

M. D. JOHNSON & I. D. MICHAEL.

TRACE.

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1,160,083.

Patented Nov. 9, 1915.

Fig. 2.

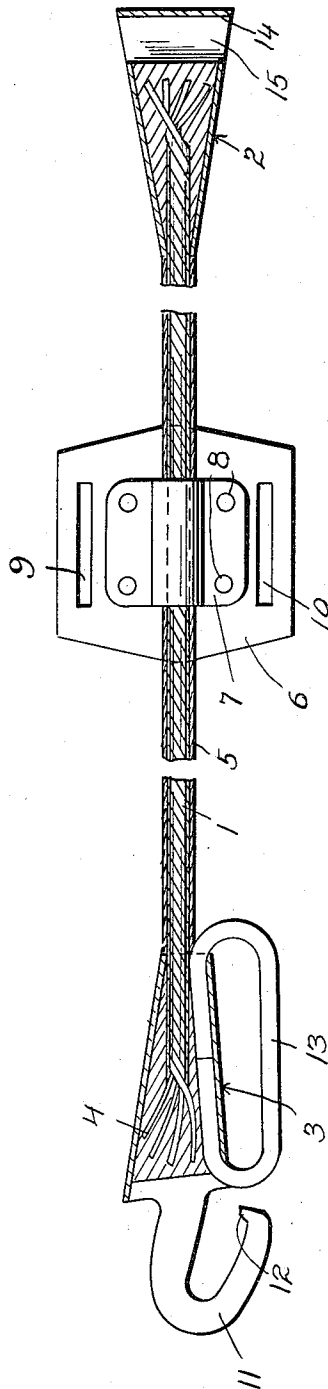
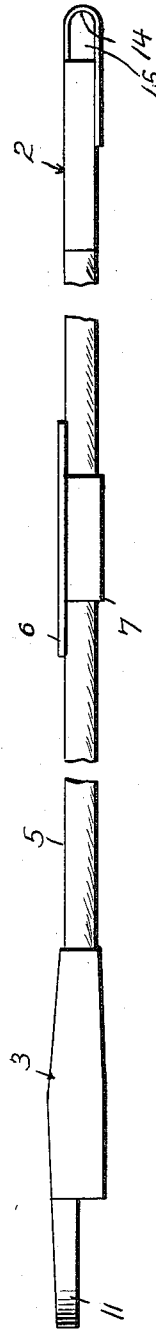


Fig. 1.



Witnesses

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TRACE.

1,160,083.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that we, MAURICE D. JOHNSON and IRVIN D. MICHAEL, citizens of the United States, residing at Crow, in the county of Lane and State of Oregon, have invented certain new and useful Improvements in Traces; and we do hereby 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.

Our invention relates to new and useful improvements in harness traces and resides in the provision of a trace that may be readily attached and which is extremely simple as to construction.

An important object of our invention is to provide a trace such as above described provided with attaching means at each end and harness securing means intermediate its ends and which is cheap to manufacture.

The invention further aims to improve traces such as above described so as to render them more durable, efficient, reliable and more commercially desirable.

The above and additional objects are accomplished by such means as are illustrated in the accompanying drawings, described in the following specification and then more particularly pointed out in the claim which is appended hereto and form a part of this application.

With reference to the drawings, wherein we have illustrated the preferred embodiment of our invention as it is reduced to practice, and throughout the several views of which, similar reference numerals designate corresponding parts—

Figure 1 is a top plan view of the trace of my improved construction, and Fig. 2 is a longitudinal sectional view showing the cable forming the trace in elevation and the girth and back band securing means attached to the trace.

Referring more particularly to the drawings forming a part of this specification and in which like numerals are employed to designate corresponding parts the numeral 1 designates a steel cable to the ends of which are secured an attaching member 2 and attaching member 3. These members 2 and 3 consist of hollow frusto-conical members in which the terminals of the cable 1 are

disposed and held against removal by means of soldering 4. The ends of the cable 1 may be deflected to provide a secure connection and to prevent the withdrawal of the cable from the members 2 and 3.

A suitable casing 5 preferably of some flexible waterproof material is secured in any suitable manner to the cable 1 to prevent the rust thereof and chafing of the horse.

A rectangular plate 6 is secured upon the cable 1 about the casing 5 by means of a rectangular clamping plate 7 secured to the plate 6 by bolts 8 or other suitable fastening means. The plate 6 is provided adjacent its upper and lower terminals with longitudinal slots 9 and 10 to which the back and girth bands are to be inserted or secured respectively. Formed integral with the attaching member 3 and upon one side thereof is a hook 12 provided with a right angular extension 13 at its free end to prevent accidental unhooking of the hook. An elongated loop or eye 13 is secured to the member 3. This eye or loop 13 consists of a single piece of wire disposed so that its free ends are at a point approximately centrally of the ends of the member 3 and within the member 3 so that when the solder 4 is administered within the member 3 to secure the end of the cable 1 the ends of the member 13 will be securely held within the member 3. The loop or eye 13 is adapted to be used to connect the trace to the swingle-tree when a hook is carried by the swingle-tree while the hook 11 is to be used when an eye is carried by the swingle-tree. The loop or eye 13 is adapted to receive a lug strap not shown for the purpose of connecting the trace to the harness. The trace may also be connected with the swingle-tree by means of a butt chain not shown, when so desired.

It will thus be seen that an attaching means is provided at one end of the trace which will facilitate its connection with a swingle-tree when hooks or eyes are carried by the swingle-tree for attaching purposes.

The member 2 is provided upon one side thereof with an integral tongue 14 which is bent outwardly, spaced from the outer end of the member 2 and bent back to form a loop or eye 15 by means of which the trace

is connected with the hame. The free end of the member 14 is secured in any suitable manner to the side of the member 2 after being bent over to lie thereagainst as will be seen with reference to Fig. 1.

It will be apparent with reference to the foregoing description and drawings that a trace has been provided which will, owing to its construction and arrangement be extremely durable, reliable and efficient and which may be cheaply manufactured. The attaching means carried by the trace for the girth and back band provides for an efficient securing of the trace thus producing a reliable draft of a vehicle.

In reduction to practice, we have found that the form of our invention, illustrated in the drawings and referred to in the above description, as the preferred embodiment is the most efficient and practical; yet realizing that the conditions concurrent with the adoption of our device will necessarily vary, we desire to emphasize the fact that various minor changes in details of construction, proportion and arrangement of parts may be resorted to, when required, without sacrificing any of the advantages

of our invention, as defined in the appended claim.

What is claimed is:—

A trace comprising a cable, a hollow frusto-conical member adapted to receive one end of said cable, means for securing the cable in the hollow frusto-conical member, said frusto-conical member being provided with a hook formed on the larger end thereof, a loop consisting of a single piece of wire bent into loop form and disposed so that its contacting ends are within the hollow frusto-conical member at a point approximately centrally of the ends of said hollow frusto-conical member forming a wedging means at the smaller end of said hollow frusto-conical member preventing the withdrawal of the cable, and attaching means secured to the other end of said cable.

In testimony whereof we affix our signatures in presence of two witnesses.

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IRVIN D. MICHAEL.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents Washington, D. C."