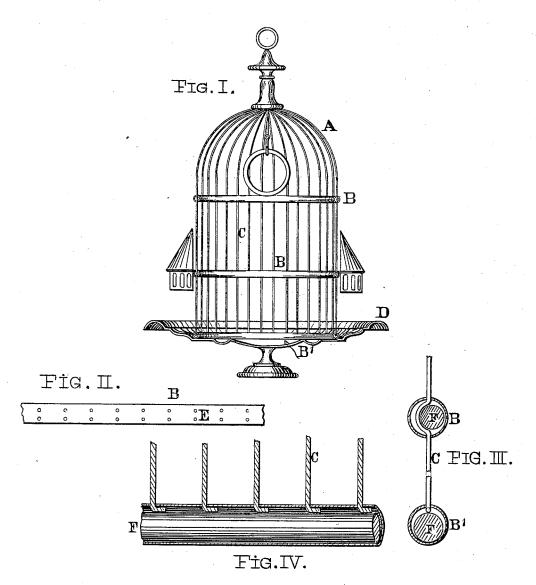
J. L. FISHER. Bird-Cage.

No. 167,325.

Patented Aug. 31, 1875.



WITNESSES: John B. Edmonde Thomas Edmonds JNVENTOR John L Fisher by Michael J. Stark astorney.

UNITED STATES PATENT OFFICE.

JOHN L. FISHER, OF BUFFALO, NEW YORK, ASSIGNOR TO CAROLINA FISHER, OF SAME PLACE.

IMPROVEMENT IN BIRD-CAGES.

Specification forming part of Letters Patent No. 167,325, dated August 31, 1875; application filed January 9, 1875.

To all whom it may concern:

Be it known that I, John L. Fisher, of the city of Buffalo, in the county of Erie and State of New York, have invented a Bird-Cage, of which the following is a full, clear,

and exact specification:

The nature of this invention relates to the construction of japanned and bright-metal cages for birds, animals, &c., whereby the same are made substantial and cheap; and the invention consists in the details as hereinafter set forth, and pointed out in the claims.

In the drawing accompanying and making part of this specification, Figure 1 is a longitudinal section of a bird-cage embodying my improvements. Fig. 2 is a detail view of the bands or tubes B, in their state, after perforating and previous to drawing or otherwise forming them into cylinders. Fig. 3 is a transverse section of the middle and lower bands B, on an enlarged scale, showing the mode of locking the vertical wires C within tubes B B'. Fig. 4 is a longitudinal section of the lower tube B', showing the mode of locking the ends of the vertical wires C within the tube B'.

Like letters of reference indicate like parts

in the several figures.

In order to enable any one skilled in the arts to which my invention pertains to make and use my invention, I shall proceed to describe its construction and arrangement in

particular.

A is the body of a cage, made of any suitable material, and in any desired shape. It consists of the horizontal bands or tubes B B', vertical wires C, and the base or bottom D in its principal parts, and it has all the accessories deemed essential in a first-class cage. B are the middle and upper horizontal bands that retain the wires C in their proper position. They are tubes of sheet metal, such as zinc, tin, brass, German silver, or the like, and are made of narrow strips punched, as shown in Fig. 2, with a double row of perforations, E, and bent in such a manner that the said perforations will be exactly opposite each other when the said strip is drawn through a draw-plate having openings of suitable size to give it the tubular form. B' is the lower

horizontal tube. It is made substantially in the same manner as the middle and upper bands, except that the strip has only one row

of perforations E.

In order to fasten the vertical wires C within the band B', which is the object of my present invention, I bend the wires C at right angles near their lower extremity, and insert them into the band B' previous to closing it to give it a tubular form, and to rolling or otherwise forming the cage-body. A piece of round wire, F, is now inserted into the core of the band B', which will hold the wires in their proper position, thus discarding the usual soldering, which would affect the appearance of the cage if made of bright metal, and reducing its cost of manufacture considerably. The wire F is left in the lower band B', and will add materially to the strength of the cage. After the cage-bodies are made up, as described, they are either rolled within suitable rollers to make round, or formed over suitable blocks to make other styles of cages.

It will be observed that the mode of constructing the horizontal band B' and the locking of the vertical wires C therein is applicable to japanned as well as bright-metal cages, especially to the latter-mentioned kind, and that no solder of any kind is required to fasten the wires, and that, therefore, a cage of fine qual-

ity and finish can be produced.

Having thus fully described my invention, I am well aware that wires have been fastened within tubes by inserting a key, such as shown in the Patent of J. B. Maurer, August 25, 1874, and I do not broadly claim such as my invention; but

What I do claim, and desire to secure by

Letters Patent, is-

In a bird-cage, the combination, with the band B', of the vertical wires C, having rightangled bends at their lower extremity, whereby they are locked within the said band by the circular wire F, substantially as described.

JOHN L. FISHER.

Witnesses: MICHAEL J. STARK, JOHN B. EDMONDS.

