

(No Model.)

J. BEATTIE, Jr.

BATTERY ZINC.

No. 376,228.

Patented Jan. 10, 1888.

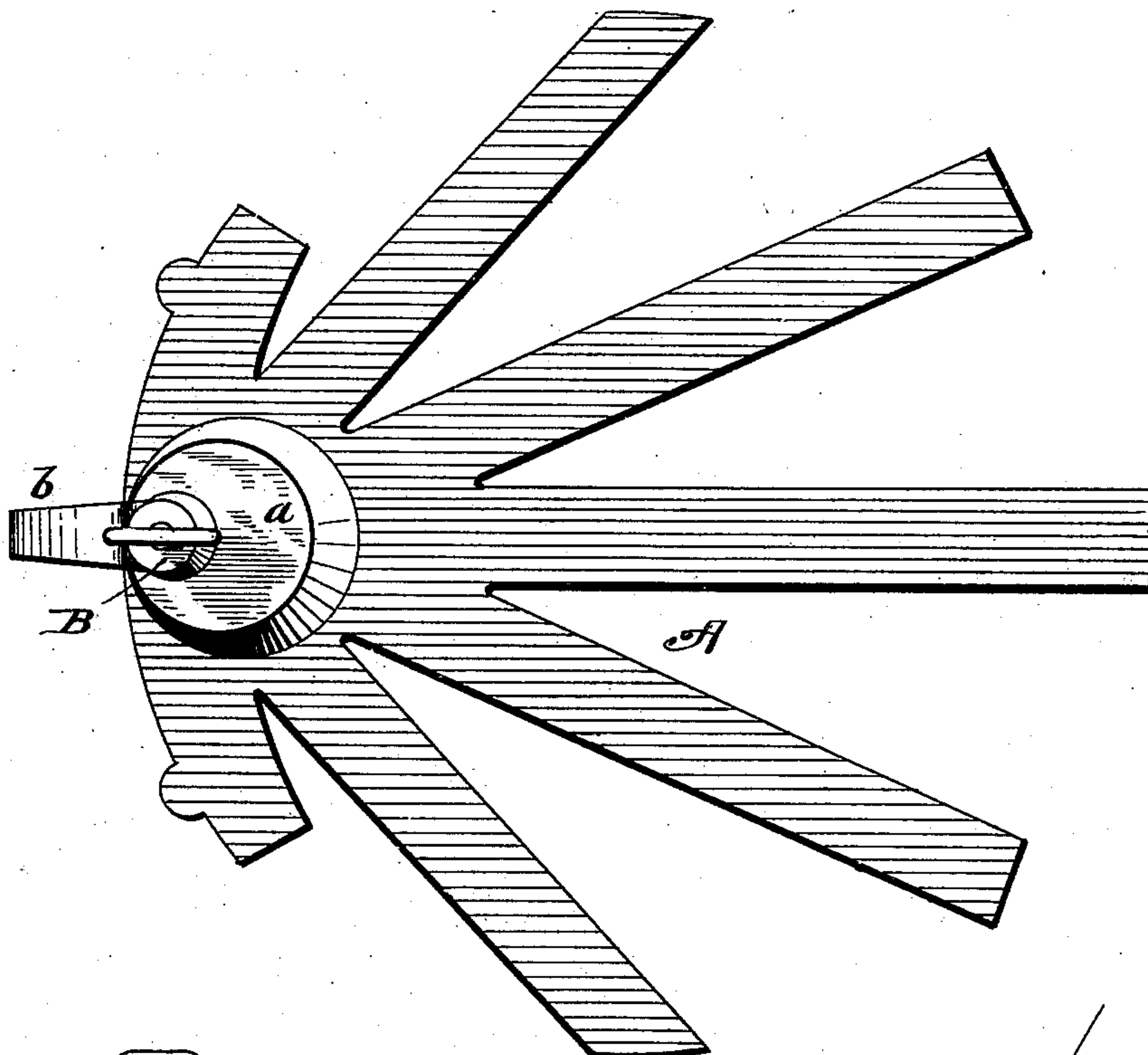


Fig. 1.

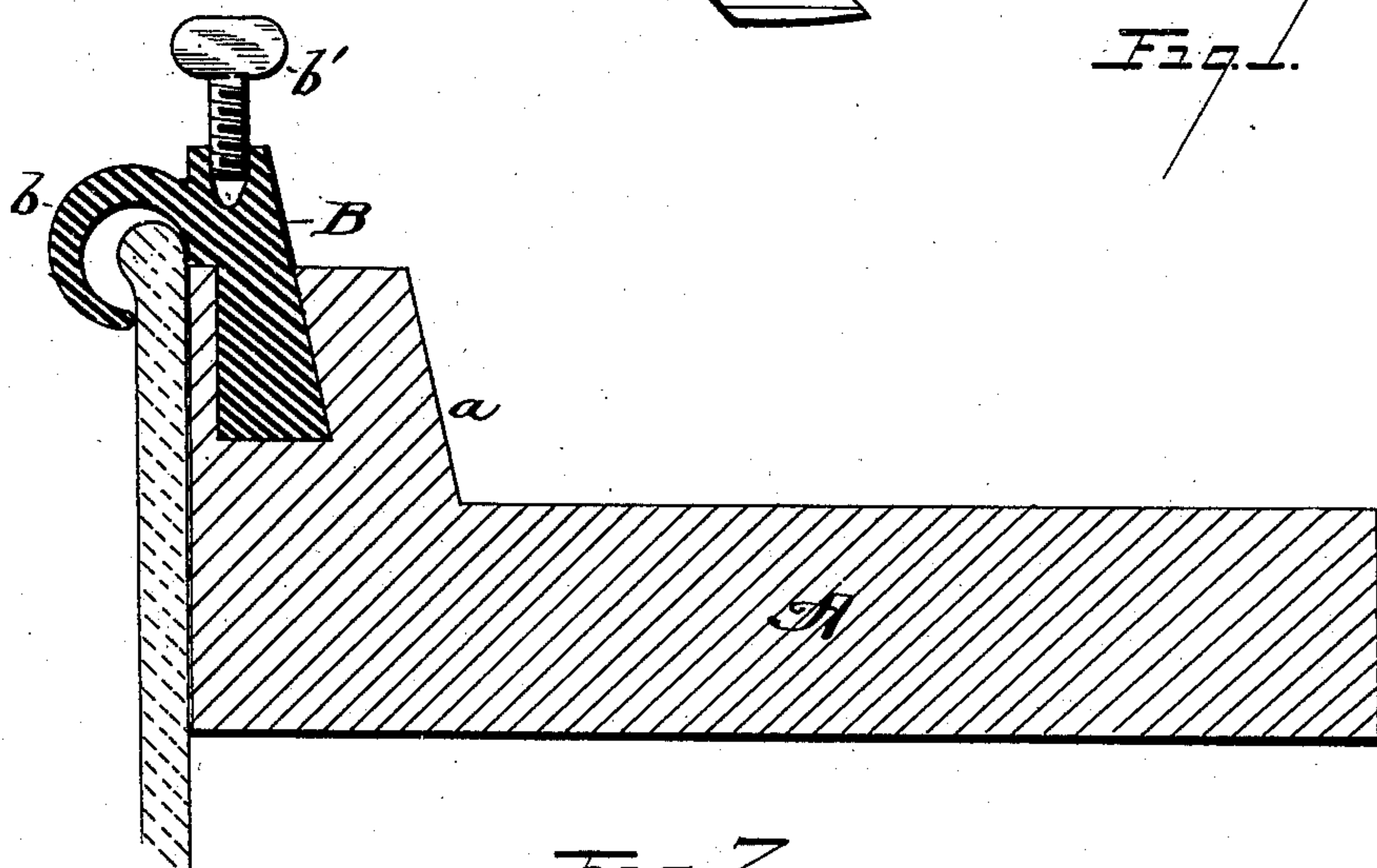


Fig. 2.

WITNESSES:

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# UNITED STATES PATENT OFFICE.

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BEATTIE BATTERY ZINC AND ELECTRICAL COMPANY, OF SAME PLACE.

## BATTERY-ZINC.

SPECIFICATION forming part of Letters Patent No. 376,228, dated January 10, 1888.

Application filed August 13, 1887. Serial No. 246,862. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN BEATTIE, Jr., a citizen of the United States, residing at Fall River, in the county of Bristol and State of Massachusetts, have invented certain new and useful Improvements in Battery-Zincs, of which the following is a specification.

My invention relates to battery-zincs, particularly to that form of zinc known in the art as the "crow-foot." Hitherto considerable expense and annoyance have been experienced in the use of this style of zinc by reason of the breakage of the post carrying the binding-screw and the supporting-hook. It has also been the custom to cast the post and the supporting-hook integral with and of the same material as the body of the zinc. This material is very brittle, and will not permit of bending to any extent without breaking. Because of this, difficulty has been experienced in some instances in properly supporting the zinc in position in the jar, owing to different thicknesses of the material of which jars are composed—that is to say, the hooks being of one size and too brittle to bend, and the walls of battery-jars being of different thicknesses, in some instances, the hooks would not fit snugly over the edge of the jar, so that it is necessary to insert a chip of wood or something of the kind between the hook and the edge of the jar to make the fit perfect.

The object of my invention is to obviate the above difficulties by providing a post which will not be easily broken and a supporting-hook which may be made to fit securely over the edge of any ordinary battery-jar.

To this end the invention consists of a crow-foot zinc having an enlarged and peculiarly-shaped post, in combination with a binding-post and supporting-hook of a different material from the zinc capable of being bent without breakage.

It also consists of other details, which will be fully described and claimed.

I will now describe the invention with reference to the accompanying drawings, in which—

Figure 1 is a plan, and Fig. 2 a vertical central section, of a crow-foot zinc constructed according to my invention.

A represents the body of the zinc, and *a* the post. As shown, the post is shaped like the frustum of a cone and of such proportions as to withstand a considerable shock without breaking.

B represents a supplemental post, which may be made of any metal capable of being bent. This post has formed upon it a hook, *b*, and is also bored vertically and horizontally to receive the binding-screw *b'* and wire.

The post B is a separate casting, preferably of brass, and ordinarily will be provided with a dovetail or cross-head at its lower end for making connection with the zinc. The preferred manner of securing the post B to the zinc is to insert it into the mold when the zinc is cast and to pour the molten zinc around it. This insures a perfect lock between the parts; but other forms of connection may be adopted.

To properly support the zinc in the jar, the hook is placed over the edge thereof, as shown in Fig. 2, and if it should not be a good fit a pair of pliers are used to bend the lip of the hook either toward or away from the edge of the jar until it does fit.

Having now described my invention, I claim—

1. The combination, with a zinc for battery purposes, of an enlarged post cast of the same metal and integral therewith, and a supplemental post secured to the enlarged post, as set forth.

2. The combination, with a crow-foot zinc for battery purposes, of an enlarged post shaped like the frustum of a cone, cast of the same metal and integral therewith, and a supplemental post of flexible material secured to the enlarged post by a dovetail connection, as described.

3. The combination, with a crow-foot zinc and a main post cast integral therewith, of a supplemental post constructed of different material and secured to the main post by a dovetail connection, as described.

4. The combination, with a crow-foot zinc, of a post constructed of different material, said post being secured to the zinc by a dovetail connection and having formed upon it a supporting flexible or ductile hook, substantially as described.

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5. The combination, with a crow-foot zinc, of a post constructed of flexible metal, said post having formed upon it a hook and carrying a binding-screw, as set forth.

5 6. A crow-foot zinc having an enlarged post, in combination with a supplemental post of different material having formed upon it a flexible hook and a binding-post.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

JOHN BEATTIE, JR.

Witnesses:

WM. A. ROSENBAUM,  
HENRY W. AUBE.