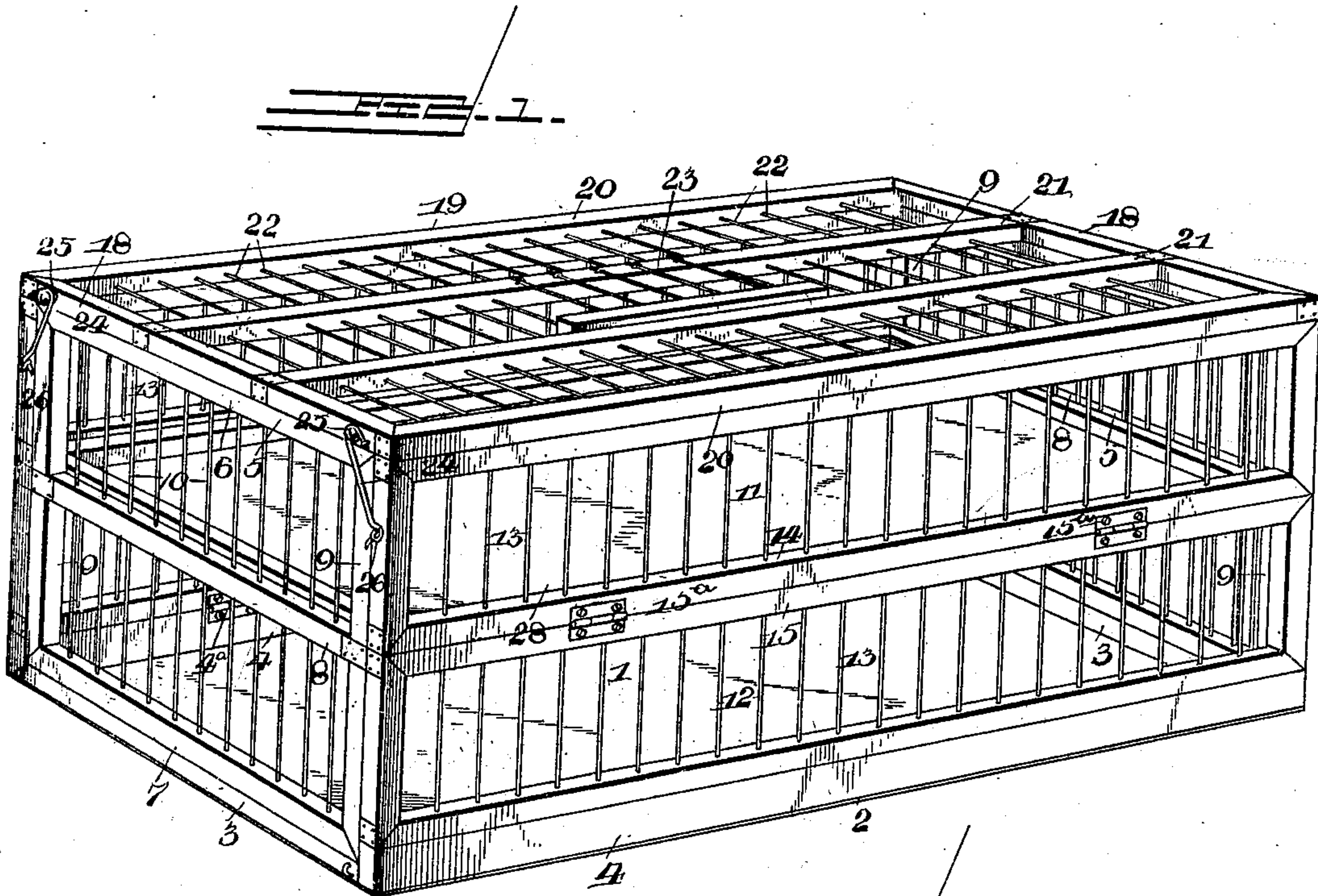
(No Model.)

D. P. ROSENBERGER.  
FOLDING POULTRY CRATE.

2 Sheets—Sheet 1.

No. 562,031.

Patented June 16, 1896.



Witnesses

By *W. S. Attorneys.* David P. Rosenberg,

*Chas. H. Co.*

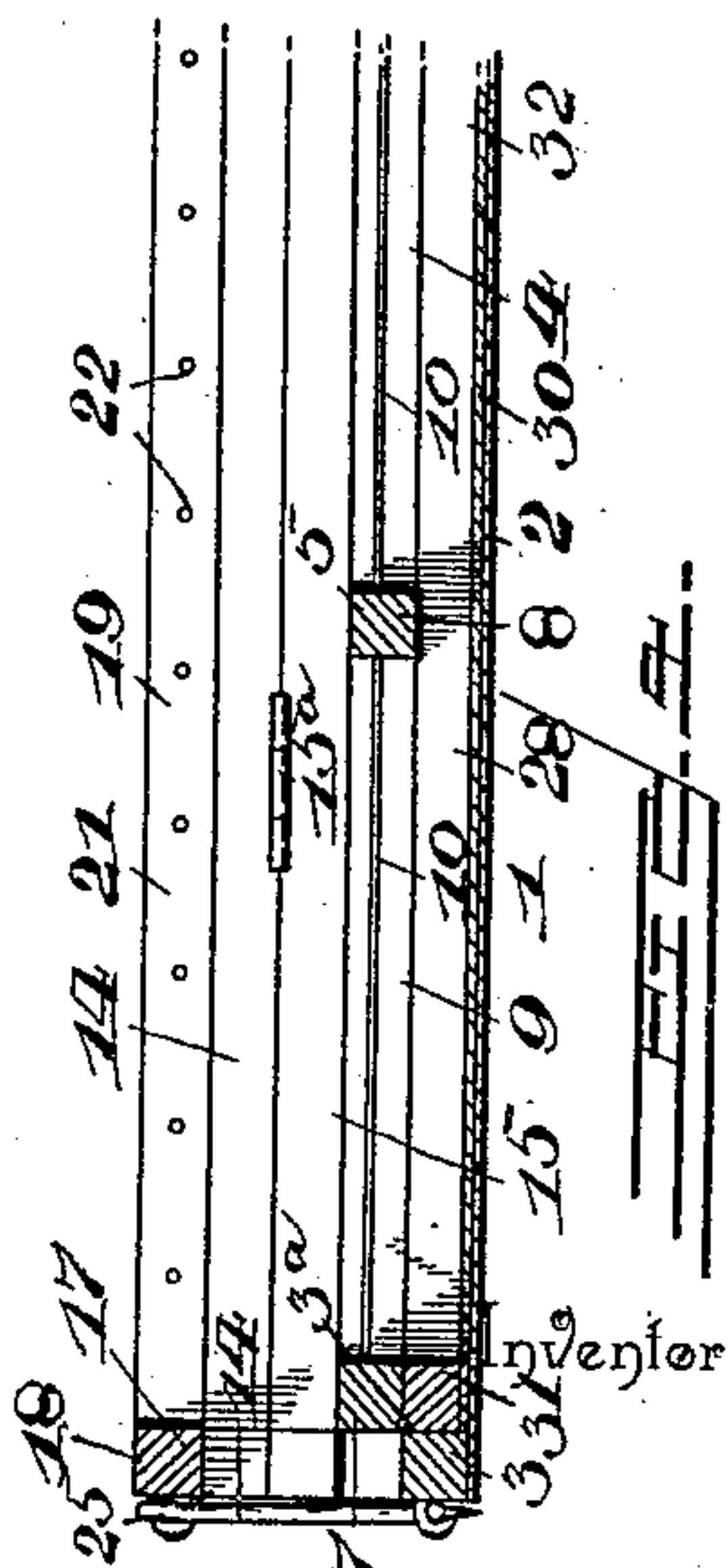
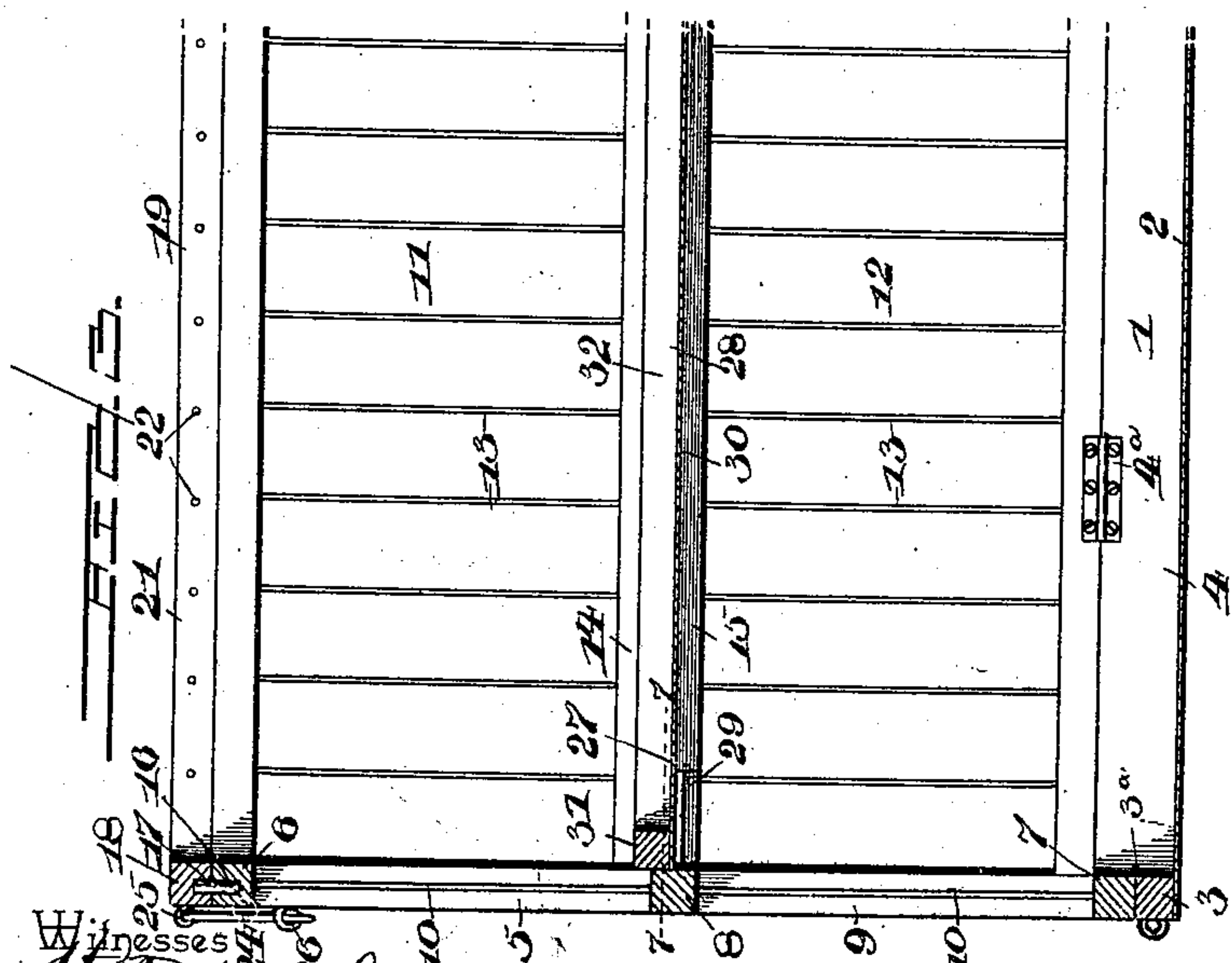
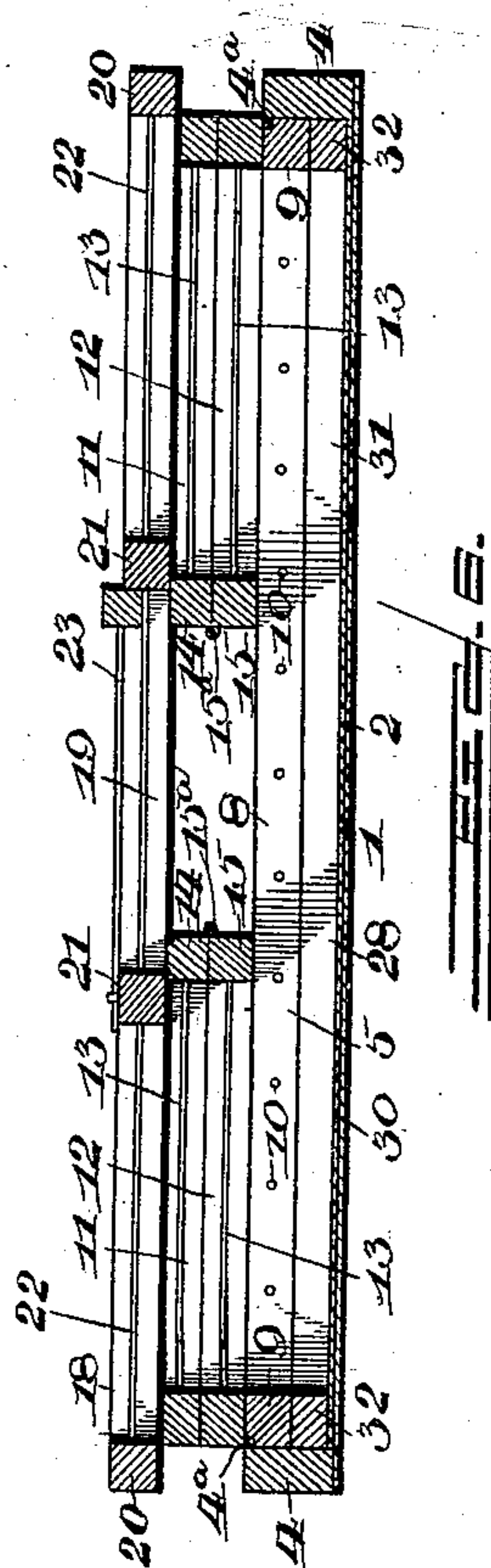
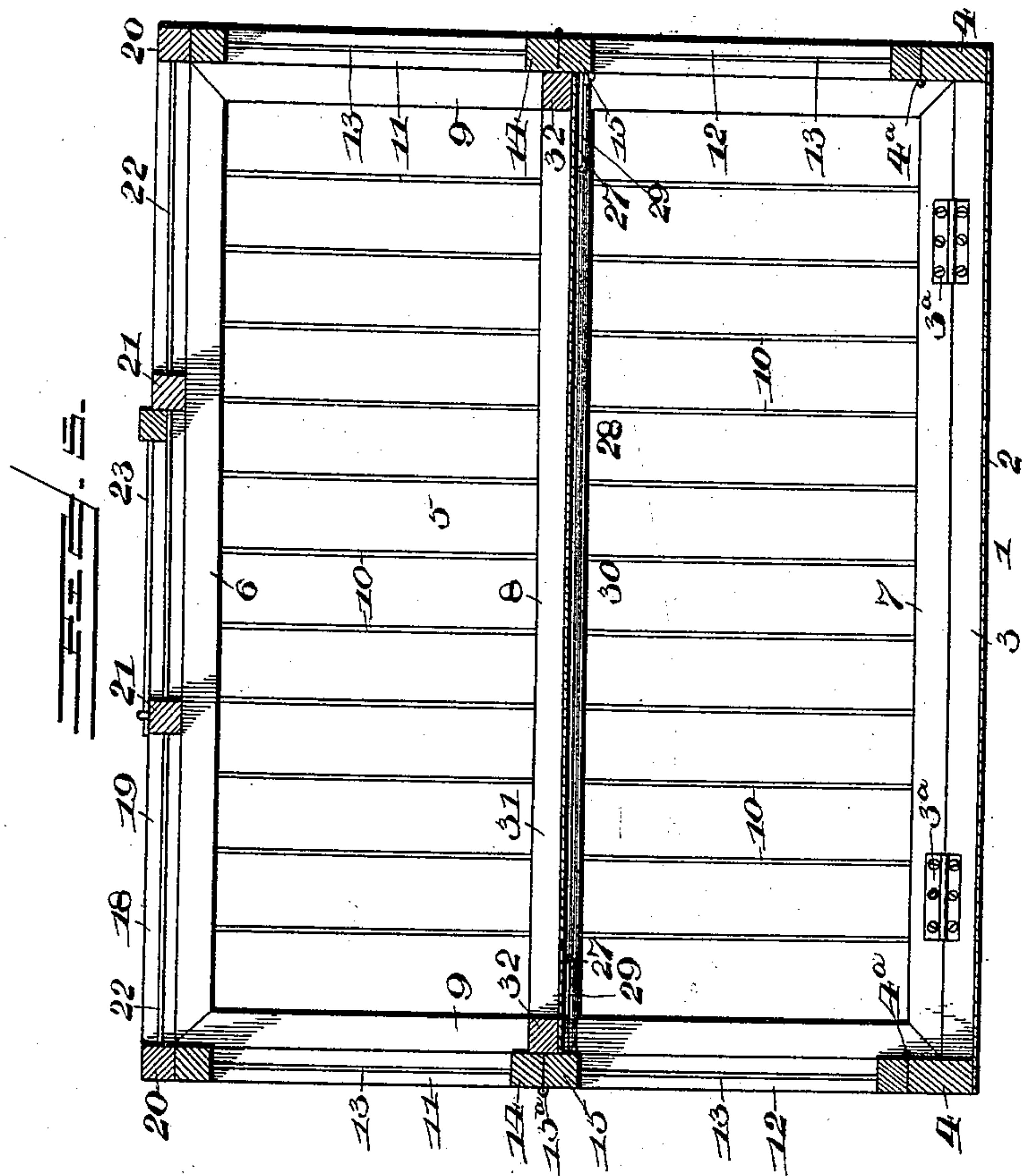
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2 Sheets—Sheet 2.

D. P. ROSENBERGER.  
FOLDING POULTRY CRATE.

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Witnesses  
*[Signature]*  
*[Signature]*

By his Attorneys, David P. Rosenberg.

*Chas. H. Co.*



# UNITED STATES PATENT OFFICE.

DAVID P. ROSENBERGER, OF LINVILLE, VIRGINIA.

## FOLDING POULTRY-CRATE.

SPECIFICATION forming part of Letters Patent No. 562,031, dated June 16, 1896.

Application filed August 26, 1895. Serial No. 560,591. (No model.)

*To all whom it may concern:*

Be it known that I, DAVID P. ROSENBERGER, a citizen of the United States, residing at Linville, in the county of Rockingham and State of Virginia, have invented a new and useful Folding Poultry-Crate, of which the following is a specification.

My invention relates to poultry-crates, and has for its object to provide a double crate having upper and lower compartments or decks constructed to fold into compact form for return transportation; to provide simple, strong, and durable means for securing the crate in either its folded or extended positions, and, furthermore, to provide means whereby the upper tray or deck may be removed to adapt the crate for large fowls.

Further objects and advantages of this invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claims.

In the drawings, Figure 1 is a perspective view of a crate constructed in accordance with my invention, the same being shown extended or in operative position. Fig. 2 is a similar view of one end of the crate, showing the same folded. Fig. 3 is a partial longitudinal section showing the crate extended. Fig. 4 is a similar view showing the crate folded. Fig. 5 is a transverse section showing the crate extended. Fig. 6 is a similar view showing the crate folded. Fig. 7 is a detail horizontal section on the line 7-7 of Fig. 3 to show the means for preventing the outward deflection of the sides and ends at their centers and for supporting the upper tray or deck. Fig. 8 is detail view of a spring-hook which I preferably employ in connection with the improved crate.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates the bottom or lower tray or deck, having a sheet-metal bottom 2, end bars 3, and side bars 4, said side and end bars being flush at their lower edges for the attachment of the sheet-metal bottom, and the side bars being of approximately double the height of the end bars for a purpose hereinafter explained.

Hinged to the upper edges of the end bars of the lower tray, as at 3<sup>a</sup>, and adapted to fold inwardly or toward each other are the end frames 5, each of which consists of a skeleton frame having upper and lower horizontal bars 6 and 7 and a parallel intermediate bar 8, the extremities of said bars being connected by the uprights 9. The spaces inclosed by said parts of the frame are fitted with filling-wires 10, and when folded to the horizontal position shown in Figs. 2, 4, and 6 the upper surface (which, in the normal position, is the outer surface) of each end frame is flush with the upper edges of the side bars 4 of the lower tray, the lower or inner surface of the end frame being spaced from the plane of the sheet-metal bottom 2 a distance equal to the height of the end bars 3.

The side frames are sectional in construction and consist of upper sections 11 and lower sections 12, provided with filling-wires 13. The contiguous horizontal bars 14 and 15 of the side-frame sections are hinged together, as at 15<sup>a</sup>, at their outer surfaces to fold with said outer surfaces in contact, as shown in Figs. 2, 4, and 6, and the lower bars of the lower side-frame sections are hinged, as at 4<sup>a</sup>, to the upper edges of the side bars 4 to fold inwardly over the end frames. Inasmuch as the upper surfaces of the end frames are flush with the upper edges of the bars 4 when in their folded positions, the lower surfaces of the lower side-frame sections 12 will bear upon said upper surfaces of the end frames. The extremities of the side frames are flush with the outer surfaces of the end frames, whereby when the parts are in the extended position (shown in Figs. 1, 3, and 5) the side frames are prevented from bending inward at their centers, or at the points of connection of their sections, by reason of the bracing action of the end frames.

The end frames are provided at their upper edges or rising vertically from their upper bars 6 with pins or dowels 16 to engage sockets 17 in the end bars 18 of the crate-top or cover 19, said crate-top having a frame including said end bars 18, side bars 20, and parallel longitudinal intermediate bars 21. The longitudinal members of the frame of the crate-top are connected by spaced filling-



wires 22, and a suitable slide-door 23 is provided therein to give access to the interior of the crate.

The crate-top end and side bars are connected at the upper corners of the crate by means of springs, corner-braces, or hooks 24, connected by means of staples or clips 25 to the end edges of the crate-top, extending diagonally across the upper corners of the end frames and engaged at their free ends with eyes or staples 26 on the end edges of the side frames. These end braces, in connection with the dowels carried by the end frames and engaging sockets in the crate-top, serve to firmly connect the members of the crate when in their extended or operative position.

Arranged upon the inner surfaces of the intermediate horizontal bars 8 of the end frames and upon the upper bars 15 of the lower side-frame sections are projections or rests 27 to support the upper tray 28, and in the construction illustrated said projections consist of eyes for engagement by angle-braces 29, said angle-braces being in the form of hooks which are permanently connected at one end to one eye and are adapted to engage the other eye and thereby extend diagonally across the angle formed by the intersection of the side and end frames at each corner of the crate. These braces add to the rigidity of the frame and allow the upper side-frame sections, or one of them, to be let down to provide for the removal of the upper tray, when the fowls have been removed therefrom, to give access to the lower compartment of the crate.

In order to facilitate the folding of the crate, the upper tray is constructed, substantially as described in connection with the bottom of the crate, of a sheet-metal bottom 30, end bars 31, and side bars 32, said side and end bars being equal in thickness, whereby their upper and lower surfaces are flush, and the thickness of said side and end bars being equal to the thickness of the end bars 3 of the bottom or lower tray. The upper tray is adapted to fit within the crate, as shown, with the outer edges of its frame-bars contiguous to the inner surfaces of the end and side frames, and hence when it is desired to fold the crate said upper tray may be telescoped within the lower tray with the upper surfaces of its side and end bars flush with the upper surfaces of the end bars 3 of said lower tray. After thus arranging the upper tray within the lower tray the end frames should be folded inwardly to occupy the position shown in Figs. 2, 4, and 6, the side frames should be folded upon themselves with their upper and lower frame-sections in parallel planes and the inner surfaces of the lower sections in contact with the upper surfaces of the end frames, and, finally, the crate-top should be arranged upon the upper sides of the upper side-frame sections and parallel therewith and secured in place to hold the various members of the

crate in the folded position by means of said corner-braces or hooks 24, which are engaged with auxiliary eyes 26<sup>a</sup>, which are arranged on the surfaces of the end bars 3.

It will be seen that when the crate is desired to contain large fowls, such as turkeys, the upper tray may be removed or fitted within the lower tray to form a single compartment instead of two compartments, as illustrated in the drawings, the interior of the crate being practically unobstructed by the arrangement of the upper tray in said folded or telescoped position.

In Fig. 8 I have shown a preferred form of hook provided with a spring or coil 24<sup>a</sup>, extended to form a tongue 24<sup>b</sup>, which, as above described, is stapled to the edge of the crate-top. This coil insures the permanent engagement of the hook with the staple 26 and prevents the disengagement thereof by jarring or otherwise.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having described my invention, what I claim is—

1. In a folding crate, the combination of a lower tray having a frame projecting above the plane of its bottom, end frames hinged to the ends of the lower-tray frame and adapted to fold inwardly over said tray, sectional side frames hinged together at their contiguous edges to fold in parallel planes, the lower edges of the side-frame sections being hinged to the sides of the frame, the lower frame-sections being adapted to fold inwardly and the upper frame-sections to fold outwardly, an upper tray having a frame adapted to fit within the frame of the lower tray, projections on the inner surfaces of the lower side-frame sections near their upper edges and in a common plane upon the end frames to support the upper tray, whereby inward folding of the end frames and the lower side-frame sections is prevented, a crate-top secured to and supported by the end frames, and locking devices for securing the upper side-frame sections in operative position, access being given to the interior of the crate above the upper tray by outwardly folding one of the upper side-frame sections, substantially as specified.

2. In a folding crate, the combination of a lower tray having side and end bars, the side bars extending at their upper edges above the plane of the upper edges of the end bars, an upper tray having a frame adapted to fit within the frame of the lower tray and having side and end bars equal in height to the end bars of the lower tray, whereby they are flush at their upper surfaces with the upper surfaces of the end bars of the lower tray, end frames hinged to the upper edges of the end bars of the lower tray and adapted to fold inward to bear upon the upper surfaces



of the side and end bars of the upper tray, sectional side frames hinged together at their contiguous edges to fold in parallel planes, the lower edges of the lower side-frame sections being hinged to the upper edges of the side bars of the lower tray, whereby the lower side-frame sections bear upon the upper surfaces of the end frames, projections arranged upon the inner surfaces of the side and end frames at intermediate points to support the upper tray when the crate is extended, angle-braces connecting said projections and extending across the angles formed by the side and end frames, a crate-top, and means for securing the same removably to the upper edges of the side and end frames, substantially as specified.

3. In a folding crate, the combination of a lower tray provided with side and end bars, end frames hinged to the upper edges of the end bars of the lower tray and adapted to fold inward parallel with said tray and between the upper edges of the side bars with their upper surfaces flush with the upper edges of the side bars, sectional side frames comprising lower frame-sections hinged to the upper edges of the side bars and adapted to fold inward parallel with the lower tray to lie in contact with the upper surfaces of the end frames, and upper sections hinged to the upper edges of the lower sections and adapted to fold outward and lie in planes parallel with the lower sections, angle-braces or hooks connecting the end frames at intermediate points with the upper bars of the lower side-frame sections and extending diagonally across the angles formed by the side and end frames to hold the lower side-frame sections in contact with the extremities of the end frames, an upper tray arranged within the space inclosed by the side and end frames, projections on

the inner surfaces of the side and end frames to support said upper tray at a point between the planes of the lower tray and the upper edges of the side and end frames, a crate-top, and means for securing the upper edges of the upper side-frame sections to the crate-top, said upper side-frame sections being adapted to be let down to enable the upper tray to be removed without displacing the other members of the crate, substantially as specified.

4. In a folding crate, the combination of a tray, end frames hinged to the end edges of the tray and adapted to fold inwardly, sectional side frames having their lower sections hinged to the side edges of the tray to fold inwardly and their upper sections hinged to the lower sections to fold outwardly, a crate-top supported by the end frames, means for securing the upper edges of the lower side-frame sections to the end frames, and spring-actuated hooks attached to the end edges of the top, extending diagonally across the upper corners of the end frames and engaged with eyes upon the end edges of the upper side-frame sections, whereby said upper side-frame sections are temporarily locked against folding outward and are adapted to be released to give access to the interior of the crate, and whereby the intermediate portions of said hooks extending across the corners of the end frames to prevent the outward displacement of the upper edges thereof, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

DAVID P. ROSENBERGER.

Witnesses:

J. S. GEIL,

GEO. W. HESS.

