G. R. OSBORN & B. A. DRAYTON.

Bird-Cages.

No. 134,094. Patented Dec. 17, 1872.

Fig. 1.

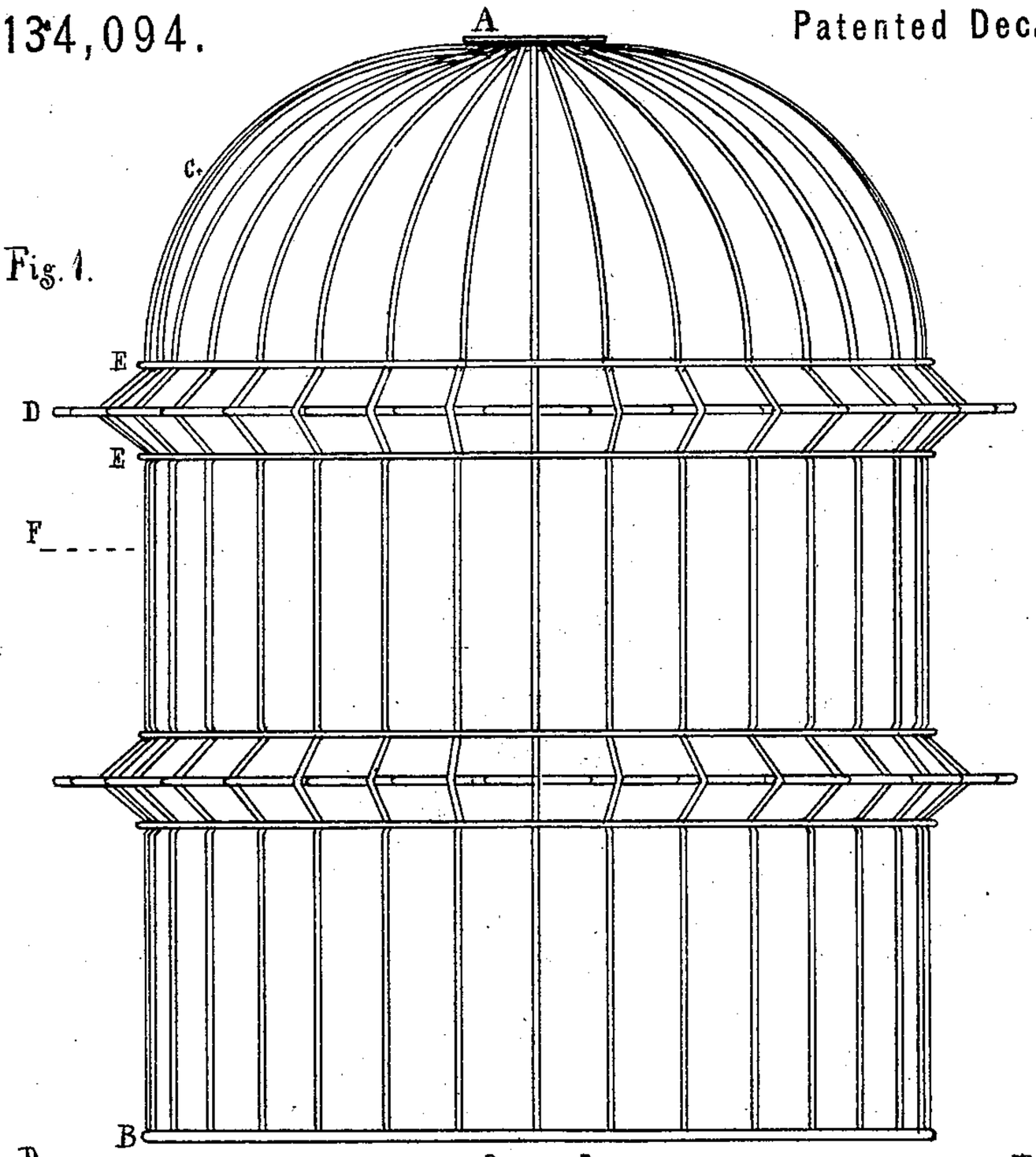


Fig. 3

Fig. 5

Fig. 4

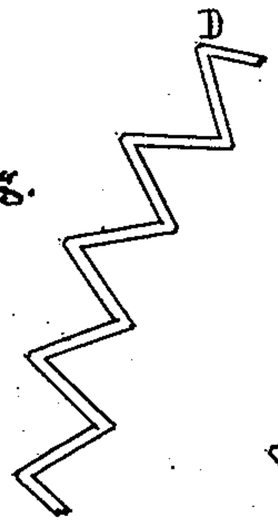


Fig. 6.

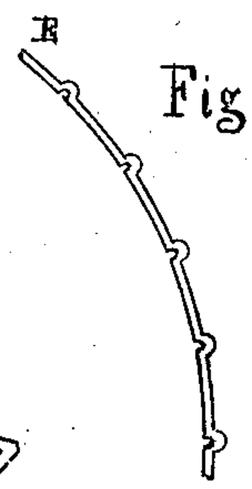
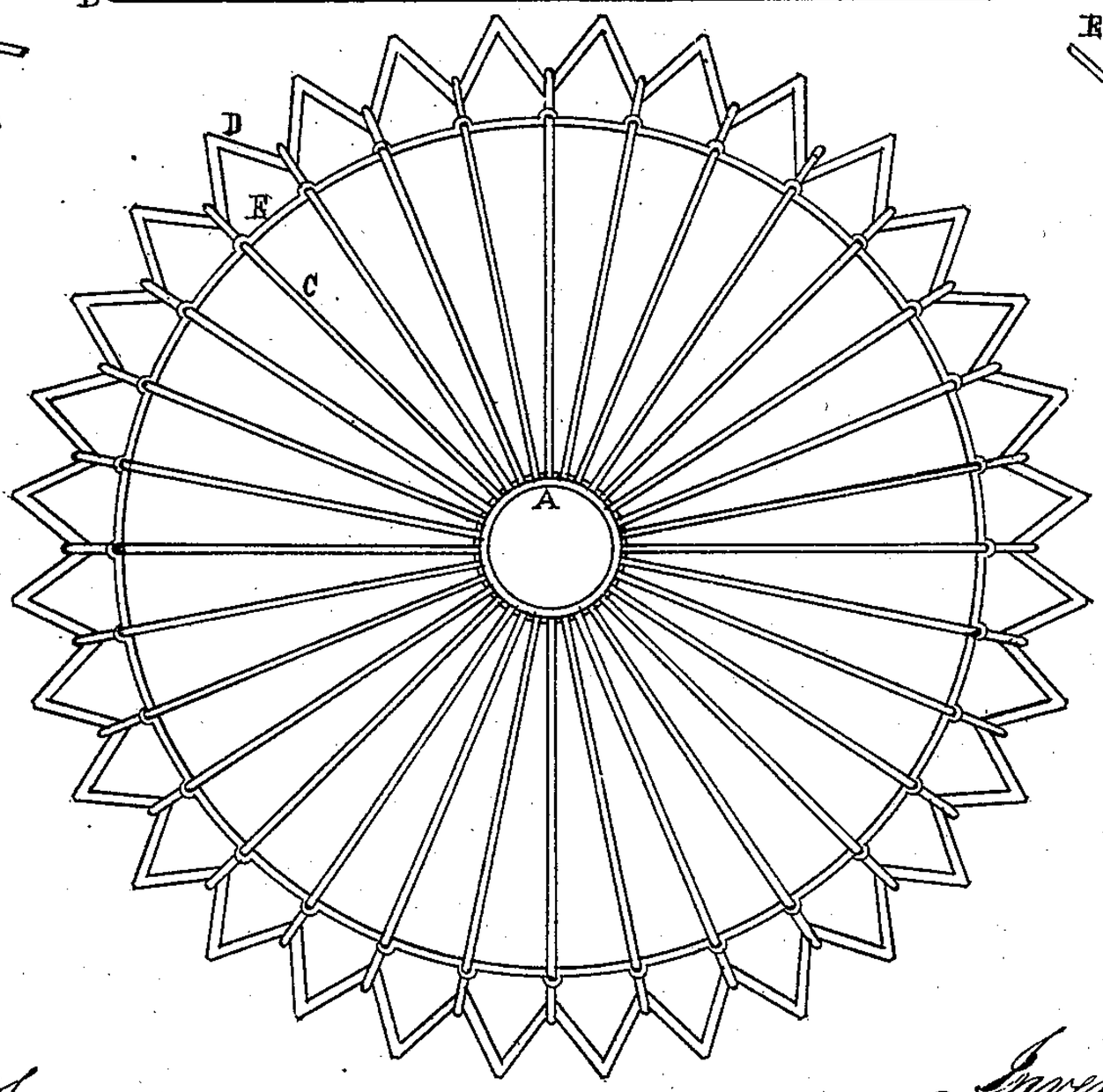


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

GEORGE R. OSBORN AND BENJAMIN A. DRAYTON, OF MORRISANIA, N. Y.

IMPROVEMENT IN BIRD-CAGES.

Specification forming part of Letters Patent No. **134,094**, dated December 17, 1872.

To all whom it may concern:

Be it known that we, GEORGE R. OSBORN and BENJ. A. DRAYTON, of the town of Morrisania, county of Westchester, State of New York, have invented certain Improvements in Bird-Cages, of which the following is a specification:

The nature and objects of the invention in general are in continuation of a series of improvements being made by us in the construction of bird-cages without the use of solder as a means of fastening the different parts together, at the same time increasing strength and durability, giving an ornamental appearance to the structure, and lessening the cost of production. This particular case refers to the main fastenings of filling-wires and frame-work.

Description of Drawing.

Figure 1, side elevation of the body of the cage, the door and cup-rests not being represented, as not being pertinent to the invention; Fig. 2, top elevation of upper section of the body of the cage, cut on dotted line F; Fig. 3, section of filling-wire with sectional cut of spring adjusting and binding rings, hereinafter described; Fig. 4, section of the crimped spring distending and adjusting ring, forming part of the frame-work of the cage; Fig. 5, section of filling-wire, with sectional cut of adjusting and binding rings, with order transposed from that as seen in Figs. 1 and 3; Fig. 6, section of binding-ring, with notches as rests for the filling-wires C_x.

A is a grooved metal ring, in which the upper ends of the filling-wires C_x are inserted and soldered in place; B, large wire, drilled at regular and suitable distances for the insertion of the lower ends of the filling-wires C_x, which are also soldered in place; C_x, filling-wires of the cage, notched, indented, or crimped in such a manner as to form three seats or angles at two points in their length, for giving position to the adjusting-ring D; D, spring-distending crimped ring, which being inserted inside the circle of filling-wires C_x, each in turn giving position to the other; E E, binding or hoop rings, crimped, indented, or notched to form a seat, in which the filling-wires rest.

Operation.

The filling-wires C_x standing in position, the crimped adjusting-ring D is inserted from the inside, the notches or seats in each being adjusted to the other. The binding-rings E are then placed on the outside of the structure, observing the notches are placed in their proper order for locking. Thus arranged, there is formed a triple-locked frame-work for the cage, secure and elastic.

There are represented two sets of frame-rings. Any number of sets may be used, according to the height of cage and strength of structure required. The upper and lower ends of the filling-wires being in such position that the solder used is not noticeable, they are soldered for the sake of firmness, though that is not essential; they may be looped or locked by pressure in position.

The intermediate fastenings, consisting of sets of three rings, as above described, have all requisite firmness; and the elasticity of the cage is an advantage, as in case of concussion in falling or careless handling there is less danger of breakage or of bending the wires than where all the fastenings are positive.

The order of the crimped distending-ring D and hoop or binding rings E may be transposed and order of crimping in filling-wires C_x reversed, giving in the system two distending-rings and one binding-ring, as shown in section, Fig. 5, the result remaining the same—*i. e.*, the notches in the distending ring or rings D, in combination with the crimps in the filling-wires C_x, give position each to the other, and are bound in place by the notched hoop or binding rings or ring E.

The distending-ring D may be a notched strip of plain or folded sheet metal, or a strip of sheet metal twisted at such a pitch as to give rests or seats at proper distances for the filling-wires; and the hoop-ring may be similarly constructed, as we have so done; but have chosen wire throughout as best in effect and appearance.

We do not claim as new the use of the crimped spring-distending ring D, simply; nor of it in combination with the crimp in filling-wires C_x, as that arrangement is allowed us by Letters Patent No. 114,593, of May 1, 1871; nor

of the use of the combination of crimped filling-wires, crimped adjusting-ring, and plain binding-rings, as that is allowed us by patent No. 129,980, July 30, 1872; but

What we claim as new and of our invention is—

In the frame-work of a bird-cage, the combination of the crimped filling-wires $C_{\times}$ and crimped distending ring or rings D, each giving position to the other, with the hoop or binding ring or rings E, with adjusting-notches therein, holding and binding the filling-wires $C_{\times}$ and distending ring or rings D in position, substantially as and for the purpose specified.

GEORGE R. OSBORN.
BENJ. A. DRAYTON.

Witnesses:
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