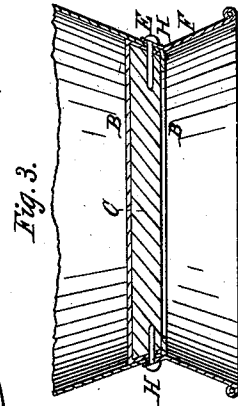
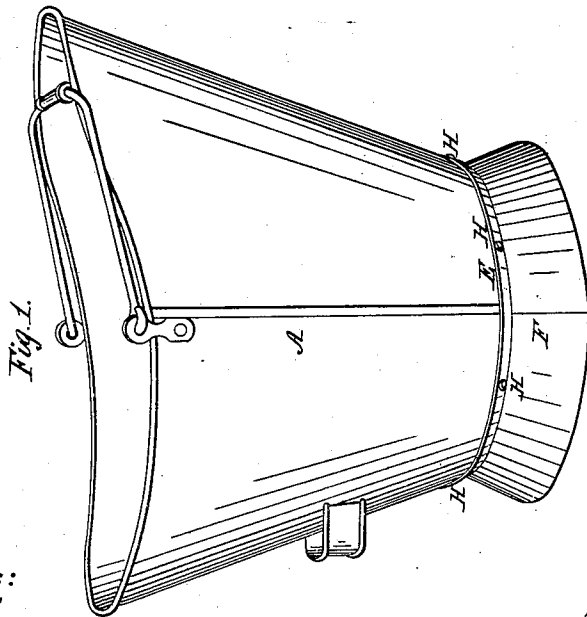
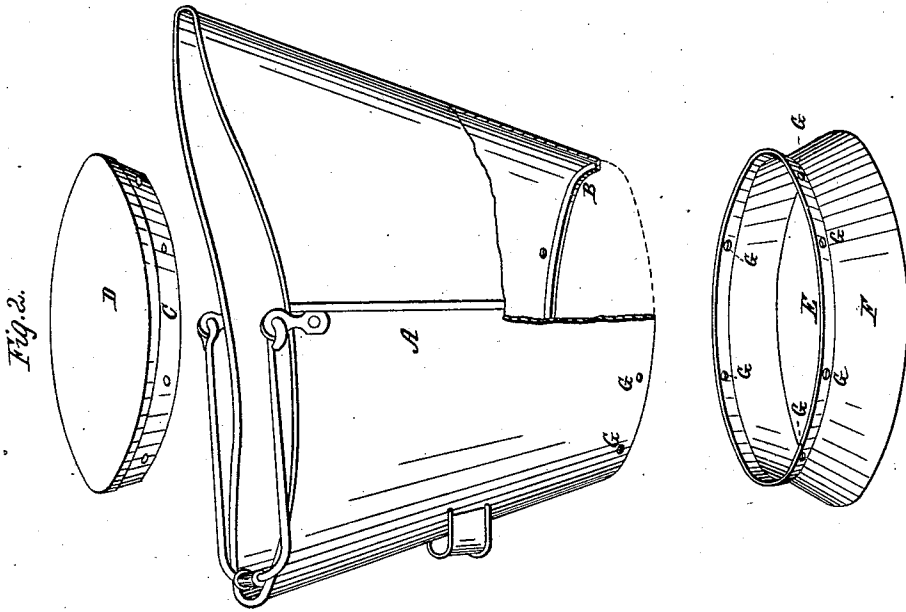


J. R. MILLER.
Coal Hod.

No. 42,623.

Patented May 3, 1864.



Witnesses:
Charles L. Fisher
D. P. Baldwin

Inventor:
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attys

UNITED STATES PATENT OFFICE.

JOSEPH R. MILLER, OF CINCINNATI, OHIO, ASSIGNOR TO HIMSELF AND JOSEPH W. WAYNE.

IMPROVEMENT IN COAL-HODS.

Specification forming part of Letters Patent No. 42,623, dated May 3, 1864.

To all whom it may concern:

Be it known that I, JOSEPH R. MILLER, of Cincinnati, Hamilton county, Ohio, have invented a new and Improved Mode of Constructing Coal-Buckets; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification.

This invention relates to the construction of metallic buckets for carrying coal and other hard and rough substances, by a process greatly more expeditious and cheaper than any hitherto employed, and one resulting in a much more durable and useful article.

In the customary and familiar mode of making coal-buckets, the bottom consists merely of a plate or disk of wrought-iron, which is united to the body by the somewhat slow and costly operation of "double-seaming," the foot being afterward secured by riveting to the body. Buckets thus constructed are well known to give out at the bottom long before the other portions have materially deteriorated, partly by rusting after contact with wet coal, and partly by heavy pieces of coal falling upon it.

The above defects are sought to be remedied in the present improvement by the provision of a peculiarly formed and secured wooden and metallic bottom combined.

Figure 1 is a perspective view of a bucket illustrating my invention. Fig. 2 shows the same in detached parts. Fig. 3 is an axial section through my bottom.

The body A is turned inward at its bottom edge, so as to form a ledge, B. The bottom is composed of a wooden slab, C, of corresponding contour to the lower portion of the body, and of a plate, D, of sheet-iron or other metal, which covers the top of the slab, and is bent over the upper edge thereof in the manner represented.

The upper edge, E, of the foot F is turned outward to fit the lower portion of the body exteriorly, and the body and foot being correspondingly perforated, G, are secured to each other, and to the bottom by nails H, which, traversing the foot and body, pass into the wooden portion of the bottom, and thus hold all fast.

A bucket thus constructed is both much more quickly put together and will far outlast one of the common form.

The slab C prevents any sagging of the plate D, and affords a serviceable bottom even after the plate has been worn or rusted through.

It will be seen that my compound bottom CD is supported wholly by the converging sides and inturned edge of the body, which, in its turn, owes its support to the similar convergence of the foot, so that no stress is thrown upon the nails, their office being merely to hold the parts together.

An important advantage of this mode of construction is its susceptibility of manufacture almost wholly by labor-saving machinery, which, however, it is not deemed necessary to describe in this place, it forming a proper subject for an independent patent.

Another valuable feature is the facility with which the article may be taken apart and renewed in any portion.

I have described this invention in its application to coal-buckets, that being the object for which I originally designed the improvement, and to which I have successfully applied it; but it may obviously be applied with advantage to a great variety of vessels, such as dry and wet measures, water-buckets, &c. When designed for carrying liquids, the bottom may be made water-tight by soldering the edge of the plate D to the body after the insertion and attachment of the bottom as above.

I am aware that coal-hods have before been constructed with compound bottoms of wood and metal; but,

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

The combination, with the body A and foot F, of the bevel edged slab C and metal plate D, upset over the edge of the said slab, when the compound bottom thus formed is applied within the downwardly-converging portions of the body A and foot F in the manner herein shown and explained, so that any depression of the bottom will tend to lock the whole more firmly together without strain upon the nails.

In testimony of which invention I hereunto set my hand.

JOSEPH R. MILLER.

Witnesses:

GEO. H. KNIGHT,
CHARLES L. FISHER.