

G. W. VOSBURGH.

HARNESS-PAD.

No. 175,791.

Patented April 4, 1876.

Fig. 1

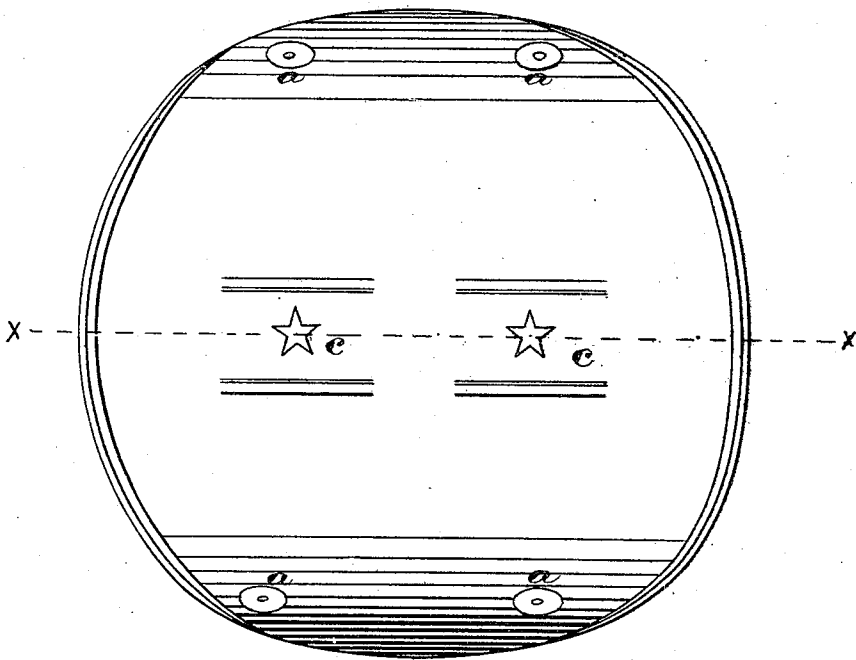
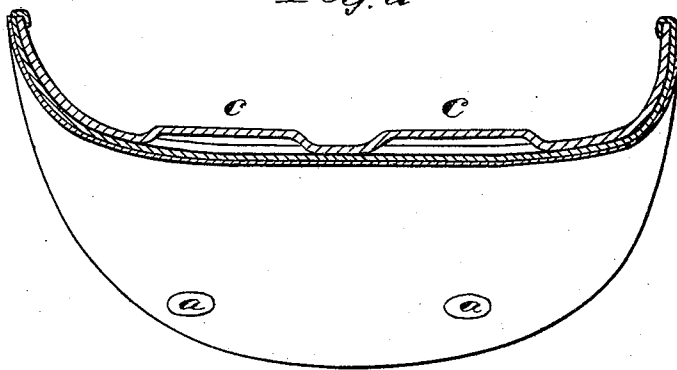


Fig. 2



WITNESSES

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IMPROVEMENT IN HARNESS-PADS.

Specification forming part of Letters Patent No. **175,791**, dated April 4, 1876; application filed January 22, 1876.

To all whom it may concern:

Be it known that I, GEORGE W. VOSBURGH, of Eau Claire, in the county of Eau Claire and State of Wisconsin, have invented a new and useful Improvement in Harness-Pads; and I hereby declare the following to be a full and accurate description of the same, reference being had to the accompanying drawings, and to the letters and figures marked thereon, making a part of this specification.

This invention is intended as an improvement on the harness-pad for which Letters Patent were granted to me August 18, 1874, No. 154,303; and consists, mainly, in the construction of the upper leather portion of the pad and in the means of attaching it to the inflexible metallic form, as will be hereinafter more fully set forth.

A complete harness-pad should consist of three parts united into one: first, a rigid non-elastic form, composed of iron or a similar metallic body, constructed in the form of the complete pad; second, this form should be lined on the inner side, or the side to come in contact with the animal, with lead or other soft metal not poisonous to the flesh of the animal, should it become abraded or chafed, and for the purpose of protecting the metallic part of the pad from the heat of the sun, and giving means of attachment to the same; third, the metallic form should be covered externally with leather or other like material. Therefore, a complete harness-pad is a compound pad, composed of the non-flexible iron or other metallic form, presenting an inner or under surface of lead, zinc, or other soft metal, so united to the form as to be incapable of mechanical separation, and an external covering of leather firmly attached to the metallic pad, for the purposes above stated.

The improved pad which I have invented is constructed as follows: First, I construct of iron, either by casting or pressing, the exact form of the pad to be made, and I make this form substantially inflexible, as represented in the accompanying Figures 1 and 2. This form may be pressed out from sheet metal, or may be cast and made malleable. It is next to be plated with lead, zinc, or other similar material, by the galvano-electric process or other means, by which the two metals sub-

stantially unite in one. This plating is to be done on the inner or under side of the metallic form, so as to constitute that part of the pad which comes in contact with the flesh of the animal, and should be of a sufficient thickness to form a body of considerable strength, to resist the tendency to crystallize and cleave off from the metallic form. When sheet lead or zinc is used as lining, it soon crystallizes, and presents a rough, uneven surface, and crumbles off, and thus injures the pad.

I use the galvano-electric process for coating the under surface of the pad with lead or zinc, because it is the most reliable, and perhaps the only way the two metals can be practically united as one, and not become liable to crystallize and separate from each other. The metal part of this pad is thus made entire, without any break in its surface presenting edges for chafing or abrading the skin of the animal.

To protect the metal pad from absorbing heat from the rays of the sun, and thus becoming heated, to the injury of the animal, I carefully cover the same with leather or other similar material, and fasten the covering to the metallic part of the pad by means of metal rivets, as shown in the accompanying drawings, *a a*, Fig. 1; and also is further secured to the same by folding the edges of the metal over the edges of the leather.

For the purpose of attaching this pad to the harness, the loops *c c*, Fig. 1, are raised in the leather cover, as represented in Fig. 1. These loops are formed in the leather cover by cutting slits of a suitable length, and about one inch apart, as represented in said figure.

These loops may be increased in number and changed in position, to apply to different parts of the harness to which the attachment is proposed to be made.

I am aware that harness-pads have been made heretofore which were lined with zinc, lead, or other soft metals, for the purposes herein set forth; that pads composed of iron and zinc, iron and lead, or other soft metals, and covered with leather, have been made; but the inflexible pad, composed of iron and lead, zinc, or other soft metal, united in the manner and for the purpose above described, and combined with the leather covering with

the loops *c c*, forming a perfect and complete pad, has not been used until invented and used by me or by my direction.

Having thus fully described the nature of my invention and the construction of the same, I will proceed to set forth my claim.

I claim—

As an article of manufacture, a harness-pad constructed with a metallic form, lined

on its under face with soft metal, as shown, with an external covering of leather secured thereto by the overlapping metal, and provided with loops *c c*, all substantially as and for the purpose set forth.

GEORGE WASSON VOSBURGH.

In presence of—

DANIEL BUCHANAN, Jr.,
FRED. GORDON.