

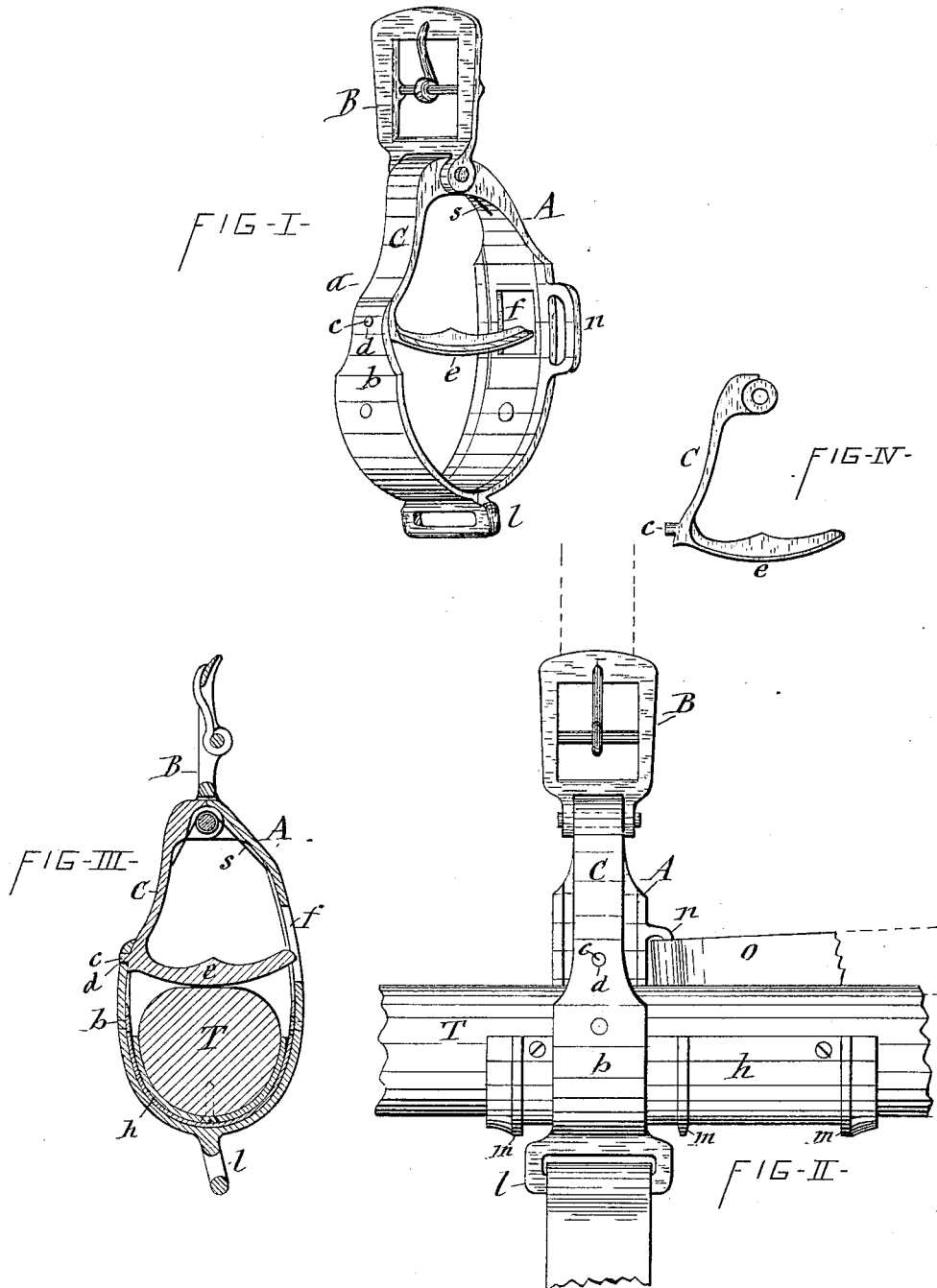
(No Model.)

G. F. DENIO.

THILL LUG.

No. 348,453.

Patented Aug. 31, 1886.



WITNESSES

C. Bendixon
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INVENTOR

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UNITED STATES PATENT OFFICE.

GEORGE F. DENIO, OF ONEIDA, NEW YORK.

THILL-LUG.

SPECIFICATION forming part of Letters Patent No. 348,453, dated August 31, 1886.

Application filed December 30, 1885. Serial No. 187,099. (No model.)

To all whom it may concern:

Be it known that I, GEORGE F. DENIO, of Oneida, in the county of Madison, in the State of New York, have invented new and useful Improvements in Thill-Holders, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention relates to the class of thill-lugs which are composed of metal and are provided with a side opening, through which to introduce the thill into the lug.

The invention consists in an improved construction and combination of the component parts of the thill-lug and certain devices used in connection therewith, whereby said thill-lug is rendered more efficient in its operation and the usual holdback-strap attachment on the thill is dispensed with, all as hereinafter more fully explained, and specifically pointed out in the claim.

In the accompanying drawings, Figure I is a detached perspective view of my improved thill-lug. Fig. II is a side view of the same and its connection with the thill and harness. Fig. III is a vertical transverse section, and Fig. IV is a detached view of the gate.

Similar letters of reference indicate corresponding parts.

A denotes the metallic thill-lug provided at its upper end with a buckle, B, and at its lower end with a loop, l, by which to connect the said lug to the usual saddle skirt and girth. Said lug is formed at one side, preferably the outer side, with an opening, a, through which to introduce laterally the thill T into the lug A, said opening extending from the upper end of the lug part way down the side thereof, and leaving a sufficient upward projection, b, on the lower portion of the lug to form a firm support for the thill.

On the upper end of the lug A, I hang a gate, C, preferably by a hinge-joint which allows said gate to swing inward. By means of a suitable spring, s, coiled around the pintle of the hinge and pressing with its ends against the inner sides of the lug and gate, said gate is forced outward and held normally across the side opening, a, where its outward movement is arrested by the collision of the free end of the gate with the upper end of the upward projection, b, of the lug. The free end of the

gate is provided on its outside with a spur, e, which enters an eye, d, in the lug portion b, and thus sustains the free end of the gate in its position on the lug. The lower end of the gate is formed with a rigid inward-projecting arm, e which reaches across the eye or loop of the lug, above the thill, when said gate is closed.

In opening the gate to admit the thill through the opening a the arm e is automatically carried out of the way to allow the thill to drop into the lug, and in allowing the gate to spring back into its closed position it carries the arm e back with it and causes the same to lie across the top of the thill, so as to prevent vertical play thereof in the lug. A slot, f, in the opposite side of the lug permits the aforesaid movement of the arm e.

In order to protect the thill from wear and abrasion by the lug A, I secure to the under side of the thill a metal plate, h, and by providing said plate with projections or flanges m m at the front and rear of the lug the latter is prevented from shifting longitudinally on the thill. This confinement of the lug A on the thill T, I utilize further by providing the lug with a loop, n, or other suitable device for connecting thereto the usual holdback-strap, o, which hitherto has been connected with a loop on the thill. This extra loop on the thill I therefore dispense with. It will also be observed that by the described attachment of the plate h to the thill and the longitudinal confinement of the lug A on the said plate I obtain a safety-holdback which prevents the vehicle from running onto the rear of the horse in case the holdback proper, o, should break.

I am aware that prior to my present invention metallic harness-lugs have been formed with an opening at the top for receiving the thill, and provided with a hinged guard or latch adapted to lie across the lug, above the thill, to retain the same in the lug; but such guards were arranged to swing outward from the lug to open the passage for the thill into the lug; but, inasmuch as there is nothing at the outside of the lug bearing against the guard or latch, the latter is insecure in its position over the thill, and liable to be crowded outward and accidentally release the thill. This is obviated by making the opening or inlet for the thill at the outer side of the lug and

hanging the guard or gate on the upper end of the lug and in such a manner as to allow said gate to swing inward and toward the horse's side in opening said gate.

5 Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

10 The combination, with the thill-lug A, provided with the opening *a* at one side and the opening *f* at the opposite side, of the gate C, hinged to said lug above the side opening, *a*, and held normally across the said opening, and the arm *e*, projecting from the free end of

said gate across the eye of the lug, above the thill, and pivoted to swing inwardly, substantially as described and shown. 15

In testimony whereof I have hereunto signed my name and affixed my seal, in the presence of two attesting witnesses, at Syracuse, in the county of Onondaga, in the State of New York, 20 this 4th day of December, 1885.

GEORGE F. DENIO. [L. S.]

Witnesses:

C. H. DUELL,
C. BENDIXON.