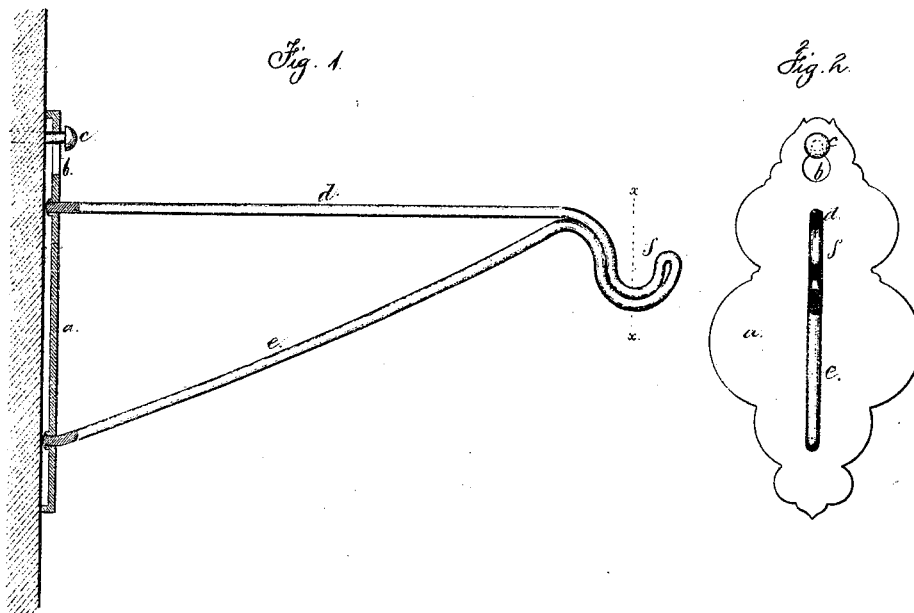


J. M. Spring,
Bird Cage Hook.
No. 113808. Patented Apr. 18. 1871.



Witnesses

Chas. H. Smith
Harold Penell

John M. Spring
Lemuel W. Serrell
att.

United States Patent Office.

JOHN M. SPRING, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO P. & F. CORBIN, OF SAME PLACE.

Letters Patent No. 113,808, dated April 18, 1871.

IMPROVEMENT IN HOOKS FOR BIRD-CAGES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JOHN M. SPRING, of New Britain, in the county of Hartford and State of Connecticut, have invented and made a certain new and useful Improvement in Hooks for Bird-Cages, and the following is hereby declared to be a correct description of the same.

A wire hook for suspending bird-cages has heretofore been made, in which the hook or suspending portion is at the outer end of an arm projecting from a plate that rests against the wall or other vertical surface, and said arm and hook are supported and strengthened by a separate arm, also extending from said plate, the two arms being connected to each other at or near the hook portion by soldering.

A hook made in the above manner is not strong, is unsightly in appearance, and the soldering of the two arms adds to the cost of the hook and is troublesome in the manufacture.

My improvement relates to forming the hook and both the arms from one piece of wire, so that all soldering is dispensed with and a hook produced which is not only neat and handsome in appearance but is of far greater strength than those heretofore made.

In the drawing—

Figure 1 is an elevation of my improved hook with the wall-plate and the ends of the arms in section, and

Figure 2 is a cross section of the same at the line *xx*, fig. 1.

The plate *a*, to set against the wall or other vertical surface, may be of any desired size or ornamental

shape, and is to be provided with an opening or hole, as at *b*, so that said plate may be suspended by a nail or screw, *c*; said plate *a* is also to be formed with holes to receive the ends of the arms *d e* of the hook *f*.

The portion of the wire that forms the hook *f* is bent double and into about the shape shown in fig. 1, before the arms *d e* are riveted to the plate *a*, and the wire of the arms *d* and *e* extends from the hook *f*, and said arms stand at an inclination to each other.

The wire of the arm *e* is to be first passed into the hole in *a* and riveted to the same, and then the inner end of the arm *d* is passed through its hole in said plate and riveted.

In thus connecting the parts the arm *e* is bent near the plate *a*, thereby causing the same to bend firmly in its hole and adapting the arm to resist the endwise compression resulting from the weight that may be suspended from the hook *f*.

By making the hook and arms out of one piece of wire and securing the same as aforesaid, the parts are much stronger and better than those heretofore constructed.

I claim as my invention—

The hook *f*, made of one piece of wire bent up double and extending in the form of arms *d e*, that are secured at their ends to the plate *a*, as and for the purposes set forth.

Signed by me this 14th day of March, A. D. 1871.
J. M. SPRING.

Witnesses:

CHARLES PECK,
EDWD. L. PRIOR.