

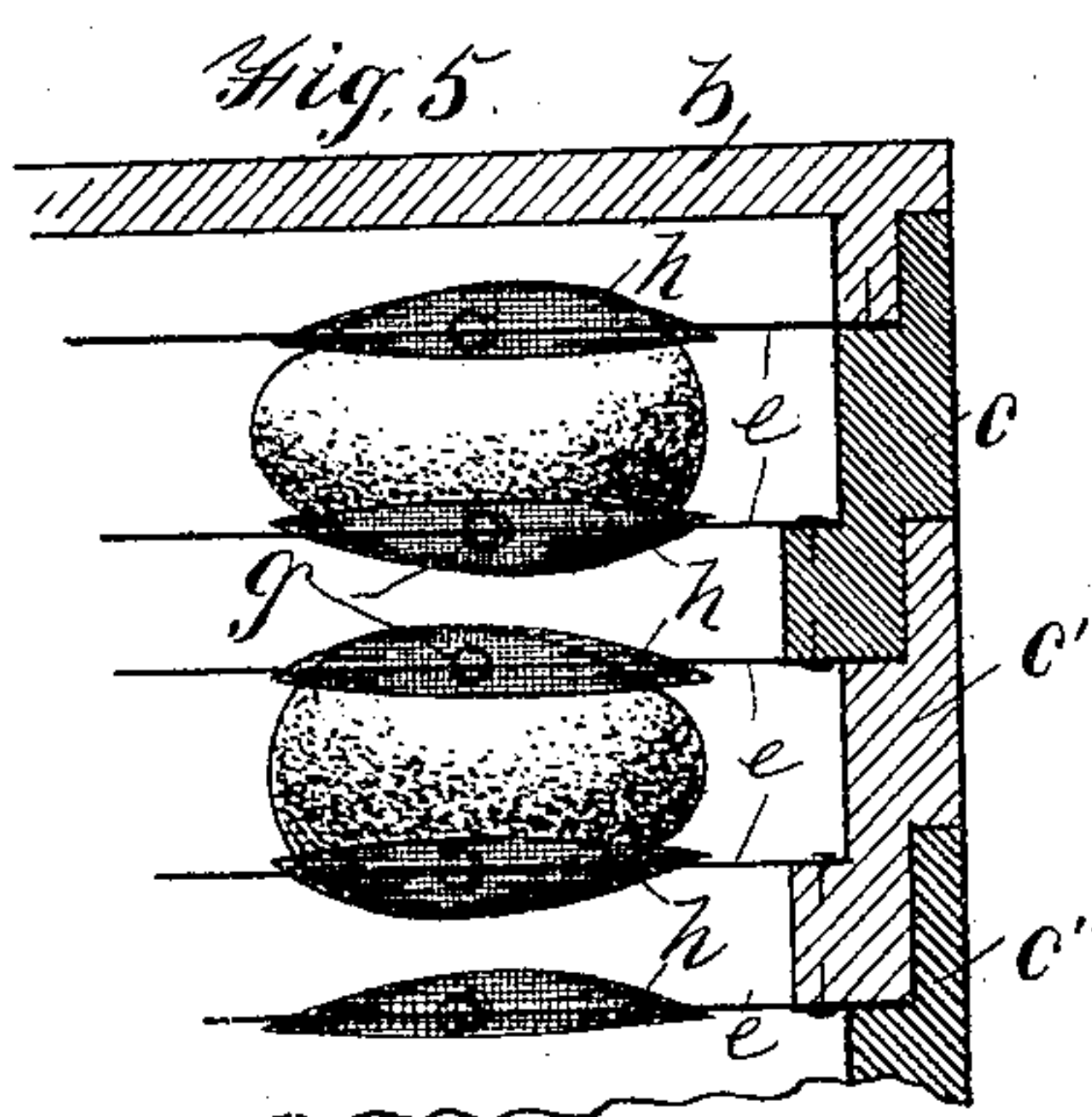
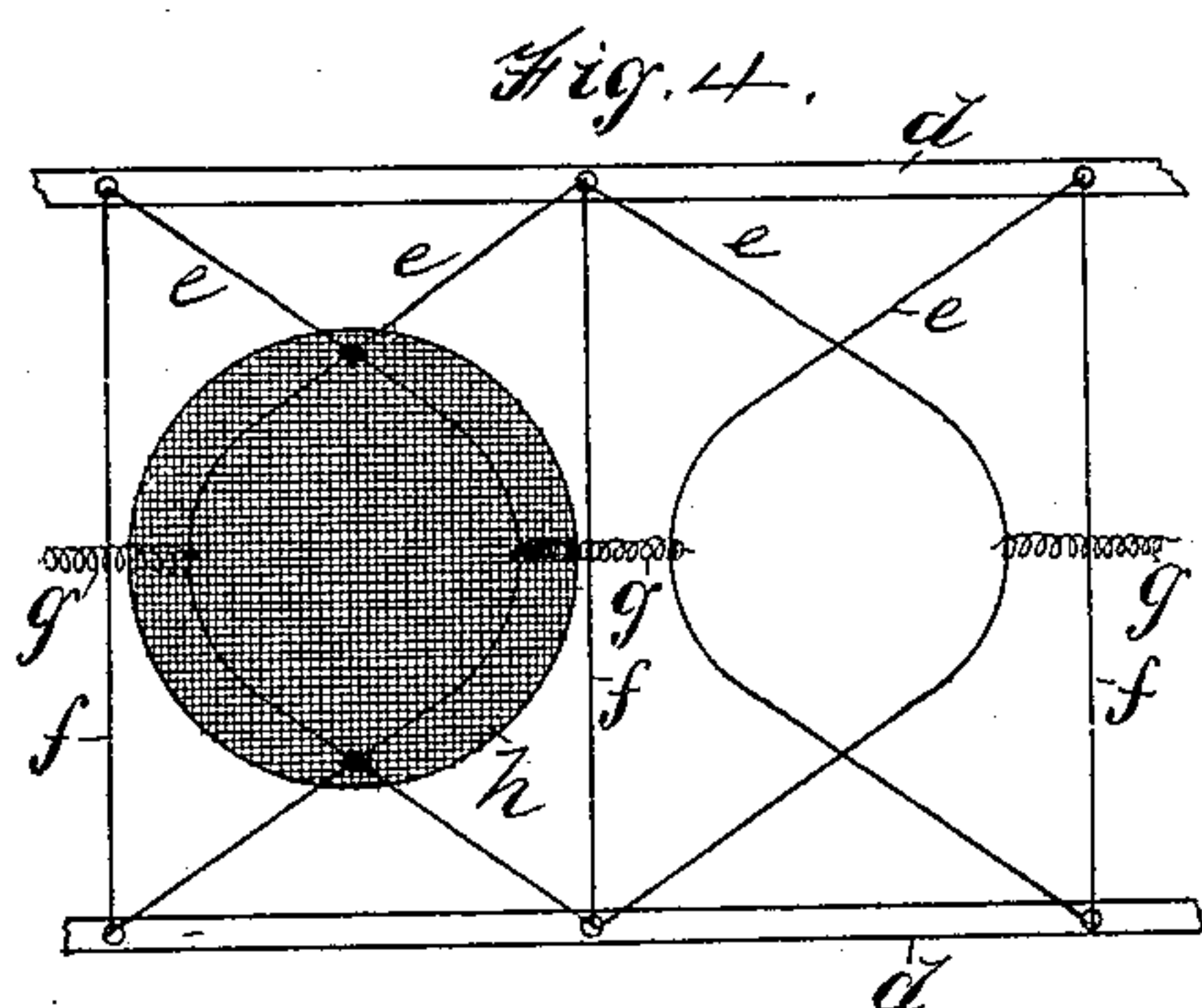
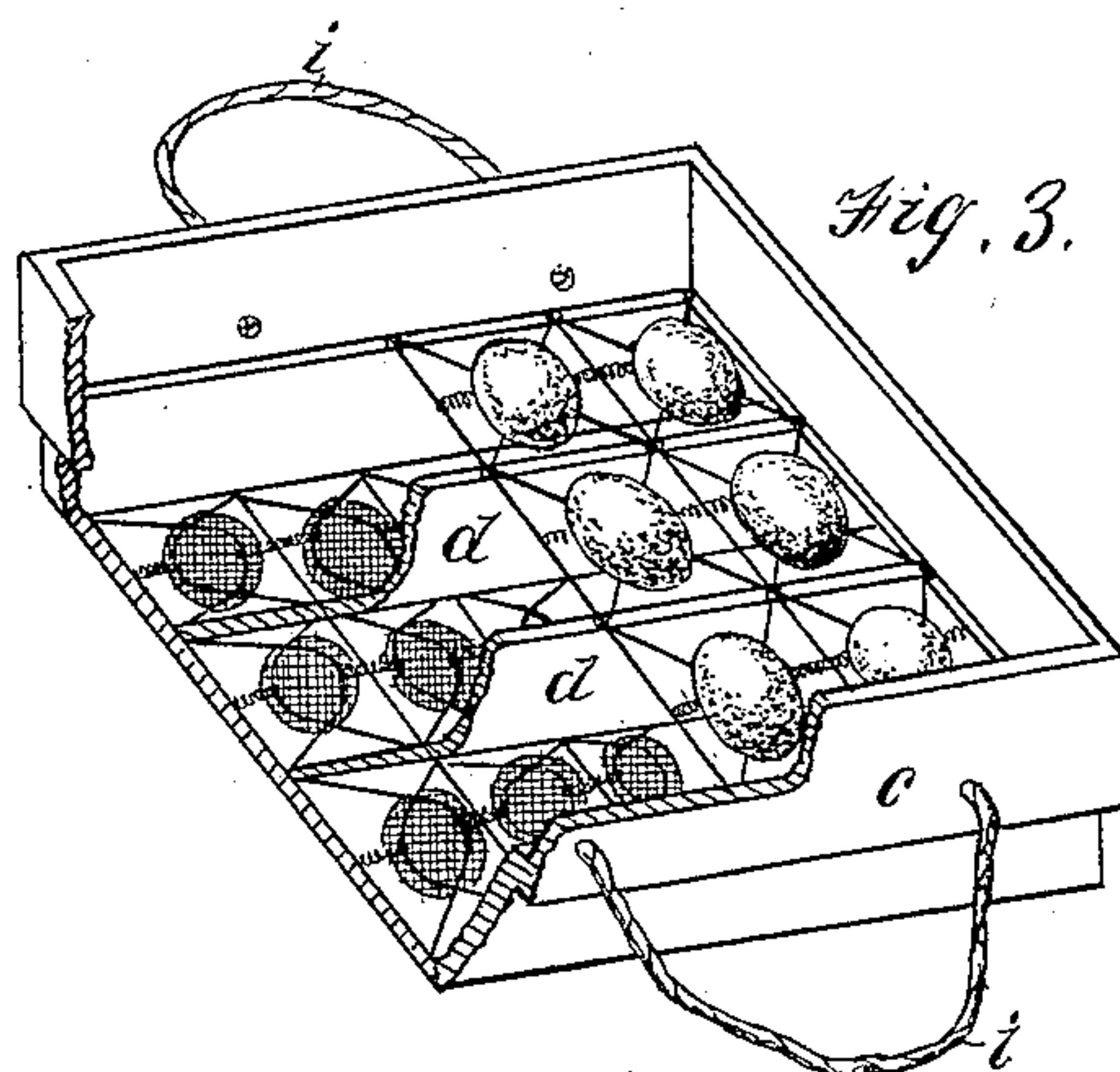
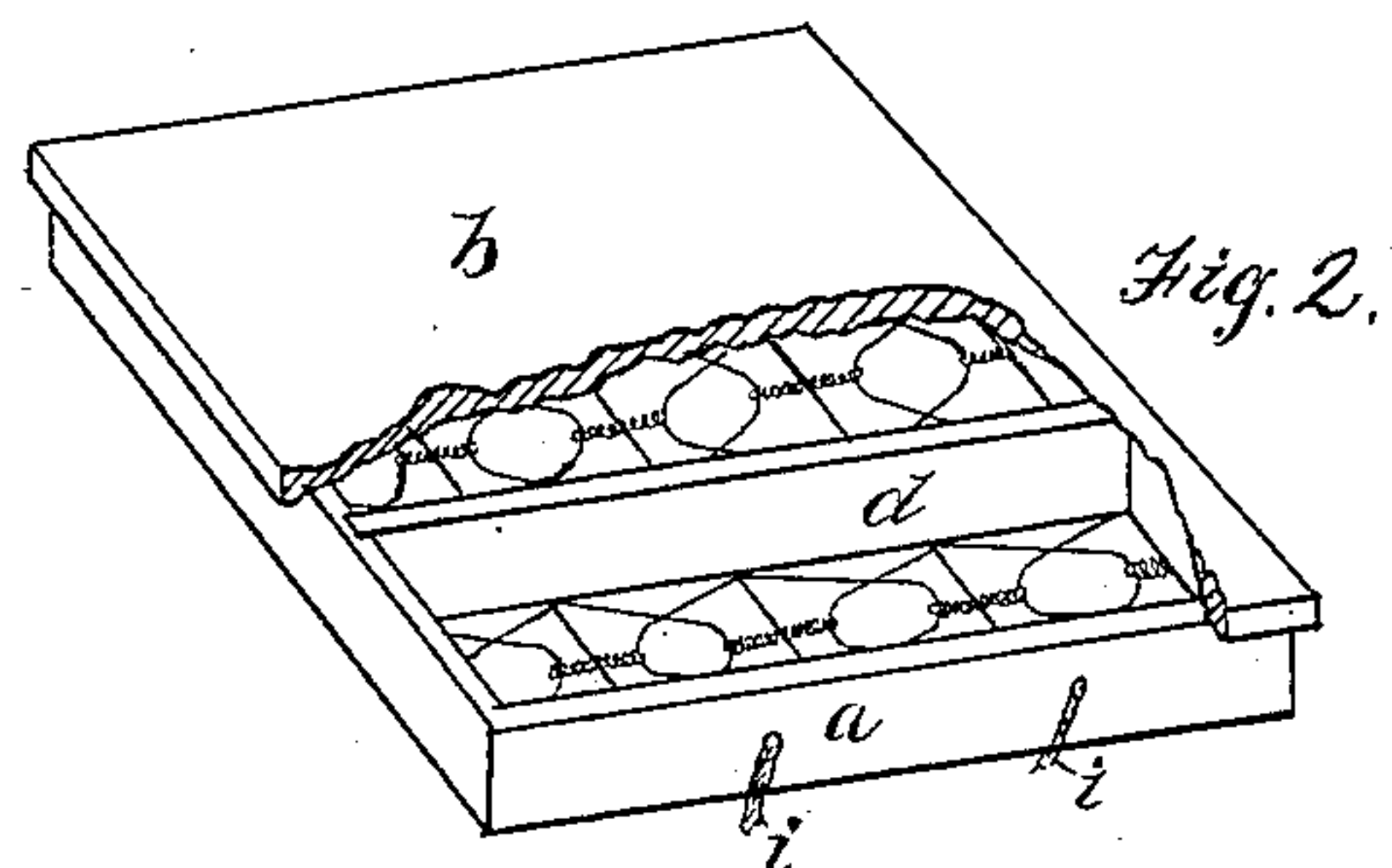
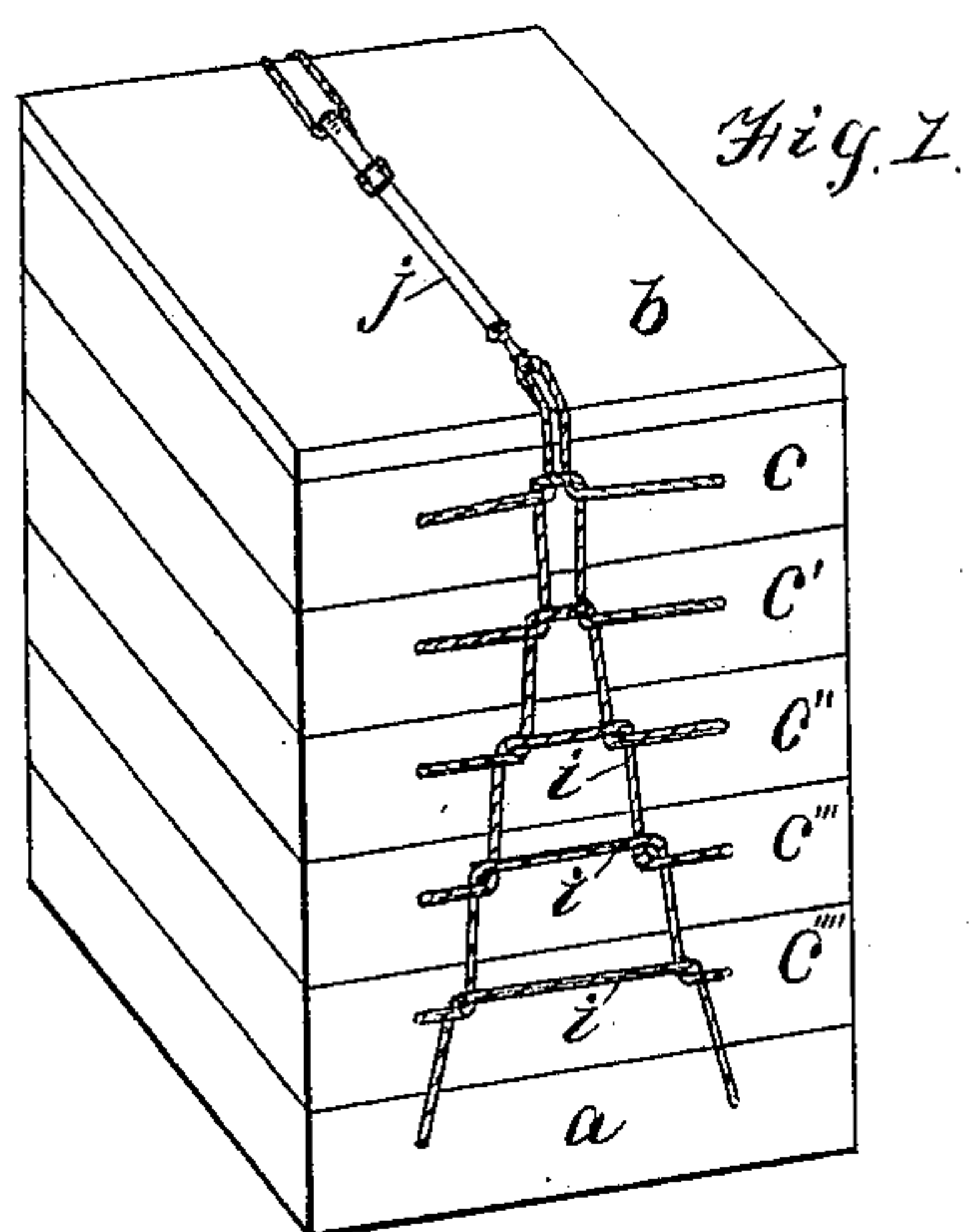
No. 607,423.

Patented July 19, 1898.

F. H. CHAMPLIN.
EGG CRATE OR BOX.

(Application filed Mar. 10, 1897.)

(No Model.)



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UNITED STATES PATENT OFFICE.

FRED H. CHAMPLIN, OF LONG MEADOW, MASSACHUSETTS.

EGG CRATE OR BOX.

SPECIFICATION forming part of Letters Patent No. 607,423, dated July 19, 1898.

Application filed March 10, 1897. Serial No. 626,878. (No model.)

To all whom it may concern:

Be it known that I, FRED H. CHAMPLIN, a citizen of the United States of America, residing at East Long Meadow, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Egg Crates or Boxes, of which the following is a specification, reference being had to the accompanying drawings and letters of reference marked thereon.

My invention relates to the construction of a device for carrying and handling eggs with safety and convenience.

The object of my invention is to produce a device by which eggs in any desired quantity may be conveniently handled and transported with safety and convenience.

My invention consists in a construction whereby the eggs are supported upon a cushion produced by the operation of springs and whereby the eggs are held between oppositely-arranged engaging pieces.

My invention also consists in an arrangement of telescoping or adjustable trays whereby one or more of said trays may be used independently or collectively and in the arrangement of handles whereby the trays are secured to each other for the purpose of transportation.

My invention further consists in the construction and arrangement herein set forth, whereby the objects of my invention are attained.

In the accompanying drawings, in which like letters of reference indicate like parts, Figure 1 is a perspective view showing several trays united in the position they occupy for transportation. Fig. 2 is a perspective view of a base-tray provided with a cover, the cover being broken away, disclosing a portion of the interior. Fig. 3 is a perspective of one of the intermediate trays with a part broken away, disclosing the interior arrangement of a network of wires in the upper portion of the tray and a similar arrangement of wires in the lower part of the tray, those in the upper part being shown with eggs in position. Fig. 4 is a plan view, on an enlarged scale, showing the preferred arrangement of wires and springs; and Fig. 5 is a vertical sectional view of a part of the trays in position with

reference to each other and showing also the one in which the eggs are held.

In detail, *a* indicates the base-tray; *b*, the cover; *c*, intermediate trays; *d*, ribs arranged in the trays; *e*, supporting-wires; *f*, transversely-arranged wires; *g*, springs; *h*, a cover for the wires; *i*, handles, and *j* a strap.

The construction and arrangement of my device will be readily understood on reference to the drawings.

The base-tray *a* is provided with a bottom and transverse ribs *d* and one network for supporting the eggs. The cover is also provided with a single network, while the intermediate trays *c* are provided with two networks, the upper network being adapted to receive the eggs being packed and the lower network being adapted to rest upon the eggs deposited in the tray next below, so that the eggs are held between cushioned surfaces both above and below.

The preferred form of network is that illustrated on an enlarged scale in Fig. 4, the wires *e* being formed in oppositely-projecting loops and extending from rib to rib, the central part of the loops being connected by springs *g*, or these springs may extend from transversely-arranged wire *f* to the loops adjacent thereto. In the manufacture it will of course be found most convenient to carry the wires across from side to side, the same being passed around pins, tacks, or other attaching devices mounted in the ribs and at the sides of the trays, and in so doing it is found more convenient to carry the wire *f* across than to cut the wire and fasten it in position, and the attaching of the pins to the transversely-arranged wire *f* is in some cases more desirable.

The looped portion of the wires are covered with a soft material *h*, preferably woolen or other similar textile, and these are secured to the wires in any convenient manner, preferably by thread.

The trays are arranged to telescope with each other, preferably by arranging the lower portion so as to set within the upper portion of the tray next below it, and I prefer to accomplish this by forming the side walls with both inner and outer rabbets, as shown most clearly in Fig. 5, so that the exterior of the complete or built-up structure will present a

uniform and unbroken appearance by reason of the outer walls being flush with each other.

Each of the trays is provided with a handle *i*, preferably made of cord, and the trays
5 are preferably secured to each other by passing the handles of each tray through the handles of the tray next below it in the manner illustrated in Fig. 1, and the handles of the cover or upper tray are secured to each other
10 by a strap *j* or other convenient means, thus forming a convenient handle by which the whole built-up structure may be lifted. It will be seen that by this arrangement the pressure placed upon the eggs is that exerted
15 by the springs, and if the springs are properly adjusted and by the right tension the eggs will be firmly held in position, so that danger of breakage is entirely avoided, as they cannot come in contact with each other, neither
20 can they be dislodged from the holding device, each individual egg being held in its individual holding device.

By preference the trays are constructed to hold a very few eggs each. For instance, one
25 tray may be constructed to hold one dozen eggs, and if it be desired to transport that number only then the base-tray *a* and cover are all that are required, while if a greater number of eggs are to be transported then
30 additional trays are employed to the extent required to transport the requisite number.

It will be seen that the position in which the trays are transported or placed becomes immaterial, as with this construction and ar-
35 rangement the eggs cannot be dislodged from their individual holding devices regardless of the position of the device.

Having therefore described my invention, what I claim, and desire to secure by Letters
40 Patent, is—

1. The combination of a base-tray and one or more individual trays arranged with their bodies to telescope one with the other, a cover and a series of loops arranged in each tray,
45 the ends of the looped pieces being fixed to a

rigid wall and the intermediate portion of oppositely-projecting loops being united by a coil-spring and a flexible covering arranged over the loops to receive the eggs and means to secure the trays together substantially as
50 shown.

2. In an egg-crate the combination of a case looped wires attached to the case *e* and springs attached to the oppositely-projecting loops, substantially as shown. 55

3. The combination in an egg-crate, of a tray having looped wires *e*; springs *g* and a covering *h*, substantially as shown.

4. The combination in an egg-crate of independent trays provided with two webs of
60 looped wires, one web being looped in opposite direction to the other with adjacent loops connected by an intermediate coil-spring, substantially as shown.

5. The combination in an egg-crate of two
65 or more independent trays arranged to lock together to prevent lateral movement between them and independent flexible looped handles with their ends attached to the outside walls of each tray, each flexible looped han-
70 dle being of sufficient length to be looped or interlocked with the next flexible handle, a bottom and a top, and means to connect and draw toward each other the top set of flexible
75 loops which overlap the cover substantially as shown.

6. The combination in an egg-carrying crate of two or more independent trays having their walls rabbeted whereby the walls telescope with each other, a series of oppo-
80 sitely-looped wires secured to the trays and arranged so that their loops cross each other, two in a set, and a series of springs connecting adjacent loops so that the egg-receiving
85 recesses are formed between the oppositely-arranged loops substantially as shown.

FRED H. CHAMPLIN.

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