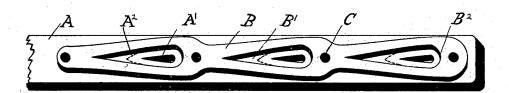
(No Model.)

S. M. HARTMAN.

TRACE EYE PROTECTOR.

No. 383,526.

Patented May 29, 1888.



WITNESSES: C. J. Dwight. Ida J. Kinney

ATTORNEY.

## United States Patent Office.

SAMUEL M. HARTMAN, OF READING, PENNSYLVANIA.

## TRACE-EYE PROTECTOR.

SPECIFICATION forming part of Letters Patent No. 383,526, dated May 29, 1888.

Application filed January 17, 1888. Serial No. 261,071. (No model.)

To all whom it may concern:

Be it known that I, Samuel M. Hartman, a citizen of the United States, residing at Reading, in the county of Berks and State of Pennsylvania, have invented certain new and useful Improvements in Trace-Eye Protectors; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawing, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to leather traces in which eyes are formed to admit the tree-hook.

The object is to prevent the rapid destructions.

The object is to prevent the rapid destruction of the eye end of the trace incident to the ordinary construction of merely cutting the leather to form the eye and stitching around it.

Referring to the drawing, showing a single view in perspective, A represents the eye end of a trace formed of two thicknesses of leather stitched together, and having two or more eyes, A', to admit of adjustment with stitching A<sup>2</sup> 25 around the eyes. A plate, B, which may be cast of malleable iron, is riveted at suitable points, C, to the face of the trace, and extends from the end to beyond the last eye. Greatly-enlarged openings B' leave the eye A' person feetly free, the rear edge, B<sup>2</sup>, of the opening just covering the stitching A<sup>2</sup>. The plate is shaped so as to have no unnecessary weight. Though I prefer to fasten this plate on the inner face of the trace, it will answer the same 5 purpose if secured between the two layers of

leather which form it.

The leather trace is generally preferred to any formed of metal, on account of its neater appearance and the avoidance of objectionable clanking and rattling which accompany the latter. The use of an eye formed in the leather is preferred, for the same reason, to a buckle or link connection, and to allow for adjustment

it becomes necessary to form two or more such

eyes. Naturally, however, the rough hand- 45 ling received in forcing the eye over the hook, during which operation it is almost certain to be both twisted and bent every time, is very hard on the thick, and consequently more or less brittle, leather. This twisting and bend- 50 ing, and that which is apt to occur when the second or third eye is used and the end of the trace projects beyond the hook, are even more destructive to it than the strain of pulling which it is compelled to withstand. These 55 causes make it necessary to renew the eye end of a trace very frequently at considerable cost and inconvenience. The simple device herein described prevents this twisting and bending of the trace, and owing to the stiffness im- 60 parted to the latter makes it much easier to force the eye over the hook. The plate may be placed on the inside where it does not show, and the hook need not touch the plate at all until the eye has been worn back to it. It may 65 be applied to any old trace at a very small cost, and when used on new ones they may be made thinner than is usual, this effecting a saving in the first cost of material, in addition to greatly lengthening the life of the trace.

I am aware that different forms of eyelets have been used; also, that Patent No. 352,031, issued November 2, 1886, shows a metal plate adapted to protect the end eye of a trace.

What I desire to secure is the following 75

claim:

The combination herein described, with a trace formed of leather or equivalent material and having two or more eyes, A', of a stiffening-plate with enlarged eyes fastened to said 80 trace, substantially as and for the purpose set forth.

Intestimony whereof I affix my signature in presence of two witnesses.

SAML. M. HARTMAN.

Witnesses:

W. G. STEWART, C. J. DWIGHT.