

(No Model.)

N. M. HABBERSTAD.

## TRACE FASTENER.

No. 291,896.

Patented Jan. 15, 1884.

Fig. 1.

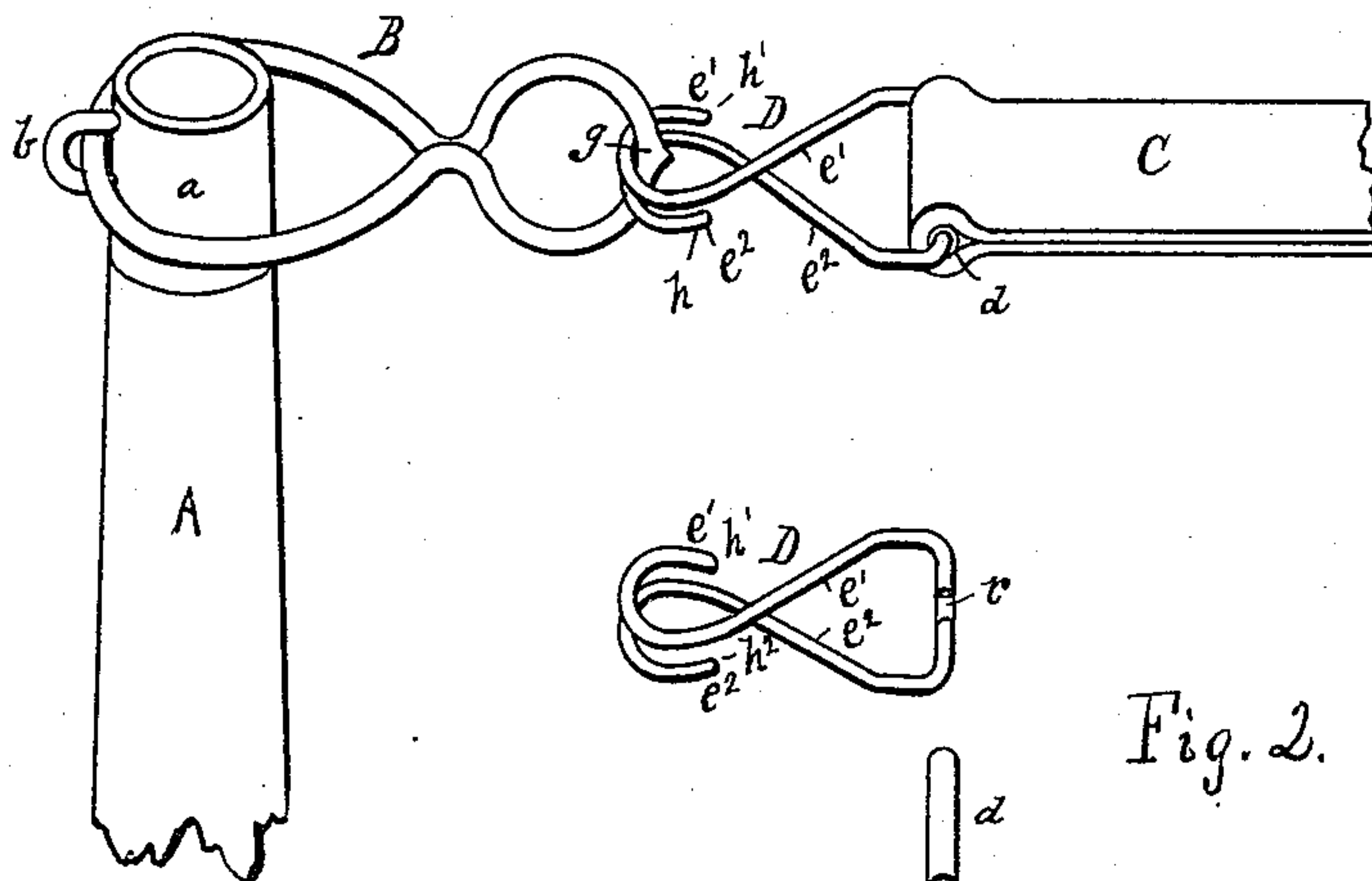
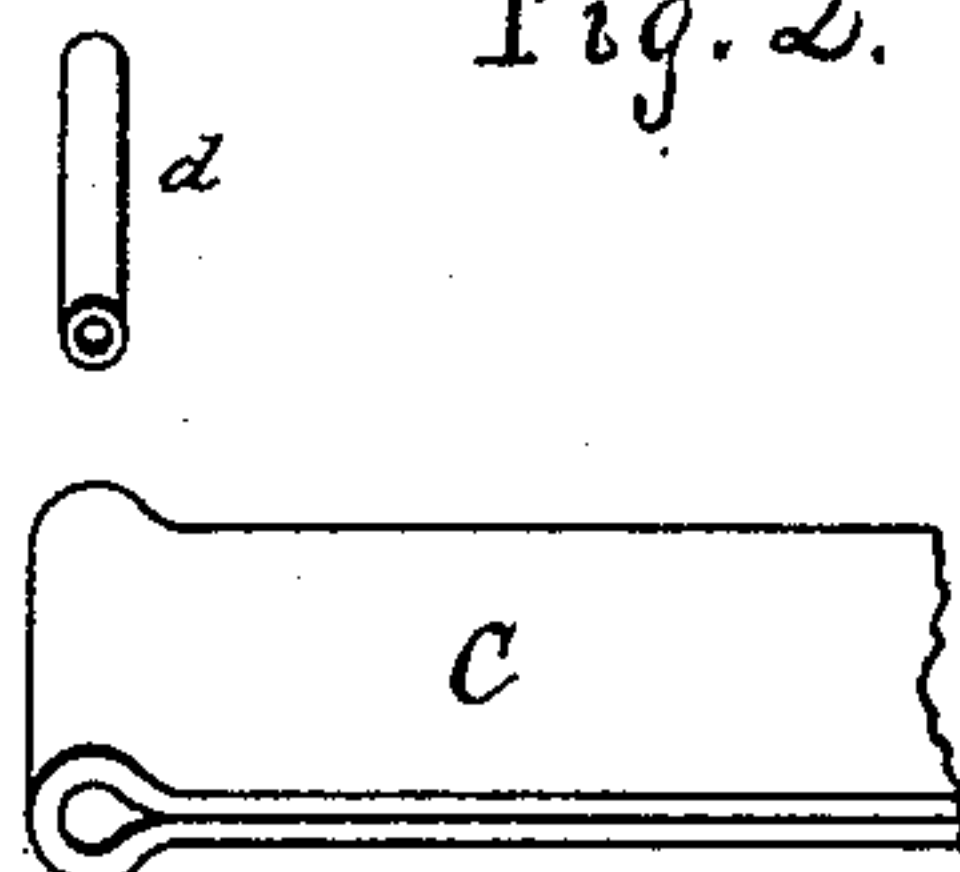


Fig. 2.



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# UNITED STATES PATENT OFFICE.

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## TRACE-FASTENER.

SPECIFICATION forming part of Letters Patent No. 291,896, dated January 15, 1884.

Application filed May 7, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, NICKOLAS MARTIN HABBERSTAD, a citizen of the United States, and a resident of St. Paul, county of Ramsey, and State of Minnesota, have invented certain new and useful Improvements in Trace-Fasteners, of which the following specification is a full, clear, and exact description, reference being also had to the accompanying drawings.

10 This invention relates to devices for fastening the traces or tugs of harness to the whiffletrees; and it consists in the construction and arrangement of parts hereinafter shown and described, and then sought to be specifically defined by the claim.

15 In the drawings, Figure 1 is a perspective view of a portion of a whiffletree and a trace with my improved fastening connecting them together. Fig. 2 is a perspective view of the different parts of the trace-connections detached.

A is one end of a whiffletree, having a ferrule, *a*, and staple *b*.

25 B is a ring, contracted near its center so as to form two loops, and connected by the larger loop to the whiffletree B by the staple *b*, as shown.

C is the trace, in the end of which a sleeve or tube, *d*, is held in the ordinary manner. 30 Through this tube one end of a snap, D, is passed and bent into the form shown in the upper view of Fig. 2. The smaller loop of the ring B is twisted around at right angles to the larger loop and lies in a horizontal position; 35 hence if the trace be turned over on its side

and the two parts *e'* *e''* of the snap D pressed over the flattened edge *g* of the smaller loop of the ring B until the points *h'* *h''* of the snap have passed into the loop and the trace turned up into position again, the oppositely-pointing hooked ends of the snap will catch into the loop and prevent the removal of the snap, unless the latter be turned backward again and pulled off. The snap D will be formed of spring-steel, so that some force will be required to force it over the ring B; hence it will not become disconnected unless an equal force is used to twist it open over the loop. This twisting open cannot be accomplished by the ordinary use of the harness, as loose rattling or twisting of the parts will not affect it, the only manner in which it can be opened being by firmly holding the parts and twisting the snap by hand. The snap D may also be used to connect traces to the ordinary hooks on whiffletrees.

Having described my invention and set forth its merits, what I claim is—

In combination with a whiffletree, a loop, B, adapted to swing laterally upon said whiffletree, a snap, D, having oppositely-pointing and backwardly-bent hooked forward ends, *e'* *e''*, and a trace, C, substantially as and for the purpose set forth.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

NICKOLAS MARTIN HABBERSTAD.

Witnesses:

C. N. WOODWARD,  
LOUIS FEESER, Sr.