G. SEYFANG.

BIRD-CAGE.

No. 174.644. Patented March 14, 1876.

Fig. 1.

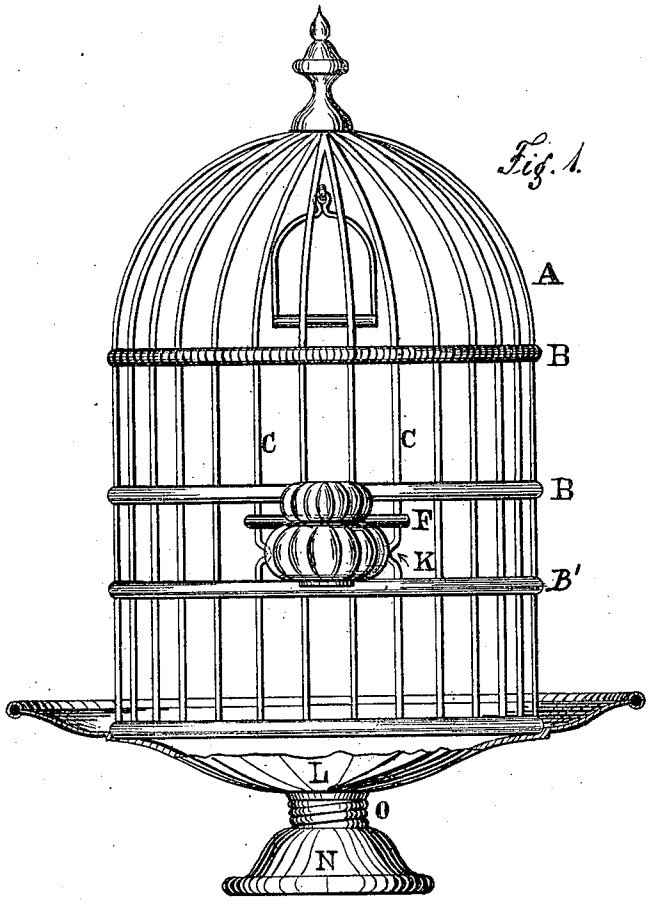


Fig. 2.

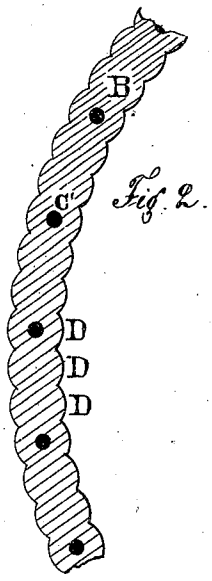


Fig. 3.

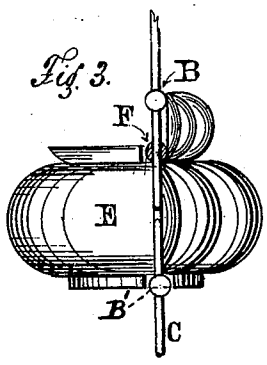


Fig. 4.

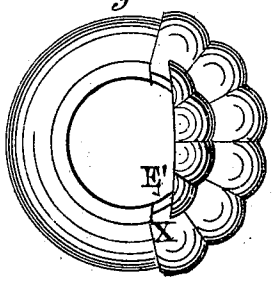
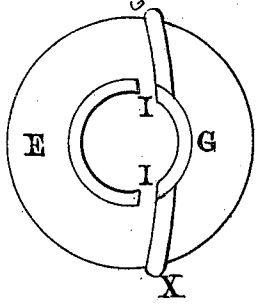


Fig. 5.



WITNESSES.

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UNITED STATES PATENT OFFICE.

GEORGE SEYFANG, OF BUFFALO, NEW YORK.

IMPROVEMENT IN BIRD-CAGES.

Specification forming part of Letters Patent No. **174,644**, dated March 14, 1876; application filed May 15, 1875.

To all whom it may concern:

Be it known that I, GEORGE SEYFANG, of Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Bird-Cages; and I do hereby declare that the following is a full, clear, and exact description thereof, having reference to the accompanying sheet of drawings, in which—

Figure 1 is a longitudinal elevation of a bird-cage embodying my improvements. Fig. 2 is a longitudinal section of one of the horizontal bands. Fig. 3 is a side elevation of the food-cup. Fig. 4 is a top, and Fig. 5 a bottom, view of the same.

Like letters of reference indicate similar parts in the various figures.

The first part of my present invention relates to the fastening of the vertical filling-wires within the horizontal bands, and the second part relates to the feed-cups and their nature and particulars of construction, which will be first described and then pointed out in the claims.

A is the body of a bird-cage, made in the usual forms, of brass or other wire. B are the horizontal bands, and C the vertical filling-wires. These horizontal bands B are made of wire, suitably provided with perforations C′ to receive the vertical filling-wires C, fastened within the said bands B without solder by providing these bands with indentations D, produced therein by suitable means, so as to compress the metal around the perforations, and thus cause the same to impinge upon the filling-wires sufficiently to hold them in their proper position.

A result similar to that described has, to some extent, been produced by passing the bands between rollers after the insertion of the filling-wires, and to swage them so as to cause the perforations to elongate, and thus impinge upon the filling-wires to hold them in their place. This mode of fastening the wires is faulty in that the perforations become oblong, and thus cause open spaces on each side of the filling-wires, where acid will be retained after the cages are "dipped," and where vermin and other impurities will accumulate that are injurious to the bird. These open spaces cannot well be closed by any amount of rolling the bands, as this operation is limited, to a great extent, by the stretching of the said bands, and, if carried on to excess, will seriously affect their strength, because the band will stretch most around the perforations and harden the metal so much as to cause it to break, while the unequal expansion of the different bands will disfigure the cage. These obstacles I have overcome by stamping, or otherwise producing, in the bands, after the insertion of the filling-wires, indentations D on each side of and parallel with the said filling-wires. These indentations will condense the metal surrounding the filling-wires, and thus cause the perforations to close up all around and impinge upon the said filling-wires without leaving open spaces, &c., and without affecting the strength of the bands, since the transverse section through the indentations is still greater then than through the perforated part of the bands.

E is the feed cup of my cage. It is made of glass or porcelain, and has in its upper edge notches or indentations E′, by means of which it engages with a locking-bar, F. The bottom of this feed-cup E is provided with a circular projection, G, having also notches I, which engage with the band B′. One-half of the circumference of the food-cup is plain, and the other, that outside of the cage, corrugated longitudinally, and the cup is inserted into the cage by raising the bar F, which slides upon two of the filling-wires C, and between the bands B B′, one of which being a section only of sufficient length to retain the broken ends of the filling-wires C, removed to produce the opening for the food-cup, sufficiently to pass the cup into the open space provided for that purpose, and by it is held in proper position by the notches E′ and I, in conjunction with the band B′ and locking-bar F. In order to prevent the food-cup from being pushed entirely into the cage, I provide the same with projections X, which will engage with indentations K in the filling-wires C, and thus insure the proper location of the feed-cup. These feed-cups, being an article of commerce, are of a size smaller than the space provided for them—the distance between a certain number of filling-wires—and, in order to enable me to use these feed-cups, I provide the respective

filling-wires with projections K, which, engaging with the longitudinal corrugations or projection X, on the food-cup, will prevent its being pushed into the cage. If food-cups are made of a size sufficiently large, or the projections X, provided thereon, of a sufficient length, I am enabled to discard the projections K in the said filling-wires. The retaining-bar F serves the double purpose of holding the feed-cups in proper position and of closing the opening therefor after the removal of the said feed-cups.

Having thus fully described my invention, in order to enable others skilled in the art to which it pertains to make and use the same, I desire to secure to me by Letters Patent of the United States—

1. The bands B B′, provided with the perforations C′, in combination with the series of indents D, produced after the insertion of the filling-wires C, and arranged parallel with, and on each side of, the said filling-wires, substantially in the manner and for the use and purpose set forth and described.

2. The feed-cup E, having the notches E′ and I, in combination with the cross-band B′ and sliding bar F, as described.

3. The feed-cup E, having the projection X, in combination with the filling-wires C, with or without the projection K, substantially as described, for the purpose set forth.

GEO. SEYFANG.

Witnesses:
MICHAEL J. STARK,
GEO. J. MUNSCHAUER.