

C. HARTMANN.
Buffer for Horseshoes.

No. 198,885.

Patented Jan. 1, 1878.

Fig. 1.

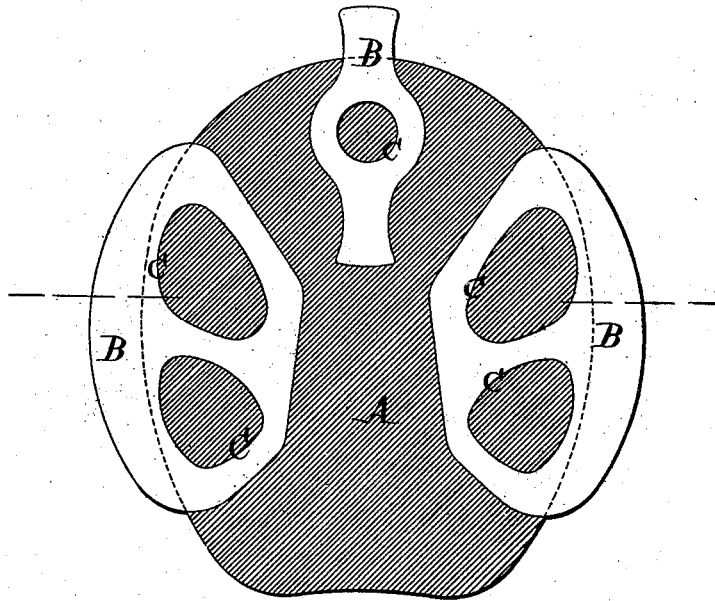
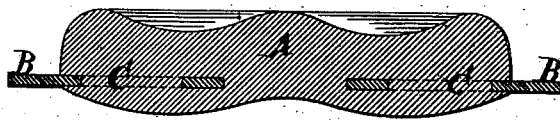


Fig. 2.



Witnesses.
Otto Kufeland,
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Inventor:
Christian Hartmann
by
Van Santvoord & Hauff,
his attorneys

UNITED STATES PATENT OFFICE.

CHRISTIAN HARTMANN, OF HANOVER, GERMANY.

IMPROVEMENT IN BUFFERS FOR HORSESHOES.

Specification forming part of Letters Patent No. **198,885**, dated January 1, 1878; application filed October 20, 1877.

To all whom it may concern:

Be it known that I, CHRISTIAN HARTMANN, of Hanover, in the Empire of Germany, have invented a new and useful Improvement in Buffers for Horseshoes, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings, in which—

Figure 1 represents a horizontal section of a buffer containing this improvement. Fig. 2 is a transverse section thereof.

Similar letters indicate corresponding parts.

My improvement relates to that class of buffers or horseshoe-protectors described in Letters Patent of the United States granted to me June 1, 1875, No. 163,997, to which reference is made; and it consists in two or more retaining-wings, by which the buffer is fastened in a horseshoe, such wings having the form of metallic plates, which are provided with perforations, and embedded at the point of such perforations in the caoutchouc or other material composing the buffer, in such a manner that the material enters or occupies the perforations, and thus holds the plates firmly in position.

In the drawings, the letter A designates the body of my buffer, and B are wings serving to fasten the same in a horseshoe, these wings being made to project on the edge of the buffer, and being made to catch in the space between the horse's hoof and the inner edge of the shoe.

In the example shown, the wings B are three in number, and they are respectively arranged on the sides and the front part of the

buffer, as shown; but, if desired, the front wing may be dispensed with.

For the purpose of forming the wings B, I use metallic plates, sheet-steel being preferred, and these plates are each provided with one or two perforations, C, while the portions containing such perforations are embedded in the caoutchouc or other material composing the buffer, before it is molded and vulcanized, so that when these operations are performed the material becomes crowded into the perforations, and thus holds the plates firmly in position.

The outer edges of the buffer A, as well as of the plates B, are curved to conform to the general shape of a horseshoe, as shown, while one of the surfaces of the buffer has the shape of a horse's hoof, as described in my patent before named.

What I claim as new, and desire to secure by Letters Patent, is—

The combination, with the buffer A, of the separate perforated elastic sheet-metal wings B B B, so embedded in said buffer that a portion of the latter will enter and fill the perforations, and having projecting edges conforming to the shape of a horseshoe, for supporting the buffer in place.

In testimony that I claim the foregoing I have hereunto set my hand this 15th day of September, 1877.

CHRISTIAN HARTMANN.

Witnesses:

A. M. SIMON,
S. GOLDSCHMIDT.