

No. 627,148.

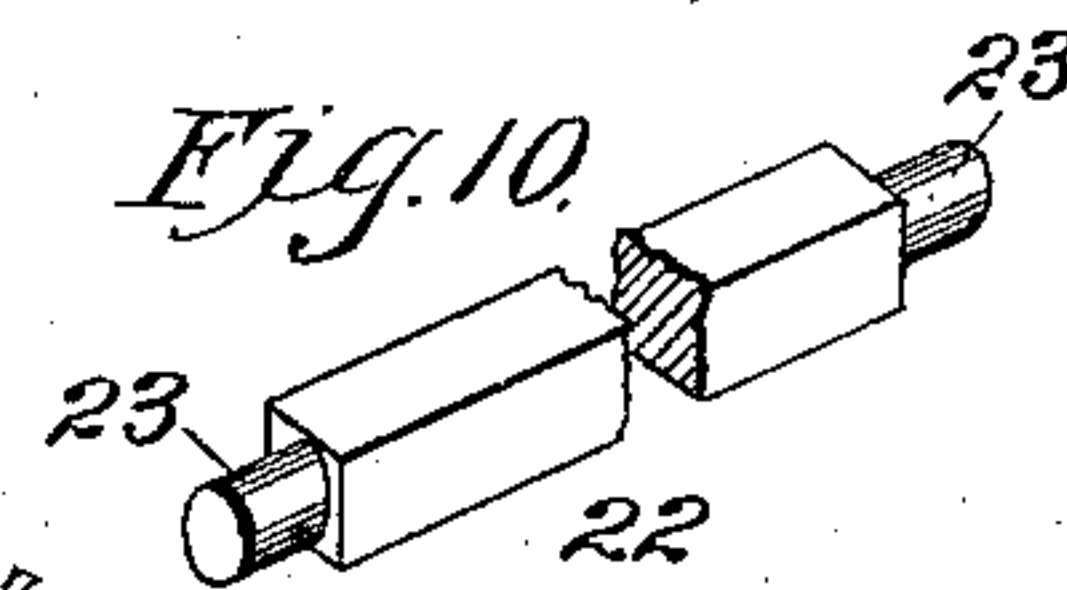
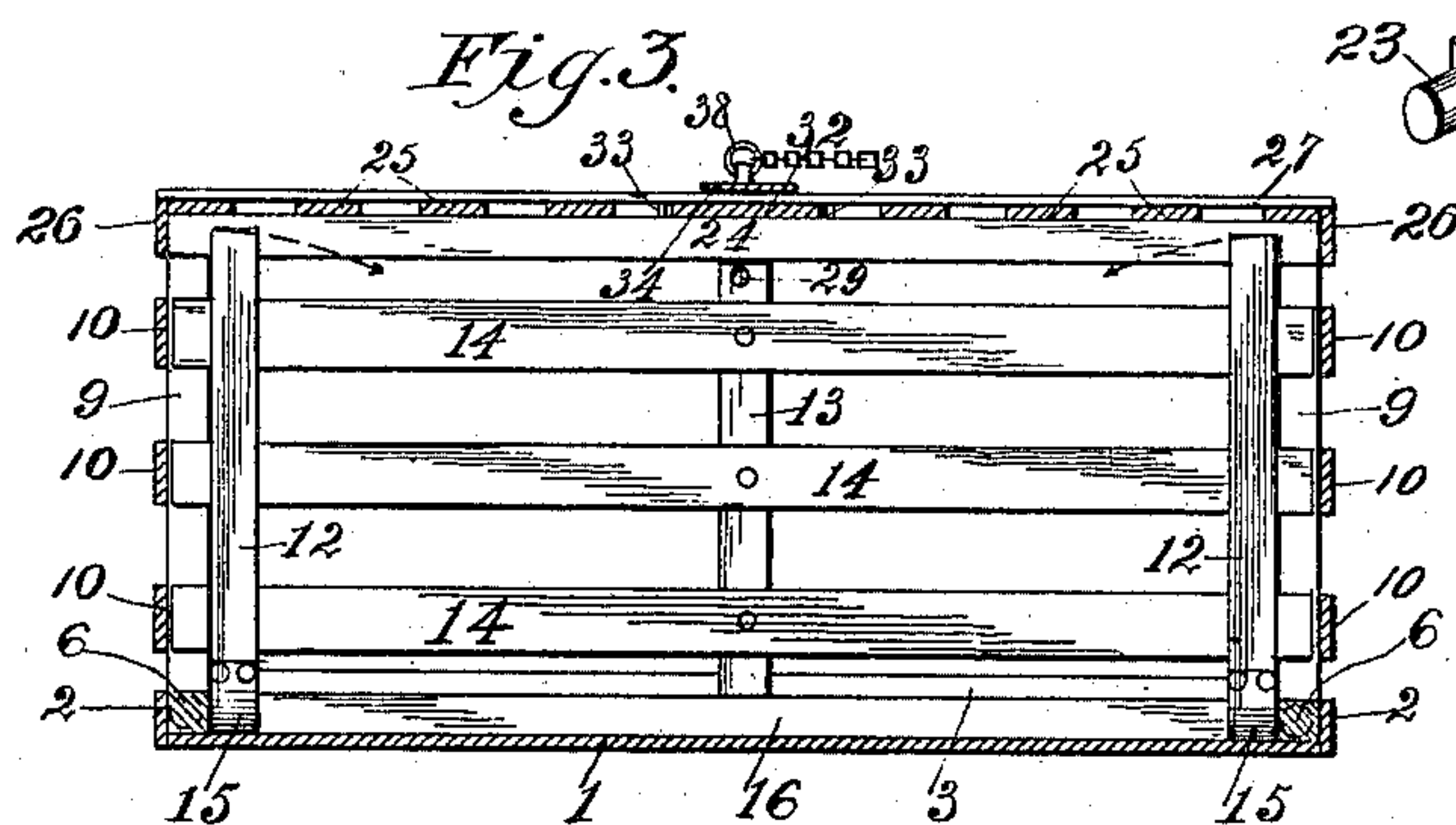
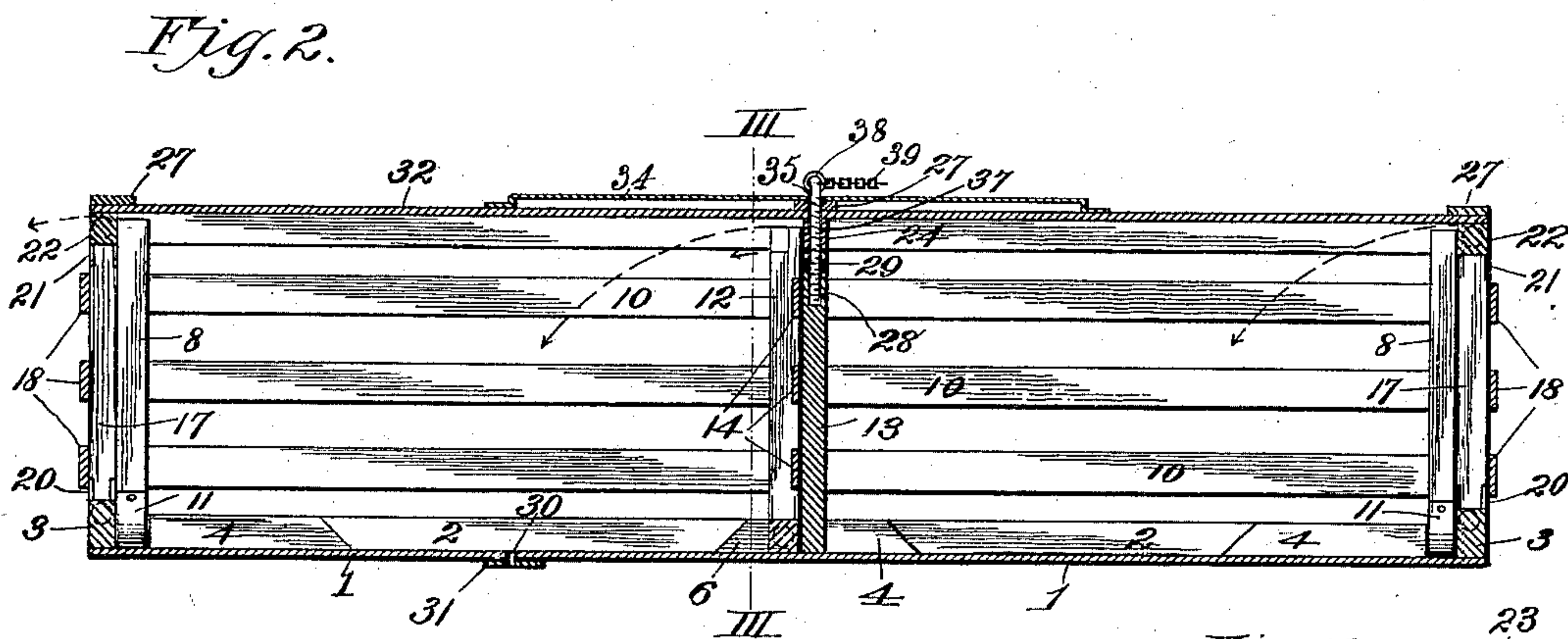
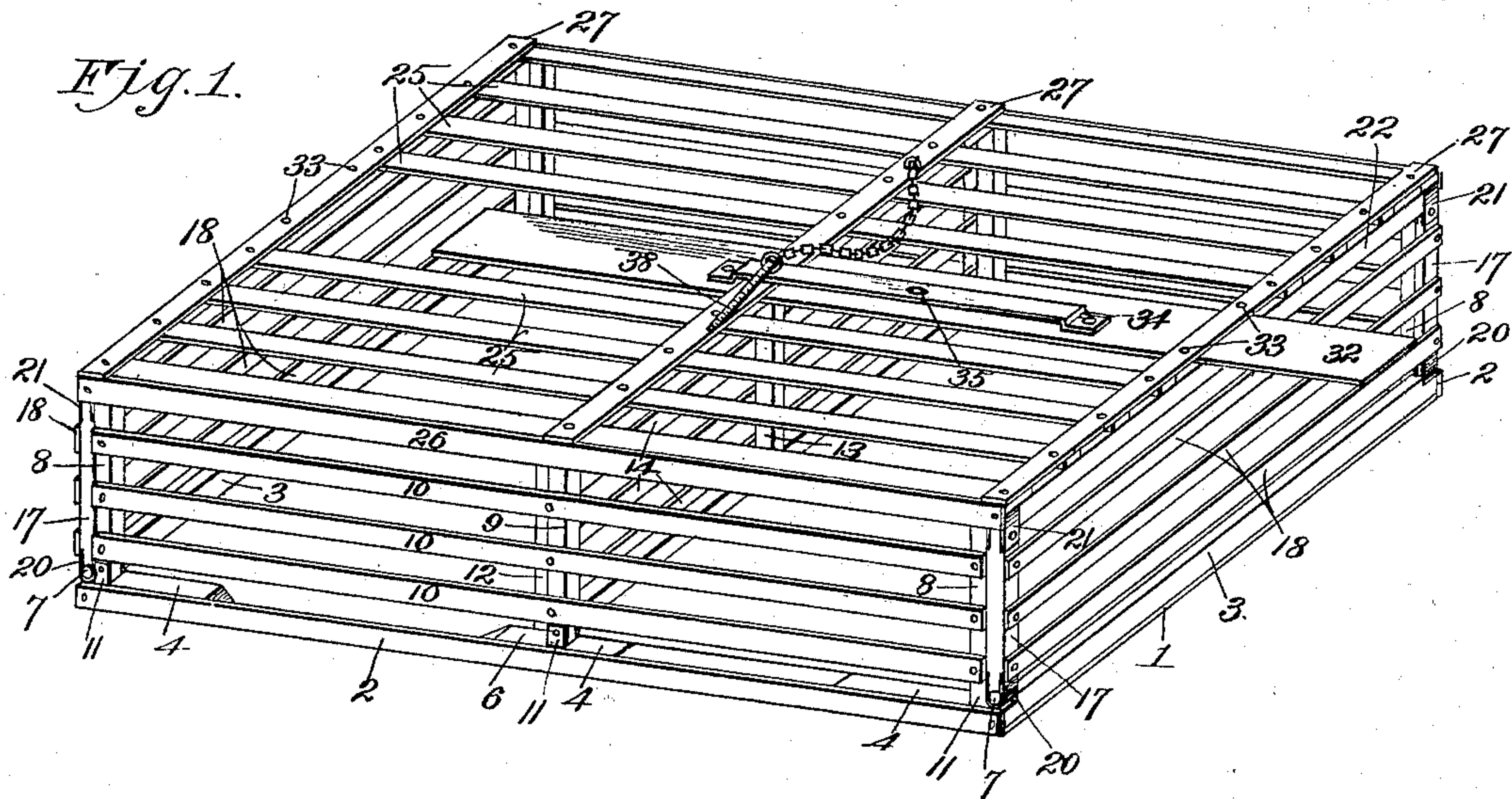
Patented June 20, 1899.

J. A. STAUFFER.  
COLLAPSIBLE POULTRY CRATE.

(Application filed Oct. 15, 1898.)

(No Model.)

2 Sheets—Sheet 1.

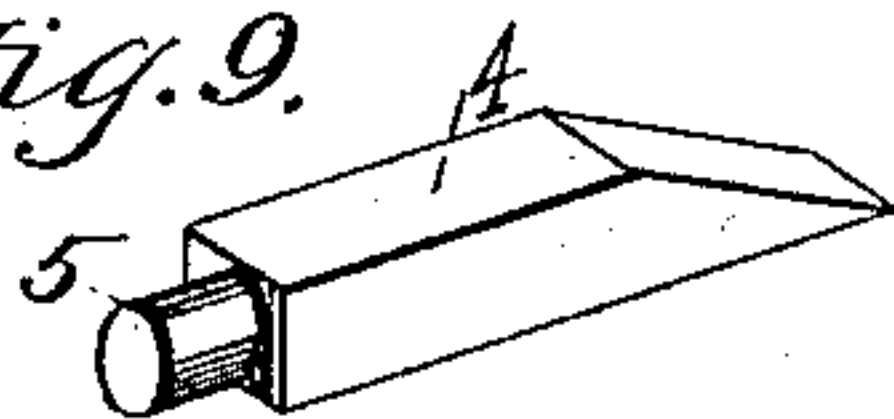


Witnesses:

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*Fig. 9.*



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2 Sheets—Sheet 2.

Fig. 4.

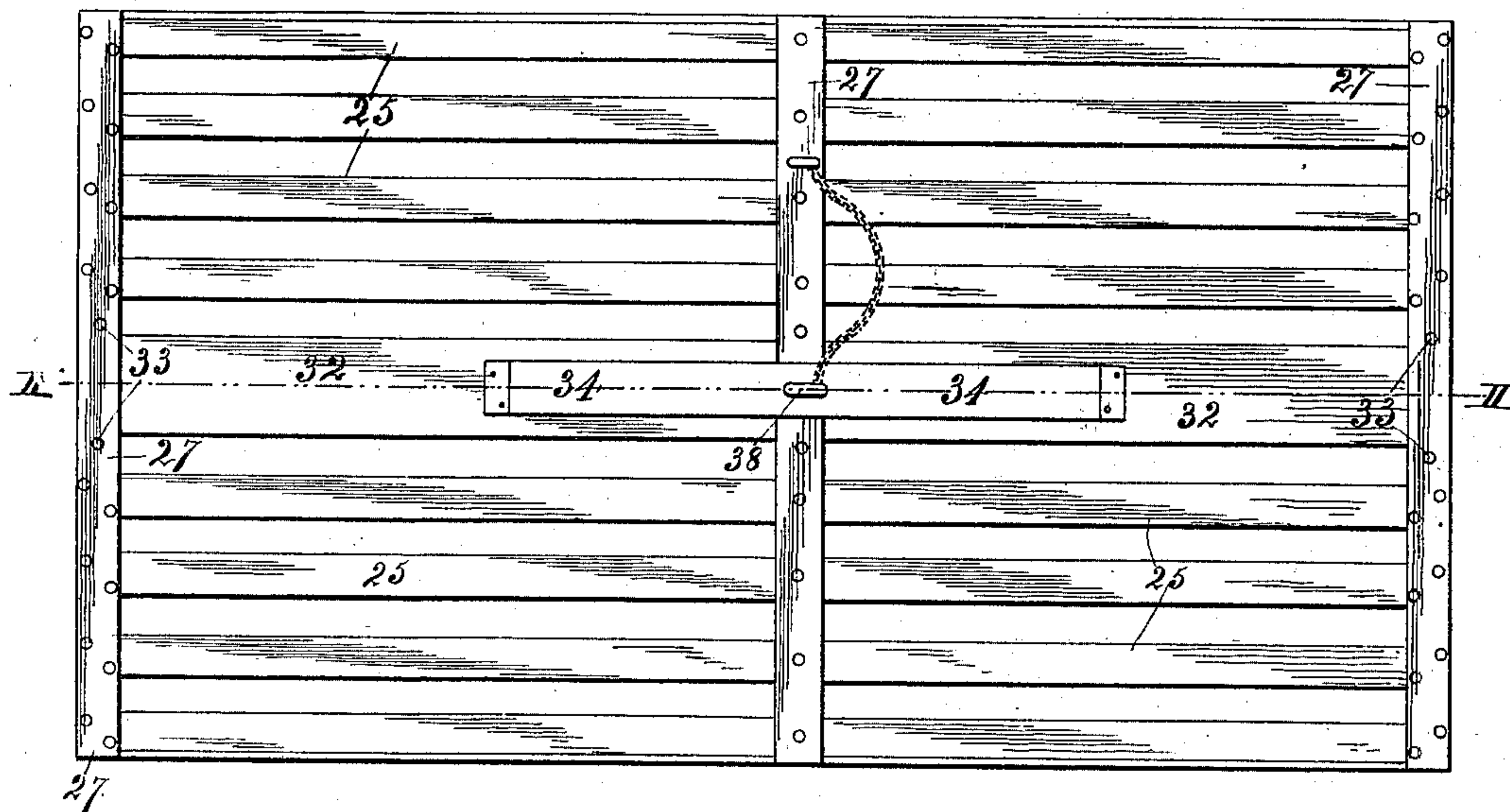


Fig. 5.

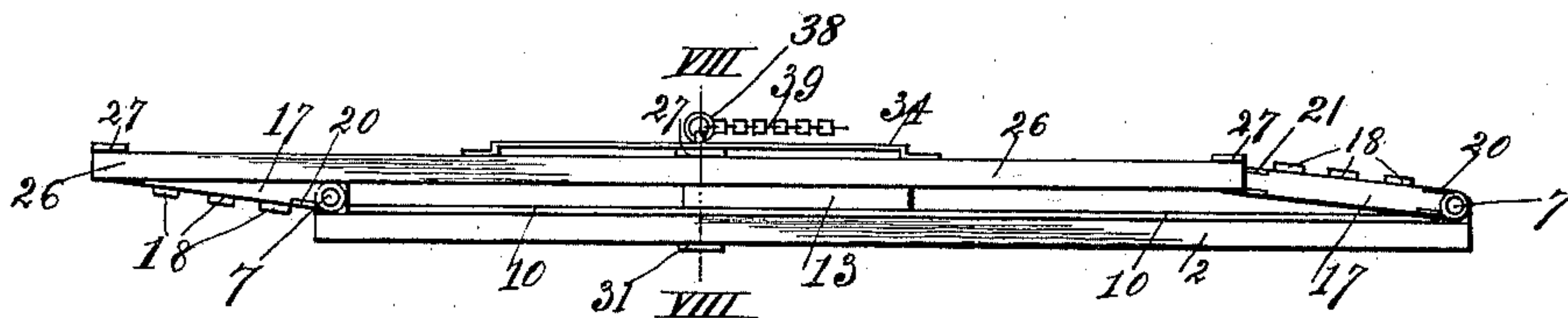


Fig. 6.

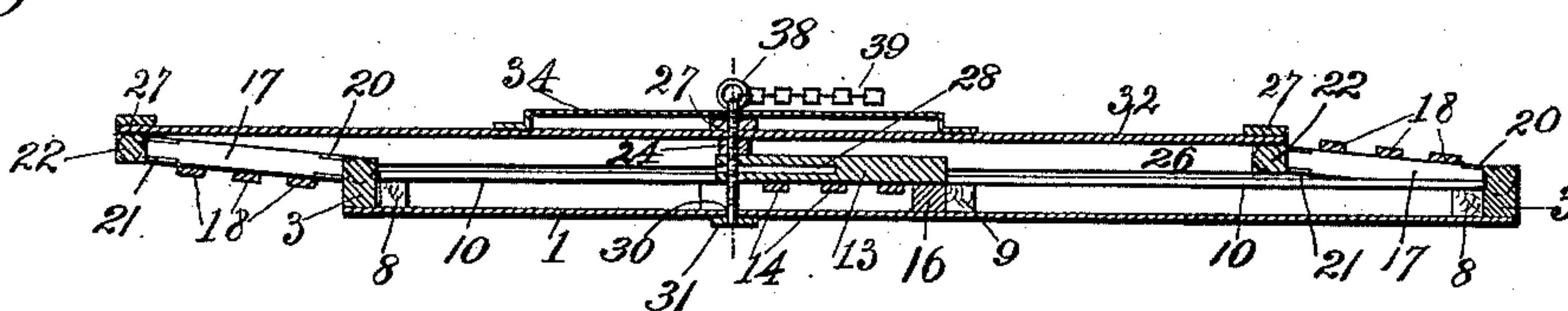


Fig. 7.

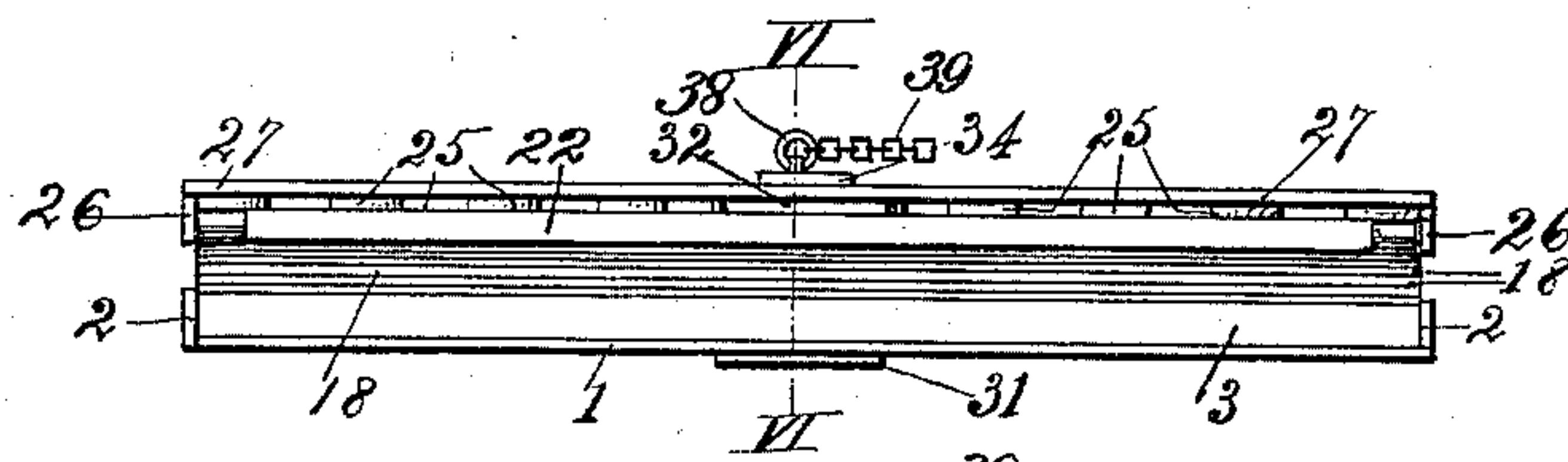
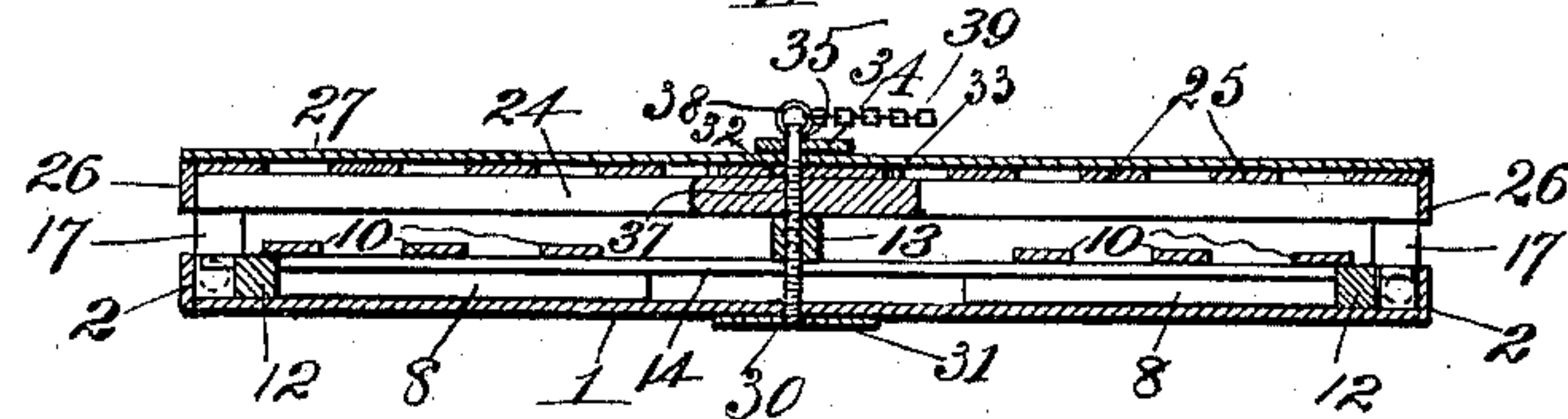


Fig. 8.



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# UNITED STATES PATENT OFFICE.

JACOB A. STAUFFER, OF ABILENE, KANSAS.

## COLLAPSIBLE POULTRY-CRATE.

SPECIFICATION forming part of Letters Patent No. 627,148, dated June 20, 1899.

Application filed October 15, 1898. Serial No. 693,638. (No model.)

*To all whom it may concern:*

Be it known that I, JACOB A. STAUFFER, a citizen of the United States, residing at Abilene, in the county of Dickinson and State of Kansas, have invented certain new and useful Improvements in Collapsible Poultry-Crates, of which the following is a specification.

My invention relates to collapsible or knock-down poultry-crates; and my object is to provide a device of this character of cheap, simple, strong, and durable construction which will obviate the necessity of breaking one or more of the laths or slats when it is desired to remove an inmate and will occupy when collapsed only about one-fourth the space taken up by it when set up, and consequently may be shipped when in that condition at about the same rate as solid freight.

With this object in view the invention consists in certain novel and peculiar features of construction and combinations of parts, as will be hereinafter described and claimed, and in order that it may be fully understood reference is to be had to the accompanying drawings, in which—

Figure 1 is a perspective view of a poultry-crate embodying my invention. Fig. 2 is a vertical longitudinal section of the same, taken on the line II II of Fig. 4. Fig. 3 is a transverse section taken on the line III III of Fig. 2. Fig. 4 is a top plan view of the crate as it appears when the poultry is secured therein. Fig. 5 is a side view, on a smaller scale, of the crate in its collapsed condition. Fig. 6 is a longitudinal section of the same, taken on the line VI VI of Fig. 7. Fig. 7 is an end view of the crate in its collapsed condition. Fig. 8 is a cross-section of the same, taken on the line VIII VIII of Fig. 5. Fig. 9 is a perspective view of one of the sill-blocks. Fig. 10 is a broken perspective view of one of the end bars of the crate-top.

In the said drawings, where similar reference-numerals designate corresponding parts, 1 designates the base or bottom of the crate, of oblong rectangular configuration by preference and provided with upturned side boards 2 and end boards 3. At its four corners are secured the longitudinal sill-blocks 4, terminating at their outer ends in cylindrical pins 5, and midway between said blocks

against the sides 2 are similar blocks correspondingly numbered, and opposite the pins 5 (not shown) of said blocks are secured sill-blocks 6, for a purpose which will hereinafter appear.

The end boards 3 of the crate project to a higher plane than the side boards 2 and are formed above said side boards with spindles 7.

The folding sides of the crate comprise the end bars 8 and the middle bar 9, connected by a series of longitudinal slats 10. Secured to the lower ends of the bars 8 and the middle bar 9 are hinge-clips 11, which are pivotally mounted upon the cylindrical pins 5 of the sill-blocks in order that said sides may be folded inward and down upon the bottom 1 between the end bars 3, as shown in Fig. 8.

The crate is preferably centrally divided by means of a hinged partition consisting, preferably, of two end bars 12 and a middle bar 13, connected by horizontal transverse slats 14, the bars 12 and 13 being arranged at opposite sides of the slats. (See Figs. 2, 3, and 6.) The end bars 12 are provided at their lower ends with clips 15, pivoted to the opposite ends of a sill-block 16, secured to the bottom 1, between the sill-blocks 6, and therefore to one side of the bars 9 of the sides, which are designed chiefly as a brace to protect the middle hinges of the sides and the hinges of said folding partition, although said sill-blocks are not indispensable. The ends of the slats 14 of said partition project beyond the end bars 12, (see Fig. 3,) so that by striking against the middle bars 9 of the folding sides the partition cannot move beyond a vertical position when the crate is being "set up," and it will be observed in this connection that by reason of the fact that the slats 10 of the folding sides are secured to the outer sides of the bars 8 and 9 the hinged partition, which is folded down upon the bottom first, does not prevent the sides from being folded down until said bars 8 and 9 rest flatly and squarely on the bottom also. The partition when upright and so secured in a manner which will hereinafter appear prevents the sides from being folded inward, and the construction of the top, to be presently described, prevents them from swinging outward.

The folding ends of the crate comprise the



end bars 17, connected by transversely-extending horizontal slats 18, and secured to the lower ends of said bars are hinge-clips 20, which are pivotally mounted upon the spindles 7, hereinbefore described, said bars when the crate is set up fitting squarely against the end bars 8 of the sides, which latter therefore absolutely prevent inward movement of the ends. Secured to the upper ends of the bars 10 17 are similar clips 21.

The top of the crate is of skeleton form and consists of the transverse end bars 22, terminating at their ends in pintles 23, and the central transverse bar 24, connected at their upper sides by the longitudinal slats 25, the outermost of said slats overhanging the pintles 23 of the end bars and carrying the depending border-strips 26, which overlap the outer sides of the bars 8 and 9 of the folding 20 sides, and thus prevent the outward movement of the latter, and also overlap the outer ends of the spindles 23, and the hinge-clips engaging and connecting the same pivotally with the folding ends, and thereby serving to 25 prevent endwise movement of the latter. To additionally strengthen this top, transverse top strips 27 are secured to the upper sides of the slats 25 vertically above the end and middle bars 22 and 24 of the same. The middle bar 24 of the hinged top rests squarely 30 down upon the upper ends of the middle bars 9 and 13 of the folding sides and partition, respectively, and also forms an abutment or stop for the end bars 12 of the partition to 35 strike against when the crate is being set up, (see Figs. 2 and 3,) and said middle bar 13 of the partition is provided in its upper end with an axial hole 28 and an intersecting hole 29, the latter being adapted to register with the 40 hole 30 in the bottom and the registering hole of a metallic plate 31 secured to the bottom.

32 designates a slide-door, which forms the central slat of the top and occupies a position midway between the innermost pair of slats 45 25 and the bars 22 24 and top strips 27, and it is furthermore guarded from lateral movement by means of the guide-pins 33. This door is provided at its upper side with a longitudinal bracket 34, bridging the middle top 50 strip 27 and of suitable length to permit the door to be slipped longitudinally until an opening is provided in the top at the desired end of the crate large enough for the easy introduction or removal of the poultry from the 55 corresponding end of the crate, (see Fig. 1,) and said bracket 34 is provided with a central aperture 35, which registers when the crate is set up with similar apertures 36 and 37, respectively, of the middle top strip 27 and 60 cross-bar 24 of the top and also with the hole 28 of the middle bar 13 of the partition, a locking-pin 38 being adapted to extend down through said apertures and into the hole 28 and lock the said strip, the crate-top, and the 65 partition reliably in the positions shown and through the medium of this connection pro-

vide an absolutely rigid structure which will yield in no direction.

When it is desired to ship this crate in an empty condition, it is collapsed as follows: 70 The locking-pin, which is connected by a chain 39, preferably to the top strip to prevent loss, is first withdrawn, and then the partition is folded down until bars 12 lie flatly upon the bottom between the upturned side 75 strips 2 thereof, (see Fig. 6,) with the slats 14 parallel with and a distance above the bottom about equal to the thickness of said bars, the bar 13 being above said slats. (See Fig. 6.) The sides are now folded inward until 80 the bars 8 and 9 thereof rest squarely upon the bottom of the crate, bars 9 being thus disposed at the opposite side of sill-block 16 to that occupied by the recumbent partition. The slats 10, connecting bars 8 and 9 at the 85 outer sides, now overlap and rest upon the slats of the partition at opposite sides of the middle bar 13, (see Figs. 6 and 8,) it being apparent that said middle bar does not interfere with the inward folding operation of 90 the sides because its distance from the hinged ends of the sides is greater than the height of the latter, as shown plainly at Fig. 8, and the fact that the partition does not interfere with the folding of the sides down upon the 95 bottom of the crate proper will be made clear by reference to Fig. 5, where it will be noticed that the bars 9 fold down, as above stated, at the side of the sill-block 16 opposite to the side occupied by the recumbent 100 partition. In brief, the only parts of the partition which are interposed between the folding sides and the bottom are end bars 12 and the slats 14, and as these do not exceed in 105 thickness the thickness of bars 8 and 9 it is obvious that slats 10 above the latter may and do overlap the former. The top is then grasped and pushed longitudinally, so as to fold the ends of the crate in the same direction that the partition was folded, so as to 110 completely collapse the crate and dispose the apertured bracket 34, strip 27, and cross-bar 24 with their apertures registering with the hole 29 of middle bar 13 of the partition and with the hole 30 of the bottom and the registering 115 hole of the metallic plate 31 secured to the bottom, this plate being preferably of sufficient thickness to receive one or two screw-threads for engagement by the threaded lower end of the locking-pin 38, which is again fitted 120 down through said registering apertures in order to lock the crate in its collapsed condition. To set up the crate, the operations described are reversed, as will be readily understood. 125

From the above description it will be apparent that I have produced a poultry-crate which embodies the features of advantage 130 enumerated as desirable in the statement of invention, and it is to be understood, of course, that I reserve the right to make all changes in the form, proportion, detail con-



struction, or arrangement of parts that properly fall within the spirit and scope of the invention.

5 Having thus described the invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A collapsible poultry-crate, comprising a bottom, a hinged partition extending transversely thereof, hinged sides which are prevented from moving inward by the partition when the latter is upright, hinged ends for the crate which are prevented from moving inward by the sides when the latter are upright, and a top hinged to the ends and provided with depending border-strips which prevent the sides from swinging outward, substantially as described.

2. A collapsible poultry-crate, comprising a bottom, a hinged partition extending transversely thereof, hinged sides which are prevented from moving inward by the partition when the latter is upright, hinged ends for the crate which are prevented from moving inward by the sides when the latter are upright, a top hinged to the ends and provided with depending border-strips which prevent the sides from swinging outward, and a locking-pin to extend through apertures in the top and the partition and thus lock the crate in its upright or operative position, substantially as described.

3. A collapsible poultry-crate, comprising a bottom, a hinged partition extending transversely thereof, hinged sides which are prevented from moving inward by the partition when the latter is upright, hinged ends for the crate which are prevented from moving inward by the sides when the latter are upright, a top hinged to the ends and provided with depending border-strips which prevent the sides from swinging outward, and a locking-pin to extend through apertures in the top, the partition, and the bottom, and thus lock the crate in its upright or operative position, substantially as described.

4. A collapsible poultry-crate, comprising a bottom, a hinged partition extending trans-

versely thereof, hinged sides which are prevented from moving inward by the partition when the latter is upright, hinged ends for the crate which are prevented from moving inward by the sides when the latter are upright, a top hinged to the ends and provided with border-strips which prevent the sides from swinging outward, and a slide-door suitably guided forming a part of the top and adapted to be shoved in one direction or the other to open communication with the interior of the crate at one side of the partition or the other, substantially as described.

5. A collapsible poultry-crate, comprising a bottom, a hinged partition extending transversely thereof, hinged sides which are prevented from moving inward by the partition when the latter is upright, hinged ends for the crate which are prevented from moving inward by the sides when the latter are upright, a top hinged to the ends and provided with depending border-strips which prevent the sides from swinging outward, a sliding door, and a locking-pin to engage registering apertures in said door, said top and said partition, substantially as described.

6. A collapsible poultry-crate, comprising a bottom, a hinged partition extending transversely thereof, hinged sides which are prevented from moving inward by the partition when the latter is upright, hinged ends for the crate which are prevented from moving inward by the sides when the latter are upright, a top hinged to the ends and provided with depending border-strips which prevent the sides from swinging outward, a sliding door, a bracket secured to the sliding door to limit its longitudinal movement, and a pin to engage registering apertures in said bracket, door, top and partition, substantially as described.

In testimony whereof I affix my signature in the presence of two witnesses.

JACOB A. STAUFFER.

Witnesses:

M. R. REMLEY,  
G. Y. THORPE.