

A. D. BAIRD.
TRACE AND BACKER LOOP.
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971,655.

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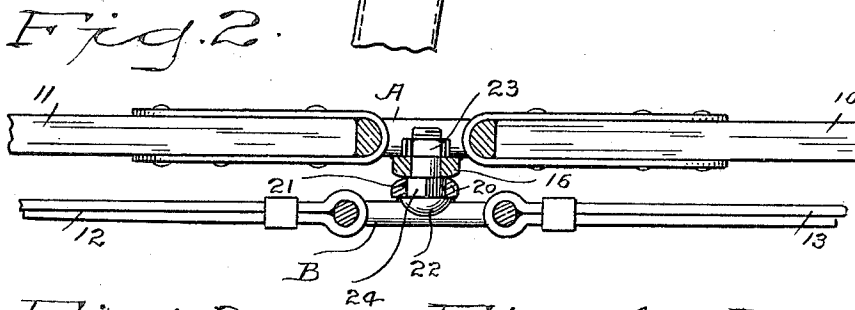
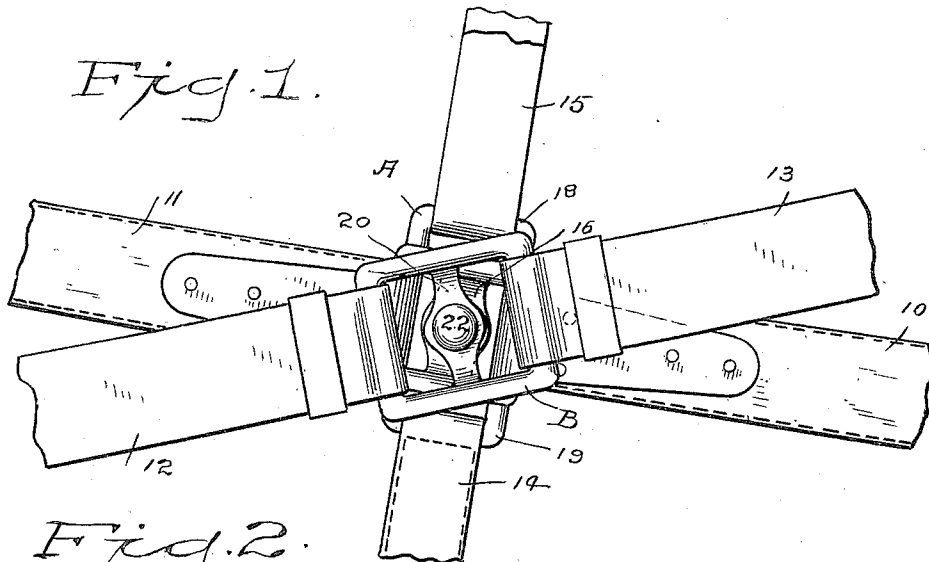


Fig. 3.

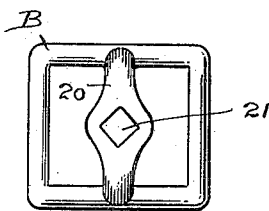


Fig. 4.

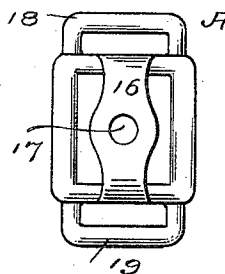
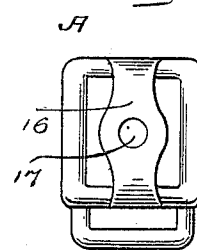


Fig. 5.



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TRACE AND BACKER LOOP.

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To all whom it may concern:

Be it known that I, ALBERT D. BAIRD, a citizen of the United States, residing at Bridgeport, county of Fairfield, State of Connecticut, have invented an Improvement in Trace and Backer Loops, of which the following is a specification.

This invention has for its object to produce a novel reversible trace and backer loop for side backer harnesses. Heretofore, so far as I am aware, trace and backer loops have been formed in a single piece of peculiar configuration necessitating the making of rights and lefts, and furthermore, the shape of the loops has been such as to produce an uneven strain upon the parts of the harness attached thereto. In order to do away with these objections and to produce a loop which may be used upon either side of a harness, I have devised the novel structure which I will now describe, referring to the accompanying drawing forming a part of this specification and using reference characters to indicate the several parts.

Figure 1 is an elevation illustrating my novel trace and backer loop as in use upon the near side of a harness; Fig. 2 a longitudinal section corresponding therewith; Fig. 3 an inverted plan view of the backer loop detached; Fig. 4 a plan view of the trace loop detached; and Fig. 5 is a plan view of a slightly variant form of trace loop detached.

I use the term "trace and backer loop" to designate the structure as a whole for the reason that that is the trade name for the part. The gist of my invention, however, lies in providing independent trace and backer loops and pivoting the latter to the former so as to make it reversible, thus making it necessary to provide but one set of patterns as any loop may be used upon either side of a harness.

10 denotes a trace, 11 a hame tug, 12 a front backer, 13 a rear backer, 14 a girth or girth billet and 15 a market strap or back pad strap, which may or may not be used as preferred.

My novel loop as a whole comprises two four-sided right-angled members which are indicated respectively by A and B and a bolt by which they are pivoted together. Member A is the base or trace loop and comprises essentially a four-sided casting open in the center, preferably made square and provided with an outwardly bowed cross piece 16

provided with a central hole 17. The trace loop may or may not be provided with a side loop 18 for the attachment of a market or back pad strap and with a side loop 19 for the attachment of a girth billet, either loop or both. In practice the trace loops are ordinarily provided with these side loops although in many harnesses no back pad is used and consequently no loop is required for a market or back pad strap, and in some harnesses no girth is used, consequently there is no use for a girth or billet loop, it being understood of course that where a girth is used the girth itself may be attached to the loop upon one side of the harness and the billet for the girth may be attached to the loop upon the other side or billets may be used upon both sides.

In Fig. 4 I have illustrated a form in which the trace loop is provided both with market strap and girth loops and in Fig. 5 I have illustrated a form in which the trace loop is provided with one side loop only which may be used either for a market strap or a girth.

The backer loop, shown detached in Fig. 3, comprises a four-sided casting open in the center, shown as made slightly rectangular and larger in its longitudinal direction than the trace loop and provided with an inwardly bowed cross piece 20 having a central hole 21. 22 denotes a bolt passing through the holes in the cross pieces and provided with a nut 23 by which the parts are secured together in superposed position. The bolt is shown as provided with an angular portion 24 under the head and the hole 21 in the backer loop as made correspondingly angular to receive it. This, however, is an important detail of construction.

By making the members four-sided and right-angled and pivoting one member to the other, the bars or sides to which the hame tug, trace and backers are attached will be at right angles to the parts themselves so that the strain both in hauling and backing will always be direct and upon the entire width of the parts, thus adding greatly to the life of the harness.

Having thus described my invention I claim:

1. A device of the character described comprising a loop adapted for the attachment of a hame tug and a trace and having an outwardly bowed cross piece with a central hole, and a loop adapted for the at-

tachment of front and rear backers and having an inwardly bowed cross piece with a central hole and a bolt passing through the holes in the cross pieces whereby the loops
5 are pivotally secured together.

2. The combination with a hame tug and a trace and a loop to which said parts are secured, of front and rear backers and a superposed loop pivoted to the other loop to which
10 the backers are secured.

3. The combination with a hame tug and a trace and a four-sided right-angled loop to which said parts are attached and which is provided with an outwardly bowed cross
15 piece having a central hole, of front and rear backers, a four-sided right-angled loop, to which they are attached and which is provided with an inwardly-bowed cross piece having a central hole and a bolt passing

through the holes in the cross pieces whereby
20 by the loops are secured together.

4. The combination with a hame tug, a trace, a market strap, a girth and backers, of a loop to which the hame tug and trace are
25 attached and which is provided with side loops to which the market strap and girth are attached and with an outwardly-bowed cross piece having a central opening, of a loop to which the backers are attached and
30 which is provided with an inwardly-bowed cross piece having a central hole and a bolt passing through the holes in the cross pieces.

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

ALBERT D. BAIRD.

Witnesses:

A. M. WOOSTER,
S. W. ATHERTON.