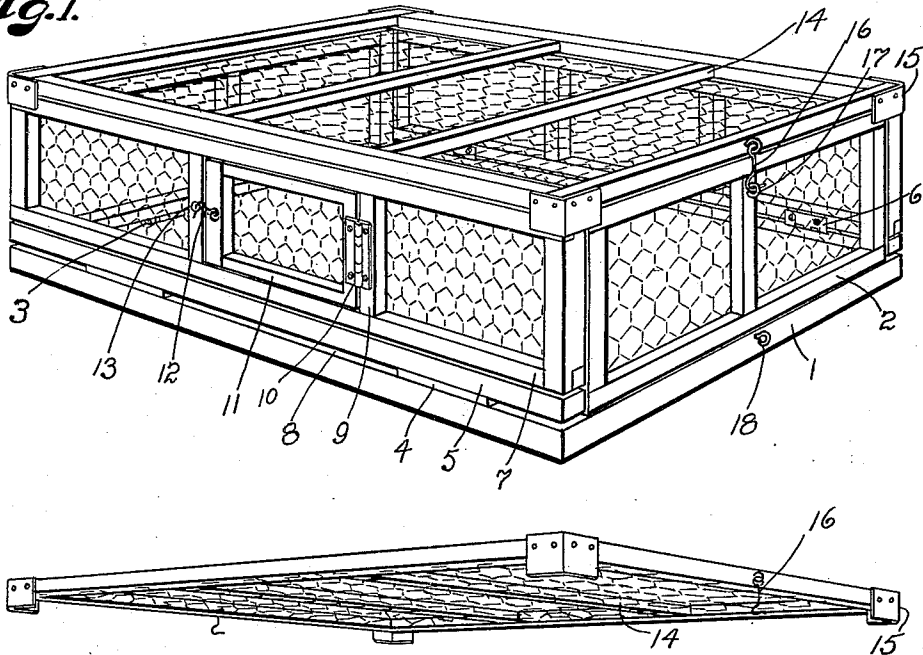


E. C. HAZEL & H. HAASE.  
FOLDING GRATE.  
APPLICATION FILED JUNE 30, 1911.

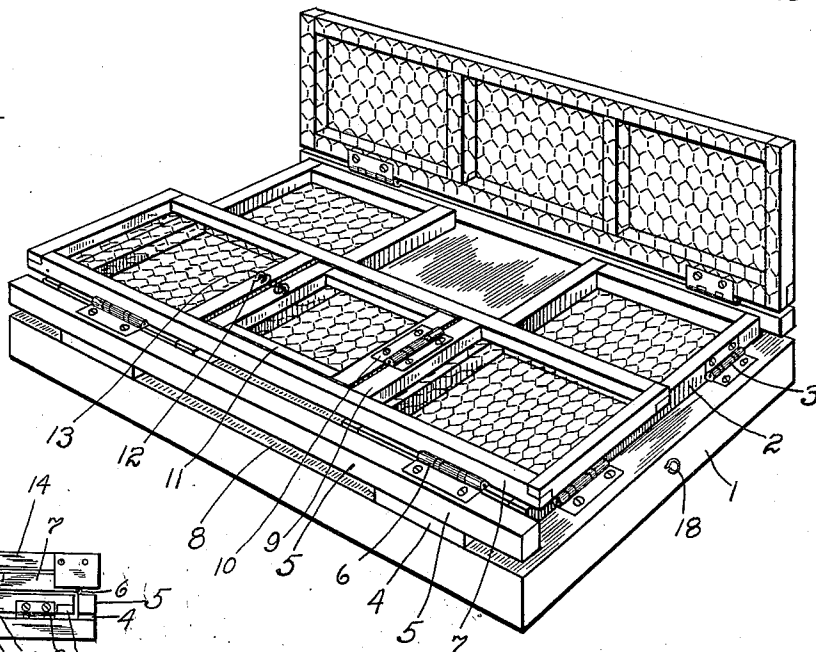
1,041,786.

Patented Oct. 22, 1912.

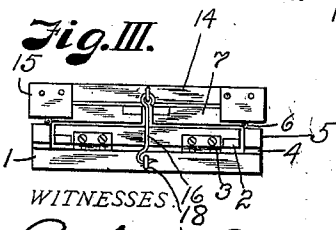
*Fig. I.*



*Fig. II.*



*Fig. III.*



WITNESSES

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# UNITED STATES PATENT OFFICE.

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## FOLDING CRATE.

1,041,786.

Specification of Letters Patent.

Patented Oct. 22, 1912.

Application filed June 30, 1911. Serial No. 636,240.

*To all whom it may concern:*

Be it known that we, ERNEST C. HAZEL and HERMAN HAASE, citizens of the United States, residing at Atchison, in the county of Atchison and State of Kansas, have invented certain new and useful Improvements in Folding Crates; and we do 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 the letters and figures of reference marked thereon, which form a part of this specification.

Our invention relates to folding crates and has for its object to provide a device of that character especially adaptable for use as a shipping coop for poultry, wherein the sides and ends may be folded when empty, in order to form a compact body for shipping. In accomplishing this object we have provided the improved details of structure hereinafter described and illustrated in the accompanying drawings, wherein:—

Figure I is a perspective view of a crate constructed according to our invention, shown in its assembled condition. Fig. II is a perspective view of same in partially folded condition; the top being shown above the partially folded body. Fig. III is a small end view showing the crate entirely folded.

Referring more in detail to the parts:—1 designates the bottom of the crate, which is preferably formed of wood and made solid to provide a close floor.

2 designates the ends of the crate, which are connected with the base 1 by hinges 3, so that they may fold flat against the base, as illustrated in Fig. II, or made to stand vertically when the crate is in use, as illustrated in Fig. I.

Fixed to the top of base 1, at the front and back, are blocks 4, and mounted on said blocks and extending longitudinally over the base are strips 5. Fixed to the top of strips 5 are hinges 6 which carry the front and back members 7, the blocks 4 and strips 5, raising the front and back members 7 sufficiently to allow them to fold down on the top of the ends 2, as illustrated in Fig. I, and the blocks 4 raising the strips 5 above the base to provide the clean out openings 8.

Fixed to one of the cross brackets 9 on the front of the crate is a hinge 10, which

carries a door 11, that is adapted to close the space between the two front braces, the edge of the door opposite the hinge being provided with a hook 12, which is adapted to take into a staple 13 on the adjacent brace, to hold the door closed.

14 designates the top of the crate, which is made in a separate piece and is adapted to rest on the top edges of the sides and ends when the crate is opened and to lie flat on the front and back members when the crate is closed. At each corner of the top member 14 is an angle bracket 15, which fits over the corners of the sides and ends to brace the structure when the parts are assembled. On each end of the top member is a hook 16, which is adapted to take into an eyelet 17 on the end member when the crate is assembled to hold the top in place, and to take into an eyelet 18 on the base 1 when the parts are folded for shipping, in order to hold the top to the other parts and retain the sides and ends in their folded position.

The sides, ends and top of the crate are of skeleton construction and covered with wire mesh 19, in order to provide light and ventilation to the interior of the crate.

In using the crate the sides and ends are raised to their vertical position, the top lowered thereagainst and the hooks 16 set into the eyelets to hold the top in place and to prevent the ends from collapsing. With the hooks in place, the ends will be held permanently in their vertical position and the front and back members will be held open by abutment against the ends of the end members, the corner brackets 15 preventing the members from collapsing outwardly and holding the top in place. It is apparent that when so assembled, the crate may be used for shipping poultry, or the like, in the usual manner.

When the crate is empty and is to be stored or shipped, the top is removed, the ends folded downwardly against the top of the base, the front and back members folded down against the end, the top is set on the front and back members, and the hooks 16 connected with the eyes 18 to hold the parts in place. It is apparent that by having the front and back strips 5 raised from the base, sufficient space is provided for folding the end members and also for cleaning the base. It is also apparent that with a crate of this construction, poultry, or the like, may be shipped, and the crates may be returned in

their folded condition, thereby occupying much less space than when fully assembled.

Having thus described our invention, what we claim as new therein and desire to secure by Letters-Patent is:—

1. A folding crate comprising a base, end and side members, a plurality of blocks secured to said base and strips mounted on said blocks and running the length of said base, and forming clean out openings on the opposite sides, end members hinged to said base and adapted to fold over flat, side members hinged to said strips and adapted to fold over the end members, and a top arranged to fit over the said members and having deep depending corner brackets for engagement with the opposite corners of said side members in their set up and knock down positions, and hook and eye members on the top and ends respectively, for holding the crate together when assembled, and eyes arranged on the ends of said base adapted to receive said hooks when the crate is in knockdown position.

2. A folding crate comprising a base, end and side members, end members hinged to the base, a plurality of blocks secured to the front and rear of said base, strips mounted on said blocks and forming openings between the base and strips, side members hinged to the strips and adapted to fold over the end members, a top having depending corner brackets, adapted for engagement with the top corners of the side and end members, when the crate is assembled and engaging the lower corners of the side members when the crate is knocked down, hooks and eyes on the top, end and base for locking the crate in assembled and knocked down position.

In testimony whereof we affix our signatures in presence of two witnesses.

ERNEST C. HAZEL.  
HERMAN HAASE.

Witnesses:

JOHN V. SMITH,  
CLYDE A. ROWE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."