

J. E. FULTON.

BROOD COOP.

APPLICATION FILED JUNE 6, 1910.

986,703.

Patented Mar. 14, 1911.

2 SHEETS—SHEET 1.

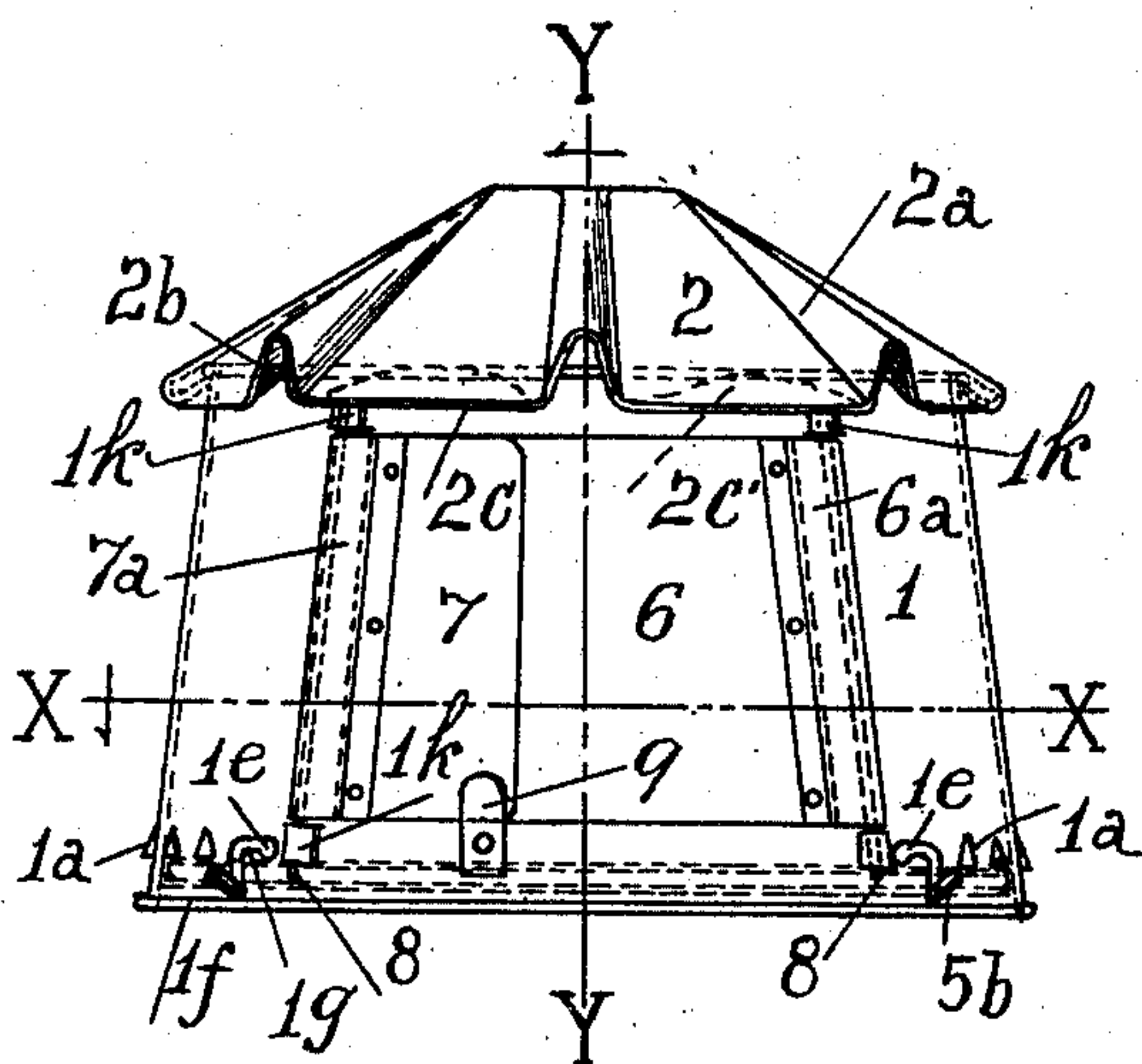


Fig. 1.

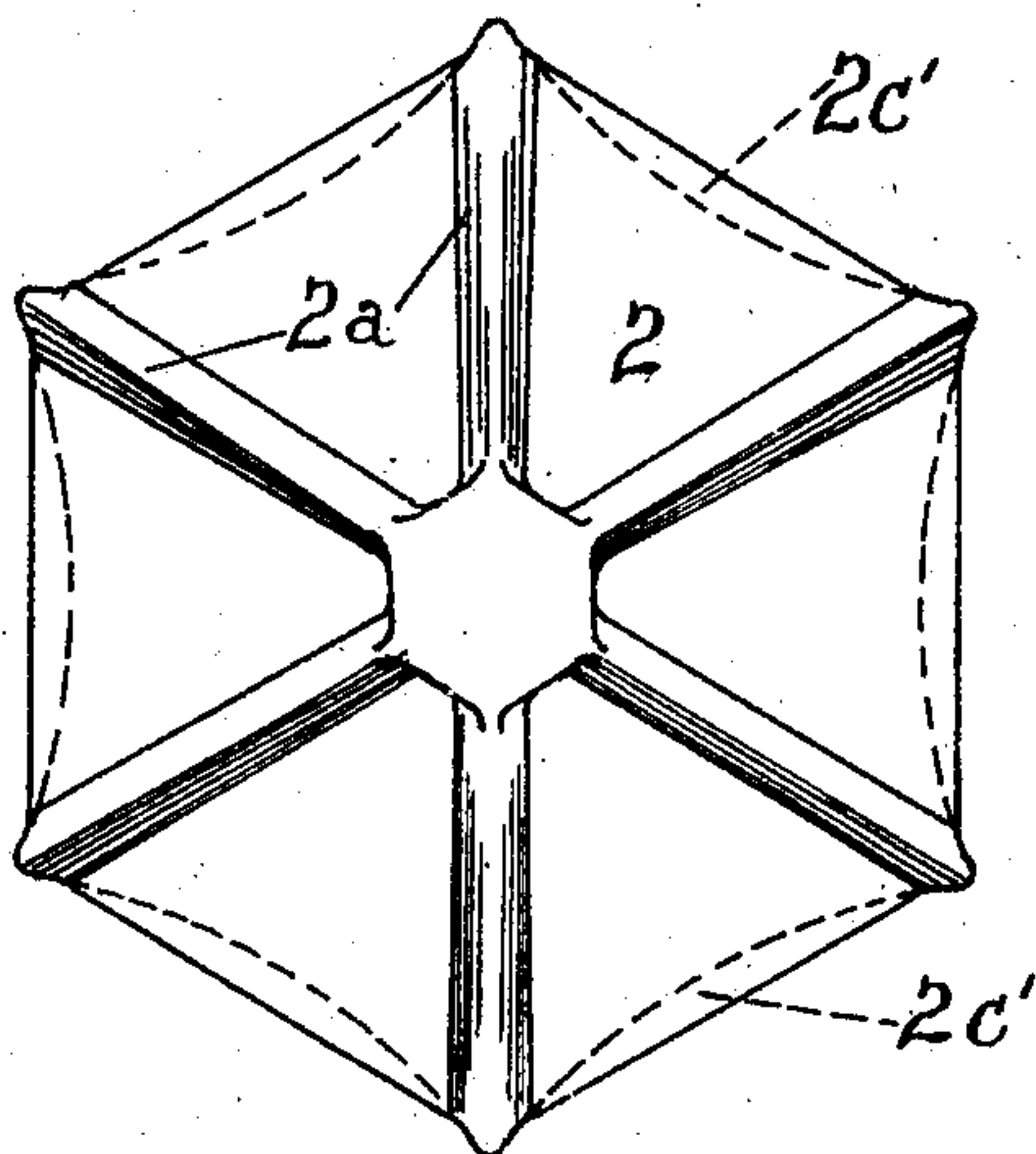


Fig. 2.

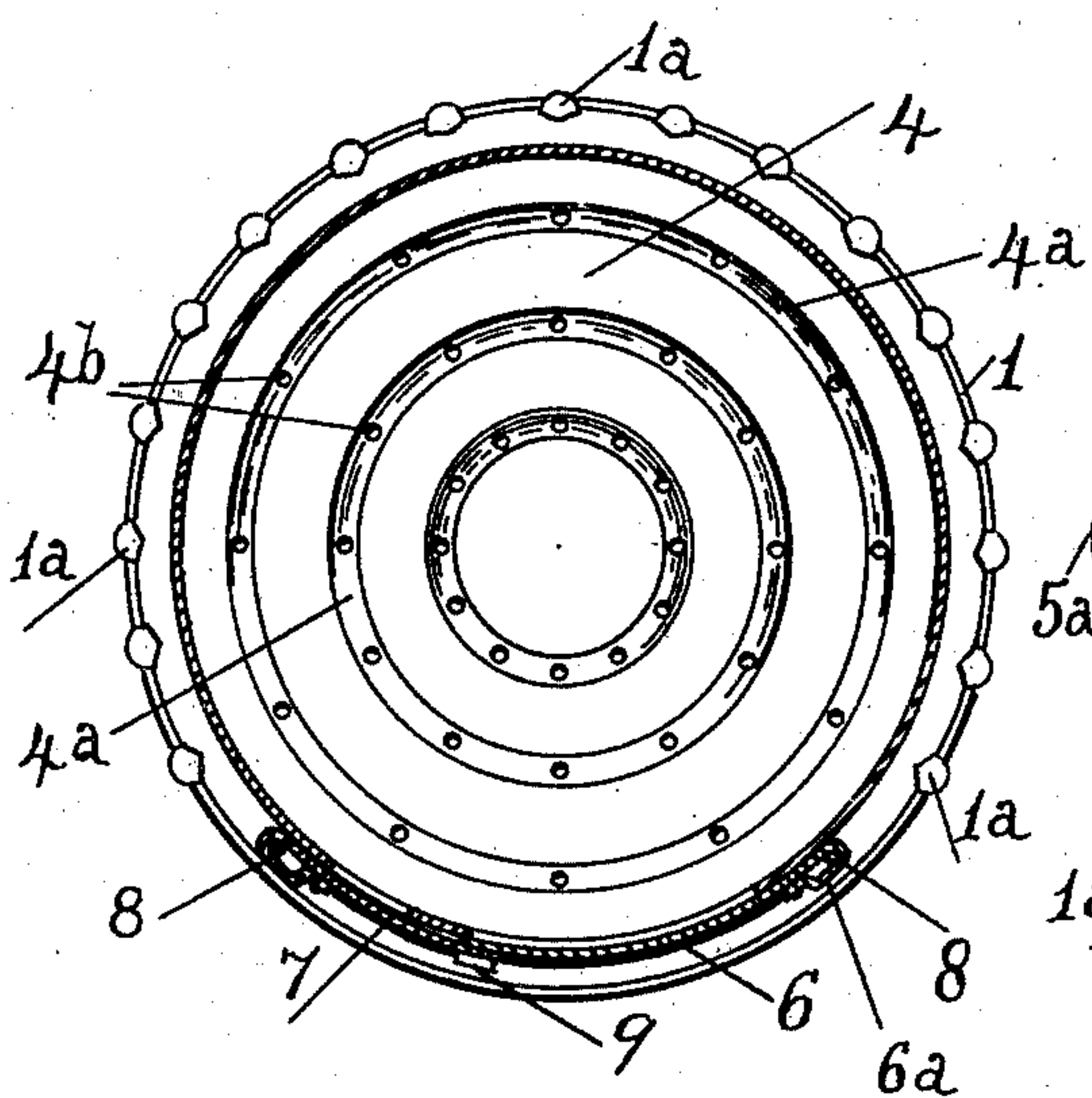


Fig. 5.

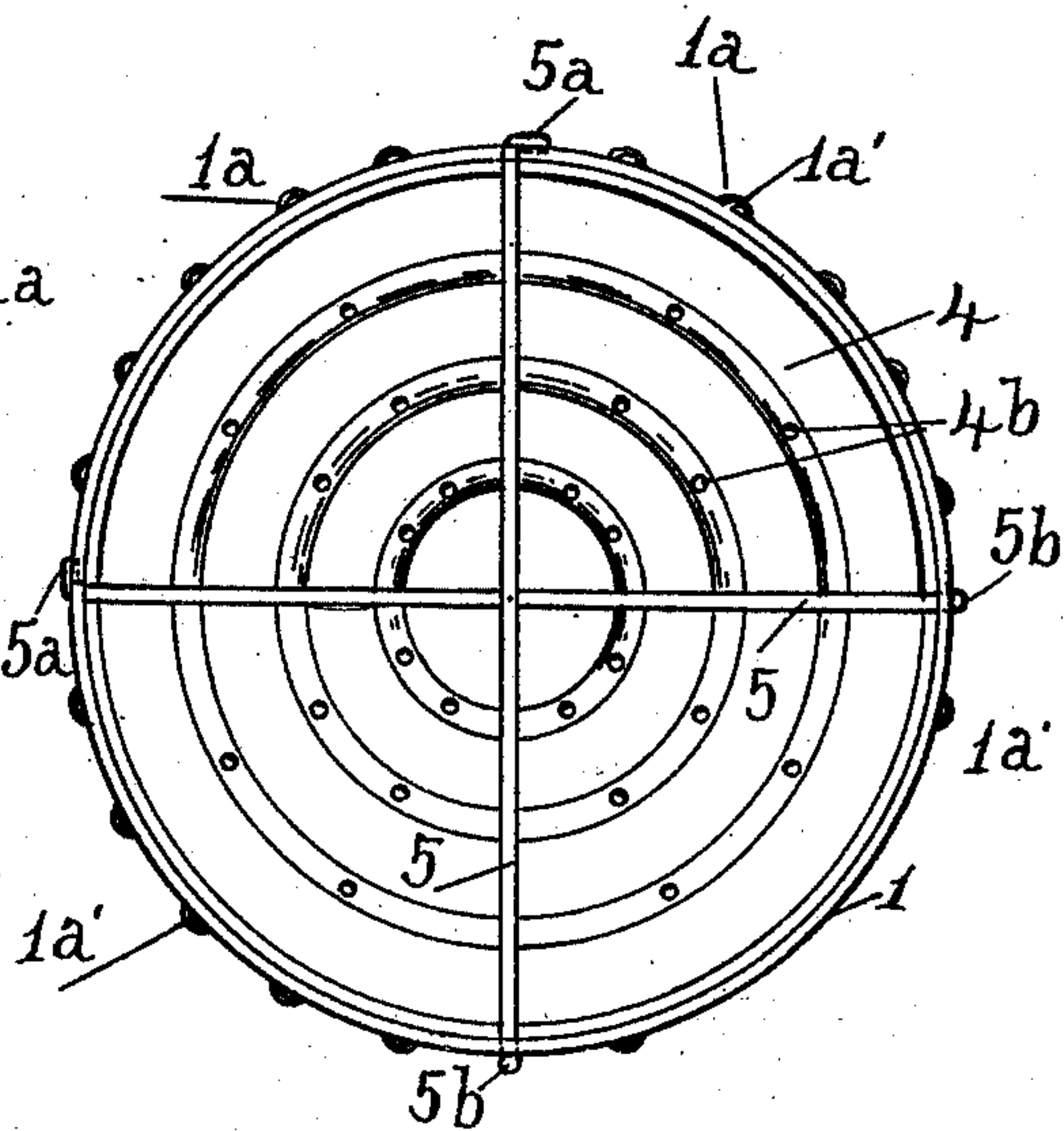


Fig. 3.

Witnesses.

Pearl Coleman.
Joseph L. Havanagh.

Inventor.

JAMES E. FULTON.
By Atty. N. DuBois.

986,703.

Patented Mar. 14, 1911.

2 SHEETS—SHEET 2.

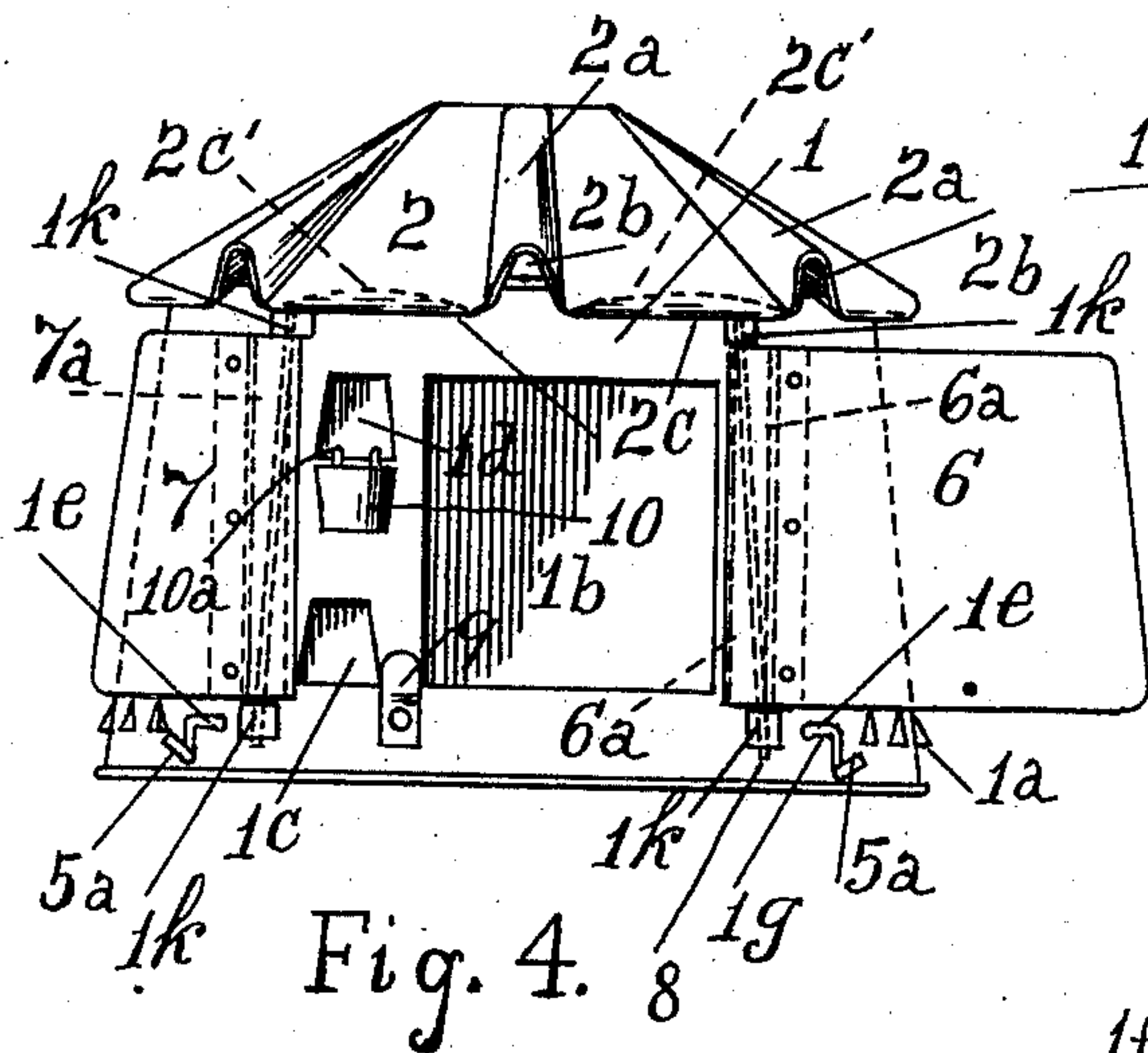


Fig. 4.

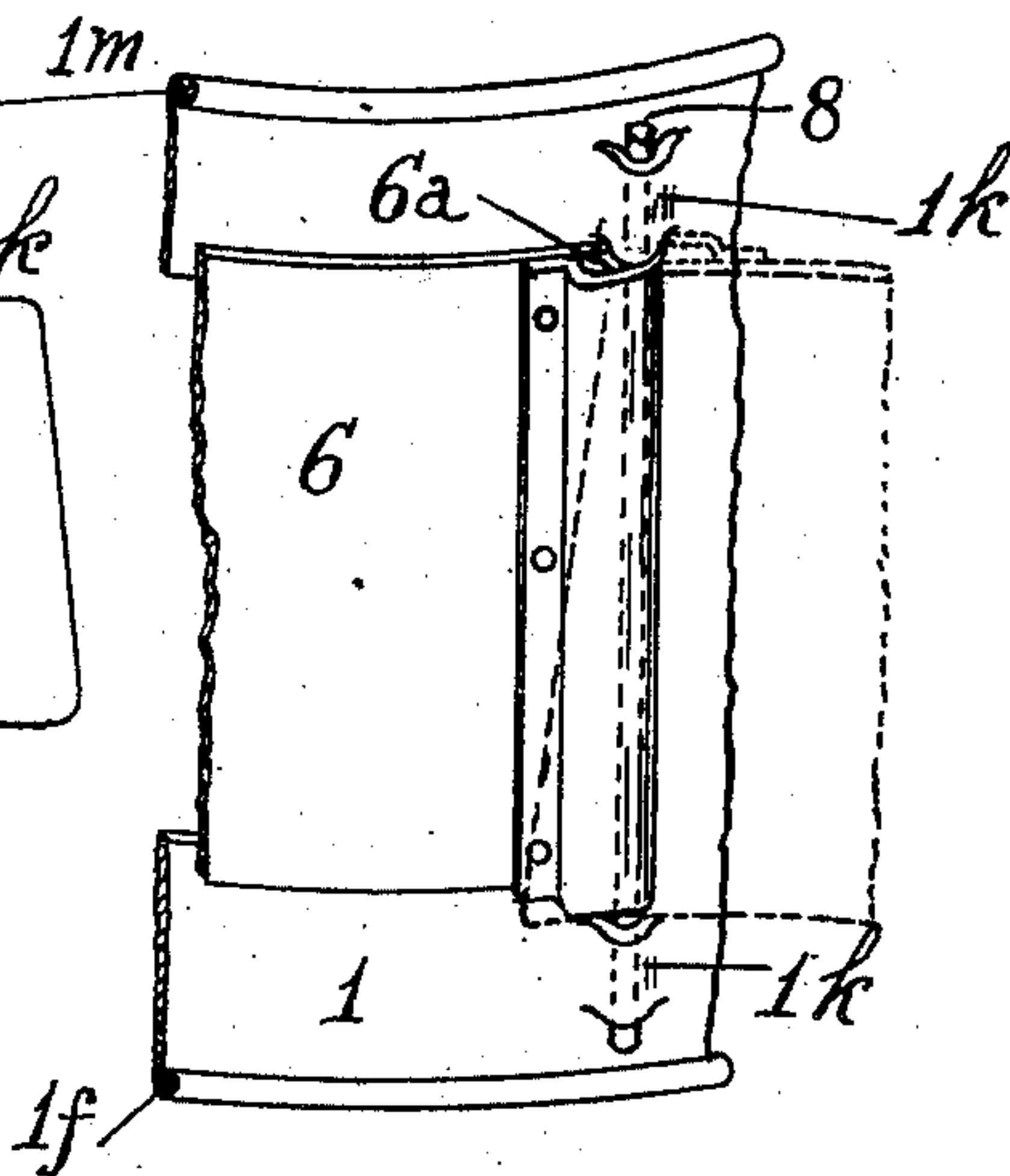


Fig. 7.

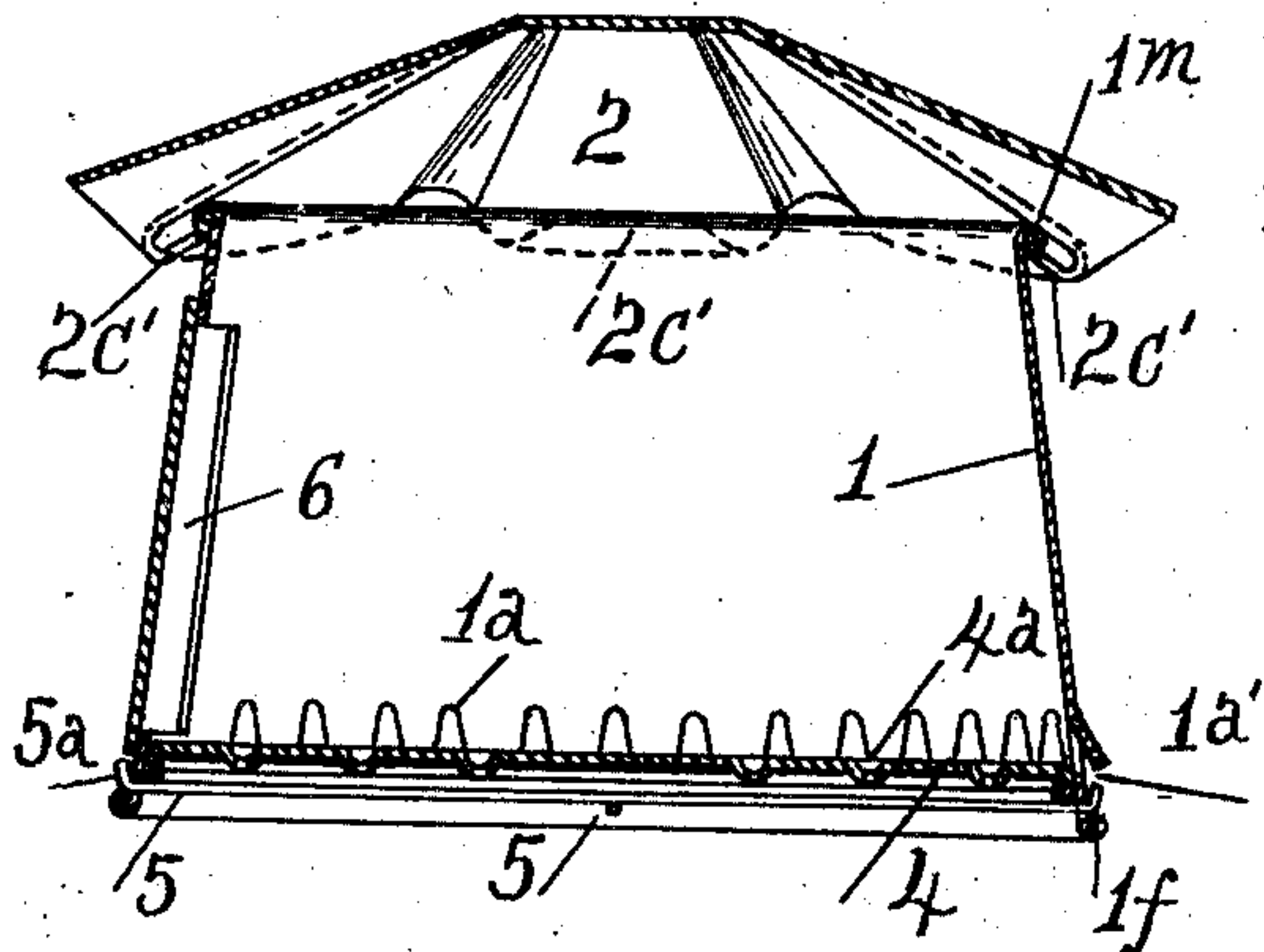


Fig. 6.

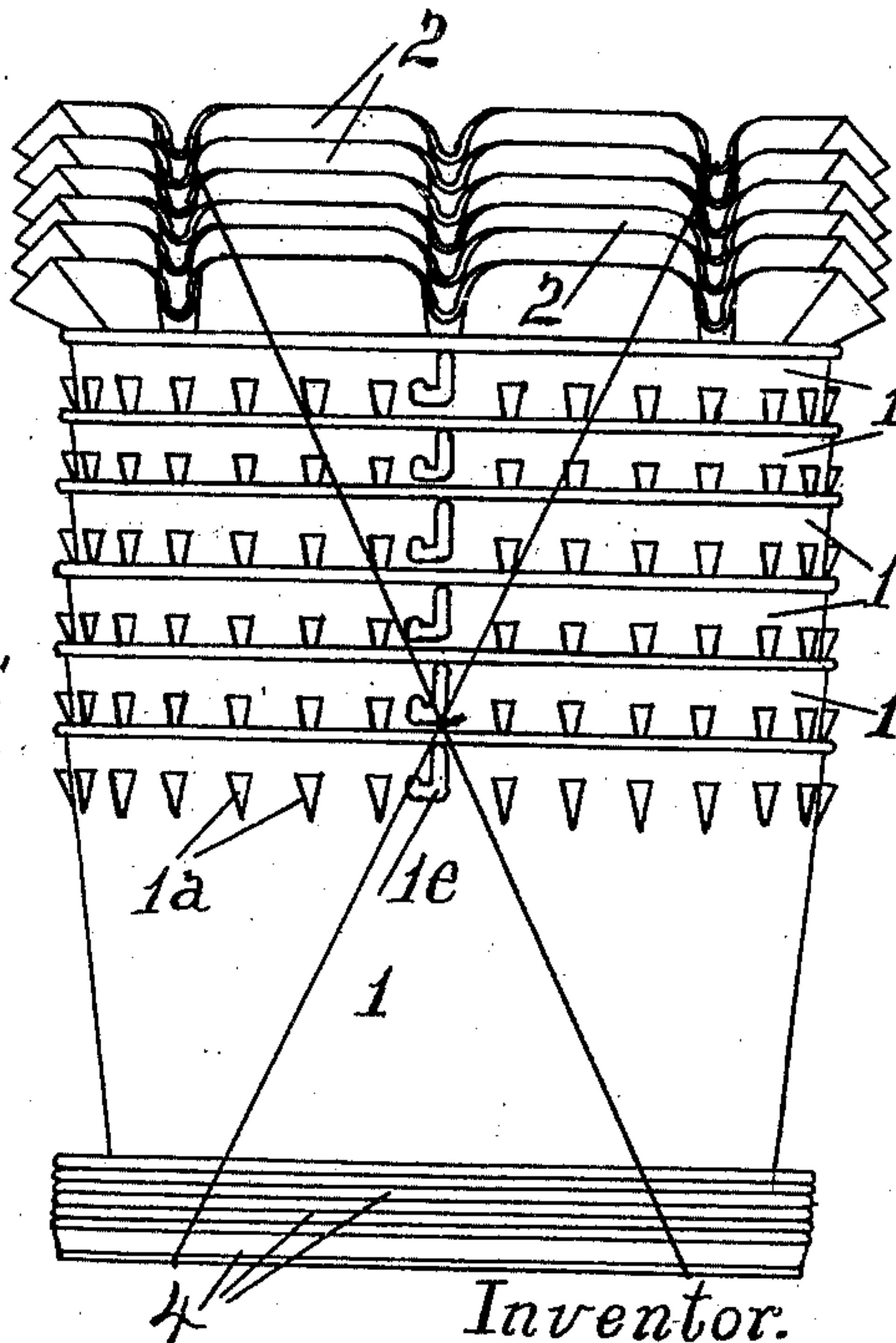


Fig. 8.

Witnesses.
 Pearl Coleman
 Joseph L. Kavanaugh.

Inventor.
 JAMES E. FULTON.
 By Atty. N. DuBois

UNITED STATES PATENT OFFICE.

JAMES E. FULTON, OF ATHENS, ILLINOIS.

BROOD-COOP.

986,703.

Specification of Letters Patent.

Patented Mar. 14, 1911.

Application filed June 6, 1910. Serial No. 565,268.

To all whom it may concern:

Be it known that I, JAMES E. FULTON, a citizen of the United States, residing at Athens, in the county of Menard and State of Illinois, have invented a new and useful Brood-Coop, of which the following is such a full, clear, and exact description as will enable others skilled in the art to make and use my said invention.

This invention relates to coops for housing hens and chicks to prevent the hens from roaming and to protect the chicks in bad weather and permit them to run out in good weather.

The purposes of the invention are to provide a coop preferably of metal, of circular form, without corners and having a tapering shell and a detachable roof so constructed and arranged that when the parts are detached the shells will nest one within the other and the roof plates will nest one within the other to occupy very small space for convenience in storage or transportation; to provide in connection with a shell having ventilating openings near its lower end a movable floor adjacent to the openings and so arranged that in bad weather the floor may be adjusted to close the openings and shut out cold and dampness, and in good weather may be adjusted to uncover the openings and permit free circulation of the air through the coop in hot weather; to provide a roof having ventilating ways formed in the metal of the roof and protected by the projecting eaves of the roof; to provide a shell and a roof of such construction that the roof will spring sufficiently to permit the placing of the roof on the shell and the springiness of the roof will hold it firmly in place on the shell; to provide a relatively large opening for the ingress or egress of the hen, a smaller opening for the ingress or egress of the chicks, and a feed-opening through which, the hen housed in the coop may have access to a feed-box supported on the outside of the coop; to provide one door covering the larger opening and another door covering the smaller openings and so constructed and arranged that when the doors are open they will not be slammed or closed by the wind; and to provide other features of construction as will hereinafter appear.

The invention is illustrated in the annexed drawings and the special features thereof are recited in the claims.

Figures 1, 2 and 3 are respectively, a front elevation, a top plan and a bottom plan of the coop; Fig. 4 is a front elevation of the coop with the doors opened; Fig. 5 is a horizontal section on the line X. X. of Fig. 1; Fig. 6 is a vertical section on the line Y. Y. of Fig. 1; Fig. 7 is an enlarged isometric view of one door and its hinge connection with the shell; and Fig. 8 is an elevation of the detached parts of a number of coops, showing them nested for storage or transportation.

Similar reference numerals and characters designate like parts in the several views.

The coop is preferably constructed of galvanized sheet metal, but other suitable material may be used.

The shell 1 is tapered and circular, as shown. The circular form of the shell is advantageous because there are no corners in which the chicks can huddle and the entire inner surface of the coop is smooth and not likely to injure the chicks. Another advantage of the tapered shells is that they will telescope one within the other to occupy the minimum space.

Extending around the shell near the lower end thereof are a series of V-shaped corrugations 1^a pressed in the metal of the shell and open at their lower ends to admit air through the openings 1^{a'}. The corrugations project over the openings and exclude rain. The lower end of the shell is reinforced by a wire ring 1^f and the upper end of the shell is reinforced by a similar ring 1^m. The metal of the shell is spun around the rings 1^f and 1^m to keep them in place.

The roof 2 is a single sheet of metal polygonal in form and pressed to form ribs 2^a radiating from the center of the roof and forming ways 2^b, through which air circulates. I have shown a hexagonal roof, but it may be of different form without departure from my invention. The edges 2^c of the roof which form the sides of the polygon are turned downward and crimped as at 2^{c'} so that when the pressure is applied on top of the roof the sides of the polygon will expand and the crimped edges thereof will engage on the circular reinforcement at the upper end of the coop and connect the roof with the coop rigidly enough to prevent accidental displacement of the roof and yet admit of removal thereof when the sides of the polygon are sprung apart.

The shell has an opening 1^b adapted to

permit the passage of the hen, a smaller opening 1^c to permit the passage of the chicks only, and an opening 1^d to permit the hen to stick her head through said opening to feed from a cup 10 supported on the outside of the shell.

The floor 4 has a series of circular corrugations 4^a to prevent slipping of the hen's feet on the floor and openings 4^b through the metal forming the troughs between the corrugations so that the moisture accumulating on the floor will run out through the openings. The floor is readily detachable for the purpose of cleaning and is also capable of being raised to close the ventilation openings 1^{a'}, or lowered to uncover the openings. The floor is supported on crossed wires 5 extending diametrically across the coop at right angles to each other. Each wire has a laterally extending handle member 5^a in the horizontal plane of the wire and a similar member 5^b in the vertical plane of the wire. The shell 1 has L-shaped slots 1^e accommodating the wires 5. When the floor is lowered to uncover the openings 1^{a'} the rods 5 will rest on the reinforcement at the lower end of the coop, and when the floor is raised to close the openings 1^{a'}, the rods will rest on the edges 1^f of the metal which forms the lower walls of the horizontal branches of the slots.

If it be desired to remove the floor the rods will be turned until one member of each rod is in line with the vertical branch of one of the slots 1^e and the other end of the rod will be pulled outward to cause said member of the rod to pass inward through the vertical branch of the slot, and the parts of the floor adjacent to the withdrawn ends of the rod will be pushed downward so that the free ends of the rods may be pushed outward below the inner end of the shell and the other ends of the rods will then in like manner be withdrawn through the opposite openings and the complete removal of the floor will then be effected by pushing downward on the floor. To replace the floor in the coop this procedure will be reversed.

The doors and their hinge connection with the frame will now be described.

The doors 6 and 7 are exactly alike except as to size, so a description of one will suffice for both. The door 6 covers the larger opening 1^b. The doors are both curved to conform to the curvature of the shell. The smaller door 7 covers the openings 1^c and 1^d. The door 6 has at one side a lengthwise box-loop 6^a formed by turning the metal back on itself and riveting it. Rods 8 extend through the box-loops 6^a and 7^a and the ends of the rods fit snugly in loops 1^k pressed in the metal of the shell 1. By reason of this construction the rods may be inserted endwise in the loops 1^k and will be firmly held in place by the loops. This means for con-

necting the rods with the shell dispenses entirely with plates or rivets or other means for securing the rods and lessens the first cost of the coop. The rods 8 are inclined to correspond to the taper of the shell and when the doors are closed the walls of the box-loops are parallel to the rods and the doors are free to turn on the rods, but when the doors are opened the positions of the box-loops are shifted so that the rods occupy a position diagonal to the loops. In the changed position of the loop of the door 6 relative to the rods, clearly shown in Figs. 4 and 7, the upper end of the box-loop contacts with the left hand side of the rod and the lower end of the box-loop contacts with the right hand side of the rod and the heel or lower part of the door extends inwardly beyond the rod and toward the opening 1^b, and contacts with the wall of the shell so that the lower part of the door contacting with the wall of the shell will prevent the closing of the door. The door 7 is capable of exactly similar adjustment relative to the openings 1^d and 1^c.

If it be desired to close the door, it is only necessary to slide the lower end of the door outward to cause the inner edge of the door to occupy a position parallel to the rod. When in that position the door may be closed by merely turning it on the rod.

A latch 9 mounted on the shell 1 serves to secure both doors when they are closed, or to secure the larger door when the smaller is open.

A feed-cup 10 has hooks 10^a adapted to support the cup on the shell adjacent to the feed opening 1^c, and the cup may be used to contain water or food for the hen housed in the coop.

When the hen is in the coop the large door will be closed, and at suitable times the smaller door will be opened so that the chicks may pass freely through the opening 1^c.

Owing to the peculiar conformation of the roof the radial ribs 2^a extend over the air-openings 2^b and prevent rain or snow from entering through the openings. The openings 1^{a'} around the lower part of the coop and the openings 2^b under the eaves of the roof permit free circulation of the air through the coop. If the weather is bad the floor may be raised to close the openings 1^a and prevent excessive draft.

Having fully described my invention what I claim as new and desire to secure by Letters Patent is:

1. A coop comprising a circular shell and a springy polygonal roof having air passages at the angles of the polygon and having sides engaging with the shell to keep the roof on the shell by spring pressure.

2. In a coop, the combination of a tapered shell having an opening, a rod mounted on said shell parallel to the opening thereof and

a door adapted to turn on said rod and also adapted to slide transversely relative to the rod to engage a part of the door with the shell to prevent closing of the door.

5 3. In a coop, the combination of a shell having a door opening, also having integral loops adapted to hold a rod adjacent to said door-opening; a rod held in said loop, and a
10 door mounted to turn on said rod and slide transversely relative to the rod to engage a part of the door with the shell to prevent closing of the door.

4. In a coop, the combination of a shell having air-openings in its lower part and a
15 floor movable vertically within said shell to open or close said air-openings.

5. In a coop, the combination of a shell having ventilation openings near its lower end; a floor movable within the shell to
20 cover or uncover said ventilation openings,

and means for supporting said floor in one position to cover the ventilation openings and in another position to uncover the ventilation openings.

6. In a coop, the combination of a shell 25 having openings to accommodate the floor-supporting means, also having ventilation openings near the lower end of said shell; a floor movable within said shell and floor-supporting means extending through said 30 first named openings and adapted to be withdrawn through said openings for removal of the floor.

In witness hereof I have hereunto signed my name at Athens Illinois, this 18th day 35 of March 1910.

JAMES E. FULTON.

Witnesses:

JOE JOHNSON,
A. T. KINCAID.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
