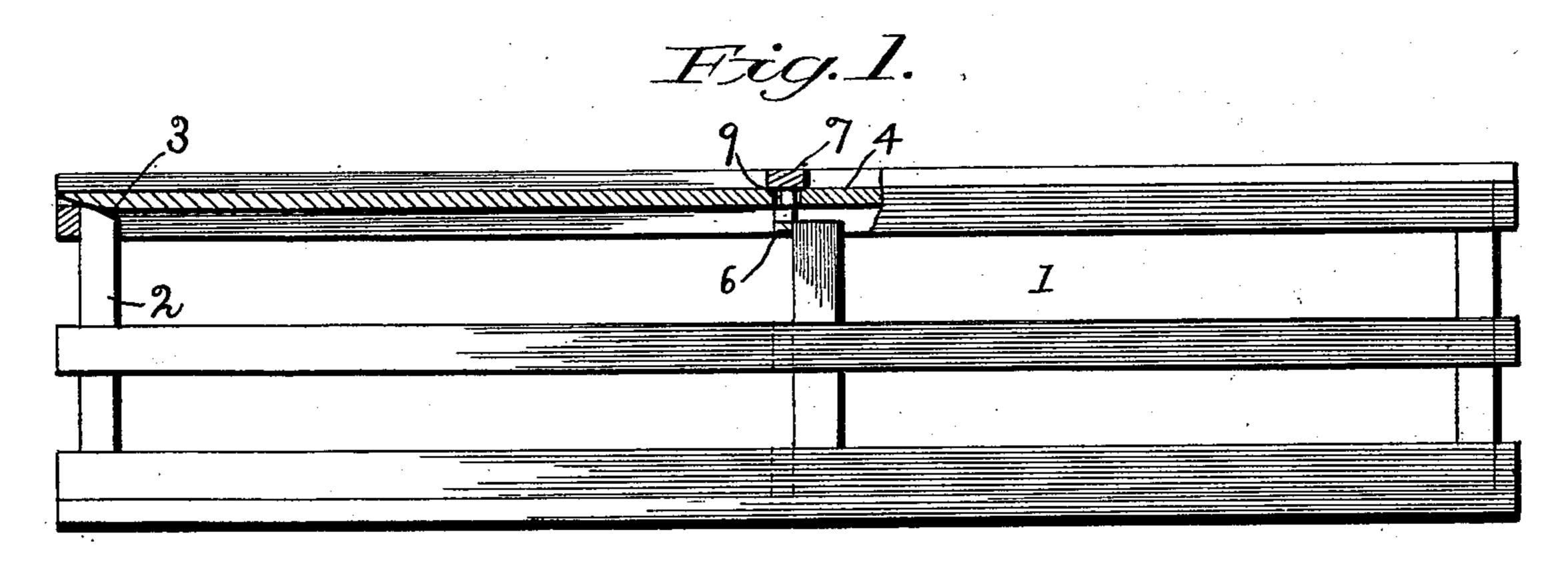
No. 725,898.

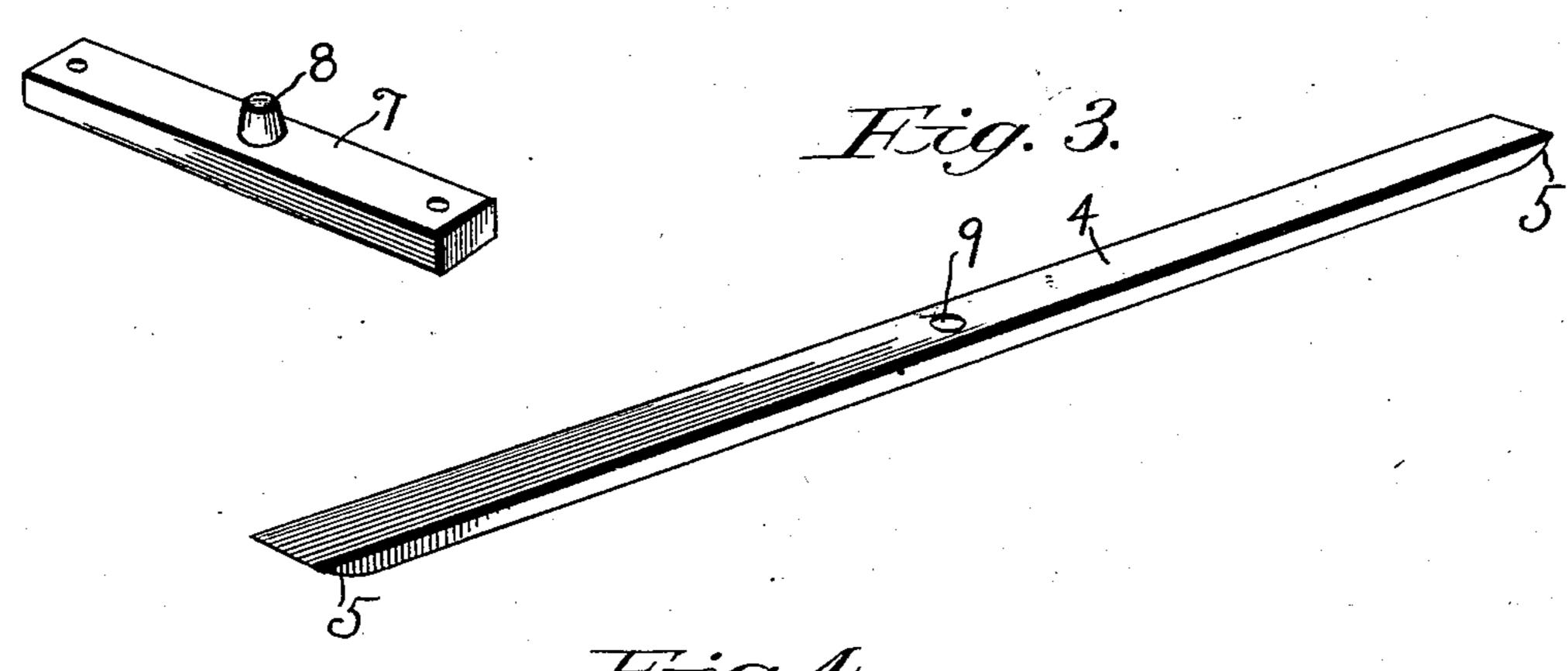
G. L. WALBURN. SHIPPING CRATE.

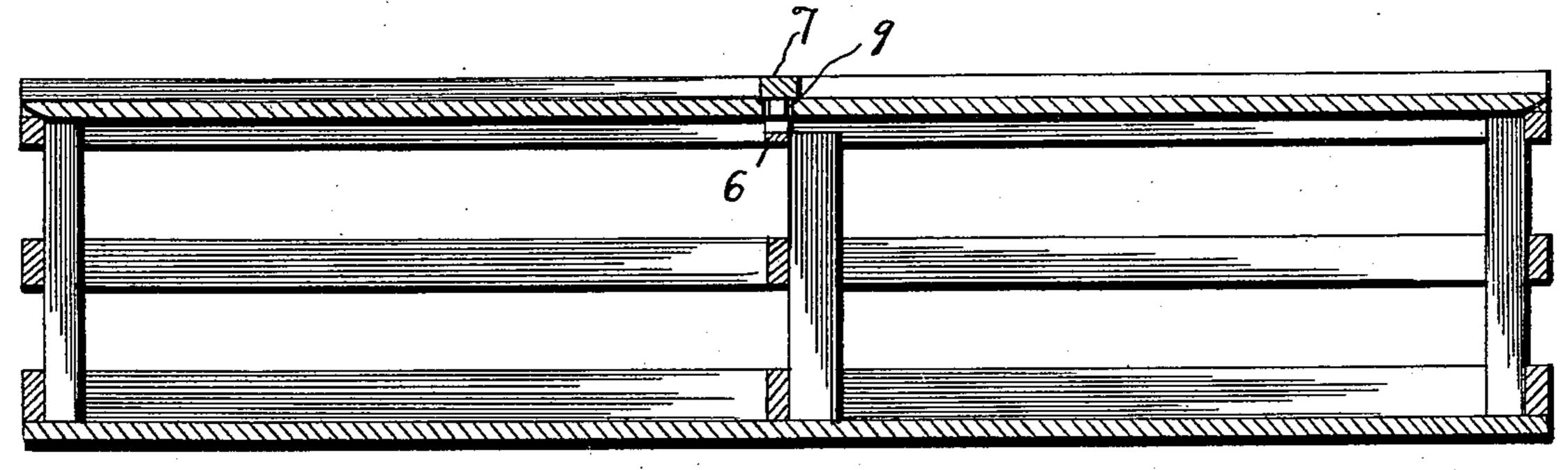
APPLICATION FILED DEC. 24, 1902.

NO MODEL.



Hig. 2.





Inventor

United States Patent Office.

GRANDERSON L. WALBURN, OF SALISBURY, MISSOURI.

SHIPPING-CRATE.

SPECIFICATION forming part of Letters Patent No. 725,898, dated April 21, 1903.

Application filed December 24, 1902. Serial No. 136,478. (No model.)

To all whom it may concern:

Be it known that I, GRANDERSON L. WAL-BURN, a citizen of the United States of America, residing at Salisbury, in the county of 5 Chariton and State of Missouri, have invented certain new and useful Improvements in Shipping-Crates, of which the following is a specification.

This invention relates to shipping crates, 10 and particularly to that class known as "poul-

try" or "live-stock" crates.

The objects of the invention are, first, to produce a closure for crates of the character noted which can be readily applied and re-15 moved and in which the retaining or engaging members are minimized and of comparatively small cost; second, to produce a selflocking closure which will automatically engage the retaining member as the said clo-20 sure is applied to a crate; third, to produce a crate-closure and means for retaining the closure against displacement against pressure from within the crate or by reason of the vibration incident to its transportation 25 or the jar encountered in handling.

Finally the object of the invention is to produce a crate and closure which will possess advantages in point of durability.

With the foregoing and other objects in 30 view the invention consists in the details of construction and in the arrangement and combination of parts to be hereinafter more fully set forth and claimed.

In describing the invention in detail refer-35 ence will be had to the accompanying drawings, forming part of this specification, wherein like characters denote corresponding parts in the several views, and in which—

Figure 1 is a view in elevation, partly in 40 section, illustrating a crate and closure embodying the invention. Fig. 2 is a view in perspective of the closure-engaging member. Fig. 3 is a perspective view of a closure. Fig. 4 is a vertical longitudinal section of the 45 crate and closure.

In the drawings, 1 indicates the crate, which may be of any desired size or configuration, the only requirement being that the opening to receive the closure shall be at a point in 50 line with the upright posts, such as shown at 2, in which their upper ends are beveled in-

faces for the closure 4, the said closure having its ends beveled, as shown at 5, in order that the end riding over the surface of the 55 post may be elevated and brought to approximately the same horizontal plane as the other end.

This invention is applicable also to crates in which posts with beveled ends are omitted, 60 and the invention is applicable to crates now in ordinary use by beveling the ends of the closures, applying the closure-retainer, and forming a hole in the closure. In this form where posts are omitted the closure may be 65 sprung up at the end to engage the upper edges of the sides of the crate by the operator.

Stays or ribs 6 are usually provided centrally the length of the crate or, as frequently happens, the crates are formed with central 70 partitions; but in any event the rib or stay is recessed to form a guide in which the closure is slidable. The closure-retaining member is in the form of a plate 7, which is secured to the rib or stay and provided with a 75 lug 8, depending into the recess of the rib or stay, there being sufficient space between the end of the lug and the bottom of the recess to permit the closure to slide therein. It will be observed that the closure, herein shown 80 in the form of an ordinary crate-strip, has an aperture 9 intermediately its length in such position as to coincide with the lug of the retaining member when both ends of the closure are engaging the ends of the crate.

From inspection of the drawings and from the foregoing description it will be apparent that inserting the end of the closure in the recess of the rib or stay and pushing said closure toward the end of the crate the bev- 90 eled end of the closure engages the cam-surface of the post and rides thereon until the end in engagement with the post is carried to the top of the post. The lug-retaining member terminates on a plane inside of the plane 95 of the tops of the posts, so that during the travel of the closure in the recess, after the end of the closure starts to ascend the surface of the post, the lug of the retaining member serves to depress the central part of the clo- 100 sure and causes a certain amount of yielding until the aperture of the closure coincides with the lug, when by reason of the resiliency wardly, as shown at 3, to form camming-sur- | of the closure it springs up over the lug and

is caught and retained against further longitudinal movement, and said closure can be released only on the depression of the central portion of the closure and at the same time 5 thrusting the closure longitudinally. As the power must be applied in two directions to effect a release of the closure it stands to reason that accidental displacement will be unlikely. In case the closure becomes warped to through prolonged use it would only be nec-

essary to invert it to make it useful in the connection, as described.

Having fully described the invention, what I claim as new, and desire to secure by Letters

15 Patent, is—

In a device of the character described a crate having the usual contour, posts having camming-surfaces on their upper ends, a cen-

tral rib having a recess cut in its central portion, a closure-retaining member having a de- 20 pending lug formed integral therewith and adapted to be secured over the recess in the rib, a closure having camming-surfaces at each end and provided with an aperture intermediately its length, said closure being slidable 25 underneath the closure-retaining member and by its resiliency caused to engage the retaining member as and for the purpose specified.

In testimony whereof I affix my signature, in the presence of two witnesses, this 1st day 30

of December, 1902.

GRANDERSON L. WALBURN.

Witnesses:

MARY K. ROSE, W. G. TYZZER.