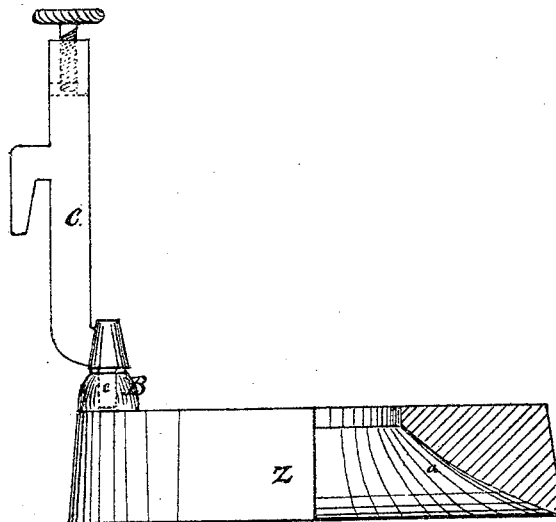
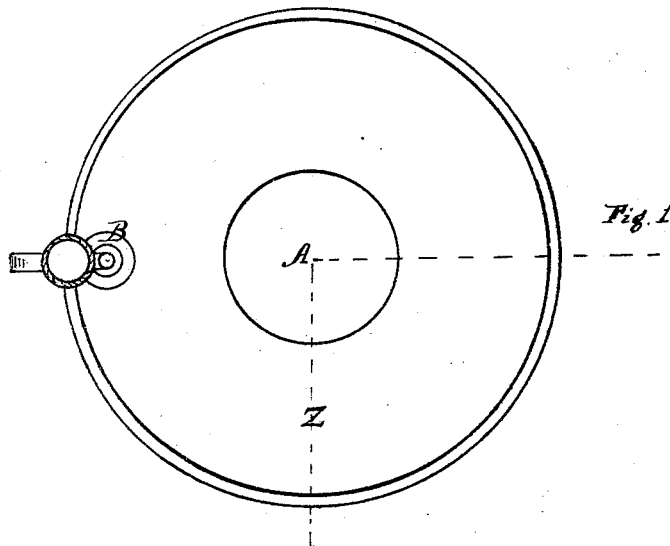


E. A. HILL.

Improvement in Zinc for Galvanic-Batteries.

No. 114,005.

Patented April 25, 1871.



WITNESSES:

J. M. Munday
J. F. Brown.

INVENTOR:

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United States Patent Office.

EDWARD A. HILL, OF CHICAGO, ILLINOIS.

Letters Patent No. 114,005, dated April 25, 1871.

IMPROVEMENT IN ZINC FOR GALVANIC BATTERIES.

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

I, EDWARD A. HILL, of Chicago, in the county of Cook and State of Illinois, have invented certain Improvements in Zincs for Galvanic Batteries, of which the following is a specification.

It is well known to those conversant in the art that the "zinc" of a galvanic battery is the part which soonest wears away by action of the chemicals, and that the other parts of a battery of ordinary construction will outlast several of the zinc plates or rings used.

The object of my invention is to provide a battery-zinc which can be readily adapted to and fitted into a battery, and which may be supplied as an article of manufacture to the trade for that purpose; and

It consists of an annular zinc disk made of peculiar and novel form, as will be hereinafter presently explained, and having an aperture in which may be inserted a hanger by which to suspend it from the battery-cup, all of which will more fully appear in the general description below given.

In the accompanying drawing, which, together with the letters and figures of reference marked thereon, forms part of this specification—

Figure 1 is a top or plan view of my invention.

Figure 2 is a side elevation of same, partly in section, on the line *x y* of fig. 1.

General Description.

Z is the zinc, of an annular or ring-shape, perforated at the center by the aperture A.

This aperture bevels away from the upper surface of the zinc until it forms a slope, *a*, extending from the upper edge of the aperture A to the lower outer edge of the zinc, as will be readily understood by reference to fig. 2 of the drawing.

The purpose of this sloping configuration is to allow of the ready escape of the gas-bubbles which arise in the chemical solution of the battery while in operation and strike against the zinc. The slope *a* directs them to the aperture A, through which they readily escape.

This aperture A has another and more important function: it permits the introduction of a tube or magazine, through which the proper chemicals in a solid form may be placed in the battery with ease.

B is a projection cast upon the zinc near its edge. This projection surrounds and serves to strengthen the attachment to an ordinary hanger, C, for the purpose of attaching which hanger there is an aperture, *c*, entering the zinc through the projection B.

The zinc Z may be cast solid, with the projection B and sloping aperture A.

The hole in the projection B for the attachment of the hanger may be either cast or drilled in; and the zinc being a soft metal the pin at the bottom of the hanger may be driven in tight enough to hold the weight of the zinc; or a screw may be cast in said projection B, upon which the said hanger may be screwed.

Having thus described my invention,

What I claim, and desire to secure by Letters Patent, is—

As an article of manufacture, the battery-zinc of the form described and shown, substantially as specified.

EDWARD A. HILL.

Witnesses:

J. W. MUNDAY,
L. L. COBURN.