

R. Howdon,

Securing Wood to Metal.

N^o 64,767.

Patented May 14, 1867.

Fig: 1.

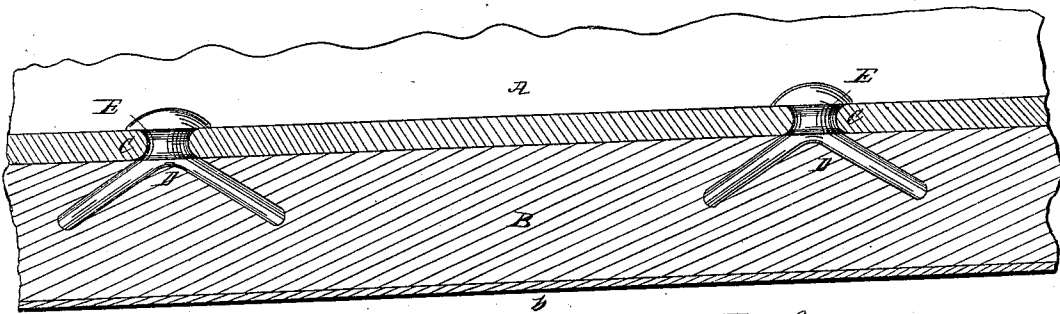


Fig: 3.

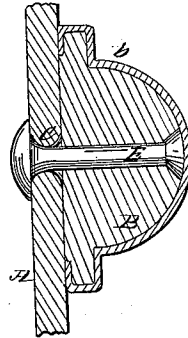
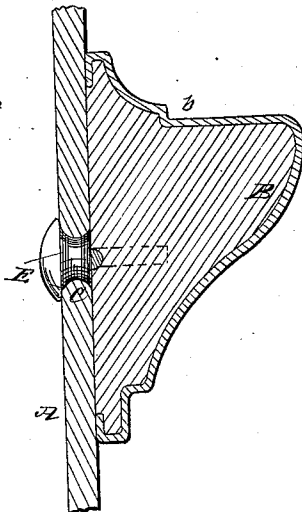


Fig: 2.



Witnesses:

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Inventor:

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United States Patent Office.

ROBERT HOWDON, OF CINCINNATI, OHIO, ASSIGNOR TO CRANE, BREED & CO., OF SAME PLACE.

Letters Patent No. 64,767, dated May 14, 1867.

IMPROVED MODE OF SECURING WOOD TO METAL.

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

TO WHOM IT MAY CONCERN:

Be it known that I, ROBERT HOWDON, of Cincinnati, Hamilton county, Ohio, have invented a new and useful Mode of Securing Wooden and other Objects to Metallic and other Surfaces; and I 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 a mode of securing ornaments or other objects of wood, papier maché, or like material to metallic or other surfaces.

Figures 1 and 2 are longitudinal and transverse sections representing a portion of a coffin.

Figure 3 is a transverse section showing a modification of my invention.

A represents a portion of a metallic coffin or other article of metal or like material. B represents a strip of wooden moulding, which may be encased with gold or silver plate &c. C are doubly countersunk holes in the metallic case or other article. D are diverging holes bored in the back of the moulding. The moulding being held in place with its back to the metallic surface I pour through the holes C and into the holes D in communication, a metallic alloy, capable of fusing at a temperature that will not by contact of the molten metal injure the substance of the moulding, and that will contract in the act of congealing, so as to unite the two pieces by a doubly flaring rivet, E. Where the ornament is plated, the rivet may have the form shown at E', fig. 3. Among the various alloys applicable for this purpose, among the best so far tested is that known as Babbitt metal, say ten parts of tin, one of copper, and one regulus of antimony. The alloy may be melted in a ladle or by contact with a soldering-iron, and in the act of settling draws the wood and metal firmly together. It will be seen that this contrivance, while cheaper than wood-screws, affords a much more perfect and reliable air-tight joint, for the rivet E cannot work loose, as wood-screws are apt to do, and which in so doing afford avenues for the passage of air and gases, and even should the ornament be broken off, the rivet E remaining in the metallic plate will prevent any leakage therethrough.

While selecting for illustration the particular application for which my invention was specially devised, it is manifestly applicable to other substances than those above cited; for example, metallic ornaments may by this means be securely united to surfaces of earthenware, and *vice versa*.

I claim herein as new and of my invention—

Securing wooden or like objects to metallic surfaces, &c., by casting "Babbitt" or other metal of easy fusion into flaring or branching holes C D and otherwise, as herein shown and described.

In testimony of which invention I hereunto set my hand.

ROBERT HOWDON.

Witnesses:

GEO. H. KNIGHT,

JAMES H. LAYMAN.