E. L. MARSHALL.
Thill-Coupling.

No. 200,143. Patented Feb. 12, 1878.

FIG. 1.

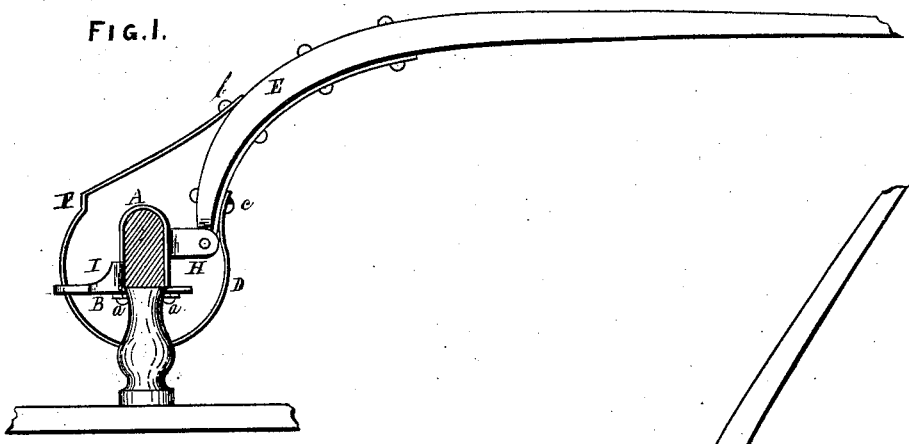



FIG. 2.

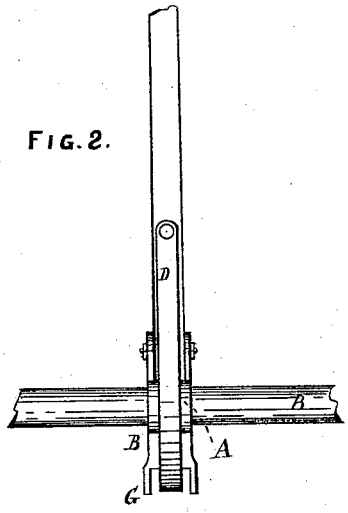
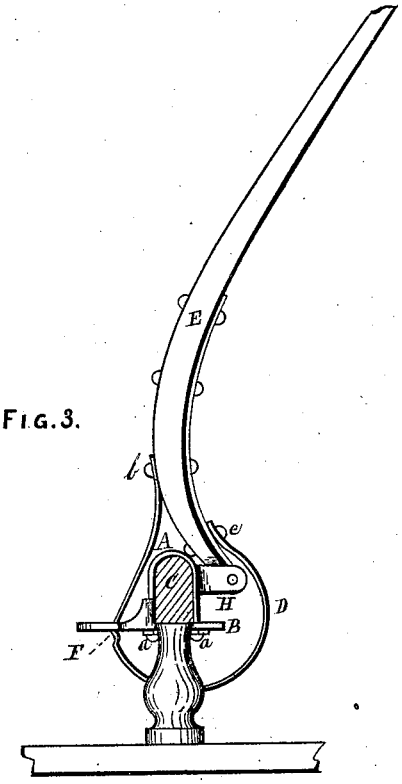



FIG. 3.




Witnesses.
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EDWIN L. MARSHALL, OF CLEVELAND, OHIO.

## IMPROVEMENT IN THILL-COUPLINGS.

Specification forming part of Letters Patent No. **200,143**, dated February 12, 1878; application filed November 3, 1877.

*To all whom it may concern:*

Be it known that I, EDWIN L. MARSHALL, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented a certain new and Improved Guard and Support for Buggy-Thills; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of the same.

Figures 1 and 3 are side views of a thill and clip in different positions, and having applied thereto the supporter alluded to. Fig. 2 is a plan view of the same.

Like letters of reference refer to like parts in the several views.

This invention is a device to support carriage-thills in an elevated position, that they may be out of the way when the carriage is not in use; and, furthermore, to prevent the thills from falling to the ground or against the horse's heel in the event the thills become detached from the carriage.

A more full description of the invention is as follows:

The clip alluded to consists of a band, A, and binding-plate B, through which the bolt ends of the plate project, and by which, together with the nuts *a*, said clip is secured to the axle of the carriage.

D is a spring, one end of which is secured to the thill E at *b*, and the opposite end at *c*, thereby forming a loop at the end of the thill, surrounding the axle and clip, as shown in the drawing.

In said spring or loop is a slight shoulder or dent, F, which, on turning the thill upward to the position shown in Fig. 3, will, in consequence of the elastic character of the loop, catch upon the end of the binding-plate B, between the fingers G, as shown in Fig. 2. This engagement of the shoulder with the end of the binding-plate retains the thill in the elevated position shown in said Fig. 3; hence the thills are out of the way, and cannot be trodden upon by the horse when being placed between them to be hitched to the carriage. A slight pull downward on the thill will disengage the shoulder from the end of the binding-plate.

The said shoulder or dent may be omitted and a stronger spring used, the strength of which, by its frictional bearing on the end of the binding-plate, will hold up the thill without a shoulder or dent.

In the event the coupling-bolts whereby the thills are secured to the clip should work out, the thills will not become detached from the axle and fall to the ground and against the heels of the horse, but will be retained in their connection with the carriage by the loops D; hence the horse will not be alarmed and endanger those in the carriage.

The binding-plate B, above referred to, is provided with a shoulder, I, which, as will be seen in the drawing, projects upward against the rear side of the axle. Said shoulder prevents the plate or clip from lateral displacement or twisting, and at the same time partially relieves the band A from the strain in drawing the vehicle, thereby making the clip strong, durable, and safe.

What I claim as my invention, and desire to secure by Letters Patent, is—

In thill-supporters, the binding-plate B and spring-loop D, provided with an offset or shoulder for engaging the end of the said plate for supporting the thills in an elevated position, in combination with the clip, thills, and axle, substantially in the manner as described, and for the purpose specified.

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Witnesses:

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