J. MAXHEIMER.
Bird-Cage.

No. 218,758 Patented Aug. 19, 1879.

Fig: 1

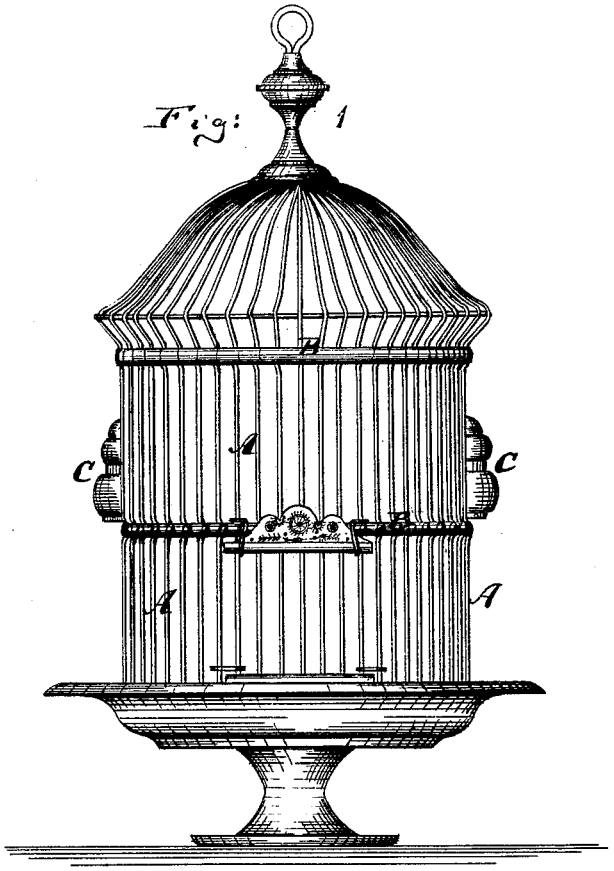


Fig: 2

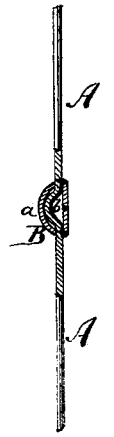


Fig: 3

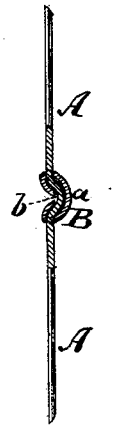


Fig: 4

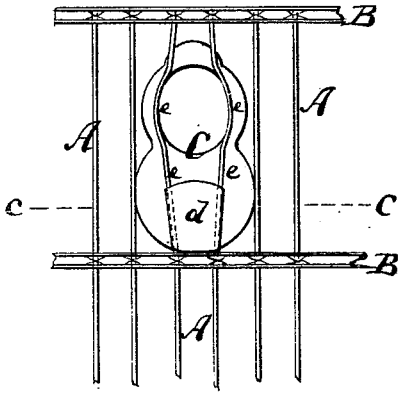


Fig: 5

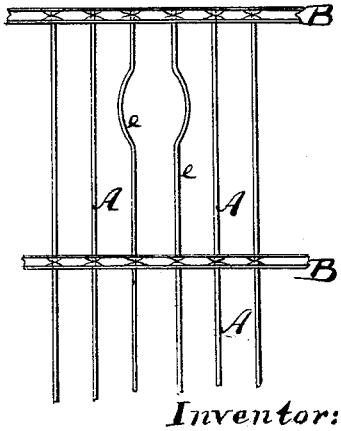
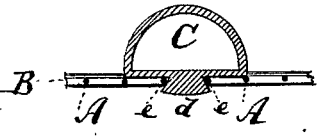


Fig: 6



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UNITED STATES PATENT OFFICE.

JOHN MAXHEIMER, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN BIRD-CAGES.

Specification forming part of Letters Patent No. **218,758**, dated August 19, 1879; application filed October 5, 1878.

To all whom it may concern:

Be it known that I, JOHN MAXHEIMER, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Bird-Cage, of which the following is a specification.

Figure 1 is a side elevation of a bird-cage containing my improvement. Figs. 2 and 3 are detail vertical sections showing the mode of joining the upright wires to the horizontal braces or galleries of the cage. Figs. 4 and 5 are detail inner face views of the openings leading to the feed-cups. Fig. 6 is a cross-section on the line *c c*, Fig. 4.

Similar letters of reference indicate corresponding parts in all the figures.

This invention relates, first, to the use of hollow sheet-metal galleries or connecting-braces, in lieu of the horizontal wires heretofore used on bird-cages; also, to a new means of connecting the feed-cups to the cage, so that they are properly held in place, and so that the openings leading to them will be contracted upon the removal of the cups.

In the accompanying drawings, the letters A A represent the upright wires of a bird-cage. These wires are usually connected by horizontal wires; but I use in lieu of such horizontal wires hollow sheet-metal galleries or braces B B, through which the wires A A are passed, and wherein they are crimped or bent, as clearly shown in Figs. 2 and 3. Each sheet-metal gallery or brace B is twice perforated for the passage of each wire A, and is bulged outwardly, as at *a* in the drawings. The wire A is, between the two apertures of the brace B, bent or crimped, as at *b*, said bent portion serving to hold the brace in place and prevent it from being vertically dislocated. On the inner side of the wires A the sheet metal B is either turned into a vertical plane, as in Fig. 2, or crowded tightly against the wire A, as in Fig. 3. The bulged portion *a* of the sheet-metal gallery may be embossed or otherwise ornamented in suitable manner.

It is preferable to crimp each wire within each gallery in manner stated; but a satisfactory result may be obtained by crimping only every second or third upright wire within each gallery. The crimping of the wires A may be performed after or before they are inserted in the galleries.

C is the feed-cup, provided at its inner side with a projection, *d*, which is dovetailed in cross-section and tapering from top to bottom. This feed-cup is to be used in connection with two vertical wires, *e e*, of the bird-cage. These wires are at one place bent apart to form a nearly circular opening, as shown, so as to freely admit the projection *d;* but below such diverging portion the wires are a less distance apart—to wit, a distance equal about to the width of the projection *d* at its bottom or narrowest end. By this construction the dovetail projection may first be inserted between the wires *e e* at their bent or diverging portion, and then as the cup is pushed downward the projection *d* will gradually spread the wires *e e* farther apart, sufficiently far to permit the animal confined within the cage to insert its head into the feed-cup.

When, however, the feed-cup is withdrawn, as in Fig. 5, the wires *e e* spring together so near as to prevent the animal from escaping through the space between the wires *e e;* in other words, by the use of the tapering projection *d* on the cup, the wires *e* are gradually spread apart during the insertion of the cup, and are so held while the cup remains in place. The dovetail form of the projection *d* (indicated in Fig. 6) prevents the cup from falling off the cage by its own weight.

I am aware that previous to my invention feed-cups have been clamped between vertical wires in bird-cages; but with the feed-cups heretofore used the wires were spread apart only while the cups were being inserted, and were then sprung back into recesses of the cups. By my invention the vertical wires are, by the dovetail projection, held continually spread as long as the cup remains inserted.

The great advantage of my invention is that, other things being equal, I can place the vertical wires nearer together than could heretofore be done, thereby preventing the escape of the bird when the cup is removed, and at the same time affording to the bird all facility for reaching the cup when the latter is in place.

I claim—

1. The combination, in a cage, of the upright

wires A A, having crimps or bends, with hollow sheet-metal gallery B, adapted to receive the crimped parts of the wires, and flattened to lock the same, substantially as herein shown and described.

2. The combination of a cage having the vertical wires *e e*, with the feed-cup C, having the projection *d* which is made tapering from top to bottom and has a dovetailed cross-section, the wires *e e* being bent apart to form a diverging nearly circular portion, all arranged so that the projection *d* spreads the wires *e e* and the diverging portion thereof farther apart, and retains them thus distended, substantially as and for the purpose herein shown and described.

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