

J. L. RITTER.  
EGG TESTER.

No. 437,245.

Patented Sept. 30, 1890.

FIG. 1.

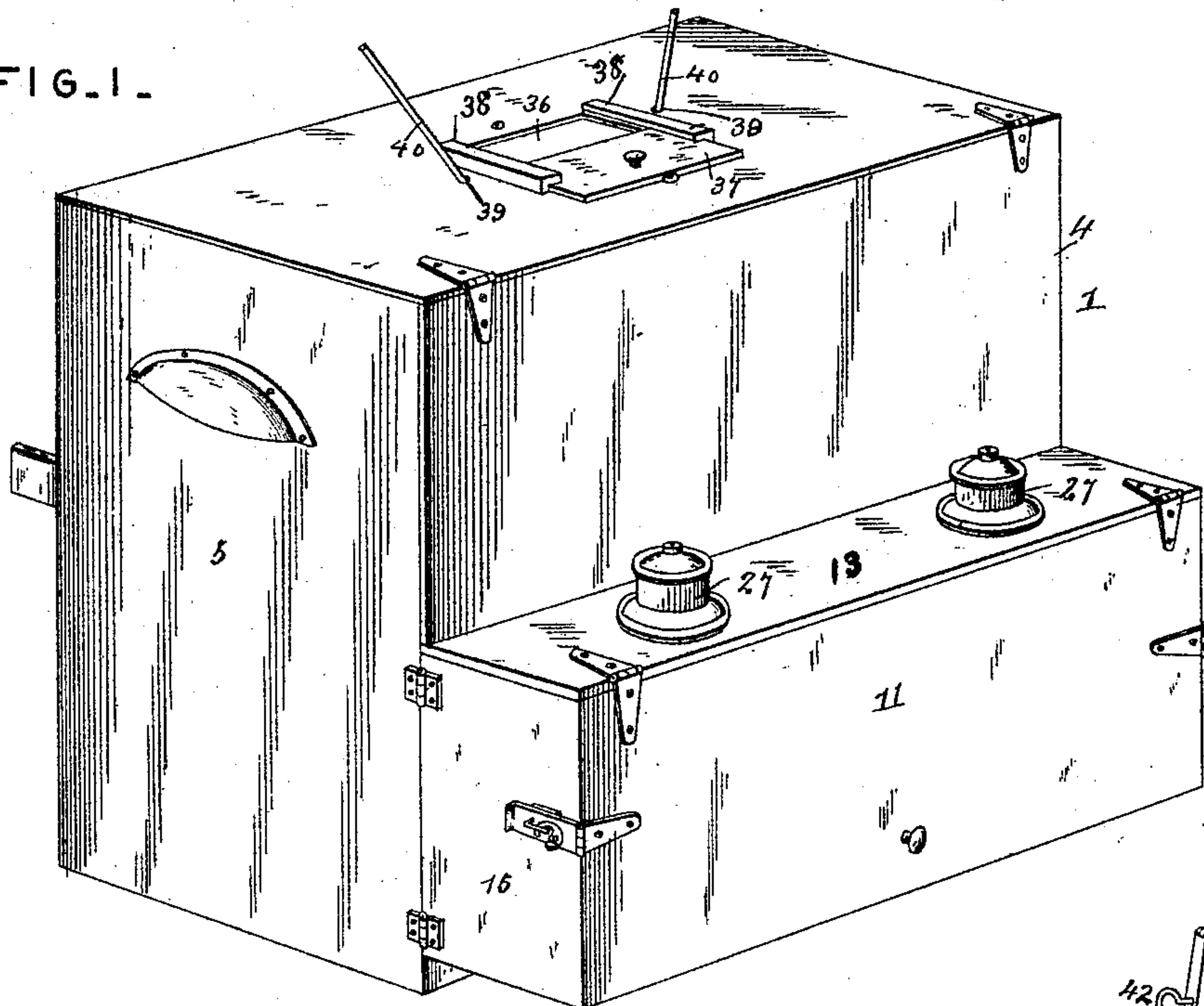


FIG. 2.

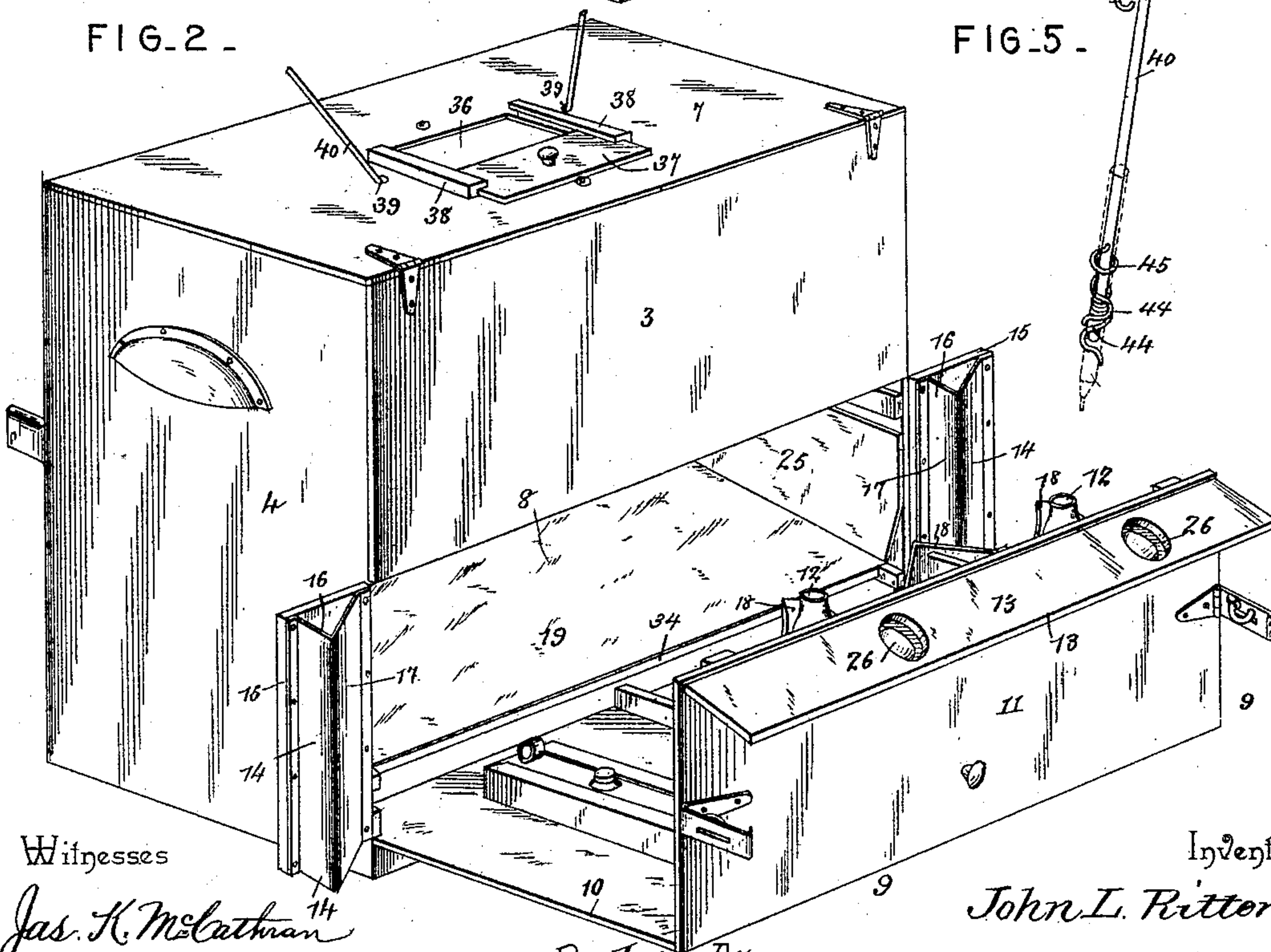
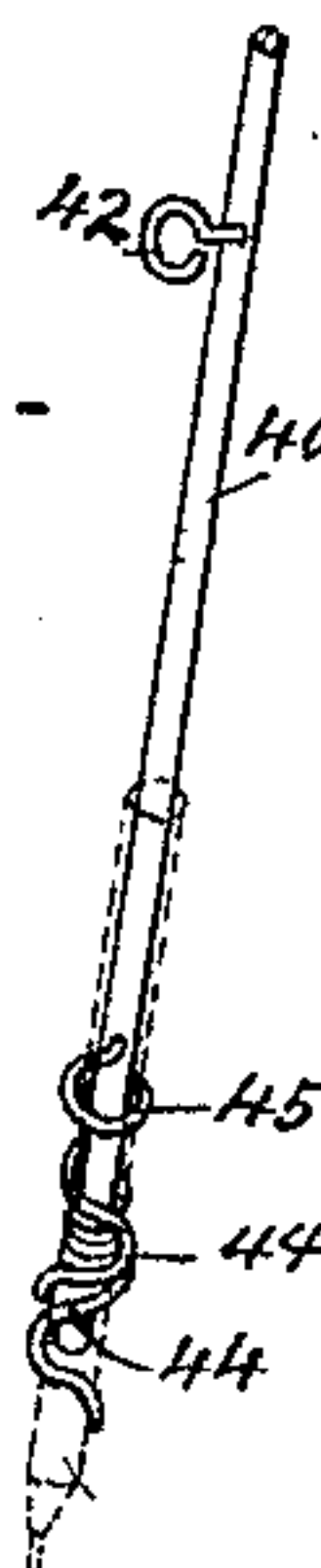


FIG. 5.



Witnesses

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By his Attorneys,

J. F. Riley

Inventor

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FIG. 3.

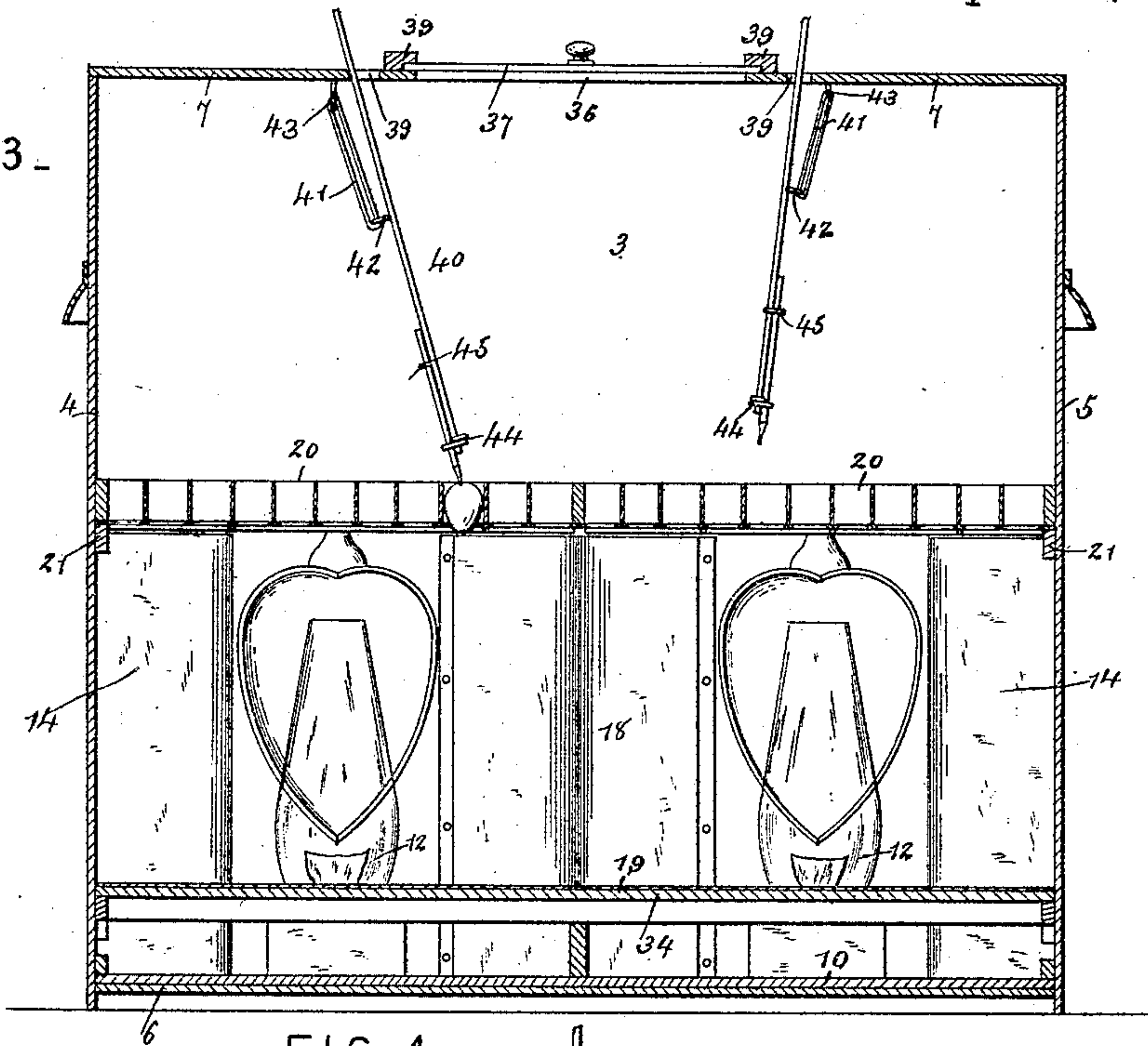


FIG. 4.

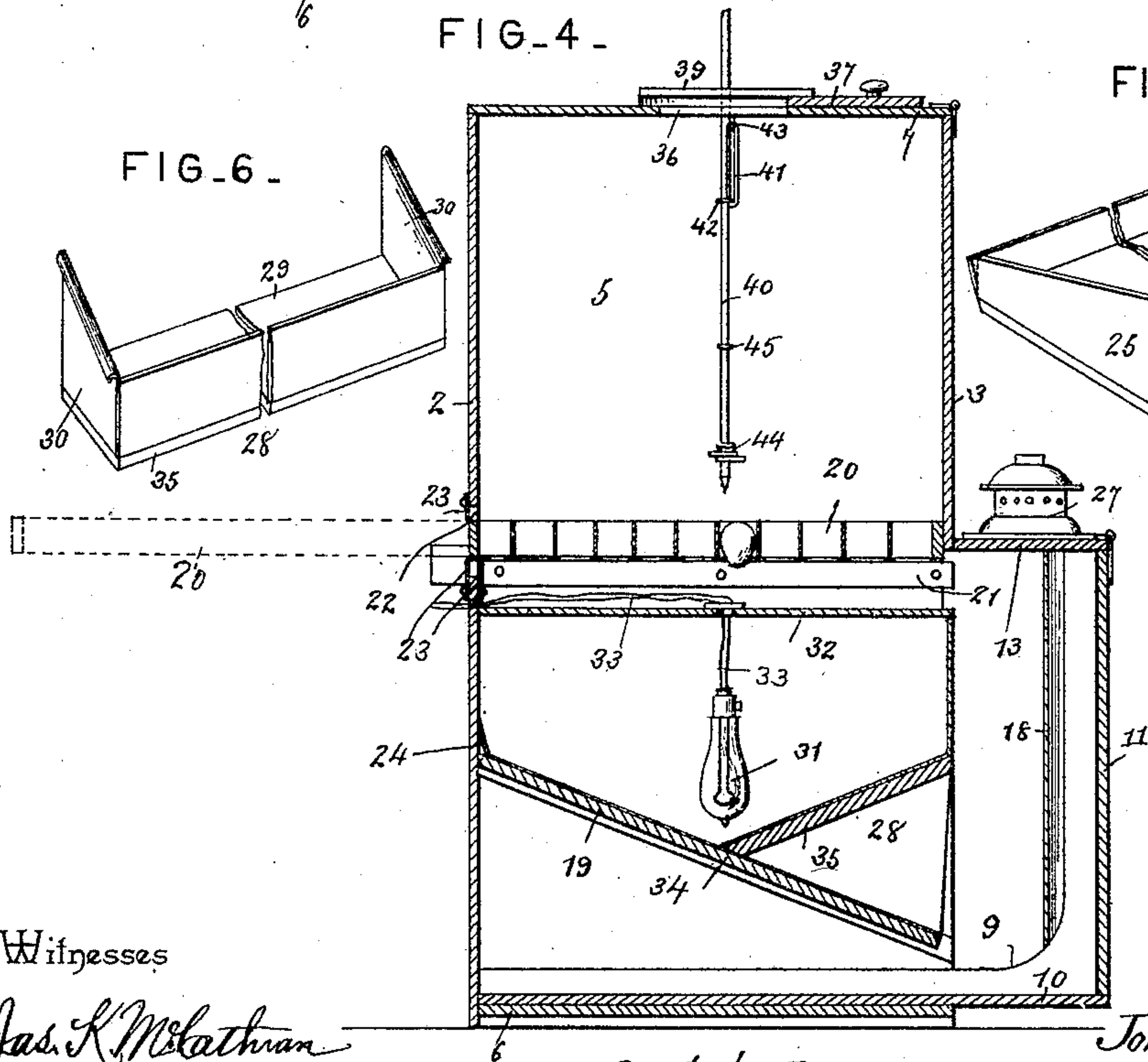


FIG. 6.

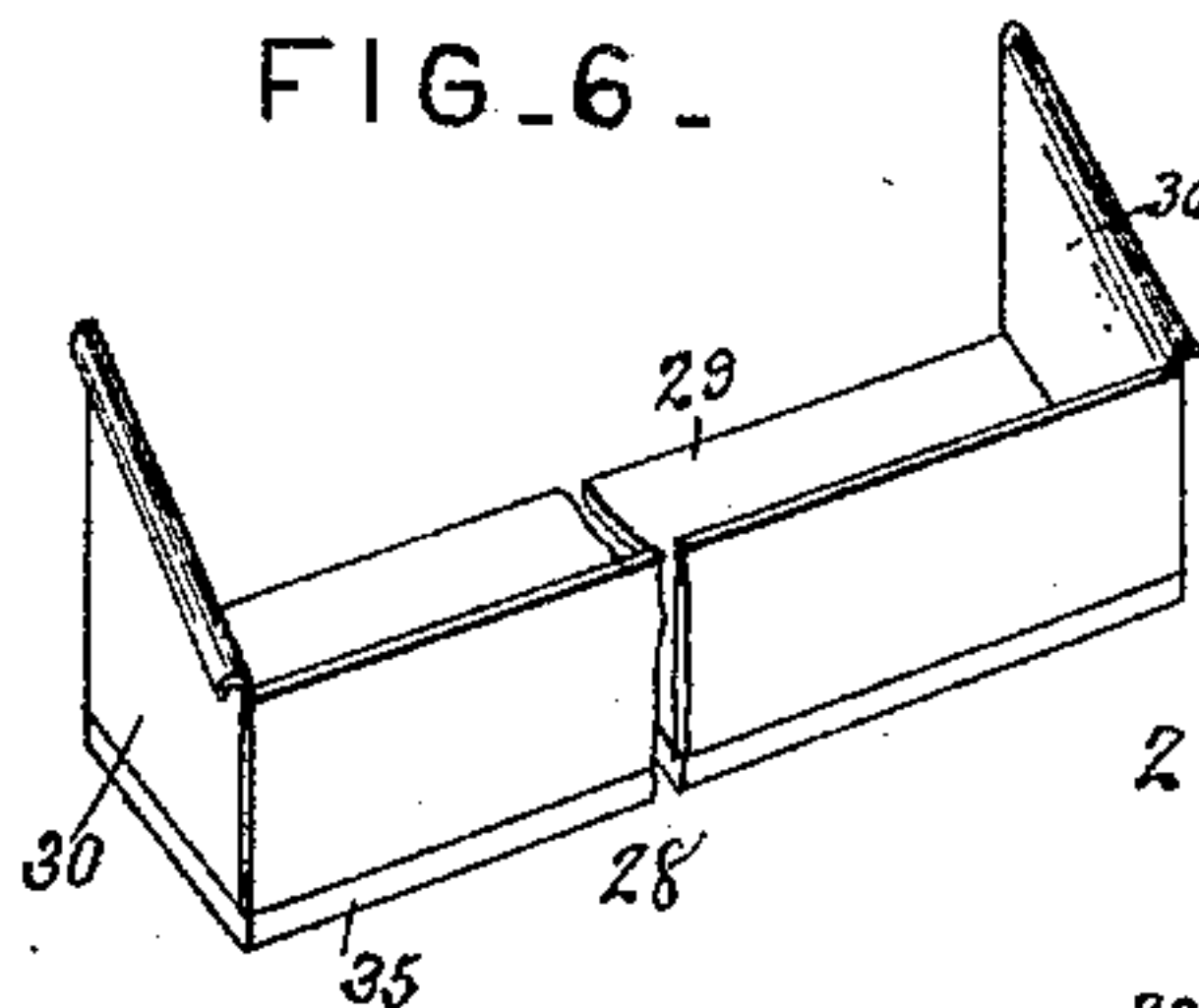
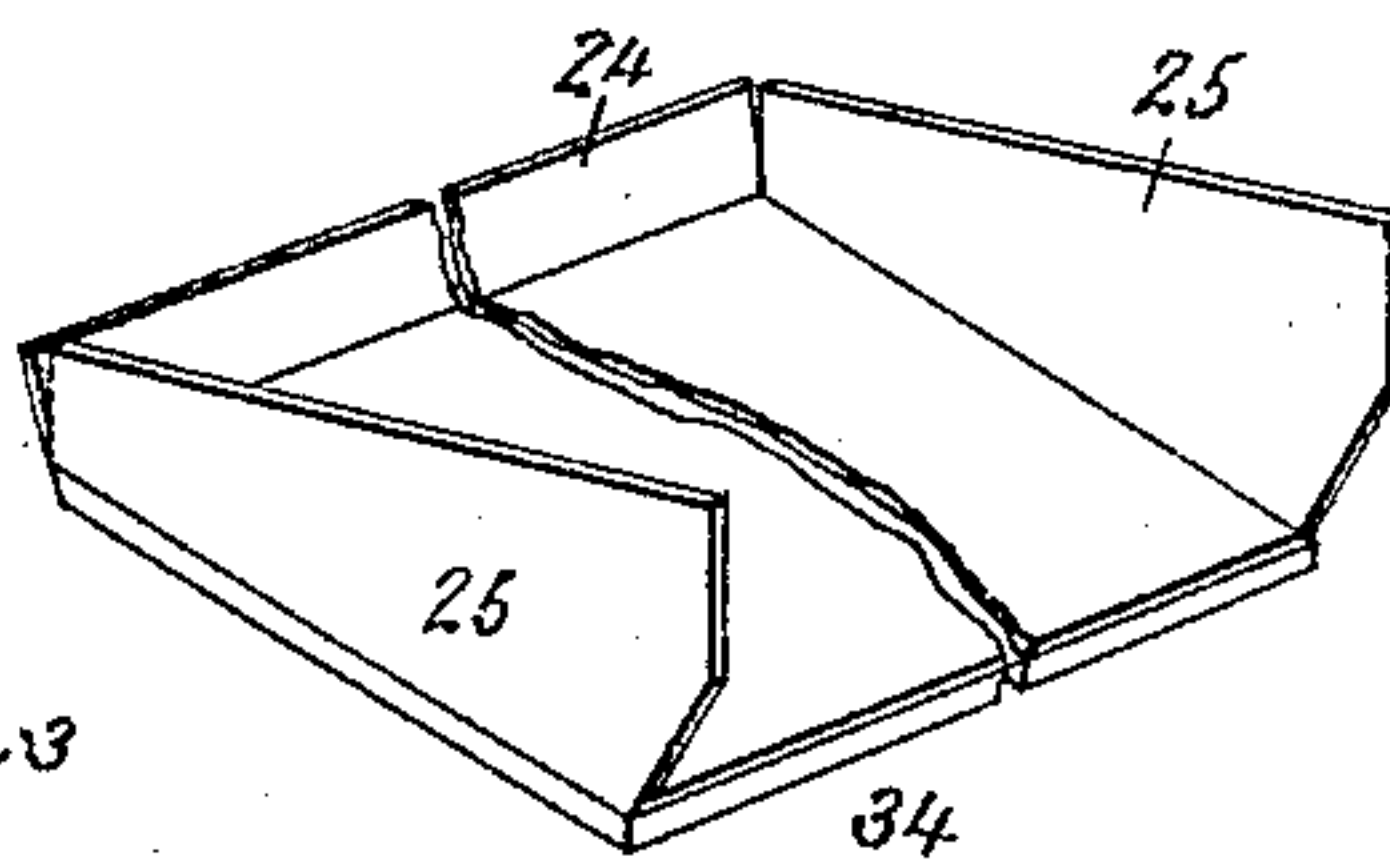


FIG. 7.



Witnesses

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# UNITED STATES PATENT OFFICE.

JOHN L. RITTER, OF SHENANDOAH, VIRGINIA, ASSIGNOR OF ONE-HALF TO  
JOHN P. BROWN, OF SAME PLACE.

## EGG-TESTER.

SPECIFICATION forming part of Letters Patent No. 437,245, dated September 30, 1890.

Application filed May 31, 1890. Serial No. 353,727. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN L. RITTER, a citizen of the United States, residing at Shenandoah, in the county of Page and State of Virginia, have invented a new and useful Egg-Tester, of which the following is a specification.

The invention relates to improvements in egg-testers.

10 The object of the present invention is to provide an egg-tester capable of being conveniently used and adapted to receive an entire tray of eggs without necessitating the changing of eggs from one tray to another.

15 Furthermore, the object of the invention is to provide an egg-tester adapted to be illuminated by lamps or electric lights and capable of being readily changed to enable either to be used.

20 A further object of the invention is to provide convenient means for marking bad eggs.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated  
25 in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of an egg-tester constructed in accordance with this invention. Fig. 2 is a similar view, the sliding section being drawn out and the hinge-reflectors being swung open. Fig. 3 is a vertical longitudinal sectional view. Fig. 4 is a transverse sectional view. Fig. 5 is a detail view of one of the markers. Figs.  
30 6 and 7 are detail views of the bottom reflectors.

Referring to the accompanying drawings, 1 designates the body of the tester composed of sides 2 and 3, ends 4 and 5, the bottoms 6, and a hinged top 7. The lower portion 8 of the side 3 is open, and is adapted to be closed when the egg-tester is in operation by a sliding section 9, composed of a horizontal portion 10 and a vertical portion 11, and adapted  
45 to form a compartment opposite the open portion 8 of the side 3 of the body to contain lamps 12 to illuminate the interior of the egg-tester, and the said sliding section is provided with a cover 13, hinged to the upper  
50 edge of the vertical portion and adapted to

fold over and close the top of the compartment formed by the sliding section, and the ends are closed by hinged reflectors 14, secured to the ends 4 and 5, and arranged opposite the open space 8, and adapted to support the hinge-cover 13, and composed of a rectangular board 15 and a sheet-metal V-shaped reflector 16, having one of the sides 17 arranged at an acute angle to the board and adapted to throw the light into the body of the egg-tester. The lamps 12 are preferably two in number and arranged equidistant from the ends of the sliding section, and are separated by a V-shaped reflector 18, having its vertical side edges secured to the section 9, and being arranged to reflect the light from the lamps 12 into the body 1 and against an inclined bottom reflector 19, extending across the body of the egg-tester and arranged beneath a tray 20, which is supported by cleats 21, secured to the inner faces of the ends 4 and 5, and it is arranged opposite a horizontal opening 22 in the side 2, and the tray 20, containing eggs, is readily inserted and withdrawn through the opening 22, and the upper and lower edges of the opening 22 are provided with flexible strips 23, of cloth or other suitable material adapted to exclude the light, and the upper portions of the inner faces of the body above the tray are blackened, so as to bring the source of light entirely beneath the tray.

The inclined bottom reflector 19 is provided along its upper edge with a longitudinal flange 24 and at its ends with transverse flanges 25, and the said flanges entirely cover the ends 4 and 5 and the side 2 between the inclined portion 19 and the tray, and are adapted to throw a bright light upon the bottom of the tray and enable the eggs to be quickly and thoroughly examined.

The cover 13 is provided with openings 26, over which are secured tops 27 for the lamps 12, and when it is desired to employ electric lights an additional reflector 28 is arranged within the body and is constructed similarly to the reflector 19, and consists of an inclined bottom, a longitudinal flange or side 29, and ends 30, and the inclined bottom portion extends from one side of the body to the middle



of the reflector 19, and is about half the width of the same, and is arranged at a similar angle. Electric lights 31, which are preferably two in number and arranged at each end of the bottom, are suspended from cross-pieces 32, arranged a short distance below the tray, and the wires 33 may enter through openings at any desired portion of the body, and it will readily be seen that the reflector 28 can readily be removed and the lamp be employed to illuminate the egg-tester. The reflector 28 fits sufficiently tight against the ends of the body to secure it in position, and the bottoms of both the reflectors 19 and 28 are strengthened and supported by boards 34 and 35.

The hinged top 7 of the body is provided with a central opening 36, adapted to be closed by a slide 37, moving in ways formed by grooved strips 38, arranged at each end of the opening, and the said hinged top is provided with perforations 39, arranged upon opposite sides, in which are arranged markers 40, which are secured to the top by elastic bands 41, connected to an eye 42 of a marker, and an eye 43, arranged on the lower face of the hinged top adjacent to the perforations 39, and the said elastic bands maintain the markers sufficiently above the eggs to prevent the markers accidentally breaking the eggs. The lower end of the marker is provided with spring-arms 44, forming a clasp and adapted to receive a pencil, and the rear end of the latter is steadied by a guide-ring 45. The markers are adapted to be used by the operator to indicate spoiled eggs, and the pencils may be readily adjusted on the ends of the markers, and it will readily be seen that spiral springs or their equivalents may be employed to connect the markers to the top instead of using the elastic bands described.

From the foregoing description and the accompanying drawings the construction, operation, and advantages of the invention will be readily understood.

Having described my invention, what I claim is—

1. An egg-tester comprising the body 1, having the open portion 8 in one of its sides and the sliding section 9, arranged opposite the opening 8 and upon the bottom of the body and comprising the horizontal portion 10, the vertical portion 11, and provided with the hinged cover 13 and adapted to form a compartment opposite the opening 8 to receive the lamps, and the hinged reflectors 14, closing the ends of the compartment, substantially as described.

2. An egg-tester comprising the body 1, having the opening 8 in one of its sides, the section 9, sliding on the bottom of the body and arranged opposite the opening 8, and having the hinged cover 13, provided with openings 26 and caps 27, the hinged reflectors 14, forming the ends of the compartments, and the lamps arranged upon the sliding section and beneath the opening 26 and caps 27, substantially as described.

3. An egg-tester comprising the body 1, having the opening 8 in one of its sides, the inclined reflector 19, extending across the body, the sliding section 9, provided with the hinged cover 13, the hinged reflectors 14, comprising the rectangular boards 15, and the V-shaped reflectors secured to the boards, the lamps arranged upon the sliding section, and the V-shaped reflector 18, located between the lamps, substantially as described.

4. An egg-tester comprising the body 1, having a horizontal opening 22, provided along its edges with strips 23, adapted to exclude light, the cleats secured to the inner faces of the ends of the body and arranged opposite the horizontal opening 22 and adapted to support a tray, the oppositely-inclined reflectors arranged beneath the horizontal opening and the cleats, and the cross-pieces 32, substantially as described.

5. An egg-tester provided with a marker 40, arranged to engage the eggs and connected with it by an elastic or the like, substantially as described.

6. The combination, in an egg-tester, of the body, the marker arranged within the body and provided with suitable means for securing a pencil, and the elastic connection securing the marker to the body, substantially as described.

7. In an egg-tester, the combination of the body provided in its top with the opening 36 and the perforations 39, arranged upon opposite sides of the opening, the markers arranged within the body and extending through the perforations and provided with suitable means for securing a pencil, and the elastic connection securing the markers to the body, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JOHN L. RITTER.

Witnesses:

GEO. E. FRECH,  
J. EDGAR SMITH.