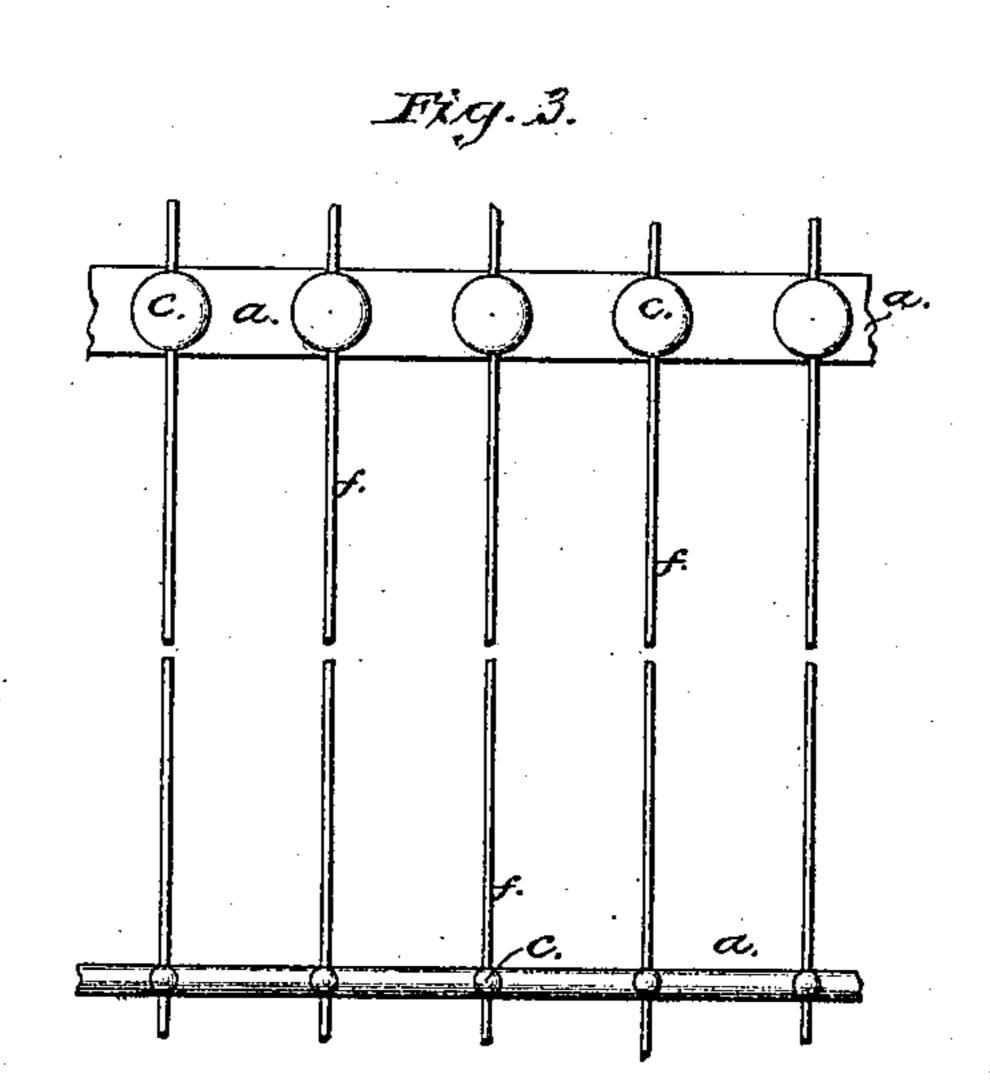
## G. F. J. COLBURN.

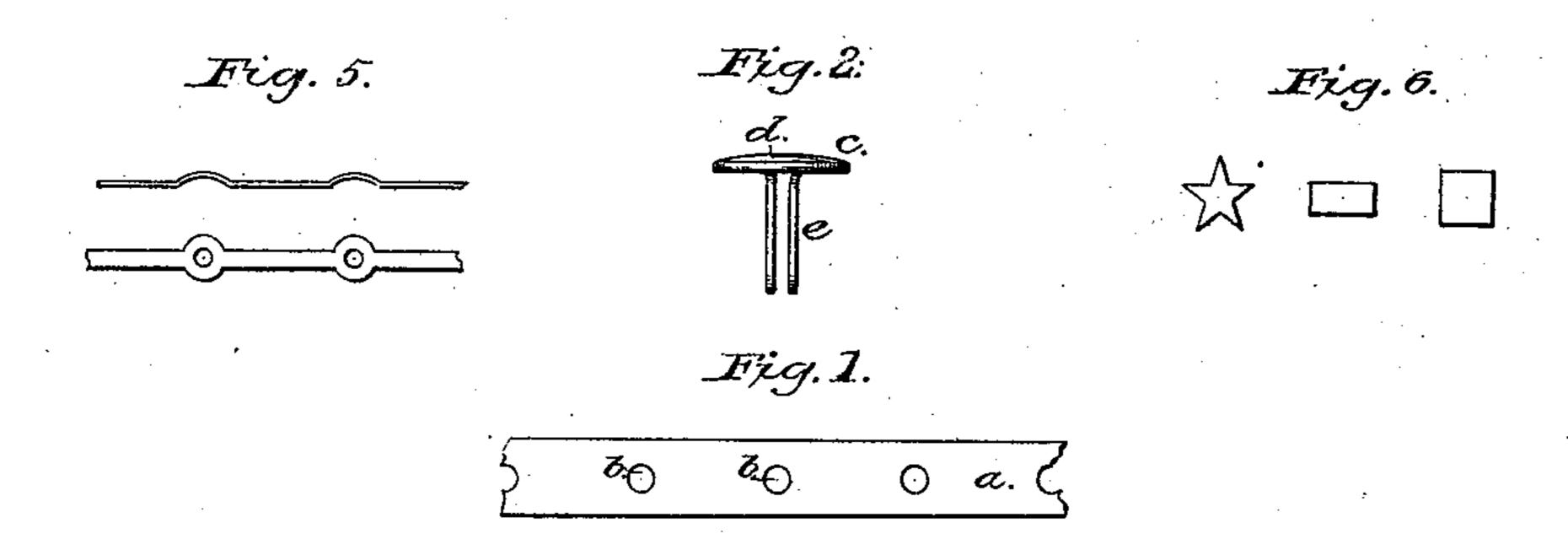
BIRD-CAGES.

No. 181,557.

Patented Aug. 29, 1876.







Hetest: Marchet, Get Charlant. Inventor:

George F. J. Colbum

## UNITED STATES PATENT OFFICE.

GEORGE F. J. COLBURN, OF WASHINGTON, DISTRICT OF COLUMBIA.

## IMPROVEMENT IN BIRD-CAGES.

Specification forming part of Letters Patent No. 181,557, dated August 29, 1876; application filed July 28, 1876.

To all whom it may concern:

Be it known that I, GEORGE F. J. COLBURN, of the city of Washington, District of Columbia, have invented a new Improvement in the Manufacture of Bird-Cages; and I do hereby declare the following, when taken in connection with the accompanying drawings, and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification.

The nature of my invention consists in keeping the wires of a bird-cage body in proper position, by means of a perforated metal strip, when combined with a metallic clamp, having

one or more prongs.

The usual manner of fastening the wires to stays, has been to perforate the stay and pass the wires through the perforations, keeping them in place by soldering, riveting, &c.

My improved manner of effecting this object is clearly shown in the accompanying drawings, making part of this specification.

Figure 1 shows the stay a with perforations b. Fig. 2 shows clamp c with head d, prongs e. Fig. 3 shows the stay a and clamp c, in combination with wires f. Fig. 4 is a sectional view. Figs. 5 and 6 show modified forms of stay and head of clamp.

I make the stay a of a diameter to suit the size of cage desired, and of such thickness, breadth, and configuration best adapted for strength and utility. At suitable distances through the center, I make openings b for the insertion of a metallic clamp, c, having one or more prongs, e, of sufficient length to pass through the opening b, and allow of being

bent upon the inner surface of the stay a, so that when the wires are in position, and the clamp inserted and properly secured, the combination of the two will serve to hold the wires firmly in their place. The manner of applying this stay is to have the vertical wires placed on the outside directly over the center of the openings b. The clamp c is then inserted by opening the prongs e, so that they will, in entering, straddle the wire. The projecting end of the prong is then bent firmly upon the inner surface of the stay, thus causing the head portion of the clamp to bind firmly upon the wire, which, with the lateral pressure of the prongs fastens the wire securely in the position desired.

The head of this clamp may be of any shape or form. A simple and effective stay for bird-cages is thus produced, that may be made quite ornamental, and of value to those man-

ufacturing bird-cages.

This invention can be applied to different portions of a cage, and is equally applicable to all wire-work, where such construction and combination are needed. Therefore I would not limit myself to bird-cages only; but

I claim—

The stay for bird-cages, and other wire-work composed of a band, a, of any desired configuration, provided with holes b, clamp c, in combination with the wires f, substantially as and for the purpose specified.

GEORGE F. J. COLBURN.

Witnesses:
Louis Bagger,
WM. Bagger.