(No Model.)

C. H. THURSTON.

HOOK.

No. 389,825.

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Fig. 1.

Fig. 2.

E. e. e.

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## HOOK.

SPECIFICATION forming part of Letters Patent No. 389,825, dated September 18, 1888.

Application filed May 14, 1888. Serial No. 273,870. (No model.).

To all whom it may concern:

Be it known that I, CHARLES H. THURSTON, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Wire Suspension-Hooks, of which the following is a full and clear description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a perspective view of a hook embodying my invention. Fig. 2 are enlarged sectional views taken through one of the hook.

My present invention relates to wire hooks for suspending garments, pictures, and various other articles, and has for its object to make a strong and secure wire hook with the least possible expense of time and material; and my invention consists in the improved hook hereinafter described, and in the application to wire hooks generally of an integral hemispherical or concavo-convex enlargement, which is formed on the outer end or ends of the hook by striking up the metal of said end with a suitable die, whereby an effective guard or protector is readily and cheaply formed, as I shall hereinafter describe and

To enable others skilled in the art to which my invention appertains to make and use my invention, I will now describe its construction and indicate a preferred manner of carrying the same out.

30 claim.

In Fig. 1 the hook A is formed of two pieces of wire, a and b, the former of which is formed at one end with a threaded tip or portion, c, whereby the hook may be readily and securely 40 fastened to the wall, door, or other place, while its opposite end is bent into the form of a hook at d, the outer end of which may be  $\frac{1}{2}$ turned down, rounded, or otherwise formed with a head of a width sufficiently greater than 45 the diameter of the main portion of the wire to obviate all danger of said end penetrating the material of the garment hung upon it. The other wire or strand, b, is formed with a hook and head corresponding with the hook 50 on the wire a, and the two hooks stand in a line upon each side of the main portions of the

wires, whereby a double hook is formed, and the said wire b, at its opposite end, is spirally coiled around the wire a at a point near the base of the screw portion c and in a plane at 55 right angles with its length to form a bearing, which is adapted to rest firmly against the wall or other object to which the hook is attached. The central portions of both wires a and b are twisted together, so as to materially 60 strengthen the hook, and the hook portions proper are formed on their lower ends and extend in opposite directions, as previously noted.

The hemispherical or concavo-convex heads 65 e, which are formed upon the outer ends of the hooks, are of considerable importance, in that I am enabled to form said head integral with the hook by simply striking up the metal of the hook in a suitable die. When subjected 70 to the action of the die, the metal is spread out or expanded in all directions, so that the width of the head is considerably greater than the diameter of the wire. At the same time the upper or convex surface of the head is rounded 75 in all directions, which not only makes a neatand ornamental finish, but also presents a bearing-surface sufficiently broad to obviate all danger of the end of the hook penetrating the material of the garment or article hung 80 upon it. In addition to these very desirable features, I am permitted to effect a great saving of material when large quantities of the hooks are manufactured.

I am aware efforts have been made to ac- 85 complish the results previously referred to by turning the end of the hook downward and by turning and securing independent balls or knobs upon the ends of the hooks; but these modes are objectionable, because of the additional length of wire needed to make the hooks when the heads are formed by turning the wire down and the extra cost and labor incurred in making and fitting the balls or knobs to the end of the wire or by turning the head 95 on said wire.

From the foregoing description it is evident I am enabled to construct a strong and secure double hook by the use of small pieces of wire which are often of no use in forming hooks of 100 a continuous wire, and also provide a hook on which an enlarged rounded and hollow head 2 389,825

is formed to prevent injury to the article hung upon it.

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

5 Patent, is—

1. A hook formed of the independent wires a and b, twisted together for a portion of their length and having at one end the oppositely-extending hook portions and at the opposite end a threaded tip or portion, and spirally-wound bearing, substantially as described.

2. As an article of manufacture, a wire hook having the metal at the end thereof struck up to form a hollow hemispherical head having a

width greater than the diameter of the main 15 wire, substantially as described.

3. The double hook herein described, formed of the wires a and b, twisted together for a portion of their length and provided with the screw point or tip, spirally-wound bearing, and 20 the hook portions, said hook portions being formed with hemispherical or concavo-convex heads formed by striking up a portion of the metal, substantially as described.

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Witnesses:

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