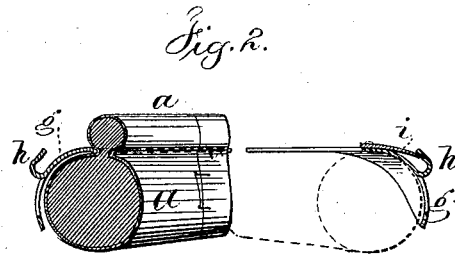
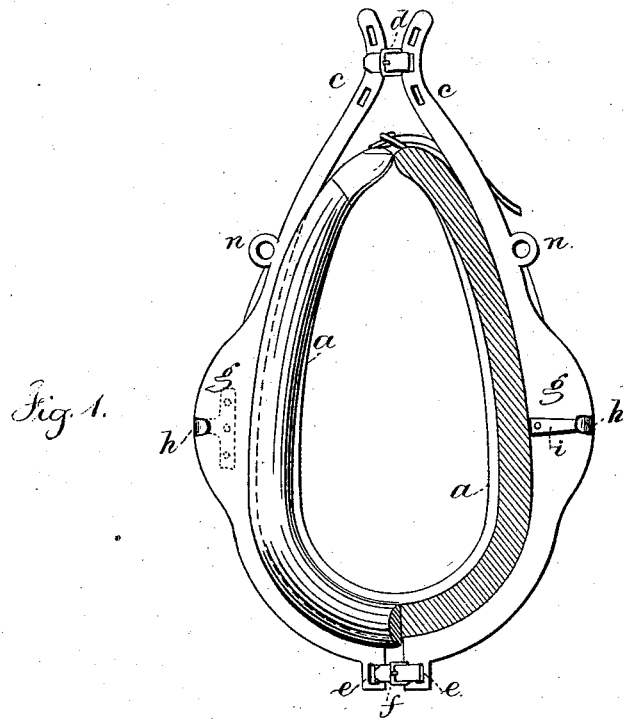


J. S. BROWN.  
Sheet-Metal Hames.

No. 221,211.

Patented Nov. 4, 1879.



— Witnesses —

Chas H Smith  
L. E. J. Pinckney

— Inventor —

John S. Brown.

For Samuel W. Serrell  
att'y

# UNITED STATES PATENT OFFICE.

JOHN S. BROWN, OF GALVESTON, TEXAS.

## IMPROVEMENT IN SHEET-METAL HAMES.

Specification forming part of Letters Patent No. **221,211**, dated November 4, 1879; application filed May 26, 1879.

*To all whom it may concern:*

Be it known that I, JOHN S. BROWN, of Galveston, in the State of Texas, have invented an Improvement in Sheet-Metal Hames, of which the following is a specification.

Hames for horse-collars are usually of wrought-iron forged up to shape, and provided with eyes or tugs, either riveted to place or brazed or welded upon the hame. These hames do not take an even bearing upon the collar, they are expensive, and are liable to be easily broken, and usually the chains rub against the collar and wear the same.

My improvement relates to a hame made of sheet metal, cut out of a width that varies in the different parts, so as to be of proportionate strength throughout, and the hame is curved backwardly at the sides where the traces are connected, so as to take an extended bearing on the surface of the collar and prevent the same becoming flattened or worn by the chains or traces.

In the drawings, Figure 1 is an elevation of the hames as applied upon a collar, the front part of the collar, at one side, being removed. Fig. 2 is a horizontal section of the collar and hames.

The collar *a* is of any usual or desired character, as my improved hames may be used with any collar or pads.

The hames are cut out of sheet metal. The top part of each hame is curved, as at *c*, and provided with slots for the strap *d* or other device that connects the upper ends together. There is a slot or mortise, *e*, at the lower end of each hame for the connecting-strap *f*.

The outline of the inner edge of each hame is of the ordinary shape, and the same is adapted to the grooved exterior surface of the collar. The sheet metal, however, is of varying widths and thickness, according to the strain upon the hames, that part where the traces are attached being the widest, as at *g*, and *h*

*h* are the hooks for the traces or trace-chains. These hooks will usually be made of a sheet-metal tongue cut from the metal of the hame and bent outwardly and forwardly, as shown in Fig. 2, and a spring-jaw, *i*, may be used similar to that in a snap-hook; or else the hook *h* may be a separate piece and riveted or otherwise attached upon the sheet metal, as illustrated in Fig. 1 by dotted lines.

The sheet metal is curved backwardly, as shown in Fig. 2, to stiffen the same, and also to cause the hame to take a proper bearing upon the collar, so as to avoid the wear that is usual with the ordinary hames. The edges of the hames may be stiffened by bending the sheet metal in the form of a flange or rib.

The rings or eyes *n* for the reins are preferably cut out of the sheet metal of the hame; but they may be separate and attached by rivets or otherwise.

These sheet-metal hames are by preference tinned or galvanized to protect the same from rust. They may also be japanned, painted, or left without any coating.

I am aware that hames have been made of sheet metal and wood combined, the sheet metal inclosing the edges of the wood, and hames have been made of metal plates of various widths and formed with openings to receive the reins.

I claim as my invention—

The sheet-metal hames having slots for the straps at top and bottom, and of greatest width where the traces are connected, which part is curved backwardly to take a bearing upon the collar, substantially as set forth.

Signed by me this 5th day of May, A. D. 1879.

JOHN S. BROWN.

Witnesses:

A. B. FINDLAY,  
SAM WATSON.