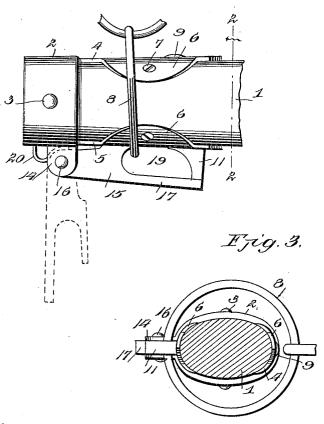
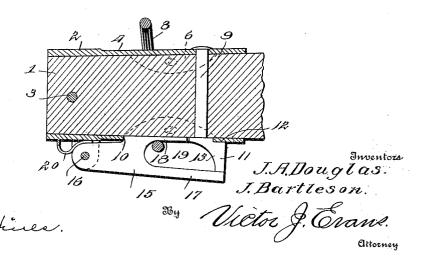
No. 839,739.

PATENTED DEC. 25, 1906.

J. A. DOUGLAS & J. BARTLESON. WHIFFLETREE HOOK. APPLICATION FILED JAN. 24, 1906.





UNITED STATES PATENT OFFICE.

JAMES A. DOUGLAS, OF YATES LANDING, AND JAMES BARTLESON, OF OLMSTED, ILLINOIS.

WHIFFLETREE-HOOK.

No. 839,739.

Specification of Letters Patent.

Patented Dec. 25, 1906.

Application filed January 24, 1906. Serial No. 297,702.

To all whom it may concern:

Be it known that we, James A. Douglas, residing at Yates Landing, and James Bartleson, residing at Olmsted, in the county of 5 Pulaski and State of Illinois, citizens of the United States of America, have invented new and useful Improvements in Trace-Hooks, of which the following is a specification

This invention relates to trace-hooks or fastenings for securing traces to whiffletrees, the invention having for its object the production of a simple, convenient, reliable, and effective construction of fastening of this 15 character for use in connection with chain traces, whereby the connecting ring or link of the chain will be securely retained against casual disengagement and yet may be readily and conveniently manually applied and 20 removed.

In the accompanying drawings, Figure 1 is a top plan view of an end portion of a whiffletree equipped with the invention, showing in full and dotted lines the latch-hook in 25 closed and open positions. Fig. 2 is a crosssection on the line 2 2 of Fig. 1. Fig. 3 is a horizontal section through the end of the whiffletree with the parts in applied position,

as shown in Fig. 1. Referring to the drawings, the numeral 1 designates the end of a whiffletree to which the invention is applied, the device comprising in its construction a ferrule or socket 2, embracing the end of the whiffletree and se-35 cured thereto by a rivet or other suitable fastening 3. Extending from and integrally connected with the ferrule 2 are front and rear straps or arms 4 and 5, each of which is centrally enlarged to provide laterally-extend-40 ing ears 6, secured by screws or other suitable fastenings 7 to the whiffletree and forming combined fastening members and wear portions to be engaged by the engaging ring or link 8 of the trace. The straps 4 and 5 thus link 8 of the trace. The straps 4 and 5 thus 45 protect the end of the whiffletree from ex-

ferrule 2 from movement. A rivet 9 extends through the inner end of the strap 4 and rearwardly through the end 5° of the whiffletree and projects at its rear end through the inner end of a longitudinal recess 10, formed in the rear strap 5, and is provided with a lug or head 11, having a notched

cessive wear and strain and rigidly hold the

end wall of the recess and a curved or seg- 55 mental-shaped face 13.

Ears 14 project from the rear side of the ferrule 2 and receive the outer end of the latch-hook 15, which is pivotally mounted therein on a pivot-pin or rivet 16 and is pro- 60 vided at its outer or rear side with an inwardly-extending arm 17, adapted when said hook is in closed position to rest against the lug 11. The inner or forward side of the hook is formed with a retaining-finger 18, 65 adapted when the hook is closed to seat within the portion of the recess 10 unoccupied by the shouldered portion of the rivet 9 and to terminate adjacent thereto, the said finger being arranged in parallel relation with the 70 arm 17 and of less length than said arm to form with the same and the curved portion of the lug 11 a receiving-space 19 for the rear portion of the trace-link 8 when the latter is in applied position. A spring 20, carried by 75 the ferrule 2, bears against the pivoted end of the latch-hook and tends to hold the same in closed position.

In applying the ring 8 to the whiffletree the hook 15 is swung to the dotted-line posi- 80 tion shown in Fig. 1, the ring 8 slipped over the same and then over the ferrule 2 onto the end of the whiffletree, so as to bear upon the ears 6 and abut against the lug 11, after which the latch 15 is closed and the ring 8 85 slipped cutward, so as to bear against the finger 18, whereby the pull of the trace will hold the latch closed, and thus prevent casual disengagement of the ring. In removing the trace the ring 8 is slid inward past the finger go 18 until it bears against the lug 11, the latchhook swung outwardly, and the ring 8 slipped off the ferrule and hook by a movement reverse of that previously described. It will thus be seen that the wear of the ring will be 95 sustained by the straps 4 and 5 and their enlargements 6 and that as the ring normally bears against the finger 18 and is held from sliding movement in either direction by the lug 11 and latch 15 casual disconnection of 100 said ring from the whiffletree cannot occur.

Having thus described the invention, what is claimed as new is-

1. A trace-fastening for whiffletrees comprising a support having a guard-lug, and a 105 latch-hook pivoted at one end to said support and provided with a retaining-finger and or shouldered portion 12 to engage the inner I an arm, said finger adapted to be engaged by

the engaging member of the trace and the arm to abut against the lug to form a space or chamber with the lug and finger for said

engaging member.

2. A trace-fastening for whiffletrees comprising a support having a lug provided with an outer curved or inclined surface, and a latch-hook pivoted at one end to the support and provided with spaced parallel portions to respectively engage the lug and to be engaged by the connecting-ring of the whiffletree, the latter-named portion being shorter than the former to lie in line with the inner end of the lug and to provide therewith a receiving-space closed by the lug when the hook is in retaining position.

3. A trace-fastening comprising a ferrule or socket having straps extending therefrom and provided with fastening means, a rivet extending through said straps and provided at one end with an abutting lug, and a latchhook pivoted at one end to the ferrule and provided with a finger and an arm arranged in parallel relation, the arm being adapted to abut against the outer end of the lug and the

5 abut against the outer end of the lug and the finger being shorter than the arm to lie in line with the inner end of the lug, whereby a receiving-space is formed which is closed by the lug when the latch-hook is in retaining position.

4. A trace-fastening comprising a socket or ferrule having front and rear straps extending inwardly therefrom and enlarged to form wear and attaching surfaces, the rear strap being provided with a longitudinal slot, a rivet extending through the front strap and whiffletree and inner end of said slot and provided with a lug projecting beyond the slot, said lug having a curved or inclined outer face, and a latch-hook pivoted at its outer 40 end to the ferrule and provided at its forward edge with a finger to seat within the slot and to be engaged by the trace member and at its rear edge with an arm of greater length than the finger and adapted to abut against the 45

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

esence of two witnesses.

JAMES A. DOUGLAS. JAMES BARTLESON.

Witnesses:

JOHN FELLENSTEIN, THOMAS B. ECHOLS.