

No. 774,016.

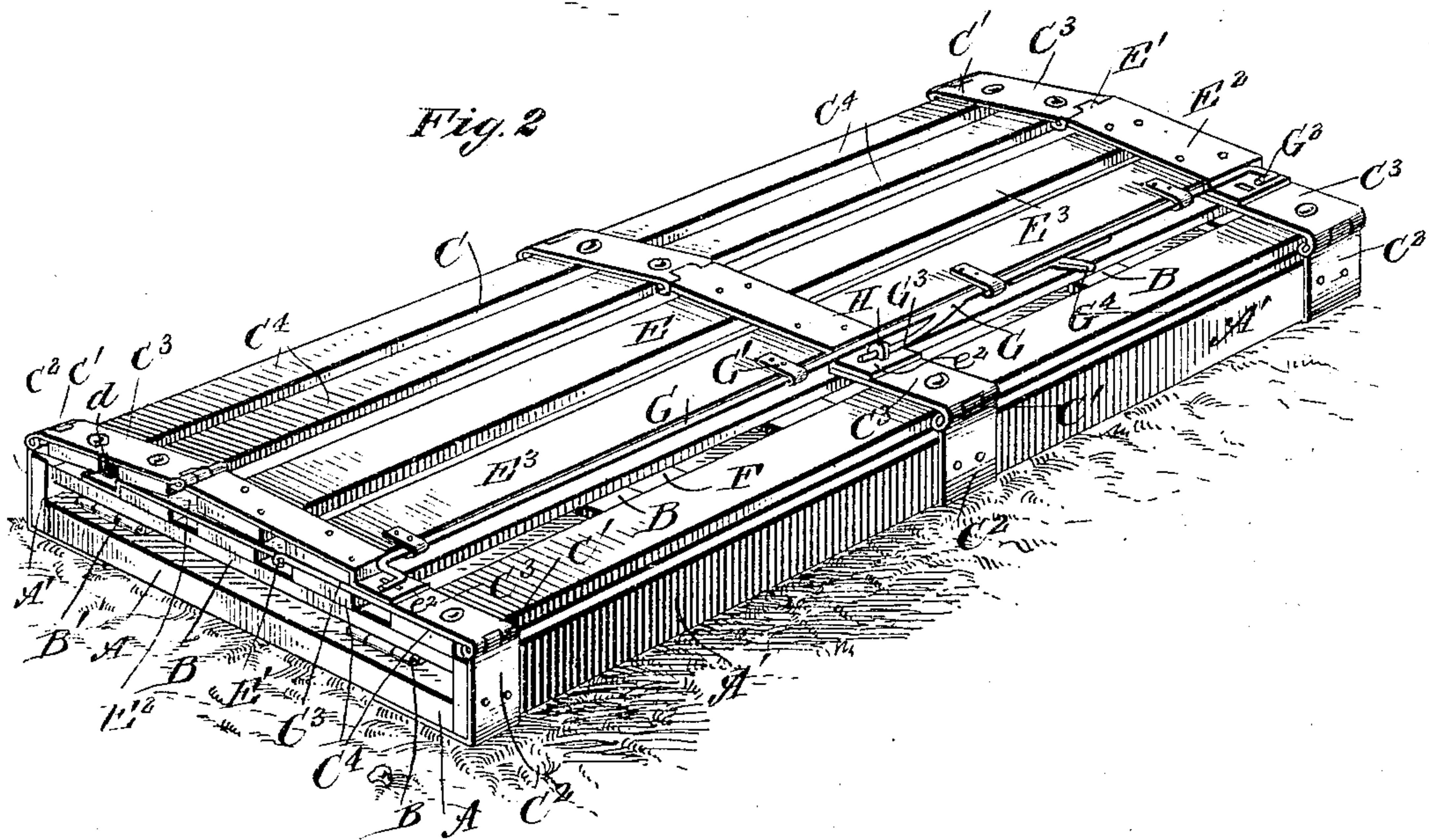
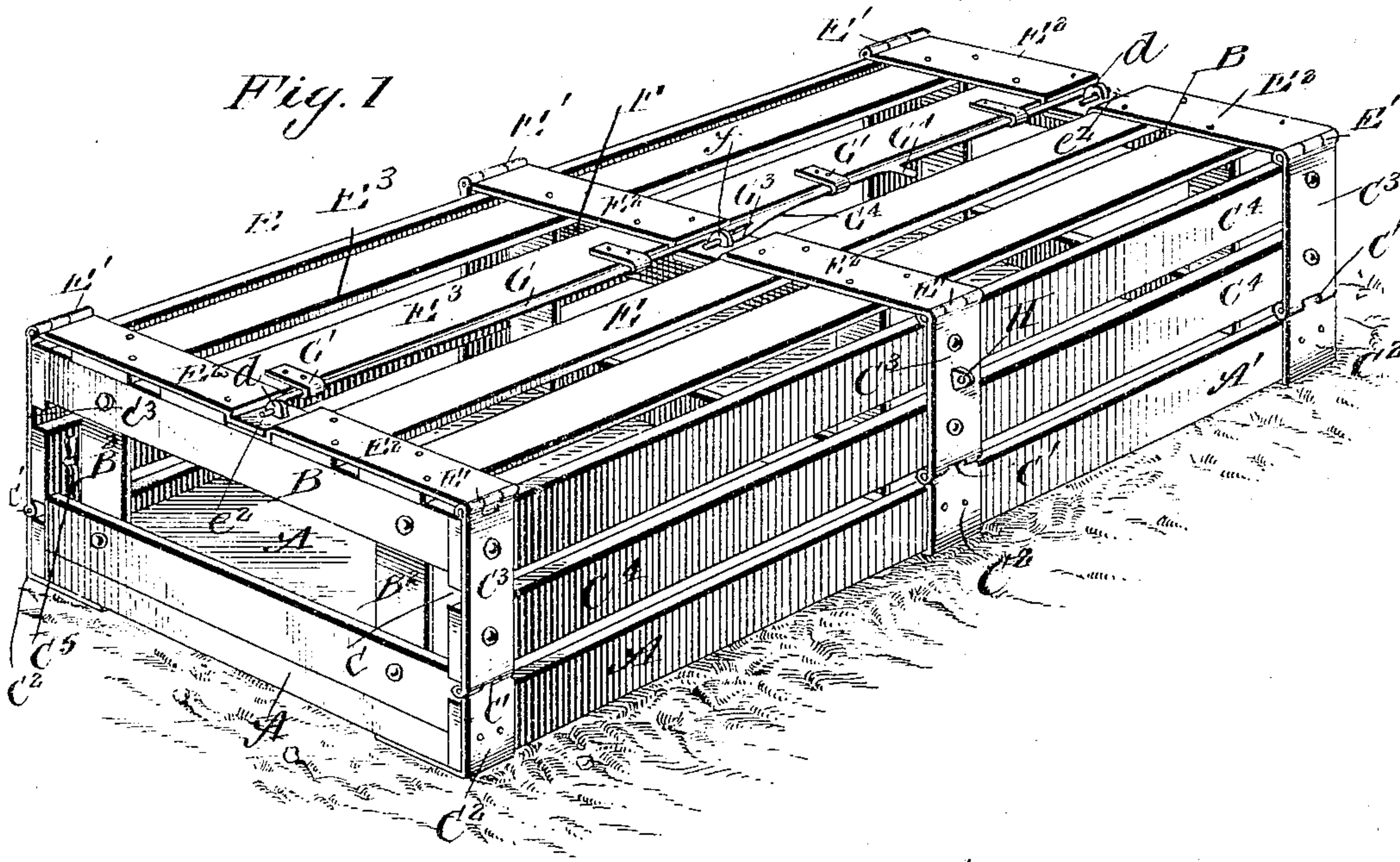
PATENTED NOV. 1, 1904.

J. H. WINKELMEYER.
CRATE.

APPLICATION FILED JUNE 18, 1904.

NO MODEL.

2 SHEETS—SHEET 1.



WITNESSES:

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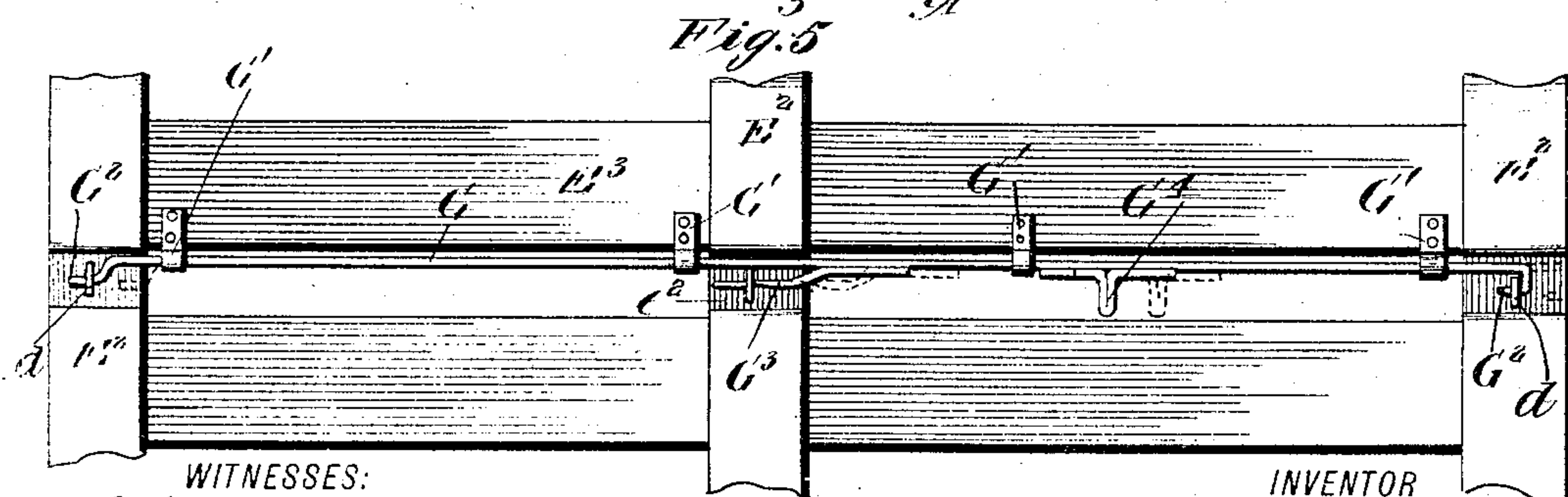
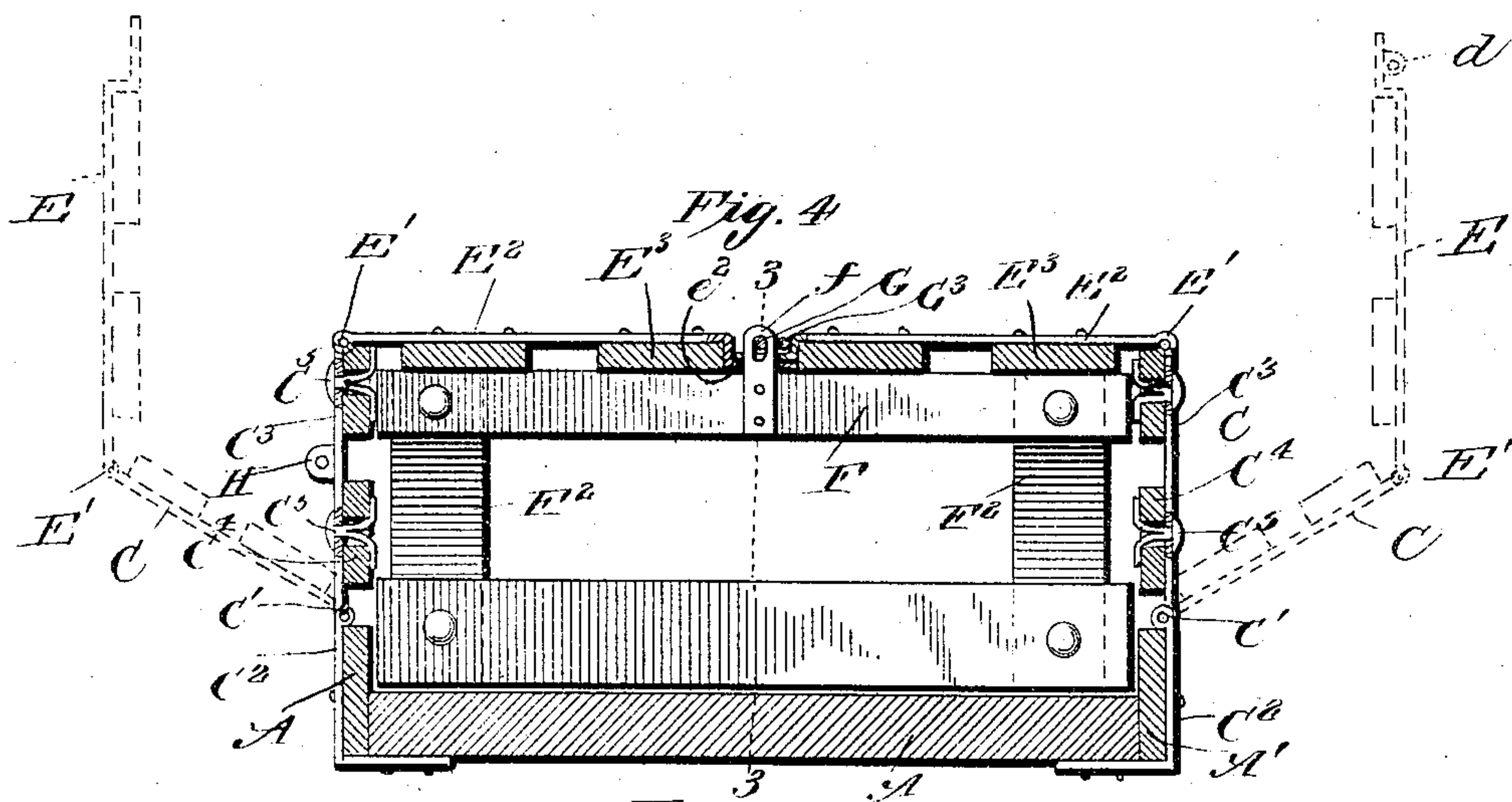
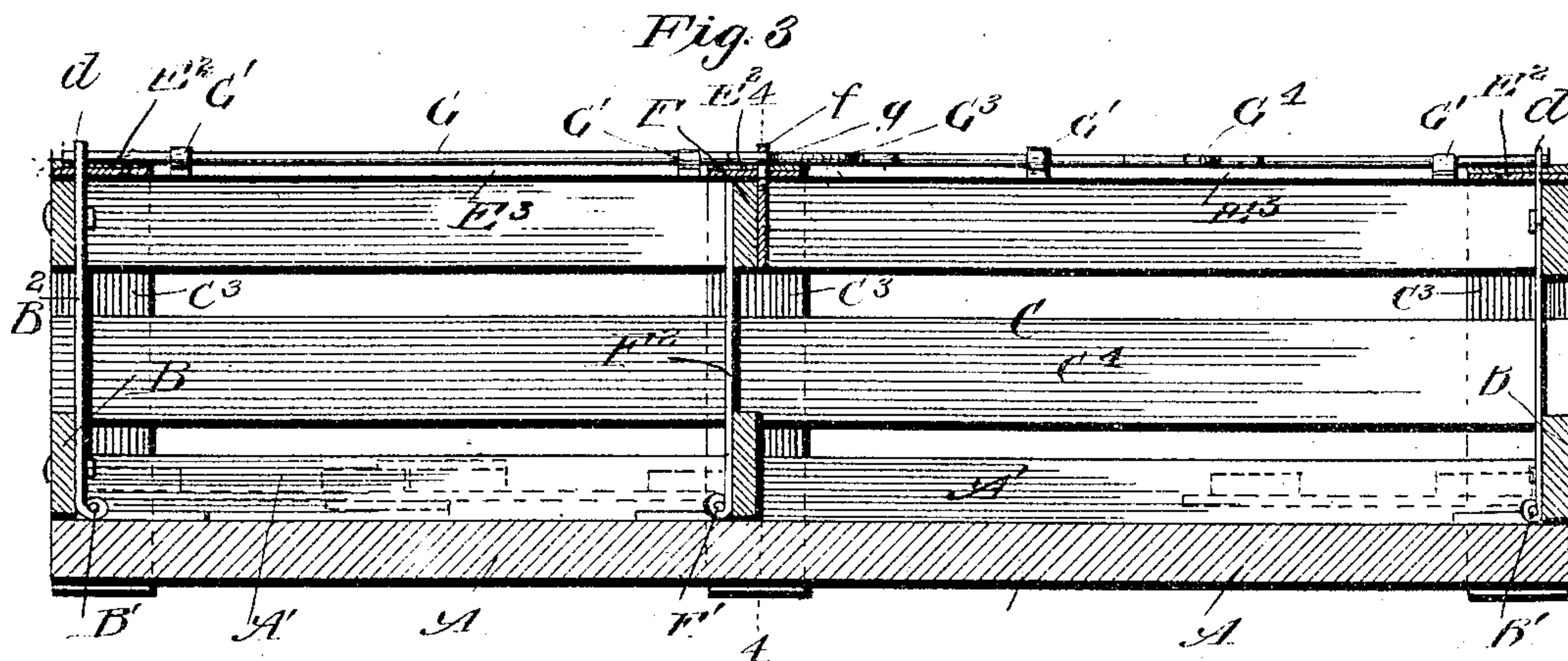
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2 SHEETS—SHEET 2.



WITNESSES:

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PHOTO-LITHOGRAPHED BY SACKETT & WILHELMS LITHO. & PRG. CO. NEW YORK

UNITED STATES PATENT OFFICE.

JOHN H. WINKELMEYER, OF ELDON, MISSOURI.

CRATE.

SPECIFICATION forming part of Letters Patent No. 774,016, dated November 1, 1904.

Application filed June 18, 1904. Serial No. 213,100. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. WINKELMEYER, a citizen of the United States, residing at Eldon, in the county of Miller and State of Missouri, have made certain new and useful Improvements in Crates, of which the following is a specification.

My invention is an improvement in folding crates, especially designed for use in carrying poultry and the like and which can be knocked down for reshipment; and the invention consists in certain novel constructions and combinations of parts, as will be hereinafter described and claimed.

In the drawings, Figure 1 is a perspective view of a crate embodying my invention when adjusted to position for use. Fig. 2 is a similar view showing the crate folded. Fig. 3 is a vertical longitudinal section of the crate on about line 3 3 of Fig. 4. Fig. 4 is a cross-section of the crate on about line 4 4 of Fig. 3. Fig. 5 is a detail top plan view showing the locking-bar in connection with the locking-straps; and Fig. 6 is a detail view of a portion of the locking-bar, showing the spring-latch construction.

As shown, the crate is formed with the bottom A, the ends B, the sides C, the top sections E, and the intermediate partition F. The ends B are hinged at B' to the bottom A, the straps B² of such hinge forming the battens to which are secured the cross bars or slats which form, with said battens, the ends of the crate. At their swinging edges the ends B are provided with upwardly-projecting staples *d* for engagement by the locking-bar presently described. The partition F is hinged at F' to the bottom and has its hinge-straps F², forming the battens, to which are secured the slats of such partition, as best shown in Figs. 3 and 4, and this partition is provided at its swinging edge with the upwardly-projecting staple *f* for engagement by the locking-bar.

At the opposite sides of the bottom A are secured the base-bars A', which project slightly above the bottom, as best shown in Figs. 3 and 4. The sides C are hinged at C', the lower straps C² of the hinge extending downwardly and inwardly beneath the bot-

tom, as shown in Fig. 4. The upper straps C³ of the hinge C' form the battens to which are secured the slats C⁴ of the sides C. In securing these slats to the hinge-straps C³ it may be preferred to employ the headed fastenings C⁵, having their legs passed through the slats C⁴ and bent to secure the same, as best shown in Fig. 4 of the drawings. The top sections E are hinged at E' to the upper edges of the sides C, preferably to the upper ends of the straps C³, the straps E² of the hinges E' forming the battens to which the slats E³ are secured, and such straps E² constituting hinge extensions which form locking members by extending their ends at *e*², such ends *e*² being depressed between the inner slats E³ and the tops E and being lapped upon each other and slotted for the passage of the staples *d* and *f*, as shown in the drawings. By depressing the lapping portions *e*² I am able to arrange the locking devices practically below the upper surface of the crate, so they will form no substantial projections above the same, and thus arrange the locking-bar presently described in such position that it will be protected against damage in piling the crates upon each other in the use of the invention.

The locking-bar G is slidable longitudinally in guides G', secured to the swinging edge of one of the top sections E, such locking-bar G having the lateral projections G² to engage the staples *d* and the intermediate tongue G³ to engage the staple *f* in the position of parts shown in Fig. 1 and to engage the staple H on the intermediate hinge-strap C³ in the knocked-down adjustment of the crate, as shown in Fig. 2 of the drawings. The rod G also has a handle projection G⁴, by which it may be moved longitudinally. The lateral projections G² are secured by bending the rod G into hook form at its ends, while the intermediate lateral projection G³ may be secured by riveting or otherwise connecting the tongue G³ to the rod G at one end G⁴, the other end of the tongue being arranged to engage the staple F and being preferably notched at *g* and arranged to spring into and out of locking contact with the staple F in the use of the invention. When the parts are arranged as

shown in Fig. 1, the crate may be secured by the locking-bolt engaging by its lateral projections with the staples *d* and *f* and locking the crate, as shown, and when the crate is 5 knocked down the locking-rod will suffice by the engagement of its tongue *G*³ with the staple *H* to secure the crate in knocked-down position.

It will be noticed from Figs. 1 and 3 that I 10 arrange the hinges connecting the sides and top sections at the ends of the crate and at a point intermediate said ends, also that the hinge-straps form battens for the slats of the sides, ends, and top sections, and those of the 15 top sections are extended to form portions of the locking devices, as before suggested.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

20 1. A crate comprising the bottom, the ends having slats and hinge-straps jointed at one end to the bottom and forming the battens for the slats of said ends, the staples projecting upwardly from the swinging edges of the 25 ends, the intermediate partition hinged at one edge to the bottom and provided at its swinging edge with an upwardly-projecting staple, the sides hinged at their lower ends and having their hinge-straps forming battens connecting the slats of said sides, the top sections 30 hinged at their outer edges to the upper edges of the sides and having their hinge-straps forming the battens which connect the slats of said top sections, such straps being extended beyond the swinging edges of the top 35 sections and depressed between said sections and lapped upon each other and slotted for the passage of the staples on the ends, and intermediate partition, and the locking-bar 40 movable longitudinally in connection with one of the top sections and provided at its ends with the lateral hook-like portions to engage the end staples and between its ends with the lateral portion or tongue notched and sliding 45 into and out of locking engagement with the staple of the intermediate partition, substantially as set forth.

2. In a crate the combination with the bottom, the ends and the intermediate partition 50 provided at their swinging edges with upwardly-projecting staples, the top sections, the straps projecting beyond the swinging edges of said top sections, and depressed and

overlapping each other at their meeting ends, and having such ends slotted for the staples 55 on the ends and partition, and the locking-rod having a laterally-projecting portion entering said staples, substantially as set forth.

3. The combination in a crate, with the top sections having at their swinging edges the 60 projecting depressed straps slotted for the passage of the staples, the staples projecting through said slots and the locking-rod having portions entering the staples operating between the swinging edges of the top sec- 65 tions and above the depressed slotted straps, substantially as set forth.

4. The combination of the bottom, the sides, the ends and intermediate partition having 70 staples projecting upwardly from their swinging edges, the top sections having straps slotted for the passage of such staples, and the locking-rod having laterally-projecting portions entering the staples, substantially as set 75 forth.

5. The herein-described improvement in crates, comprising the bottom, the ends jointed to the bottom, the staples projecting upwardly from the swinging edges of the ends, the intermediate partition jointed at one edge 80 to the bottom, the upwardly-projecting staple at the swinging edge of said partition, the sides jointed at their lower ends to the bottom, the top sections hinged at their outer edges to the upper edges of the sides, the 85 straps projecting beyond the swinging edges of the top sections and slotted for the passage of the staples on the ends and partition, and the locking-bar movable longitudinally and provided with portions sliding into and out 90 of engagement with the staples of the ends and partition, substantially as set forth.

6. The combination in a crate with the top sections and the straps projecting beyond the swinging edges thereof, and depressed be- 95 tween the sections and slotted for the passage of the staples, the staples to fit said slots, and the locking-rod held slidably in connection with one of the top sections and fitting within the depressed portion of the straps and hav- 100 ing lateral portions to engage with the staples, substantially as set forth.

JOHN H. WINKELMEYER.

Witnesses:

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JOS. W. TIMMONS.