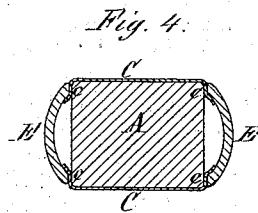
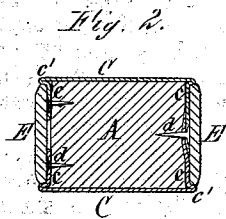
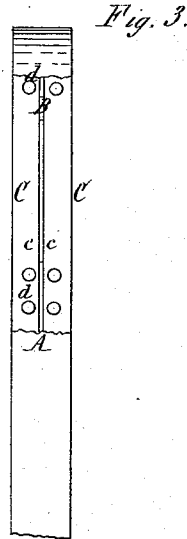
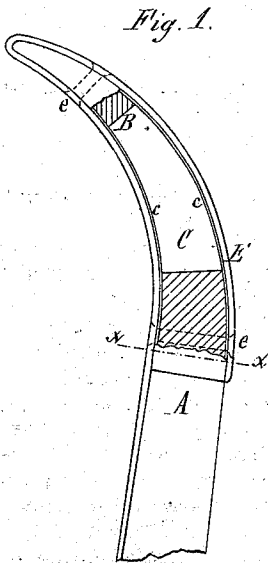


J. THORNTON.
Hames.

No. 154,428.

Patented Aug. 25, 1874.



J. J. Donner
E. Hoadnick Witnesses

James Thornton...Inventor
by Jay Nyath
Atty.

UNITED STATES PATENT OFFICE.

JAMES THORNTON, OF WELLSVILLE, ASSIGNOR OF ONE-FOURTH HIS RIGHT
TO PRATT & LETCHWORTH, OF BUFFALO, NEW YORK.

IMPROVEMENT IN HAMES.

Specification forming part of Letters Patent No. 154,428, dated August 25, 1874; application filed
April 3, 1874.

To all whom it may concern:

Be it known that I, JAMES THORNTON, of Wellsville, in the county of Allegany and State of New York, have invented an Improvement in Hames, of which the following is a specification:

My improvements relate more especially to the method of constructing the upper or tip portion of hames.

In the accompanying drawings, Figure 1 is side elevation; Fig. 2, a cross-section in line *x x*, Fig. 1; Fig. 3, an edge view with a portion of the metallic strap broken away; Fig. 4, a cross-section, showing a different form of back-strap.

Like letters of reference designate like parts in each of the figures.

I am aware that the upper ends of hames have heretofore been provided with a cast tip or socket, and have also been incased by means of the back-strap on one side and a cast portion inclosing the other three sides of the upper portion of the hame.

As represented in the drawing, A is the upper end of the main wooden portion of the hame, and B is a separate wooden-tip portion made in the shape of the ordinary bent upper end of the hame, as commonly constructed. C C are two plates of sheet metal formed to fit the inner and outer sides of the upper portion of the hame, and provided with flanges *c c* overlapping the edges of the wooden tip B and upper end of the main wooden portion A. The adjacent flanges *c* of the two side straps C may be made to overlap each other, so as to both be held by the same tacks or nails *d* driven into the wood, or the flanges may be made of less width, so as not to overlap, both of which methods are shown in Fig. 2. E is the back strap of the hame, which I make of sufficient length to bend over the top of the hame, and extend downward along the inner edge of the hame, so as to inclose the flanges *c c* of the side plates and retain the tacks *d* from working loose. The back strap is secured by rivets *e* passing through the hame, as clearly represented, or in any other suitable manner,

whereby the side plates and wooden tip B are firmly secured in place.

By using a back strap of the peculiar form shown in Fig. 4, such as is secured by Letters Patent No. 147,507, granted to Josiah Letchworth, the edges of the flanges *c* of the side straps may be turned slightly outward, so as to be secured in place by the edges of the back-strap, as clearly represented in Fig. 4. The side straps C may be formed with a raised bead, *c'*, at either side, so as to be flush, or nearly so, with the face of the back-strap, when the latter is secured in place, as shown in Fig. 2.

As the wooden tip B is employed to fill up the space inside of the metal, to stiffen the same, to prevent the compression thereof, and to receive the tacks which fasten the flanges of the side plates, it can be readily formed out of soft wood without bending, the metallic covering thereof imparting the requisite strength to this portion of the hame.

By means of my improvement the upper ends of hames can be made strong, light, and of any desired curvature, at a trifling expense, thereby dispensing with the necessity of bending the upper end of the main wooden portion of the hame, whereby considerable material is saved, and the labor of bending the same.

I claim as my invention—

1. The combination, with the main wooden portion A of a hame, of the wooden tip B, side plates C, and back-strap E overlapping both edges of the upper part of the hame, substantially as and for the purpose hereinbefore set forth.

2. The combination, with the wooden portion of a hame and back-strap, of the side plates C, provided with flanges *c* secured by tacks *d*, which are held from working loose by the back-strap, substantially as hereinbefore set forth.

JAMES THORNTON.

Witnesses:

J. J. BONNER,
ERNST HODDICK.