

No. 664,192.

Patented Dec. 18, 1900.

G. T. TREADWELL.
COLLAPSIBLE CRATE.

(Application filed July 19, 1900.)

(No Model.)

2 Sheets—Sheet 1.

FIG. 1.

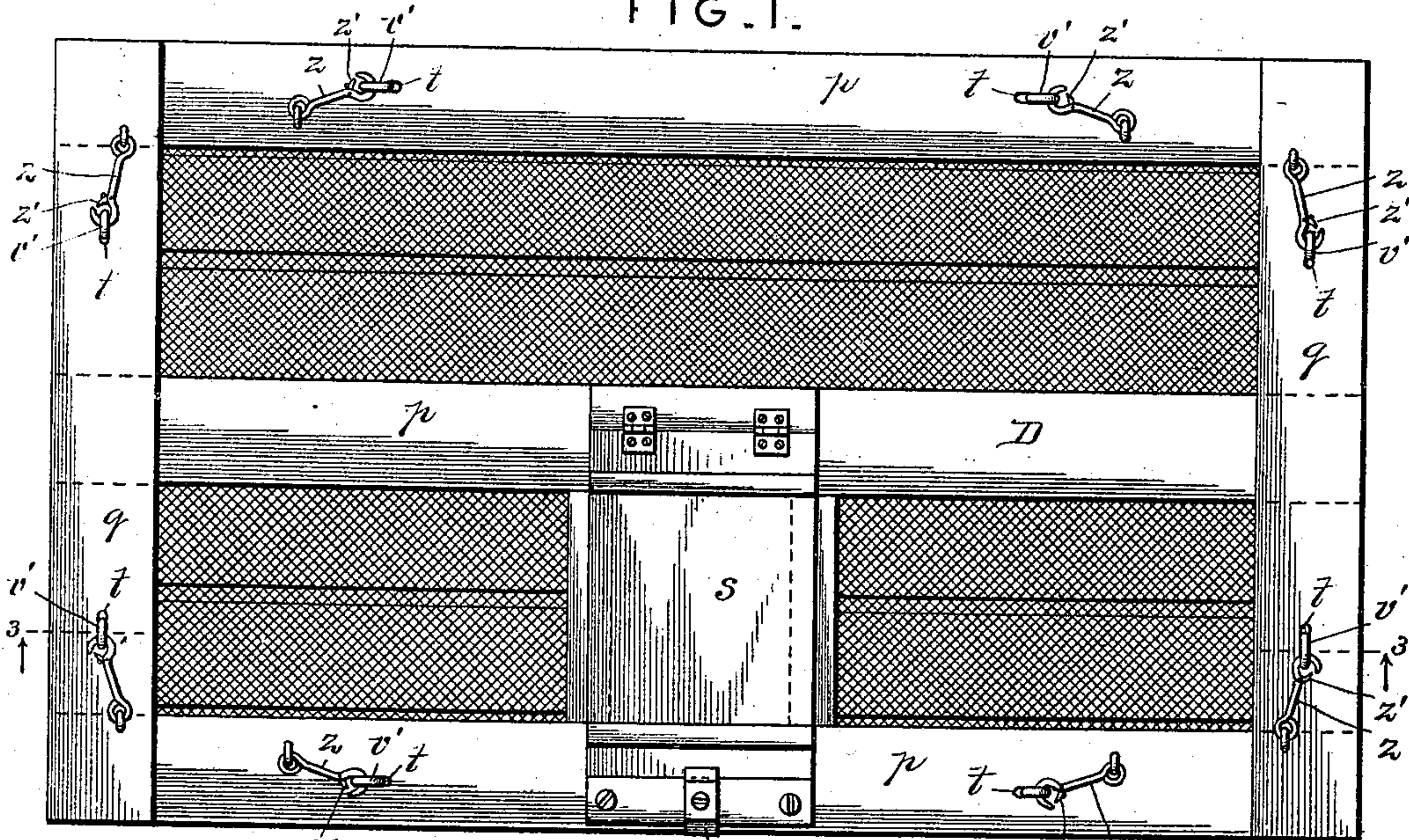


FIG. 2.

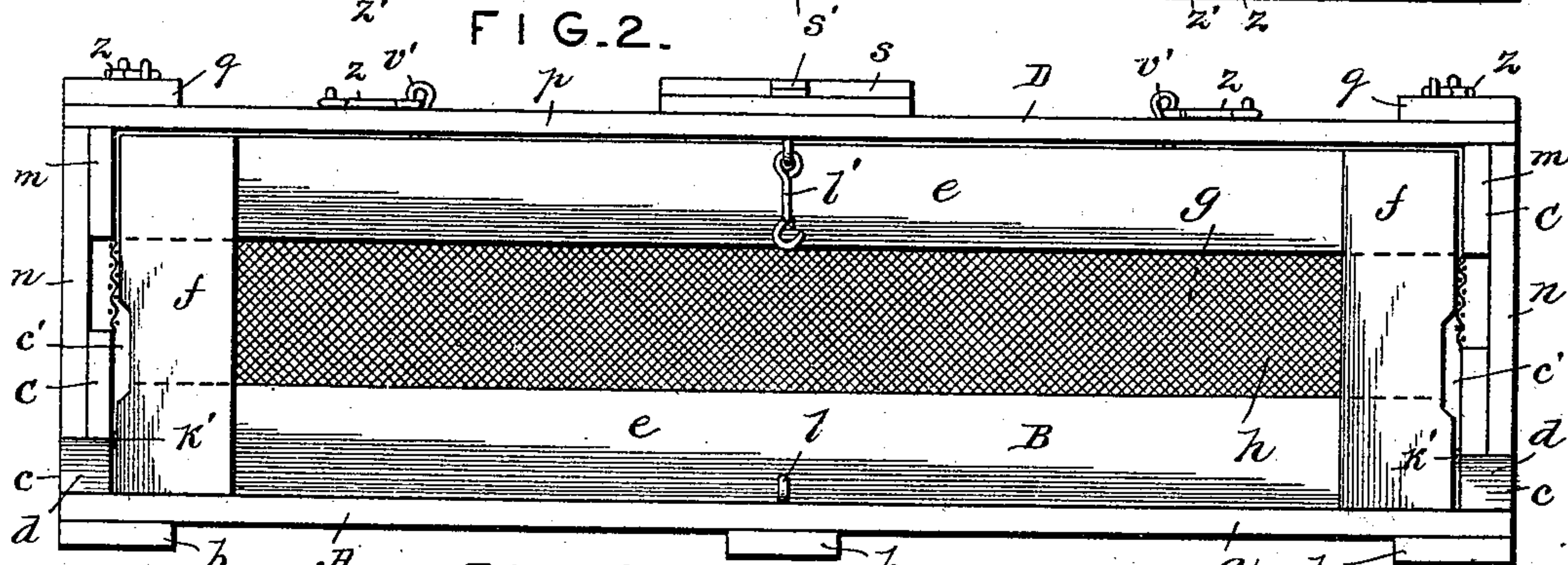
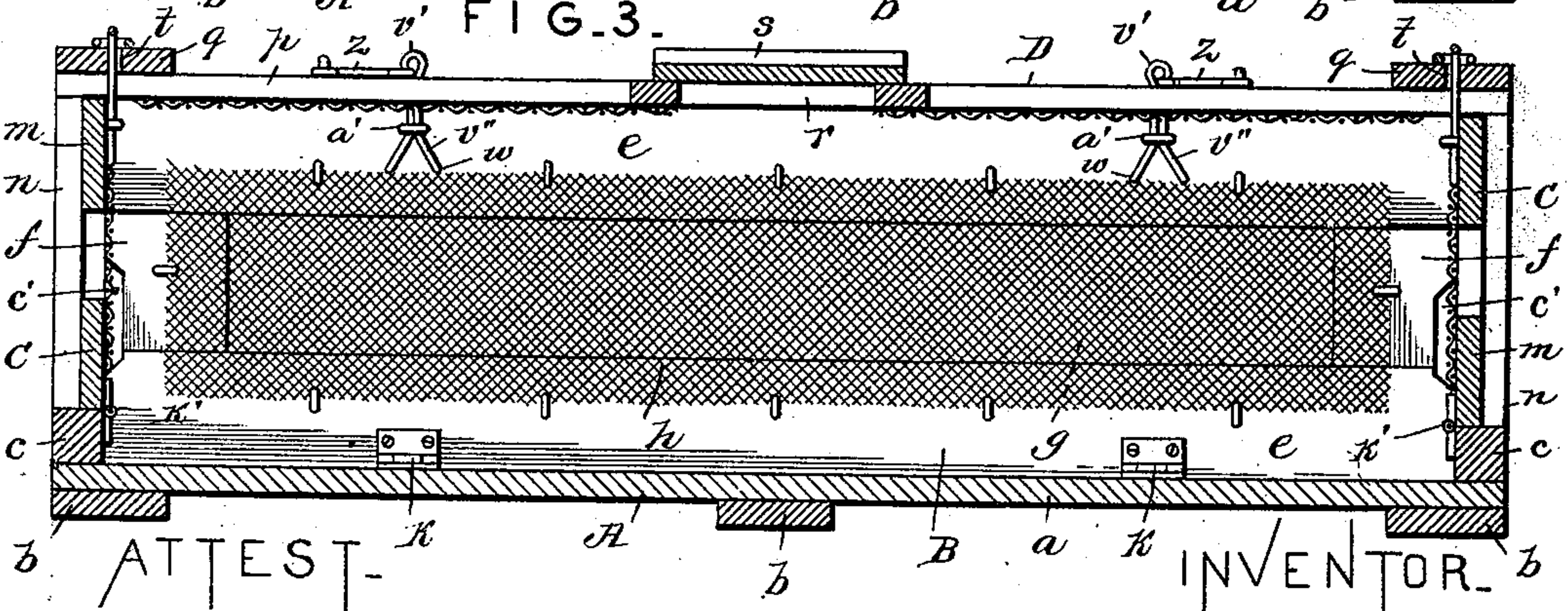


FIG. 3.



ATTEST-

Harry L. Amer.
George M. Anderson

INVENTOR-

George T. Treadwell.
By E. W. Anderson.
his Atty.

G. T. TREADWELL.
COLLAPSIBLE CRATE.

(Application filed July 19, 1900.)

(No Model.)

2 Sheets—Sheet 2.

FIG. 4.

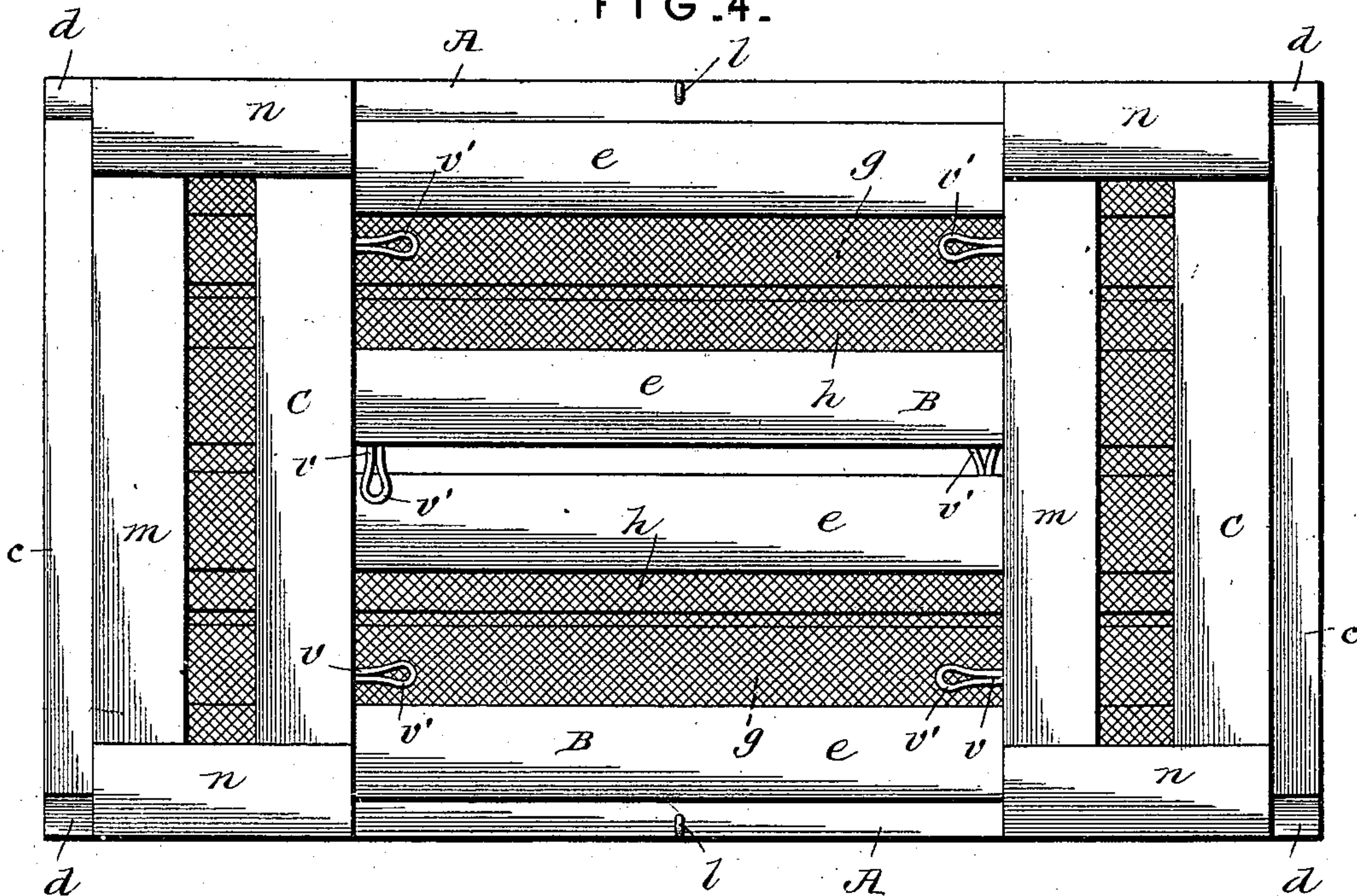


FIG. 5.

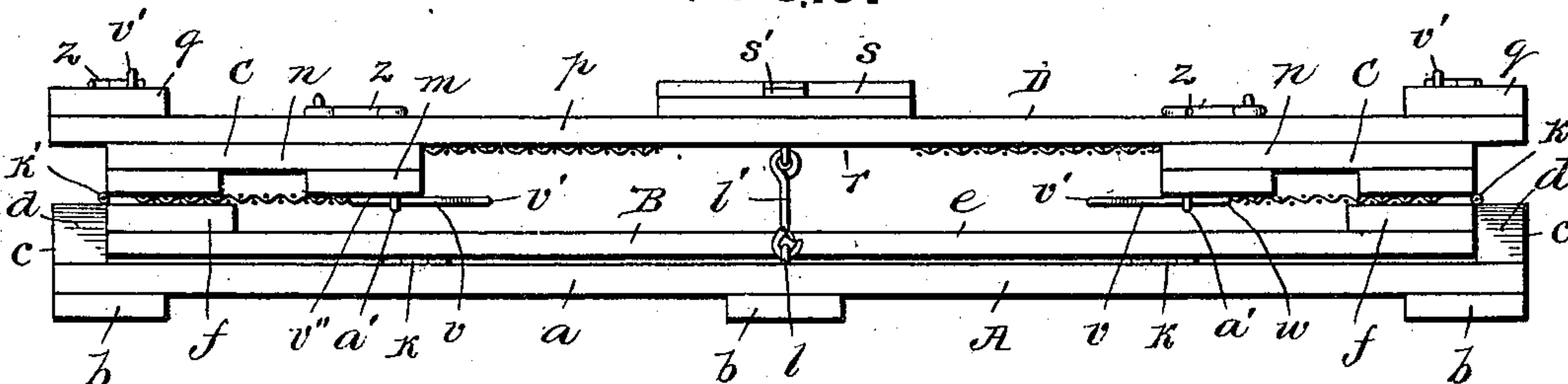
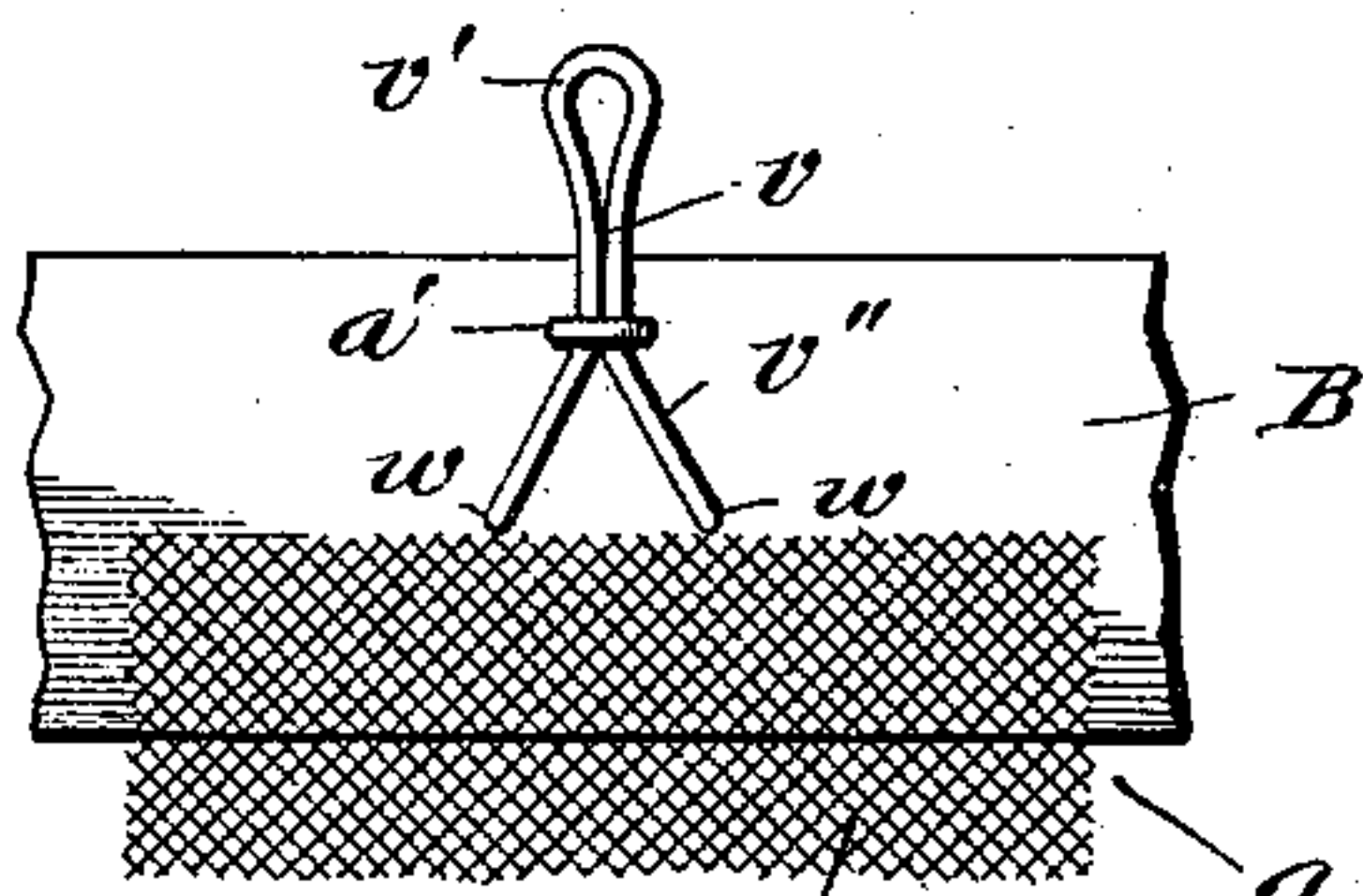


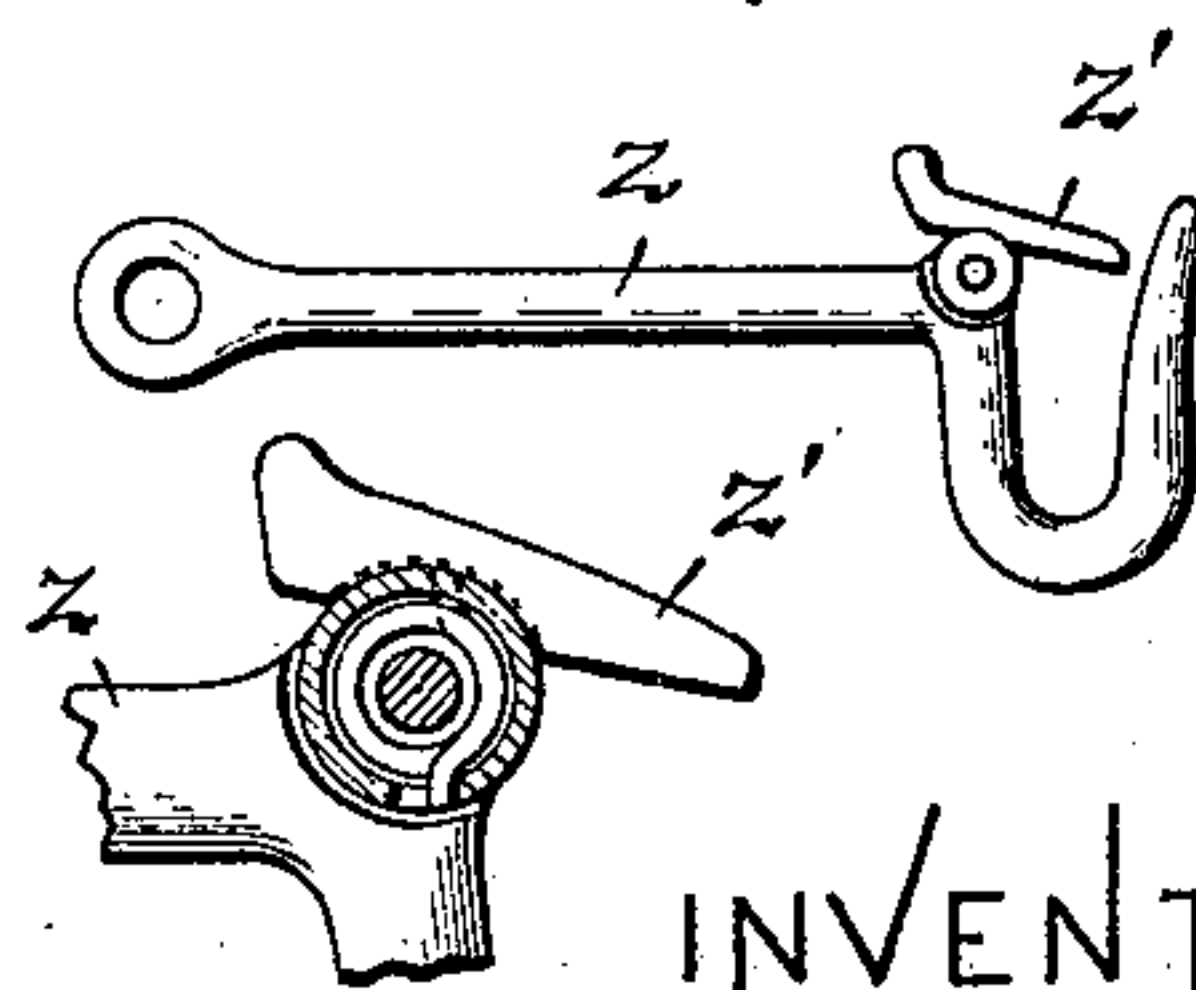
FIG. 6.



ATTEST.

Harry L. Amer.
George M. Anderson

FIG. 7.



INVENTOR.

George T. Treadwell.

By C. W. Anderson -
his Atty.

UNITED STATES PATENT OFFICE.

GEORGE T. TREADWELL, OF SELMA, ALABAMA.

COLLAPSIBLE CRATE.

SPECIFICATION forming part of Letters Patent No. 664,192, dated December 18, 1900.

Application filed July 19, 1900. Serial No. 24,204. (No model.)

To all whom it may concern:

Be it known that I, GEORGE T. TREADWELL, a citizen of the United States, and a resident of Selma, in the county of Dallas and State of Alabama, have made a certain new and useful Invention in Collapsible Crates; and I declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 is a plan view of the crate. Fig. 2 is a side elevation of the same. Fig. 3 is a section on the line 3 3, Fig. 1. Fig. 4 is a plan view of the crate collapsed. Fig. 5 is a side view of the same. Fig. 6 is a detail view of one of the loops V. Fig. 7 illustrates in detail one of the fastening-hooks Z.

The object of the invention is to provide a knockdown or collapsible crate; and it consists in the construction and novel combinations of parts, as hereinafter set forth.

In the accompanying drawings, illustrating the invention in connection with a crate especially adapted to contain chickens, the letter A designates the bottom of the crate; B B, the sides hinged thereto; C C, the ends hinged to cleats thereof, and D the top or cover.

The bottom A consists of longitudinal strips or slats *a*, which are secured together by means of the cross strips or cleats *b* on the lower surface at the ends and middle of said bottom. At the ends on the upper surface of the bottom are secured the risers or cleats *c*, which also extend across and serve to hold the ends of the bottom slats in a clamping manner. The ends of the riser-cleats are beveled, as indicated at *d*.

Each side B consists of the longitudinal slats *e* and the cross-slats *f*, whereby the slats *e* are secured together at such distance apart as is desirable to leave between them an interval *g*, which may be closed with wire-netting *h*. The sides are connected to the outer bottom slats by means of hinges *k*, which are placed sufficiently inward to permit the sides when raised to standing position to abut against said outer bottom slats, and thus acquire a firm position at right angles to the bottom. When in such standing position,

the loop or screw-eye *l*, which is secured to the middle of the outer bottom slat, abuts against the middle portion of the side and assists in holding it firmly in position.

The ends C C are of similar construction to the sides, consisting of the slats *m* and the cross-pieces *n*, which connect said slats, and when in upright position abut against the cleat-risers *c* of the bottom. These ends are connected to the cleat-risers by means of hinges, (indicated at *k'*.) The ends are not so broad as the sides of the crate, being hinged to the risers, and when both ends and sides are unfolded to upright position their upper edges are in the same plane or flush with each other in proper position to receive the top D. The openings between the slats of the ends may be covered with wire-netting.

The top or cover consists of the longitudinal slats *p* and the transverse end slats *q*, to which they are secured. Intervals between the slats may be covered with wire-netting, and a hand-opening is provided at *r* for access to the crate. A cover *s* is provided for this hand-hole, said cover being usually hinged and being secured by means of a button *s'*.

Through the side and end slats of the top are made small slots *t* to receive the loop ends of the wire loops *v*, which are secured to the upper slats of the sides and ends and passing through said slots provide eyes for the fastening-hooks *z* of the top. These fastening-hooks are provided with spring-stops, (indicated at *z'*,) which serve to prevent the hooks from escaping casually from the loop-eyes. The loops *v* are of wire and consist of the looped upper ends, the double shank portions *v'*, and the diverging branches *v''*, which have offset or bent ends *w*, adapted to be driven into the slats, as indicated. The shanks are then secured by means of staples *a'*.

The end slats of the sides are notched, as indicated at *c'*, to provide for passing the joints of the end hinges when the sides are raised to upright position, in which they abut neatly against the ends of the crate.

The top or cover is provided upon its bottom at the middle of each side with a hook *l'*.

When the crate is in upright position, it is held securely by means of the loops *v* and hooks *z* and is firmly braced by the abutting portion of its ends and sides. When it is not

in use, it can be folded for storage or transportation by releasing the hooks from the loops *v*, removing the top temporarily, folding down the sides against the bottom, folding down the ends on the sides, and placing on said ends the top or cover, which is then secured to the bottom by connecting its middle hooks *l'* with the middle eyes *l* upon the top of the bottom. The crate is thus secured in collapsed form and is ready for shipment or storage.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

In a collapsible crate, the combination with the bottom portion, having the side and end portions hinged thereto to fold down thereupon, of the loops or eyes secured to the top

of said side and end portions, the removable cover having slots in its sides and ends arranged to receive said loops or eyes, pivoted catches secured to the top of said cover for engagement with said loops to secure the parts of the crate in their normal positions, additional pivoted catches secured to said cover, and loops or eyes upon said crate-bottom for engagement with said last-named catches to secure the parts of the crate together when collapsed, substantially as specified.

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

GEO. T. TREADWELL.

Witnesses:

J. T. LUMSDEN,

JNO. S. FORD.