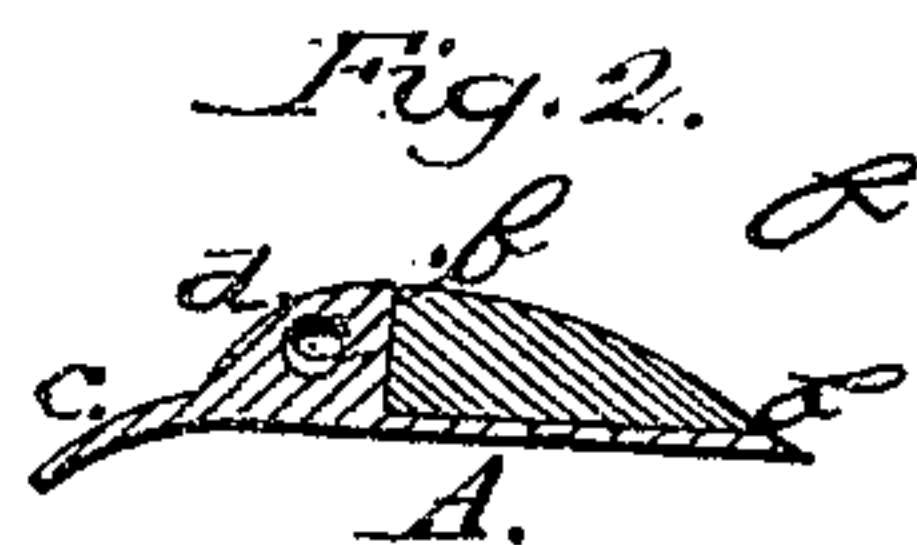
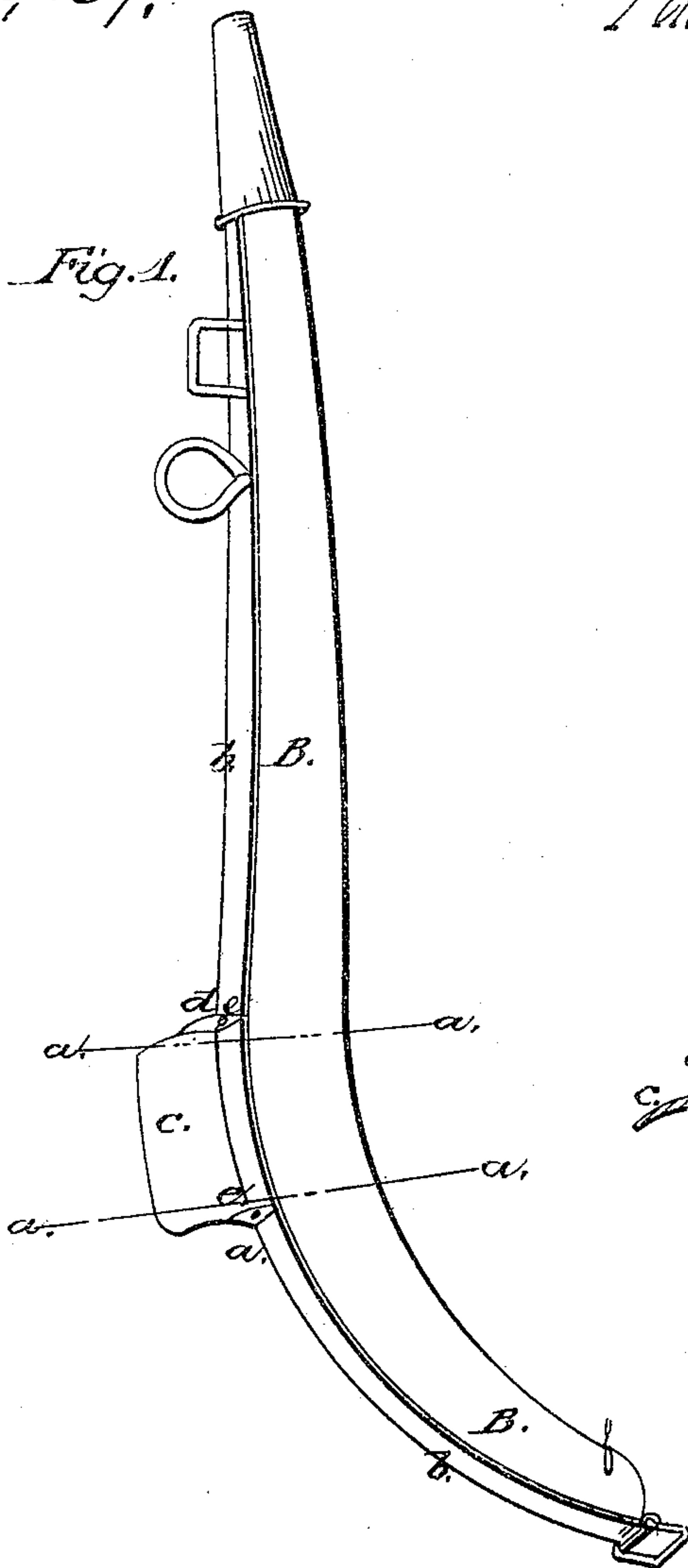


W. H. Burstin,

Owner,

No 89287.

Patented Apr. 27, 1869.



Witnesses:
E. C. Hamington
Chas M. Intier

Inventor:
W. H. Burstin



W. H. BUSTIN, OF WATERTOWN, MASSACHUSETTS.

Letters Patent No. 89,287, dated April 27, 1869.

IMPROVEMENT IN HAMES.

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

To all whom it may concern:

Be it known that I, W. H. BUSTIN, of Watertown, in the county of Middlesex, and State of Massachusetts, have invented a new and useful Improvement in Hames for Harnesses; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a front view.

Figure 2 is a section of the part at the lines *a a*.

It has for a long time been the study of interested persons to know how to avoid the use of the very clumsy and heavy hames used on harness, where great strain is necessary, and introduce into use instead thereof, a light, strong, durable, and pleasing form of hames.

Another difficulty has been in the ordinary form of hames, that at the lower end below the draught-point, it has been so constructed, that the edge of the hames did not fit into the groove between the roll and cushion, or pad of the collar, so that when the strap was unloosed from the loops at the bottom end of the hames, they would if any strain were upon them, immediately turn off of the collar on to the shoulder of the horse.

In my construction, the lower end of the hames is made to curve around and conform to the groove in the collar by said curvature, and by making the edge of the lower curved portion of the hames thin, so as to exactly fit into the groove of the collar, the shape of the hames causing it to so fit into the groove, prevents the hames from violently slipping off the collar when the fastener is released.

My invention, therefore, consists in so constructing a hames, that it will fully answer the above requisitions, by being light, strong, durable, and of the shape to be retained in the groove of the collar.

In the drawings—

A, fig. 2, represents the sheet-metal plate, which in use lies next the collar, and *b*, the flange turned up,

at or nearly at right angles to plate A, and is a part of the same, by being bent or struck up into form from sheet-metal.

B is the wood part of the hames, which is made to fit on to plate A and its flange *b*, as seen in cross-section in fig. 2. Attached to plate A and flange *b*, is a shield, or protecting-plate, *c*, having ears *d*, with holes for the pins, or bolts for fastening the traces, or tugs to.

This plate prevents the tug, or trace from wearing the collar.

The metal plate and its flange filled with wood, is curved at its bottom and at *f*, fig. 1, to fit the curvature of the bottom of the collar, and the edge *f* is formed to closely fit into the groove of the collar, by being brought into a nearly sharp edge, as seen at *f*, fig. 2.

It is obvious that when sheet-metal is formed with its flange, so as to receive the wood, as above shown, the hames will be lighter than when made of cast-iron or other cast-metal, and will be as strong, and have a much neater appearance.

The protecting-plate can be attached in any secure manner, by brazing or riveting.

I am aware that cast-iron hames have been used; I am also aware that cast-metal in part and wood combined, have been used in making hames; and am further aware that the protective-plate is in use, as of my invention, and for which a patent has been applied for. None of these features of themselves singly do I now claim, but having thus described my invention,

What I desire to secure by Letters Patent, is—

The hames above described, consisting of plate A, with flange *b*, wood B, plate C, and ears *d*, when constructed in the manner and for the purpose substantially as described.

W. H. BUSTIN.

Witnesses:

E. C. HARRINGTON,
WILLIAM S. MASON.