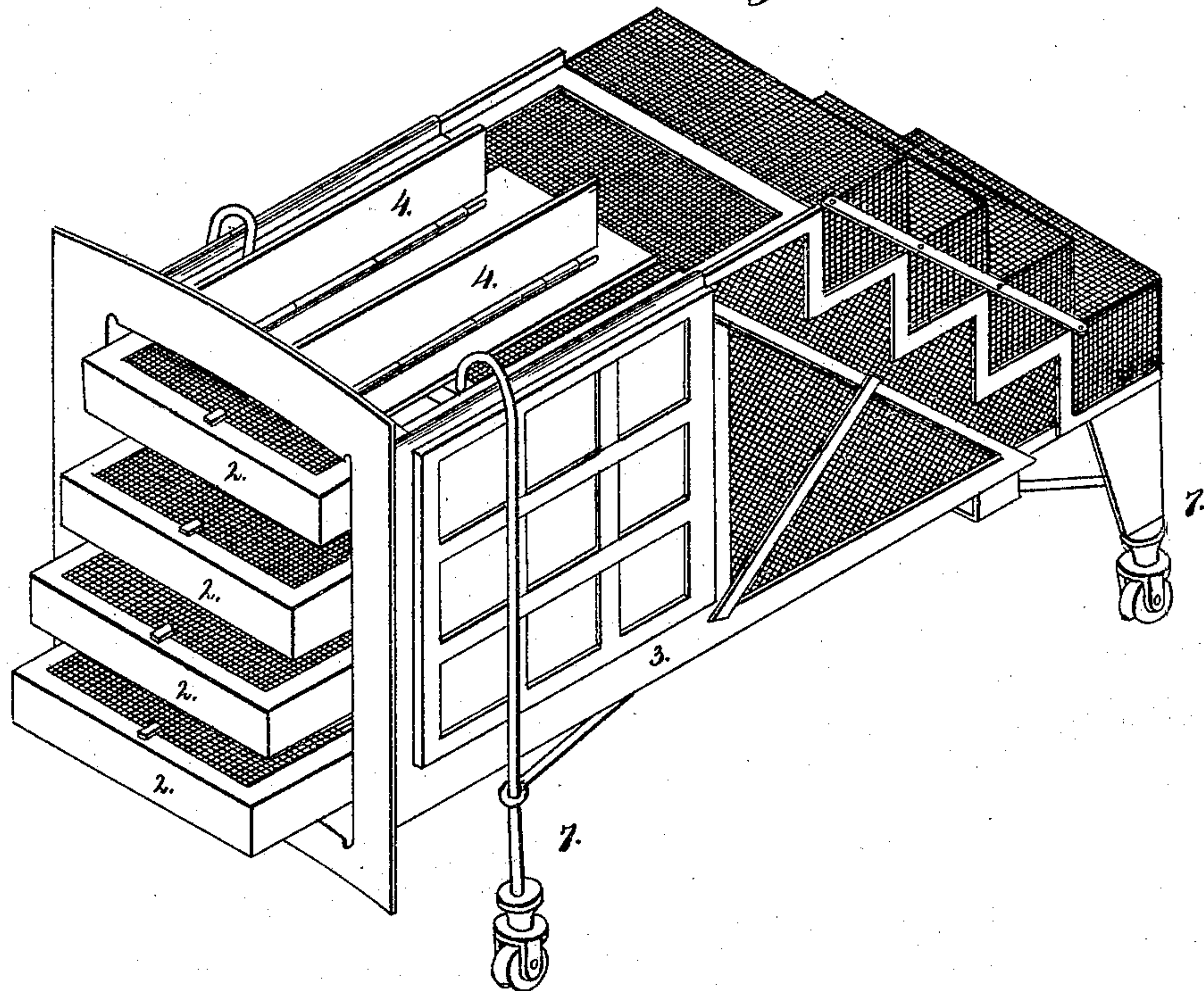


H. J. HAIGHT.
Incubators.

No. 153,948.

Patented Aug. 11, 1874.

Fig. 1.



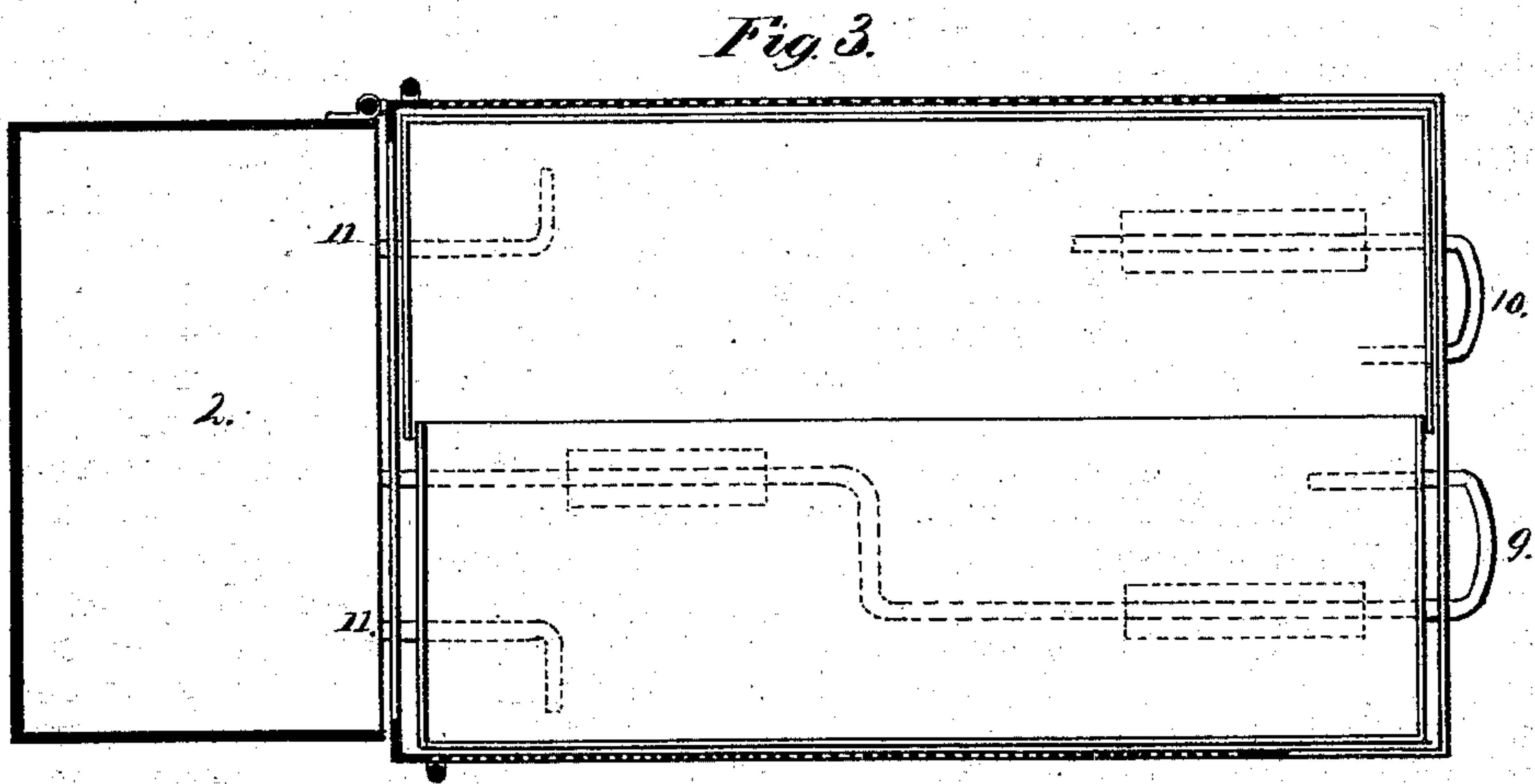
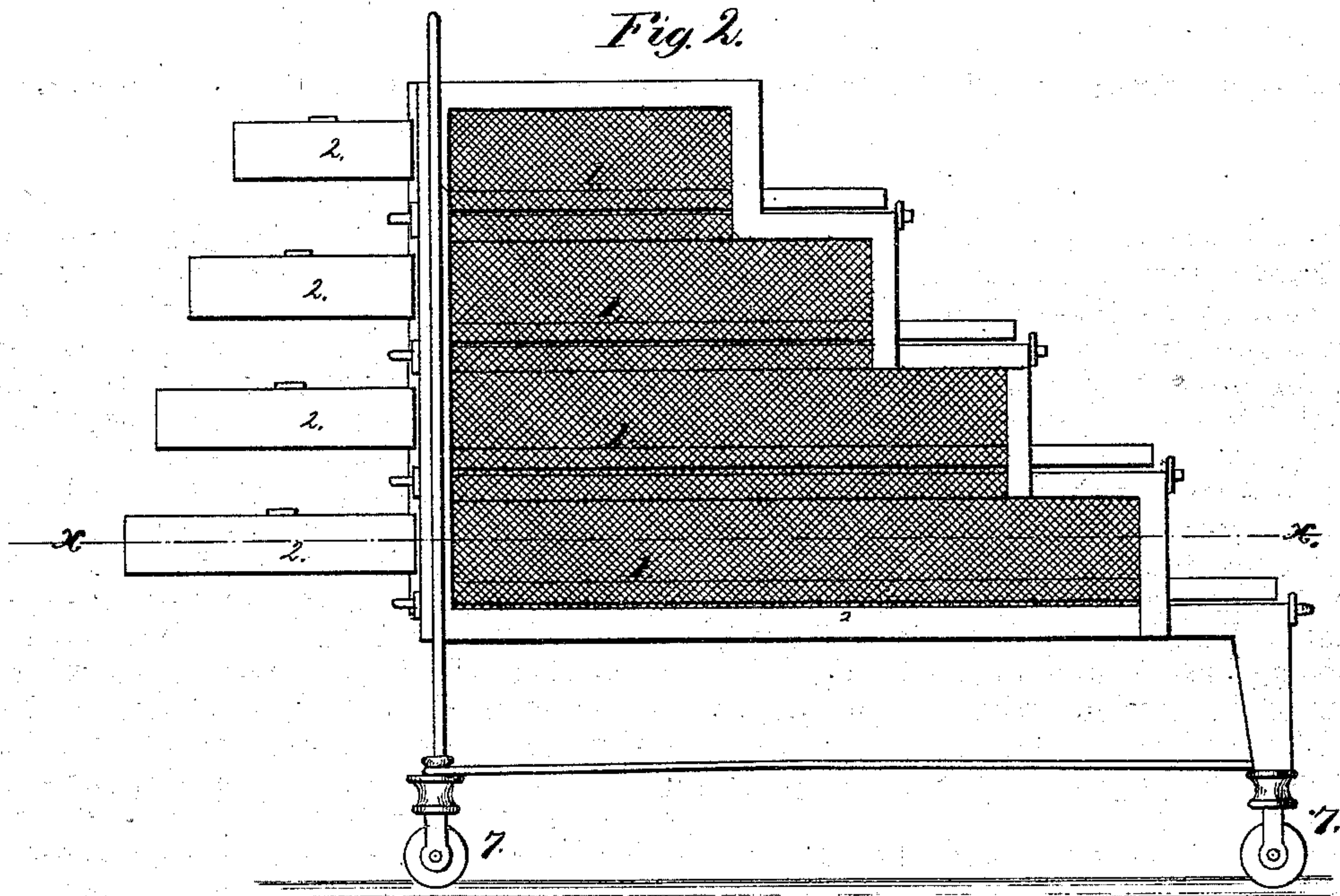
Witnesses
Chas. S. Newell Jr
John Carlin

Inventor:
Henry J. Haight

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UNITED STATES PATENT OFFICE.

HENRY J. HAIGHT, OF NEW YORK, N. Y.

IMPROVEMENT IN INCUBATORS.

Specification forming part of Letters Patent No. **153,948**, dated August 11, 1874; application filed December 28, 1871.

To all whom it may concern:

Be it known that I, HENRY J. HAIGHT, of the city, county, and State of New York, have invented a new and Improved Brooding Apparatus, for protecting newly-hatched chickens, which I term an "artificial mother;" and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification—

Figure 1 being a view of the apparatus in perspective; Fig. 2, a side view of the same, the inclosing case being removed; Fig. 3, a plan thereof in section, taken in the plane indicated by the line *x x*, Fig. 2.

Like letters designate corresponding parts in all of the figures.

My improved brooding apparatus is composed essentially of two sets of shallow boxes, shelves, or trays, one above another; one set being inclosed in a case, and the other set being outside of the said case, free to be inserted into an artificial incubator of suitable construction to receive its heat therefrom. The outer or projecting set is for the reception of chickens when first hatched, and the inclosed set is for the reception of chickens somewhat older, and is intended to inure them to the open air, and prepare them to take care of themselves.

In the drawings, 1 1 represent the inclosed shelves or trays, and 2 2 the exterior trays. The trays 1 1 are inclosed by a removable case, 3, which may have glass lights in the sides to admit light, and adjustable ventilating-covers 4 4. The trays are arranged in terraces, as shown—that is, each lower tray projects some distance outward to the rear beyond the one next above it, and so on to the top. Thus each tray is exposed, at one end, to the light and air, so that the chickens can either exercise themselves there or retire within the case; and this arrangement affords opportunity for feeding the chickens, there being suitable openings in the case, at the rear, to insert the food. The whole is or may be covered with a screen of wire-gauze, as represented in Fig. 1, to exclude rats and other pests, and better shield the chickens.

The bottom of each shelf or tray 1 is made so as to separate in two parts, and to let

down in the middle, for the purpose of cleaning the tray of filth at any time. This construction is shown in Fig. 3, where the two parts, at one end, are pivoted at 9 and 10, respectively, and at the other end by pivots 11 11. The pivots 9 and 10 are movable end-wise, and have each a crook or bend, as shown, which enters a socket or hole in the end of the tray. On withdrawing either bent pivot from its socket, that part of the bottom or support is free to turn down edge-wise and let down whatever dirt there may be upon it. This bent fastening may extend to both ends of the tray, as shown by dotted outlines of pivot 9. One part of the bottom may be made to support the adjacent edge of the other, as represented. The outer or free trays 2 2 are hinged at one corner to the case or frame of the inner trays, as represented, so that they may be swung away therefrom when desired. Each tray is to be lined or covered with lamb-skin, or some other soft and warmth-retaining substance, to keep the chickens warm, and has, or may have, also a cover of wire-gauze to ventilate the same. The whole apparatus is supported on legs having casters or small grooved wheels, 7 7, by which it can be wheeled about over the ground or floor, or on a railway.

This apparatus is intended especially to be used in connection with an artificial incubator, and constructed to be connected therewith. It is particularly adapted to the artificial rotary incubator invented by me, and patented December 26, 1871, and it is so constructed that when it is brought into connection therewith the projecting shelves or trays 2 2 enter one side of the incubator and receive the newly-hatched chickens therefrom, and are to remain therein and be heated or warmed thereby. The chickens, as they grow in size and strength, are transferred to the inclosed trays 1 1, and remain therein till they are capable of sustaining themselves in the open air. When the incubator is to be turned, the brooding apparatus is withdrawn therefrom for the moment, and then again brought into connection therewith.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. An artificial brooding apparatus pro-

vided with inclosed and outer projecting sets of shelves or trays, 1 1 and 2 2, the trays 1 1 being arranged in terraces, constructed substantially as and for the purpose herein specified.

2. The swinging shelf or tray bottoms, provided with the bent fastening-pivots 9 10, substantially as and for the purpose herein specified.

3. The removable outer case 3, in combination with the shelves or trays 1 1, substantially as and for the purpose specified.

HENRY J. HAIGHT.

Witnesses:

CHAS. S. NEWELL,
JOHN CARLIN.