

P. BURNS.  
TRACE-CARRIER.

No. 182,161.

Patented Sept. 12, 1876.

Fig. 1.

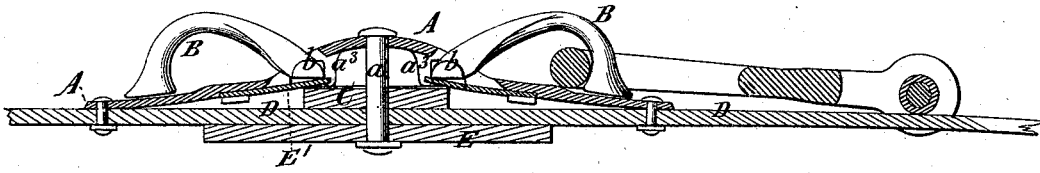


Fig. 2.

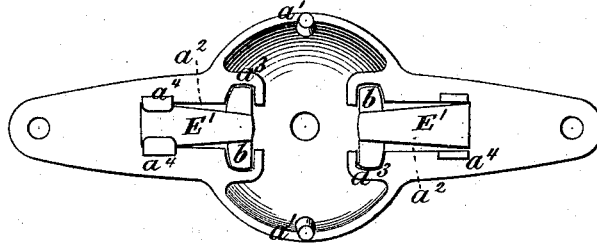


Fig. 3.

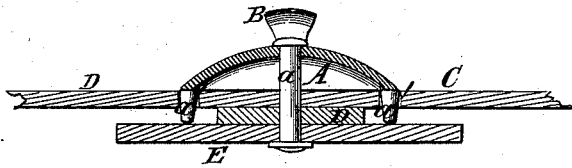


Fig. 4.

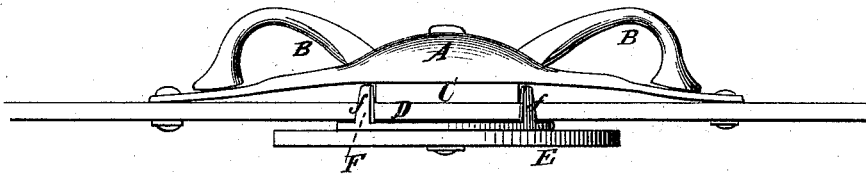
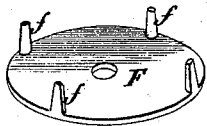


Fig. 5.



Witnesses:  
A. Ruppert,  
L. Van Quinick.

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by C. E. C. C. C.  
his Atty

# UNITED STATES PATENT OFFICE.

PETER BURNS, OF SYRACUSE, NEW YORK.

## IMPROVEMENT IN TRACE-CARRIERS.

Specification forming part of Letters Patent No. 182,161, dated September 12, 1876; application filed August 11, 1876.

*To all whom it may concern:*

Be it known that I, PETER BURNS, of Syracuse, in the county of Onondaga and State of New York, have invented a certain Improvement in Trace-Carriers, of which the following is a specification:

This invention relates to that kind of trace-carriers which consist in the main of spring-hooks attached to the hip-straps of the harness in suitable manner for ready suspension of the traces therefrom.

My improvement consists, first, in a peculiar construction and mode of connecting the hooks, the springs, and the plate which forms the base for securing the device to the harness; second, in providing the said base-plate with studs for steadying the several straps at their intersection, as well as for making its attachment more secure.

In the annexed drawings, Figure 1 is a longitudinal section of my improved trace-carrier. Fig. 2 is a bottom view thereof, showing one end in the condition before the application of the spring which actuates the hook. Fig. 3 is a transverse section of the same. Figs. 4 and 5 show modifications of my invention.

The same letters of reference are used in all the figures in the designation of identical parts.

A refers to the plate to which the hooks B are pivoted. The central portion of the plate has a circular and exteriorly convex contour, with a central aperture for the insertion of a rivet, *a*, for securing it centrally to the harness-straps C and D and sweat-leather E. The extreme ends of the plate are also provided with rivet-holes for riveting it to the strap D, while the central portion has two studs, *a*<sup>1</sup> *a*<sup>1</sup>, cast on it for engaging holes in the strap C, on opposite sides of strap D, as shown best in Fig. 3. The shanks of the hooks B terminate in T-heads *b*, adapted to pass through longitudinal slots *a*<sup>2</sup> in the plate A, and fitting transverse sockets *a*<sup>3</sup>, formed

upon the under side of the plate, as best shown in Fig. 2. The heads *b* are semicircular in cross-section, and their flat under sides bear against flat springs E, which are placed in shallow recesses in the under side of the plate, and are secured by prongs *a*<sup>4</sup> cast on the plate, and subsequently bent down over the springs. The free ends of the hooks are held in close contact with the plate by the action of the springs. These ends have the peculiar form clearly shown in Fig. 1, spreading both upon the inner and the outer side.

This flaring construction has two objects in view: first, it prevents the tail of the animal from being caught in the trace-carrier; and, secondly, it causes the draft of the cockeyes of the traces to come at points where it will tend to keep the hooks closed rather than to open them.

In the modification shown in Figs. 4 and 5 the studs *a*<sup>1</sup> *a*<sup>1</sup> are omitted from the plate A, and in lieu thereof an extra circular plate or disk, F, placed under the straps C and D, and having four upwardly-projecting spurs, *f*, located in the corners of the straps, is substituted, it being secured by the central rivet *a*.

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

1. A trace-carrier composed of a plate for riveting it to the harness, provided with studs, as described, and a spring hook or hooks, the free ends of the latter terminating in a flat-faced head made flaring both upon the inner and the outer side, substantially as and for the purpose specified.

2. The trace-carrier plate A, having studs *a*<sup>1</sup> *a*<sup>1</sup> integral therewith, substantially as and for the purpose specified.

In testimony whereof I have signed my name to the foregoing in the presence of two subscribing witnesses.

PETER BURNS.

Witnesses:

W. S. HUNTINGTON,  
W. B. BURNS.