(No Model.)

G. C. HINMAN.

PERCH HOLDER FOR BIRD CAGES.

No. 562,468. Patented June 23, 1896.

FIG 1

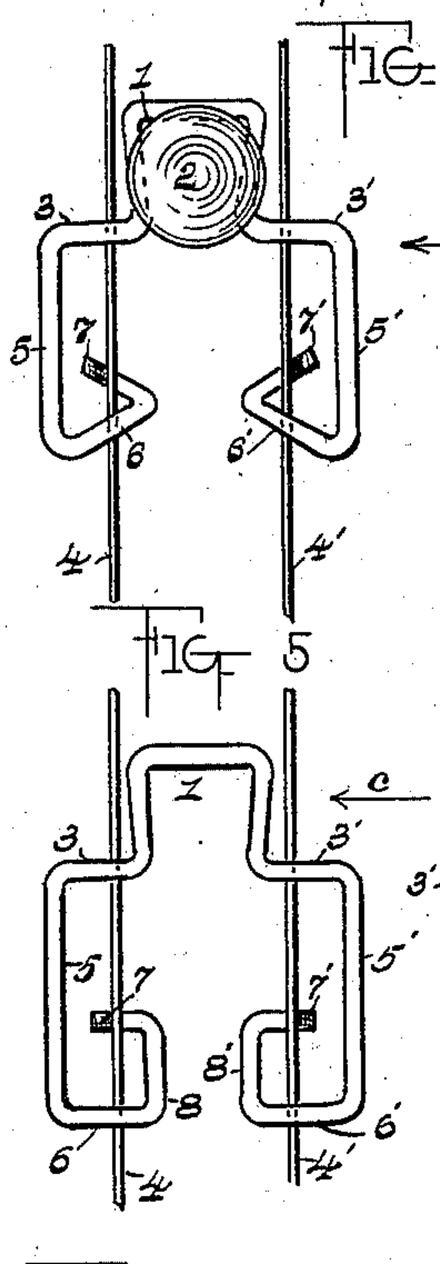


FIG 2

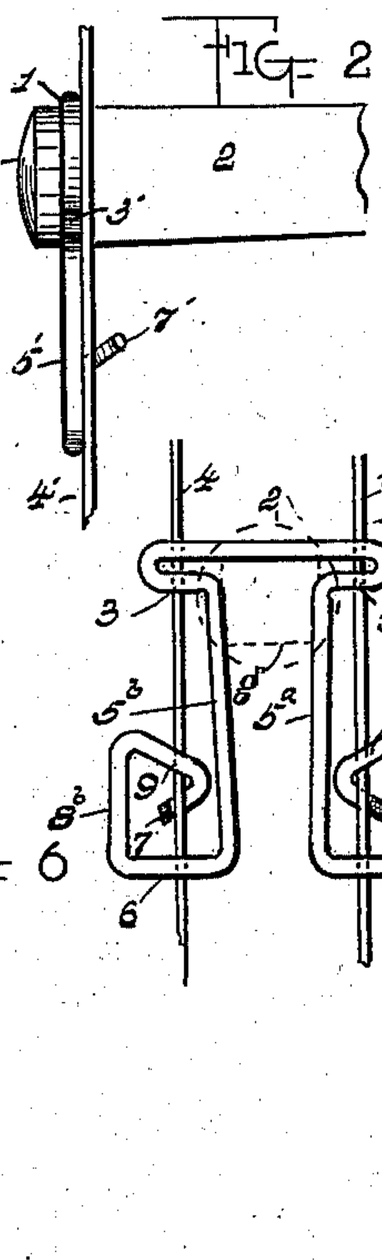


FIG 3

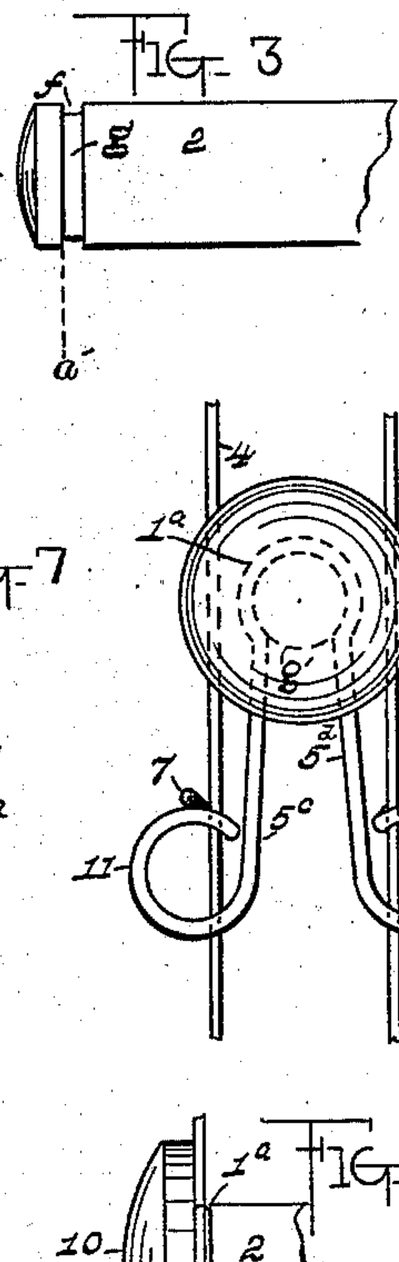


FIG 4

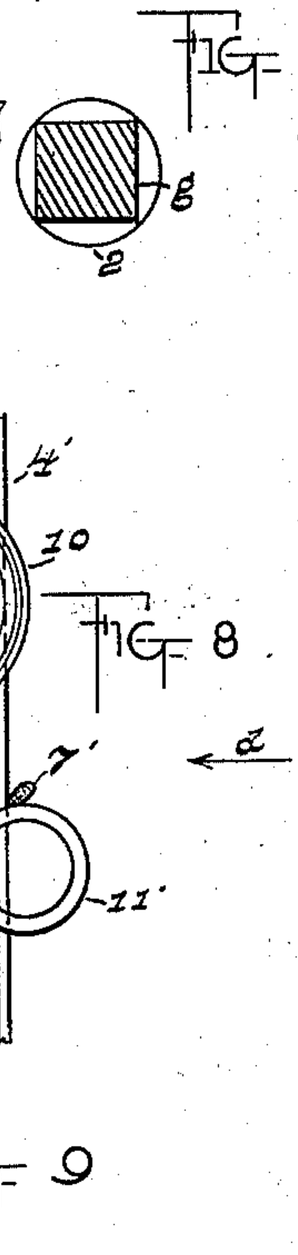


FIG 5

FIG 6

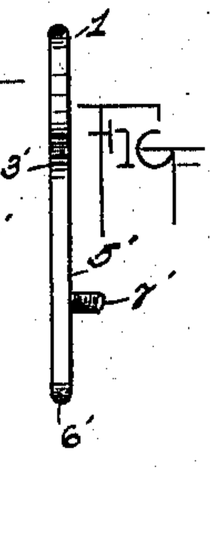


FIG 7

FIG 8

FIG 9

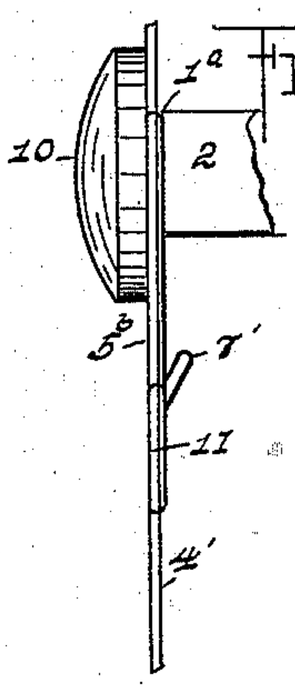


FIG 10

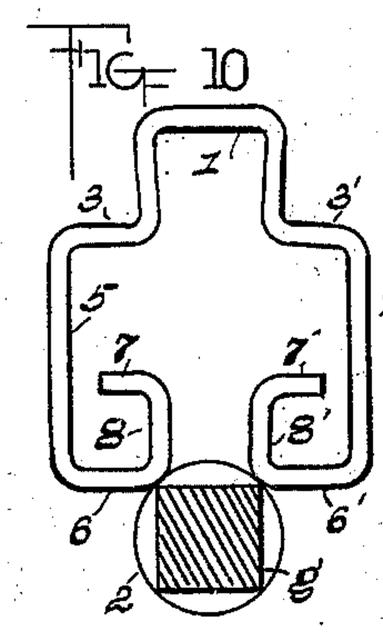


FIG 11

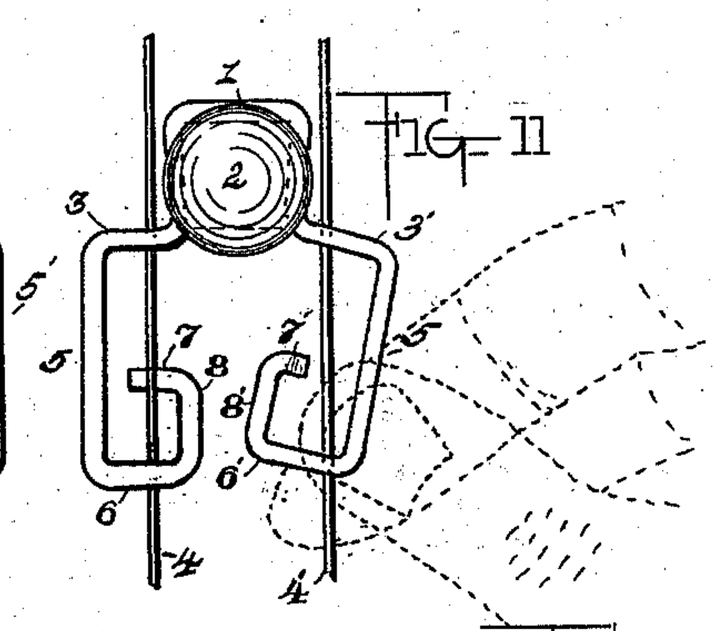


FIG 12

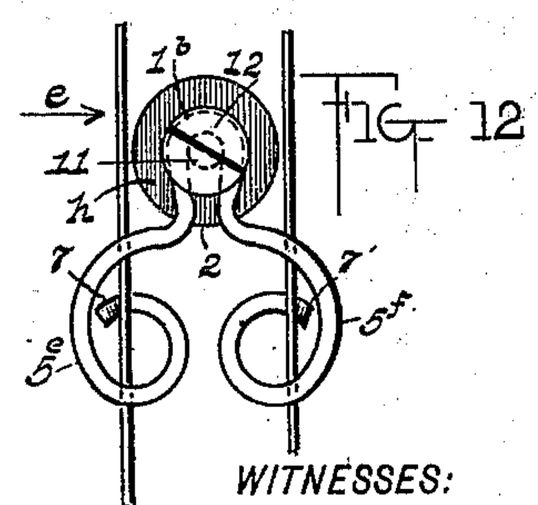


FIG 13

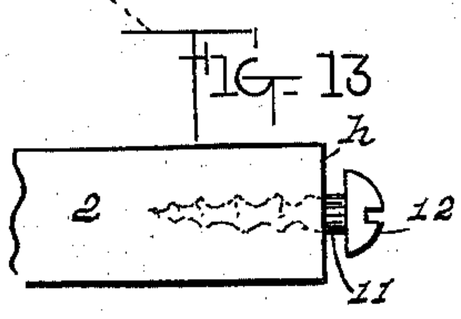
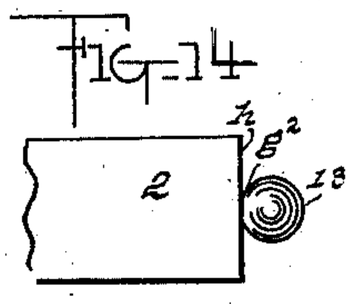


FIG 14



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HIS ATTORNEY.

UNITED STATES PATENT OFFICE.

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PERCH-HOLDER FOR BIRD-CAGES.

SPECIFICATION forming part of Letters Patent No. 562,468, dated June 23, 1896.

Application filed November 13, 1894. Serial No. 528,620. (No model.)

To all whom it may concern:

Be it known that I, GEORGE C. HINMAN, a citizen of the United States, and a resident of New Haven, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Perch-Holders for Bird-Cages, of which the following is a specification.

My invention relates to an improvement in bird-cage perches, and has for its object the construction of a holder not only cheap, simple, and effective as a means for attaching and detaching the perch to the wires or bars of the cage, but that such attachment or holder shall be so constructed and secured at or near the end of the perch in such a manner that no portion thereof shall project within the cage to interfere with the smooth cylindrical surface of the perch to the injury of the bird's feet.

To this end my invention consists of an attachment preferably made of a single piece of wire bent in a form calculated to cover sufficient surface so as to embrace two, at least, of the vertical bars of the cage, and to engage such bars at four or more points on the outside of the cage; a suitable bend or loop formed in the body of the wire-holder to provide means whereby it is attached to the perch at or near the outer end thereof, the free ends of said holder engaging with the inside surface of the vertical cage-bars at a point between the perch and the lower outer-surface contact, and when thus engaged to form with such outer-surface contact a leverage that will firmly maintain the holder in any desired position within the range of the vertical bars of the cage, thus forming a construction that presents the equivalent of a flat surface against the cage-bars and representing breadth rather than thickness.

To enable others to fully understand my invention, reference is had to the accompanying drawings, in which—

Figure 1 represents a detail side elevation, looking from the outside of the cage, of one form of my improved perch-holder attached to two vertical cage-bars, shown in broken section and supporting at its upper end the perch shown in end elevation; and Fig. 2 is a detail side elevation looking in the direction of arrow *a*, Fig. 1, of the perch-holder, broken section of the cage-bars, and perch. Fig. 3 is a detail side elevation and broken section of the wooden perch having a groove near the end to receive the loop portion of the holder. Fig. 4 is a detail sectional end elevation through dotted line *a'* looking in the direction of arrow *b* of Fig. 3. Fig. 5 is a detail front elevation of a slightly-modified form of holder and broken section of two cage-bars to which it is attached. Fig. 6 is a detail side elevation of the holder shown in Fig. 5, looking in the direction of arrow *c*. Fig. 7 is a detail front elevation of modified form of the holder attached to two cage-bars, shown in broken section; also, dotted position of the wooden perch. Fig. 8 is also a detail modified form of the perch and holder, the former in end and the latter in front elevation, and broken section of the cage-bars, the lower portion of the holder, and an enlarged portion of the perch resting thereagainst. Fig. 9 is a detail side elevation of the device shown in Fig. 8, looking in the direction of arrow *d*. Fig. 10 is a detail front elevation of a holder about to be attached to the groove in the wooden perch, the latter being a sectional end elevation through line *a'* of Fig. 3, looking in the direction of arrow *b*. Fig. 11 is a detail side elevation of the holder, end view of the perch connected thereto, broken section of two cage-bars, one side of the holder being compressed so that its engaging point or lever may be attached thereto. Fig. 12 is a detail side elevation of another modified form of the perch-holder and an end elevation of the perch, the loop in the body of the holder, by which it is connected to the perch, being smaller than previously shown, so as to engage the body of the screw, shown in end elevation; also, a broken section of the cage-bars to which said holder is secured. Fig. 13 is a detail broken side elevation of perch shown in Fig. 12, looking in the direction of arrow *e*, showing the screw in the end thereof to support the holder. Fig. 14 is a detail broken side elevation of the perch having a reduced neck portion on the end in place of the screw to receive the loop of the holder.

The device is preferably made of a single piece of wire having a suitable bend or loop

formed in the body thereof to engage a reduced portion or neck located at or near the end of the perch, the main body of the holder covering sufficient superficial area to rest against the outer surface of two, at least, of the vertical cage-bars, while the free ends are angularly deflected from the plane of said body, so as to engage with the inner surface of the said cage-bars, thus forming a leverage by which the holder is made vertically adjustable and maintained in any desired position within the range of such bars.

The several forms of the perch-holder, as illustrated in the accompanying drawings, embody the same characteristic features respecting their attachment to the perch and cage-bars which is common to all. 1, Fig. 1, represents an angular bend or loop formed in the body of the wire-holder. *f*, Fig. 3, is a groove near the end of the perch 2, forming the reduced neck *g* to receive the before-mentioned angular loop 1 of the holder, which latter is secured thereto in the manner shown at Fig. 10, wherein the lower branches of the holder are to be sprung apart to admit the neck *g* of the perch within the embrace of the said loop and arranged to rest against the outer surface of the cage-bars 4 4′. The vertical members 5 5′ have each an angularly-bent arm 6 6′, which also rest against the outer surface of the cage-bars 4 4′. These arms terminate in the free ends 7 7′, and, being slightly raised above the plane of the holder, (see Figs. 2, 6, and 9,) and at an angle therewith, form gripping-levers to engage the inner surface of the cage-bars.

The form of holder shown in Figs. 5, 10, and 11 differs only in the rectangular shape of the lower part, which has one more bend therein—viz., the gripping-levers 7 7′ being located at right angles to the uprights 8 8′.

Fig. 7 presents the same general features respecting the superficial contact of the holder with the outer surface of the cage-bars. In this construction the main vertical members 5^a 5^b are brought closer together, while the arms 6 6′ turn outward. The vertical portions 8^a 8^b have the angular bends 9 9′, which terminate in the regular gripping-levers 7 7′. The upper part of the holder is vertically folded down upon the lateral branches 3 3′, so as to provide a bearing against the cage-bars for the upper part of the holder.

In Fig. 8 the circular loop 1^a is shown as embracing the circular neck *g*′ of the perch, while the enlarged head 10 of said perch rests against the outer surface of the cage-bars 4 4′, thus supporting the holder at the upper end. The vertical members 5^c 5^d have the circular bends which rest against the cage-bars and also terminate in the gripping-levers 7 7′, as in the other views.

Fig. 12 represents a holder having the small circular loop 1^b to embrace the body (see also Fig. 13) 11 of the screw, which is inserted in the end of the perch 2, the space between the outer face *h* of said perch and the inner face of the head 12 of the screw being an equivalent of the groove and neck shown in Fig. 3. This same feature is carried out in the perch shown in Fig. 14, wherein the ball 13 is turned on the end of the said perch, so as to form the neck portion g^2 to receive the small round loop of the holder. The lateral branches 5^e 5^f are of circular construction and rest against the cage-bars similar to the angular constructions before mentioned, such branches terminating in the usual gripping-lever ends 7 7′.

To attach the holder to the cage-bars, the perch, which is previously attached to the holder, is inserted (see Fig. 11) between the cage-bars 4 4′, and one of the engaging-levers being made to engage one of the cage-bars without pressure the other engaging-lever is then forced inwardly to engage the opposite cage wire or bar. Said engaging-lever being then released, it slides upon the wire inwardly of the cage, forcing its inclined form thereon with sufficient power to hold the perch in any desired position, as shown at Fig. 5. The operation of attaching all of the other constructions is similar to the one just described. To release the holder, this operation has simply to be reversed.

In all the various constructions shown the gripping-levers engage the cage-bars below the perch. It will be understood, however, that this feature may be reversed and such levers engage the bars above the perch. There is, however, one feature common to all the various forms of the holder shown, which consists in placing said gripping-levers at some point between the upper and lower contact-points of the holder proper, *i. e.*, those surface contact-points of the holder which rest against the outer surface of the cage-bars. This feature is essential in order to impart sufficient leverage or bracing quality to the holder. Therefore I do not wish to be confined to any particular form or outward configuration that the holder may assume so far as superficial latitude is concerned, as this feature may vary to suit the convenience of the manufacturer.

The holder above described has many valuable qualities. It is cheap, simple, and effective. The perches and holders may be manufactured at different places and assembled without the aid of skilled labor. In this respect, as well as in many others, it is vastly superior to the device for which Letters Patent No. 340,116, dated August 20, 1886, were granted to me, which device consisted of two diverging arms, and this feature was required solely for the purpose of effecting an easy entrance of the holding device between cage-bars of varying distances from each other. The holding part of the device consisted of the two grooves with exactly the same kind of contact both on the inside and outside of the cage, as well as the same kind of contact and holding pressure, vertically, the entire length of said grooves. In my present device all of these elements are wanting, it being

simply the equivalent of a flat surface touching the outside bars of the cage at four or more similar points and held thereto by inclined gripping-levers sliding laterally against the inside surface of the cage-bars.

It may be found convenient, and equally as good results may be obtained, to form a simple hook or curve on one of the free ends of the holder to first engage one of the cage-bars, while the other free end is provided with the inclined gripping-lever.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A perch-holder, having a loop or other like device in the body thereof, in combination with a perch having a neck or groove at or near one of its ends for the purpose of receiving said loop therein, in the manner described and set forth.

2. A perch with a neck or groove at or near one of its ends, in combination with a perch-holder having a loop or other like device in the body thereof, the free ends of said holder forming inclined sliding arms to engage with the cage-bars so that, when the body of the holder rests against one side of the bars and the inclined sliding levers engage the opposite face of said bars a leverage or bracing effect will be produced that will support such holder in any vertical position, as set forth.

3. The combination with a perch of a holder and means for securing it thereto, said holder having a superficial area or body portion sufficient to embrace two or more of the vertical bars of a cage for a supporting-surface, one or more inclined sliding arms at the free ends of said holder to engage with the inner surface of said cage-bars, and thus form, with said body portion, sufficient leverage to properly support the holder in a vertical position, as described.

4. A perch having a reduced portion or neck near one of its ends, combined with a holder, preferably of wire, a loop or other like bend formed in the body thereof to engage with the neck of said perch, the free ends of said holder branching out therefrom to provide sufficient superficial area to embrace two, at least, of the vertical cage-bars, and on one side thereof, laterally-inclined sliding arms at or near the free ends of said holder to engage with the opposite surface of the cage-bars, said sliding arms located at a point intermediate of the bearing or outer contact-points of the holder, all as described and for the purpose set forth.

Signed at Bridgeport, in the county of Fairfield and State of Connecticut, this 10th day of November, A. D. 1894.

GEORGE C. HINMAN.

Witnesses:

CHARLES W. MANN,

LEWIS F. PELTON.