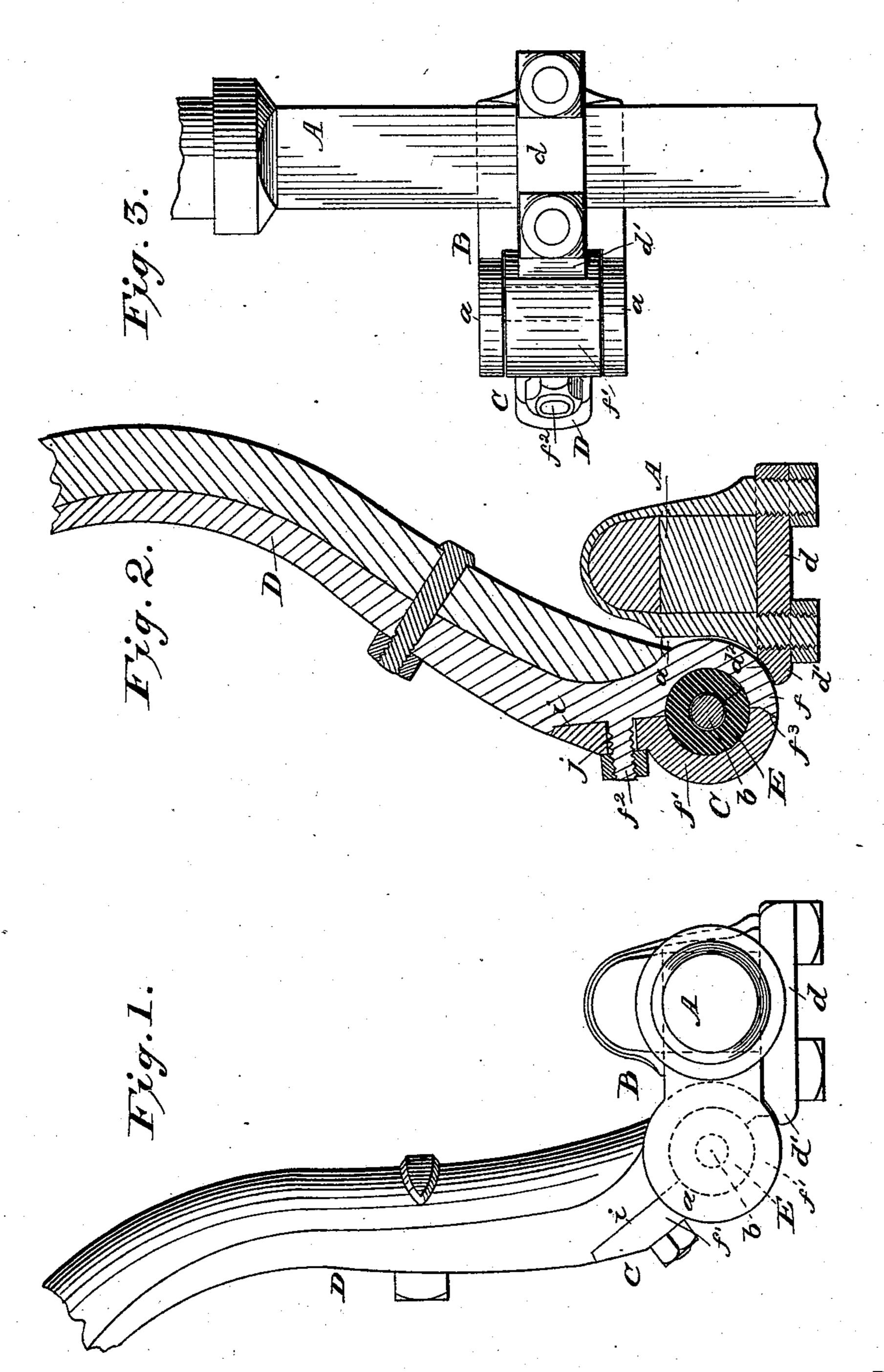
## P. T. McMILLAN & H. T. HILL.

THILL COUPLING.

No. 364,032.

Patented May 31, 1887.



WITNESSES:

George Binkenburg

6. Sedawick

INVENTUR:

#.J. Hill

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## United States Patent Office.

PETER T. McMILLAN AND HALLET T. HILL, OF BAY SHORE, NEW YORK.

## THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 364,032, dated May 31, 1887.

Application filed December 3, 1886. Serial No. 220,605. (No model.)

To all whom it may concern:

Be it known that we, Peter T. McMillan and Hallet T. Hill, of Bay Shore, in the county of Suffolk and State of New York, have invented a new and Improved Thill-Coupling, of which the following is a full, clear, and exact description.

Our invention consists of a thill-coupling eye made in sections to adapt the thill to be to connected to the jack clip without removing

the clip bolt or pin.

The invention also consists of a thill-coupling eye made in sections combined with the jack-clip and its bar, the latter serving as a lock to the lower section of the clip when the thills are lowered to position for use.

The invention finally consists of the employment of rubber packing within the sectional eye and of the construction, arrangement, and combination of parts, all as herein-

after described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 shows our new and improved thill-coupling in side view applied to an axle and curved end of a thill, the latter being in the position it assumes when the thills are held in the thill-loops of a harness. Fig. 2 is a sectional elevation of the curved end of the thill, the coupling, and the axle, the thill being shown in elevated position for detachment from the clip; and Fig. 3 is an inverted view of the axle jack-clip and eye.

A represents the axle, and B the jack-clip, which is formed with the cheek-pieces a a and pin b, and attached to the axle by the cross-piece d, which is slightly projected at its forward end, d', to stand near or in contact with the thill-eye C. The eye C is sectional or made of two parts, the main part f formed integral with the thill-iron D, and the removable

section f' connected to the thill-iron D by a screw,  $f^2$ , and nut.

About the screw  $f^2$  the iron D is made flat, as shown at i, to form a seat for the front end of the section f', which is elongated and formed with an aperture, j, for the screw  $f^2$ . Upon the pin b is placed the annular packing E, of 5crubber, which is compressed by the attachment of the section f', and prevents rattling. The rear meeting-edges of the sections ff' and the seat i are in a plane with a diameter of the eye and at an angle with the plane of the axle, 55 so that when the thills are in the position shown in Fig. 1 the lower joint,  $f^3$ , will come within the area of the curved surface  $d^2$  of the cross-bar d of the clip, so that the bar acts as a safeguard to obviate all danger of the sec- 60 tion f' becoming accidentally detached. When the thills are raised to the position shown in Fig. 2, the joint  $f^3$  is carried in front of the bar d, so that the section f' may be easily removed by simply removing the nut from the screw  $f^2$ , 65 thus adapting the thills to be detached from the vehicle without removing the bolts or pins from the jack-clips.

Having thus described our invention, what we claim as new, and desire to secure by Let- 70

ters Patent, is—

1. The thill-coupling eye comprised of two sections, in combination with the cross-bar d of the clip, formed with the projection d', for locking the sections of the eye, substantially 75 as described.

2. The thill-eye composed of the sections f f', bolted together, in combination with the clip A, pin b, packing E, and the bar d of the clip, which serves as a lock to the section f' 80 of the clip, substantially as described.

PETER T. McMILLAN. HALLET T. HILL.

Witnesses:

ALBERT BOYCE, GEORGE JAYNE.