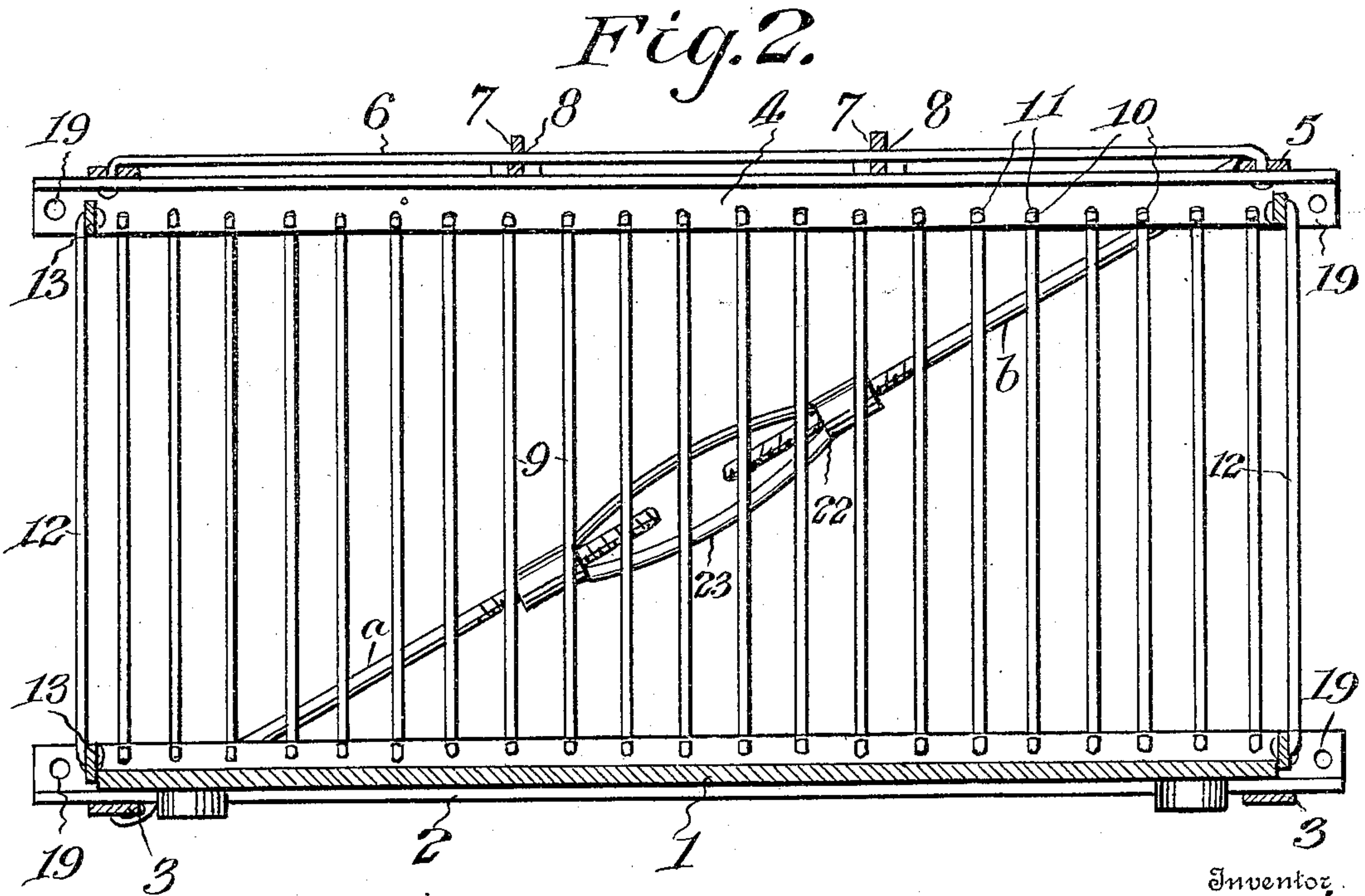
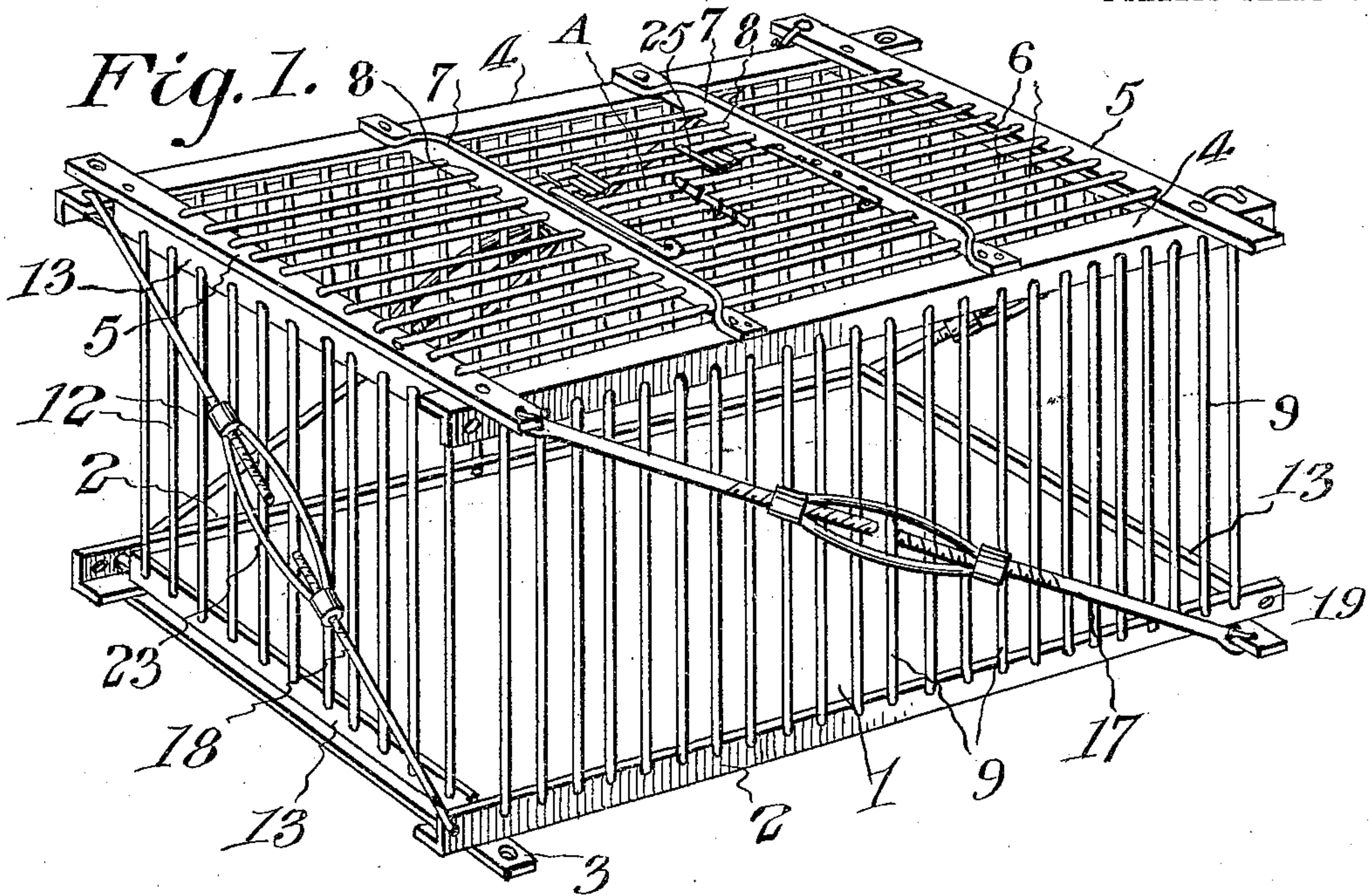


J. P. CARNEFIX.
FOLDING COOP OR CRATE.
APPLICATION FILED MAR. 9, 1909.

934,282.

Patented Sept. 14, 1909.

2 SHEETS—SHEET 1.



Inventor.

James P. Carnefix.

Witnesses.

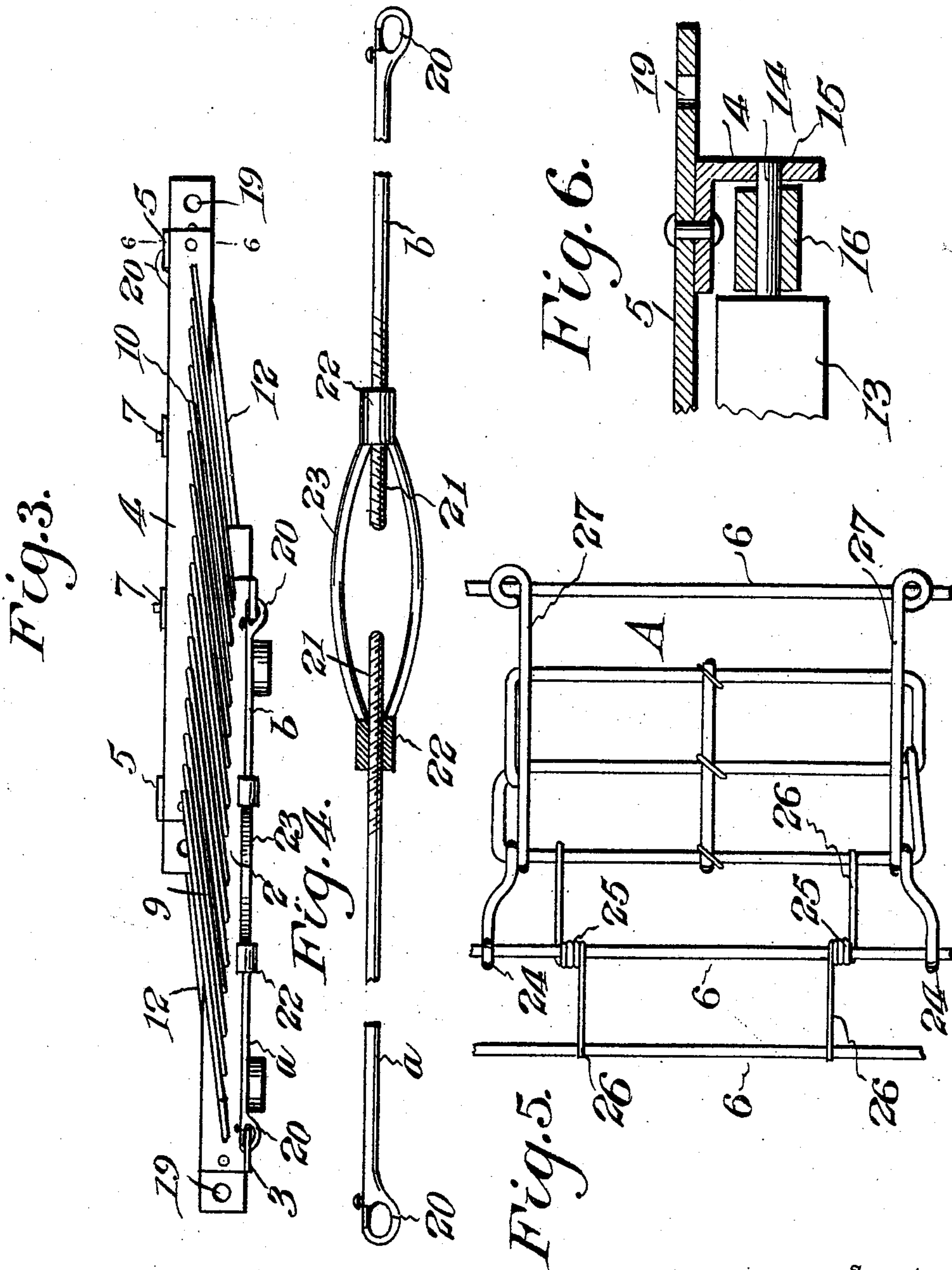
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UNITED STATES PATENT OFFICE.

JAMES P. CARNEFIX, OF RICHMOND, VIRGINIA.

FOLDING COOP OR CRATE.

934,282.

Specification of Letters Patent. Patented Sept. 14, 1909.

Application filed March 9, 1909. Serial No. 482,301.

To all whom it may concern:

Be it known that I, JAMES P. CARNEFIX, a citizen of the United States, residing at Richmond, in the county of Henrico and State of Virginia, have invented new and useful Improvements in Folding Coops or Crates, of which the following is a specification.

This invention relates to a knock-down crate or coop for poultry or the like which is especially designed to take up little space when not in use so that crates can be returned from the market in a convenient manner and at little expense.

The invention has for one of its objects to improve and simplify the construction of devices of this character so as to be comparatively simple and inexpensive to manufacture, of durable and substantial construction, and readily set up or knocked down.

Another object of the invention is the provision of a metallic crate having the sides, ends and top permanently connected with the bottom of the crate so that none of the parts can become detached, the crate being locked in set-up position by brace rods equipped with turn buckles for tightening the crate.

With these objects in view and others, as will appear as the description proceeds, the invention comprises the various novel features of construction and arrangement of parts which will be more fully described hereinafter and set forth with particularity in the claims appended hereto.

In the accompanying drawings, which illustrate one embodiment of the invention, Figure 1 is a perspective view of the crate. Fig. 2 is a central longitudinal section thereof. Fig. 3 is a side view of the crate in folded position. Fig. 4 is a detail view of one of the brace rods with portions broken away. Fig. 5 is a plan view of the door of the crate. Fig. 6 is an enlarged sectional view on line 6—6, Fig. 3.

Similar reference characters are employed to designate corresponding parts throughout the views.

Referring to the drawing, 1 designates the bottom of the crate which may be made of strips of board or other suitable material supported on angle irons or side bars 2 at the bottom of the crate. These angle bars are secured to cross pieces 3 arranged under the angle irons at the ends thereof and riveted or otherwise suitably secured to-

gether. The top of the crate consists of a frame composed of side bars 4 of angle iron rigidly connected with end cross bars 5, and extending from one end bar to the other are parallel wire rods 6 that form closures for the top of the crate, said rods being supported at intermediate points by cross bars 7 that have apertures 8 through which the wire rods extend, and the ends of the bars 7 are turned at right angles to the plane of the bar to rest on the top of the side bars 4 to which the said ends are riveted. The sides of the crate are closed by vertical wire rods 9 which have their extremities formed into hooks 10 that engage in apertures 11, the said hooks loosely engaging in the apertures so as to form pivots for permitting the crate to fold and unfold. The ends of the crate are closed by vertical rods 12 which are rigidly secured at their top and bottom with horizontal bars 13. These bars 13 have terminal pintles 14, as shown in Fig. 6, which engage in apertures 15 of the angle bars 2 and 4 at the sides of the frame, there being collars 16 on the pintles to prevent the bars 13 from longitudinal movement.

The crate is held between brace rods 17 and 18 at the sides and ends of the plate, respectively, which are connected with the ends of the cross bars 3 and 5 and the longitudinal side bars 2 and 4, the extremities projecting beyond the corners of the crate. These extremities have apertures 19 for receiving the terminal clips 20 on the brace rods. These brace rods are of such length as to extend from one corner to the opposite diagonal corner at each side or end of the crate. Each brace rod is composed of two sections *a* and *b* which have their inner ends threaded at 21 to engage in threaded collars 22 of the turn buckle 23. By means of these turn buckles, the brace rods can be contracted or lengthened in order to rigidly support the crate in open position. When the crate is folded, the brace rods will be contracted so that the terminal clips can be connected with the corresponding bars at the top or bottom of the crate.

The top of the crate has a central opening which is closed by a door designated by A, Fig. 1, and shown in detail in Fig. 5. This door is a wire structure formed with eyes 24 through which extends one of the wires 6 of the top. On this wire to which the eyes 24 are connected are coiled torsion springs 25 which have their ends engaging

the bars 26 of the door and one of the adjacent wire rods 6 of the crate top. The door has forwardly-extending members or stops 27 which engage the bar 6 at the side of the opening opposite from the bar on which the door swings so that the door cannot swing into the crate.

From the foregoing description, taken in connection with the accompanying drawings, the advantages of the construction and of the method of operation will be readily apparent to those skilled in the art to which the invention appertains, and while I have described the principle of operation of the invention, together with the device which I now consider to be the best embodiment thereof, I desire to have it understood that the device shown is merely illustrative, and that such changes may be made when desired as are within the scope of the claims appended hereto.

Having thus described the invention, what I claim is:—

1. A folding crate comprising upper and lower side angle bars, cross bars connecting corresponding side bars and attached to the horizontal flanges thereof, vertical rods pivotally connected to the vertical flanges of the angle bars upon the same side of the crate, means closing the top and supported by the

upper cross bars, a bottom supported upon the horizontal flanges of the lower angle bars, end closures, each consisting of upper and lower horizontal bars having terminal pintles mounted in the vertical flanges of the side angle bars, rods secured at their ends to said horizontal bars, and brace rods at the ends and sides of the crate to hold the latter when unfolded.

2. A crate comprising a bottom frame consisting of side and end bars connected together with their extremities projecting, said extremities having apertures, a top frame of substantially similar construction, members pivotally connected with the side bars of both frames for closing the sides of the crate, end frames for closing the ends of the crate, connections between the corners of the end frames and corners of the top and bottom frame, and extensible and contractible brace rods at the sides and ends of the frame and detachably connected with the projecting extremities of the bars.

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

JAMES P. CARNEFIX.

Witnesses:

T. J. VANCE,

LILLIE M. MITCHELL.