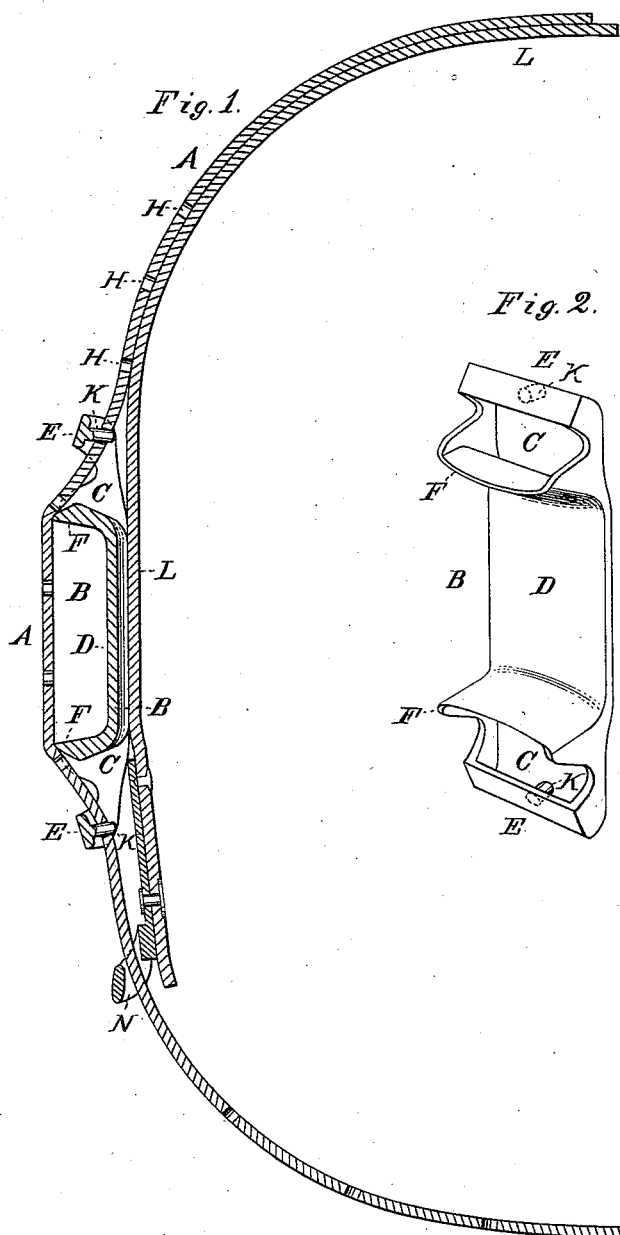


(No Model.)

J. G. MILLER.
TRACE GUARD FOR HARNESS.

No. 304,346.

Patented Sept. 2, 1884.



WITNESSES
Villette Anderson.
John D. Morrow.

INVENTOR
John G. Miller
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UNITED STATES PATENT OFFICE.

JOHN G. MILLER, OF CHAMPAIGN, ILLINOIS.

TRACE-GUARD FOR HARNESS.

SPECIFICATION forming part of Letters Patent No. 304,346, dated September 2, 1884.

Application filed January 16, 1884. (No model.)

To all whom it may concern:

Be it known that I, JOHN G. MILLER, a citizen of the United States, residing at Champaign, in the county of Champaign and State of Illinois, have invented certain new and useful Improvements in Trace-Guards for Harness; 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 drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a representation of this invention, and is a vertical section. Fig. 2 is a perspective view of the slide-plate.

This invention has relation to harness tug-slides; and it consists in the construction and novel arrangement of the adjustable slide-plate having flat end loops formed with inwardly-turned studs, and between said end loops outwardly-turned top and bottom flanges extending outward beyond said end loops, and adapted to form bridges, over which the back-strap passes through the end loops to form the tug-bearing.

The invention also consists in the combination, with a slide-plate, concave and open on its outer face, of a back-strap, all as herein-after set forth.

In the accompanying drawings, the letter A designates the back-strap, to which the tug-slide B is connected. The slide B is an oblong plate, the ends of which are slotted, as at C, between the body portion D and the end loops E, which are raised sufficiently to allow the strap A to pass through the slots under the loops. Between the end loops, and at the ends of the body portion, are the outwardly-turned

top and bottom flanges, F, which extend outwardly beyond the end loops, and thus form bridges, over which the strap A is bent at each end downward under the loop. The body portion is in this manner made with an outwardly-facing concave bearing, the walls of which are transversely rounded and polished or plated, to provide a smooth surface for the tug to work against. The outer wall of the tug-bearing is formed by that portion of the strap A which extends from the top to the bottom flange. The strap A is punched to provide holes H at suitable distances apart to engage the studs K, which are formed on the under sides of the end loops, and project inwardly. The inner face of the slide rests against the skirt-leather L, to the end of which a keeper, N, may be secured.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

1. The adjustable tug slide-plate having flat end loops formed with inwardly-turned studs, and between said loops top and bottom flanges extending outward beyond said end loops, and adapted to form bearings for the back-strap as it passes over the front of the plate to inclose the tug, substantially as specified.

2. The combination, with a tug slide-plate, concave and open on its outer face, and provided with end loops, of a back-strap engaging the same to form the outer wall of the tug-bearing, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN G. MILLER.

Witnesses:

J. L. RAY,
JACOB BUCH.