

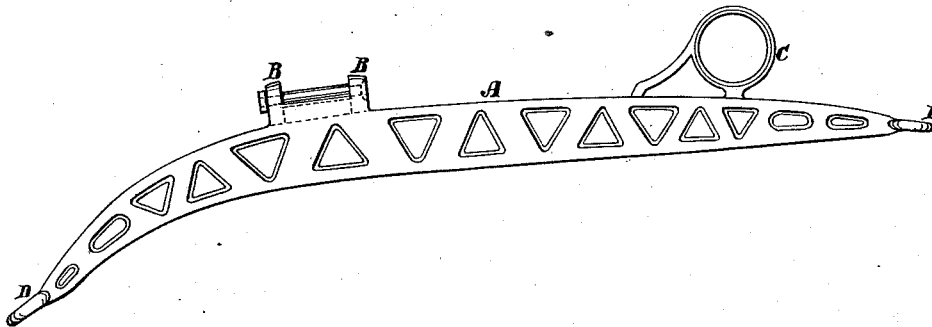
J. G. EBERHARD.

Hames.

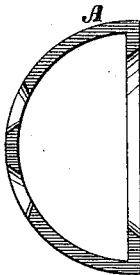
No. 163,368.

Patented May 18, 1875.

*Fig. 1.*



*Fig. 2.*



WITNESSES:

*A. Benneckenhoff*  
*A. J. Terry*

INVENTOR:

*J. G. Eberhard*  
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# UNITED STATES PATENT OFFICE.

JOHN G. EBERHARD, OF AKRON, OHIO.

## IMPROVEMENT IN HAMES.

Specification forming part of Letters Patent No. **163,368**, dated May 13, 1875; application filed April 17, 1875.

*To all whom it may concern:*

Be it known that I, JOHN G. EBERHARD, of Akron, in the county of Summit and State of Ohio, have invented a new and Improved Hame for Harness, of which the following is a specification:

My invention consists of a new manufacture of hames for harness, the same being a hollow hame of cast metal of ductile character, or iron malleableized, the object being to obtain the requisite size for strength in such material without too much weight.

Solid cast-iron hames and hollow rolled-iron hames have been made; but they are not satisfactory, the first not being strong enough unless more metal is used than is desirable on account of weight, and the second being too expensive to shape in the requisite forms.

Hollow cast-metal hames have not up to this time been made, owing to the difficulty of controlling the core, the size and shape of which are such as to render it exceedingly difficult to do. I have succeeded in it by contriving numerous connections of the core with the mold for the flat sides of the hame to make plain or ornamental openings in the sides, the said connections being also to strengthen and control the core, thus enabling me to make perfect castings in any shape desired, and with any degree of ornamentation.

Figure 1 is a side elevation of a cast-metal hame of my invention, and Fig. 2 is a cross-section.

Similar letters of reference indicate corresponding parts.

A is the body of the hame; B, ears for a pin to connect the traces; C, the main ring, and D loops for the straps to connect the two hames together, all being cast together, and thus made in the cheapest possible manner; but the trimmings may be put on separately, and fastened on with rivets or screws, if preferred.

When the hame is of the kind which extends above the upper connecting-strap, it will have the loops for the strap cast on or in the side, or can be put on separately, if preferred.

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

The improved article of manufacture herein described, the same being a hollow cast-metal hame for harness, substantially as specified.

JOHN G. EBERHARD.

Witnesses:

PHILIP UPINGTON,  
HENRY FEUCHTER.