

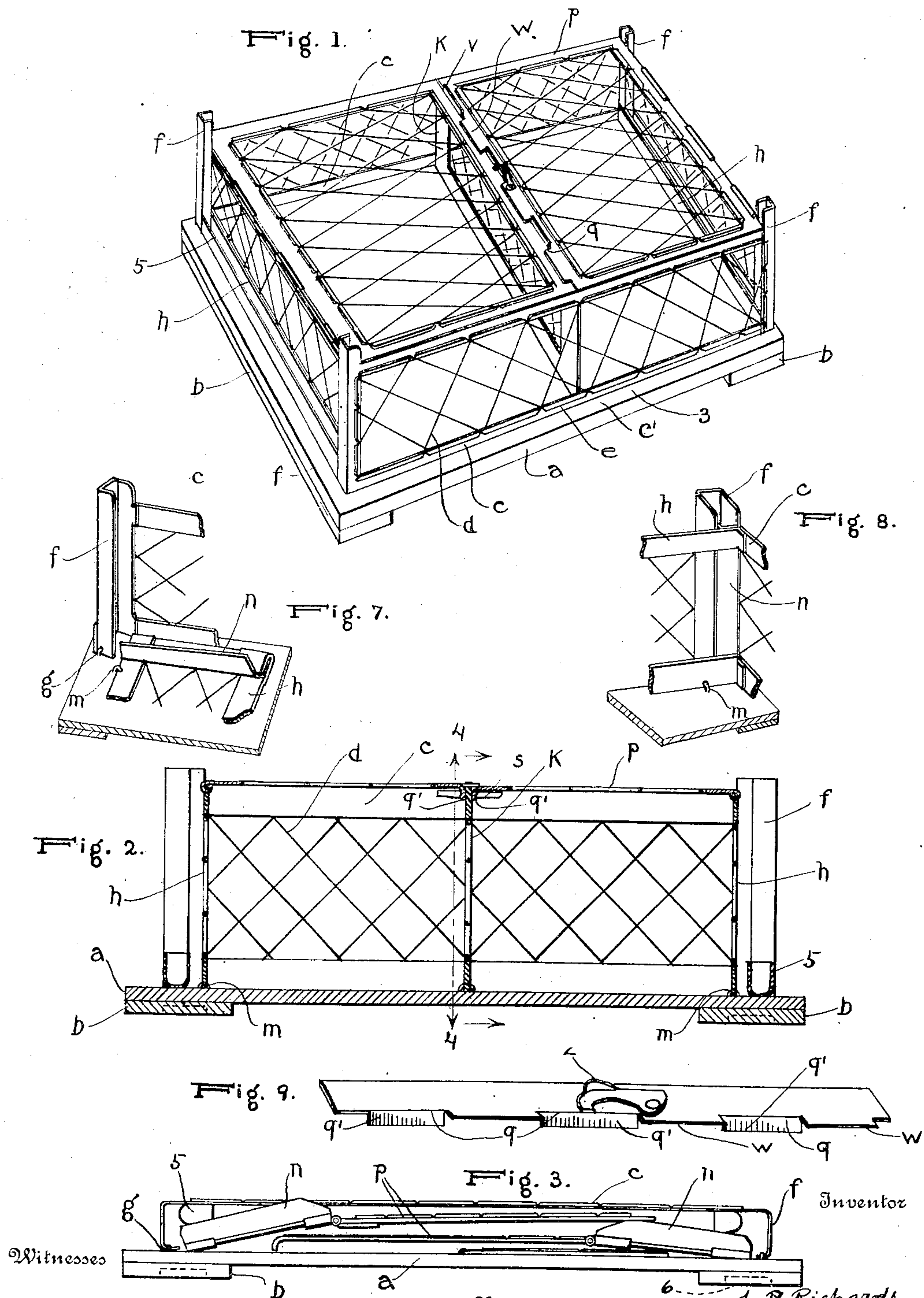
No. 862,659.

PATENTED AUG. 6, 1907.

J. P. RICHARDS.  
CRATE.

APPLICATION FILED JUNE 13, 1906.

2 SHEETS—SHEET 1.



Witnesses

Stuart Hilder  
George M. Anderson.

By

J. P. Richards,  
E. W. Anderson  
his Attorney

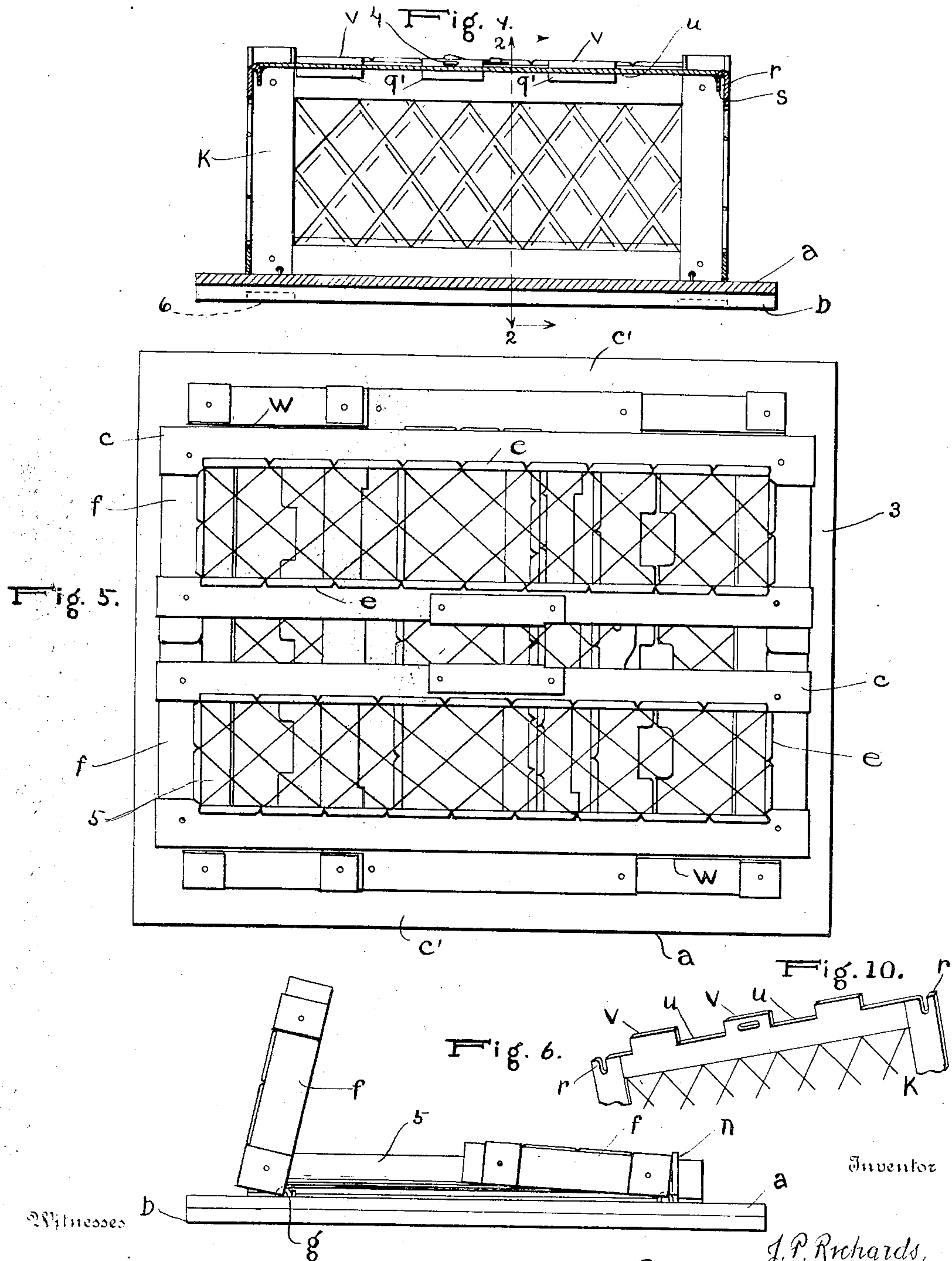
No. 862,659.

PATENTED AUG. 6, 1907.

J. P. RICHARDS.  
CRATE.

APPLICATION FILED JUNE 13, 1906.

2 SHEETS—SHEET 2.



Witnesses

Stuart Hilder.  
George M. Anderson

By

J. P. Richards,  
E. W. Anderson  
his Attorney

Inventor



# UNITED STATES PATENT OFFICE.

JAMES P. RICHARDS, OF NETAWAKA, KANSAS.

## CRATE.

No. 862,659.

Specification of Letters Patent.

Patented Aug. 6, 1907.

Application filed June 13, 1906. Serial No. 321,530.

*To all whom it may concern:*

Be it known that I, JAMES P. RICHARDS, a citizen of the United States, and a resident of Netawaka, in the county of Jackson and State of Kansas, have made a certain new and useful Invention in Crates; and I declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it appertains to make and use the invention, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 is a perspective view of my crate. Fig. 2 is a longitudinal section of the same on the line 2—2, Fig. 4. Fig. 3 is a side view of the crate in collapsed condition. Fig. 4 is a section on the line 4—4, Fig. 2. Fig. 5 is a plan view of the crate collapsed. Fig. 6 is an end view of the crate collapsed, with one side partly raised. Fig. 7 is a detail fragmentary perspective view of one corner of the crate, one side being folded down and the other side raised. Fig. 8 is a similar view, with both sides raised. Fig. 9 is a detail perspective view of one of the frame bars of the top. Fig. 10 is a detail fragmentary perspective view of the upper portion of the central partition.

The invention has relation to folding or knock-down coops for poultry and game, and it consists in the novel construction and combinations of parts, as hereinafter set forth.

In the accompanying drawings, illustrating the invention, the letter *a*, designates the flat base of the coop having end cleats *b*. The base is large enough to provide a margin 3, around the coop.

The sides consist of rectangular metallic frames *c*, each surrounding an open portion, and interwoven wire work or wire cloth *d*, extending over these openings and connected to reversely bent flange lugs *e*, of the frame. The ends of these frames are flanges *f*, turned inward at right angles to the plane of the side, forming corner posts which are connected to the base *a*, by hinge staples *g*, passing through the inner portions of the flanges. The lower margins of these flanges are level with the lower edges of the sides, and the sides are hinged to the base inside the margin *c'*, so that when they are unfolded to upright position they will stand squarely on their angular lower ends. The end flanges are designed to be just wide enough to include the ends and partition in folded position.

Between the sides are hinged to the base, the ends *h*, and the partition *k*. The ends are hinged to the base by means of staples *m*, and they consist of wire work connected to metallic frames of rectangular shape, having at their ends outward extending flanges *n*, which are designed, when the ends are raised to unfolded position, to engage the end flanges of the corner posts of the sides, whereby they are held in connected position. To the upper portions of the end frames, are

hinged the top sections *p*, of the coop, said top sections consisting also of rectangular metallic frames, and wire work, of similar character to the ends and sides.

The partition *k*, also consists of a similar rectangular metallic frame and wire work, hinged by staples to the base. The ends of this partition are provided with upward projections or lugs *r*, designed to engage downward projecting flange lugs or box catches *s*, on the upper marginal portions of the side frames, midway between their ends. When the partition is lifted to upright position, its lugs are brought into engagement with these box catches so as to hold the partition in place and to brace the sides so that they cannot bend outward. The upper margin of the partition is provided with elongated notches *u*, and projections *v*, adapted to engage elongated projections *w*, and downward bent right-angle tongues *q'* forming notches *q*, of the free margins of the top sections. When, therefore, the partition is in place in upright position, engaging the box catches, the top section of one end is brought down against it in such wise as to cause engagement of the elongated notches and projections in such wise as to brace these parts securely. And then the top section of the other end is brought down in engagement with the partition, on its other side, so that its elongated notches and projections interlock with those of the partition, and its projections overlap those of the top section of the opposite end. In this manner the unfolded coop is braced securely and it may then be locked in position by engaging the hook *z*, of the overlapping top section with the catch slot 4, of the partition. In its unfolded condition the coop forms a very strong receptacle well adapted for its purposes.

In folding the coop in order to reduce its size for transportation, the hook *z*, is disengaged, and the ends with the partition are folded down upon the base, the end which is provided with the fastening hook *z*, being folded down upon the other end section and partition. Then, by pressing down these folded portions upon the base, the sides can be made to pass over their ends in folding down towards each other, and in so passing, to come into engagement with the flanges *n*, of the upper end which, under the spring action of the metallic folded portions below, act against the lower margins of the sides to lock them down in folded position upon the other folded portion of the coop.

The troughs 5, of the coop are connected to the lower portions of the ends, and are covered in and protected when the coop is in folded condition.

When the coops are unfolded and charged, they may be set upon top of each other, in a solid and steady manner by causing the corner recess seats 6, in the bases above to engage the upward projecting ends of the flange corner posts.

This knock-down coop is designed to have great strength on account of the material of which it is made.



and the manner in which it is braced. The flanged corner posts are so hinged to the base as to hold the sides upright, and the center partition, engaging the ends, sides, base and top sections, serves to support and  
5 brace all these parts in their relative position.

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

1. The combination with a base having recess seats in its bottom and a marginal extension, of hinged ends having outward projecting flanges, hinged sides having inward projecting corner post flanges the corner posts having upward extensions above the top of the crate, top sections hinged to said ends, and means for locking said ends and sides in upright position.  
10
2. In a crate, a base, hinged sides having corner posts attached thereto, said corner posts having inward projecting flanges, and said sides having downward projecting flange lugs at their upper middle portions, hinged ends having outward projecting flanges adapted to engage the inward projecting flanges of the corner posts, a central hinged partition having end lugs adapted to engage the flange lugs of the hinged sides, and alternating notches and upward projecting lugs at the top thereof, top sections hinged to said ends and having alternating notches  
15 and horizontally projecting lugs at their inner end por-

tions adapted to engage respectively the upward extending projections and notches of the hinged partition, and a turn-button carried by one of the hinged top sections and adapted to engage a perforation of one of the upward projections of the hinged partition.  
30

3. In a crate, hinged sides having corner posts attached thereto, said posts having inward projecting flanges, hinged ends of less width than the distance between the upright sides and having outward projecting flanges adapted to engage the inward projecting flanges of the corner posts, a central partition, and top sections hinged to said ends and having locking engagement with said central partition, the outward projecting flanges of the hinged ends engaging the bottom edges of the hinged sides when folded to lock the parts in collapsed form.  
35 40

4. In a crate, a hinged central partition, hinged ends and top sections adapted to fold over said partition, hinged sides adapted to fold over said hinged ends and top sections, said hinged ends having outward projecting flanges which engage the bottom edges of the hinged sides to lock the parts in collapsed form.  
45

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

JAMES P. RICHARDS.

Witnesses:

H. P. HOUSERSTOCK,  
H. C. BIBB.