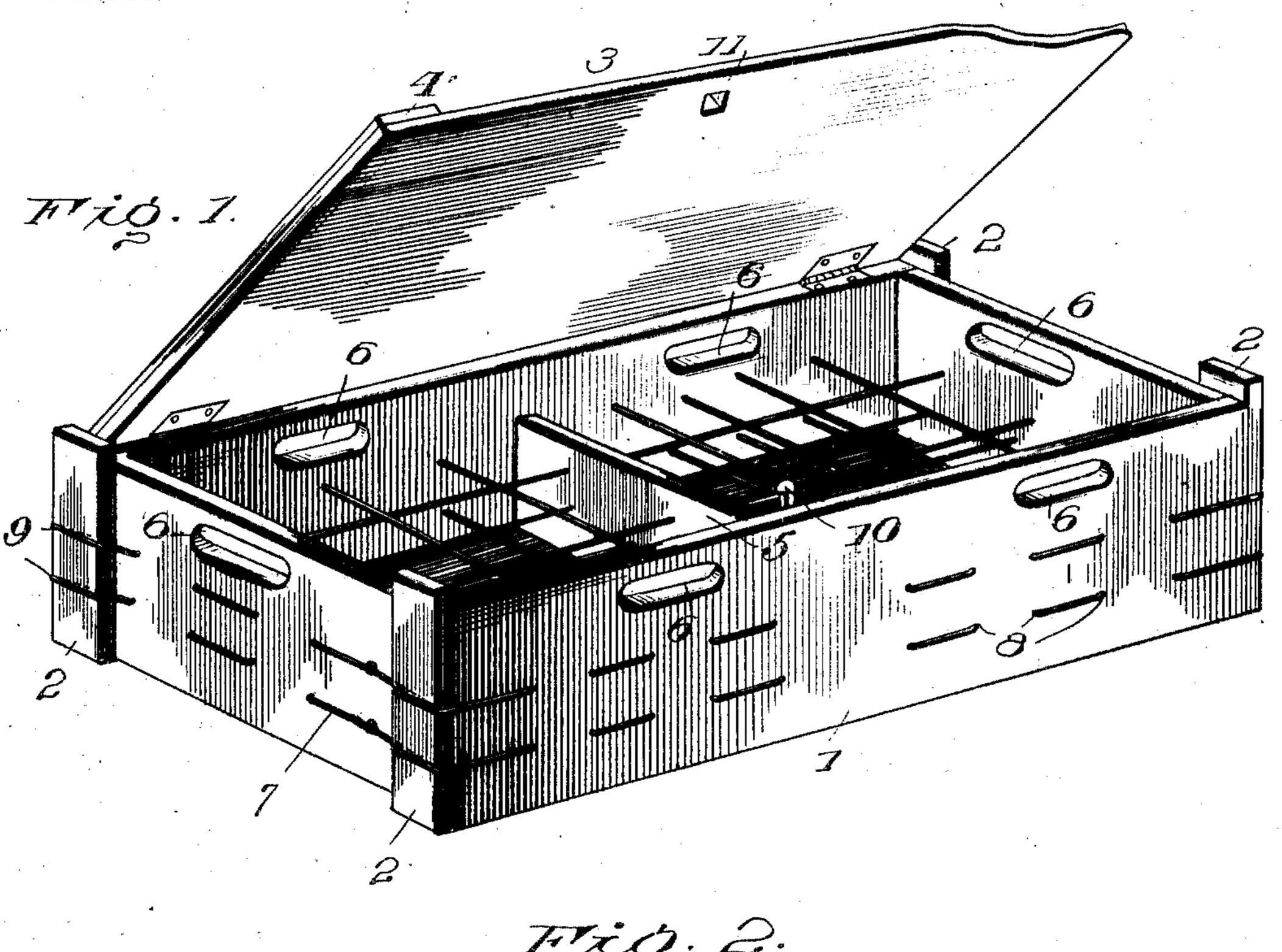
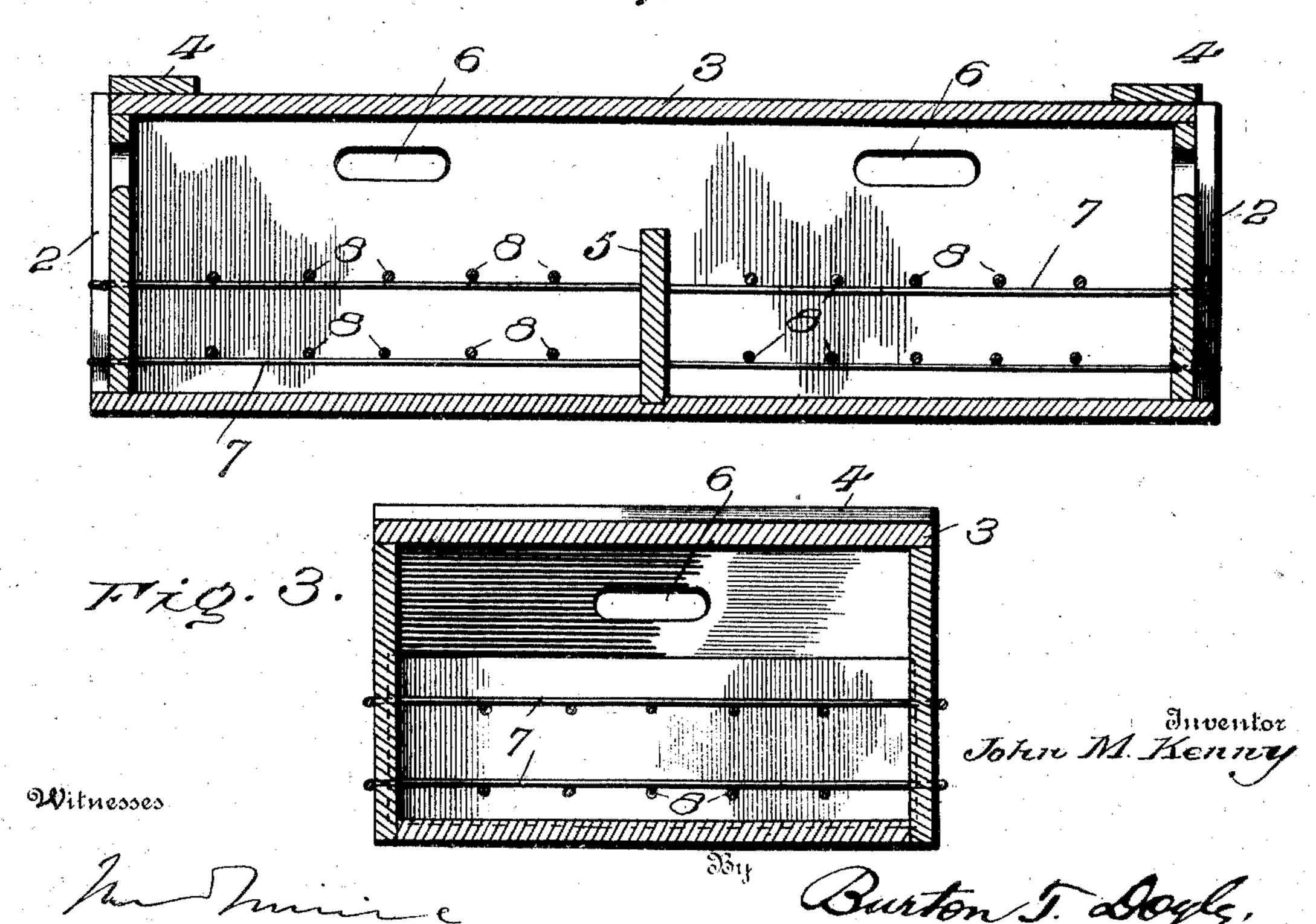
## J. M. KENNY. SHIPPING CRATE. APPLICATION FILED AUG. 4, 1903.

NO MODEL.





## United States Patent Office.

JOHN MICHAEL KENNY, OF NASHVILLE, TENNESSEE, ASSIGNOR OF TWO-THIRDS TO PERKINS BAXTER AND ALEXANDER G. HUNTER, OF NASHVILLE, TENNESSEE.

## SHIPPING-CRATE.

SPECIFICATION forming part of Letters Patent No. 766,829, dated August 9, 1904.

Application filed August 4, 1903. Serial No. 168,136. (No model.)

To all whom it may concern:

Be it known that I, John Michael Kenny, a citizen of the United States, residing at Nashville, in the county of Davidson and State of Tennessee, have invented certain new and useful Improvements in Shipping-Crates, of which the following is a specification.

My present invention relates to packingcrates for shipping bottles and other commodities of oblong shape in such a manner as will give them protection against being bumped together; and its object is to produce a packing-crate which will be lighter, stronger, and tougher than any other crate now in use for such articles.

Another object of my invention is to produce a packing-crate of the character described which will not require the use of excelsior, sawdust, cotton, or other padding to protect the articles shipped against being injured or destroyed by jarring contact with each other.

Another object of my invention is to produce a shipping-crate of the character described which will save the shipper freight by diminishing the weight of the crate in which his articles are shipped and will at the same time give him better protection of the articles shipped.

Another object of my invention is to produce 30 a packing-crate of the character described which will not only afford to the articles shipped protection against weather, pillage, and molestation, but at the same time will provide them with ample ventilation and ready 35 means of being handled.

I attain these and other ends not specially pointed out, by means of the construction, combination, and arrangement of parts explained in the specification, pointed out in the claim, and illustrated in the accompanying drawings, which form a part of this specification, in which—

Figure 1 is a view in perspective of one of my packing-crates having the lid partly raised so as to expose the interior formation. Fig. 2 is the side view of a longitudinal section through one of my packing-crates with the

lid down, and Fig. 3 is the side view of a cross-section through one of my packing-crates with the lid down.

Like characters of reference denote like parts wherever they occur throughout the various views of the drawings.

1 is the body of the crate, which may be made of any material and of any size and shape, 55 but, as shown, is made of wood, of low rectangular shape, and reinforced at the corners by the braces 2 2 2 2 2 on the end faces.

3 is the lid of the crate, hinged on one side of the body and reinforced by the braces 4 4 60 on either end.

5 is a partition-piece placed crosswise of the interior space about midway thereof and made to stop short of the top thereof.

6 is a series of oblong apertuers provided in 65 the upper side and end surfaces of the box-shaped frame, two on each side and one in each end, for handholds in lifting the crate and for ventilation purposes.

7 is a wire which is passed through two or 70 more series of holes 8, made in lines one above the other all the way around the box-frame, each hole of the lower series being in a vertical line beneath one in the upper series. 9 9 9 9 represent groove-beds made across the end 75 braces 2 2 2 2 to accommodate the wire to at least the depth of the diameter thereof, and 10 and 11 together form a spring-lock between the body and the lid of the crate. After these two or more series of holes for the wire lac- 80 ing have been made in lines one above the other all the way around the box-frame of the crate, each hole of the lower series being exactly beneath a hole of the upper series, the wire lacing is put on by securing one end of 85 the wire in any suitable manner on the boxframe and then inserting the other end through a hole, carrying it across to and passing it through a hole on the opposite side, then traveling horizontally along the outer surface of 90 that side to the next hole of the same series, then through that hole across to the opposite side, through the corresponding hole on that side, and so on, till one series is completed,

then skipping from one series to the other and proceeding in like manner till the result shown in Fig. 1 has been achieved, or, if preferred, both ends of the wire may be passed through any two consecutive holes of the same series and both ends of the wire worked at the same time.

When the single strand of wire passes from end to end of the crate, it is made to go through holes in a partition - piece 5 corresponding with those in the end pieces of the box-frame, which creates a mutual support between the

wire and the partition-piece.

It is obvious that in passing from end to end
the wire intersects the cross-strands and forms
wire-cells whose sides are measured by the respective distances between the holes of each
series and the series themselves, so that the
dimensions of such cells may be made to suit
the particular article for which any particular
crate is designed and exactly accommodate
such article. While this wire lacing provides
these cells, it also strengthens the crate and
makes it lighter and more durable than wooden
cells would be. Besides it lends such resiliency to the walls of such cells as may be necessary to protect the articles in them from
bumping together violently.

In passing around the corners of a wooden 3° frame I may, if I prefer it, provide grooves

across the end braces in line with each series for the wire to rest in when rounding the corners.

Having thus fully described my invention and without meaning to be restricted to the 35 exact construction and arrangement of parts shown and described, what I claim, and desire

to secure by Letters Patent, is—

In shipping-crates, the combination, with a box-shaped outer frame having a fixed bottom 40. and a hinged lid, of a transverse partitionpiece parallel with and about midway between the end walls of said outer frame and wovenwire interior cells on either side of said partition-piece, said cells being formed by pass- 45 ing but a single strand of wire sucessively and . intersectingly from side to side and end to end of said frame through two or more lines of holes one above the other and at suitable distances from each other and from the top and 5°. the bottom of said frame on its sides and ends, and said partition-piece having the longitudinal strands of said wires passed through it, substantially as described.

In testimony whereof I affix my signature in 55

presence of two witnesses.

JOHN MICHAEL KENNY.

Witnesses:

PERKINS BAXTER,
WARNER SETTLE GLEAVES.