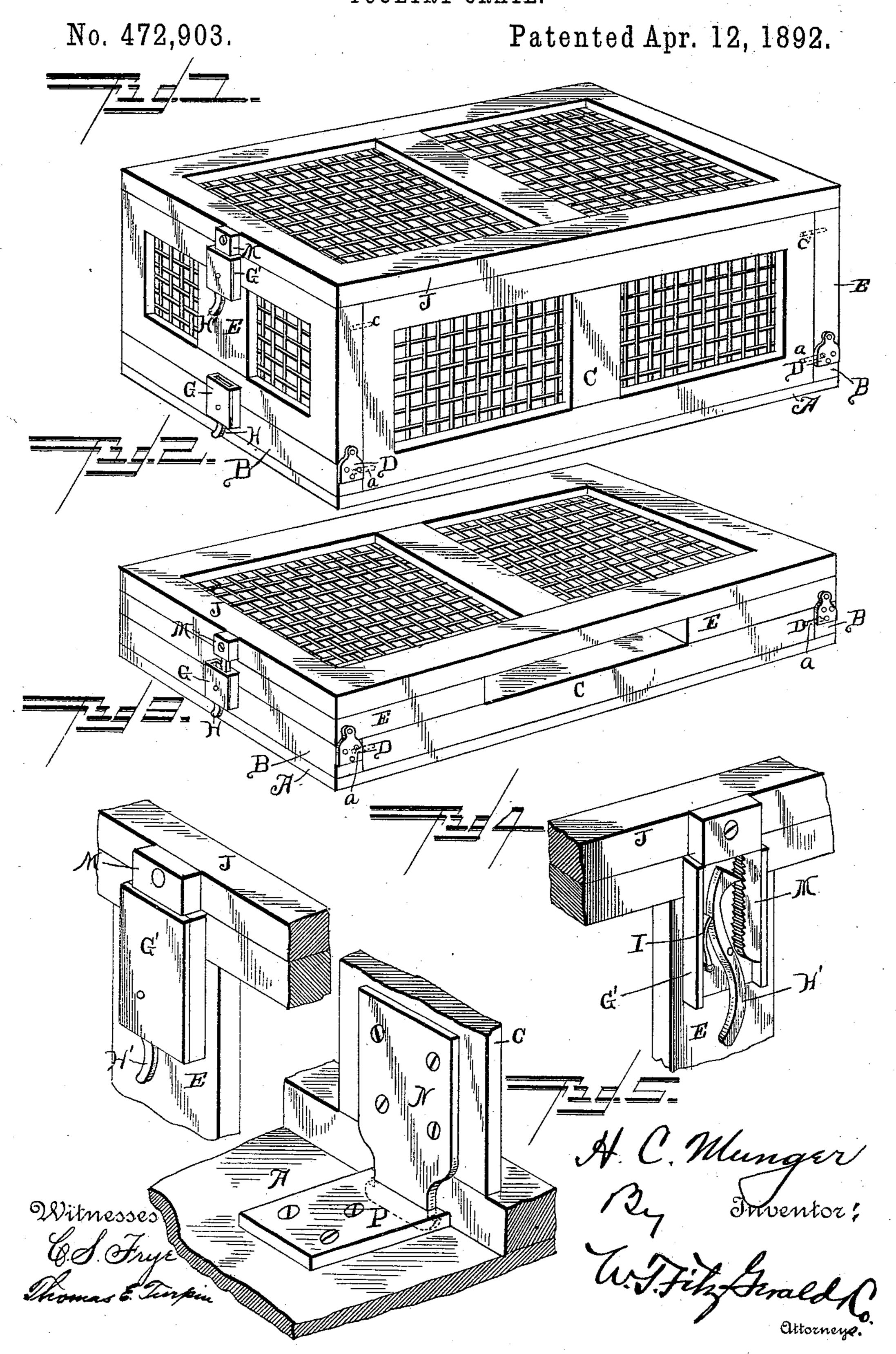
H. C. MUNGER.
POULTRY CRATE.



## United States Patent Office.

HENRY C. MUNGER, OF CHICAGO, ILLINOIS.

## POULTRY-CRATE.

SPECIFICATION forming part of Letters Patent No. 472,903, dated April 12, 1892.

Application filed December 5, 1891. Serial No. 414,115. (No model.)

To all whom it may concern:

Be it known that I, Henry C. Munger, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Poultry-Crates; and I do hereby 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.

My invention has relation to improvements in folding crates; and it consists in the peculiar construction, certain novel combinations, and the adaptation of parts hereinafter described, and particularly pointed out in the

claims appended.

In the accompanying drawings, Figure 1 is a perspective view of my improved crate, illustrating the parts in their operative positions. 20 Fig. 2 is a similar view illustrating the parts folded. Fig. 3 is an enlarged detail perspective illustrating the lock in position. Fig. 4 is a similar view with the cap-plate of the lock-casing removed, and Fig. 5 is a detail

25 perspective view.

Referring by letter to the said drawings, A indicates the bottom of my improved crate, which is of a rectangular form and is provided on its upper side, at its ends, with trans30 verse ledges B for the attachment of the end walls of the crate, whereby it will be seen that the said end walls will fold flat upon the side walls C. These side walls C, which preferably comprise a rectangular frame and wire mesh, as illustrated, are provided at their ends adjacent to their lower edges with longitudinally-extending trunnions a, which are journaled in the transverse ledges B of the bottom, whereby it will be seen that the side walls may be folded flat upon the said bottom.

Fixedly connected to the ends of the transverse ledges B of the bottom and extending upwardly therefrom are standard-plates D, in which are journaled the longitudinally-extending trunnions of the end walls E, which walls are of such a width or height that their upper edges will rest flush with the upper edges of the side walls C when the parts are

in their operative positions.

Extending from the inside of the end walls | walls of the crate in their open or operative E, adjacent to the ends and upper edges there- of, are study c, which are designed to take | folded in, to lock the same in their compact

into corresponding recesses in the ends of the side walls C to render the crate more rigid and firm when the parts are in their operative 55 positions.

Fulcrumed in casings G G', attached to the ledges B and to the end walls E, adjacent to the upper edges thereof, are pawls H H', which are backed by springs I and have their lower 60 ends extending beneath the casing, whereby they may be readily manipulated for a pur-

pose presently disclosed.

Preferably connected in a pivotal manner to the ends of the crate-top J and depending 65 therefrom are rack-hasps M, the teeth of which are beveled, as shown, whereby they will pass the pawls before described when shoved downwardly, but will be engaged and held thereby when pulled upwardly. These 70 rack-hasps M are designed and adapted in practice to alternately engage the pawls H and H', as illustrated, to lock the walls of the crate in their folded and in their open or operative position.

When it is desirable to unlock the crate, it is simply necessary to press the lower free ends of the pawls H or H' laterally, when they will be disengaged from the rack-hasps of the top and said top may be raised.

Connected to the inside of the side walls C of my improved crate and depending below the lower longitudinal edges thereof are preferably metallic tongues N, which are headed. at their lower ends and are preferably re- 85 duced above their heads to adapt them to take into the recesses in the ends of the locking-strips P, which are connected to the upper side of the bottom and extend a slight distance laterally outward from the longi- 90 tudinal edges thereof. By this construction it will be readily perceived that when the side walls of my improved crate are swung up into an upright position the reduced portion of the tongues N will take into the re- 95 cesses in the ends of the strips P, whereby it will be seen that sagging of the side walls or the bottom will be prevented and the strength and durability of the crate increased. By this construction it will be seen that the top, 100 which serves to lock and rigidly hold the walls of the crate in their open or operative positions, also serves, when said walls are

folded positions, whereby it will be seen that when returned to the shipper the crate may be made to take up but a small part of the space it occupies when its walls are in their

5 open or operative positions.

By reason of the peculiar connections of the walls to the bottom it will be seen that not only are the walls adapted to be folded very compactly, but when said walls are in their upright positions every corner and part of the crate may be readily and effectually cleansed, which is a highly-important desideratum, as is obvious.

Having thus described my invention, what I claim, and desire to secure by Letters Pat-

ent, is—

1. In a folding crate, substantially as described, the combination, with the bottom having the transverse ledges at its ends, the standard-plates connected to and extending upwardly from the ends of said ledges, the side walls having recesses in its ends, and the longitudinally-disposed trunnions extending from the ends of the side walls and journaled in the transverse ledges of the bottom, of the end walls, the longitudinally-disposed trunnions extending from the ends of the end walls and journaled in the standard-plates of the bottom ledges, and lateral stude extend-

ing from the inside of the end walls and 30 adapted to take into the recesses in the ends of the side walls, substantially as and for the

purpose specified.

2. In a folding crate, substantially as described, the combination, with the bottom 35 having the transverse ledges at its ends, the standard-plates connected to and extending upwardly from the ends of said ledges, and the strips connected to the upper side of the bottom and having recesses in their laterally- 40 extended ends, of the end walls, the longitudinally-disposed trunnions extending from the ends of the end walls and journaled in the standard-plates, the side walls, the longitudinally-disposed trunnions extending from the 45 ends of the side walls and journaled in the transverse ledges of the bottom, and the tongues connected to the inside of the side walls and depending from the lower longitudinal edges thereof and adapted to engage 50 the recesses in the ends of the bottom strips, substantially as specified.

In testimony whereof I affix my signature in

presence of two witnesses.

HENRY C. MUNGER.

Witnesses:

WILLIAM H. HENDRICKS, WILLIAM M. MUNGER.