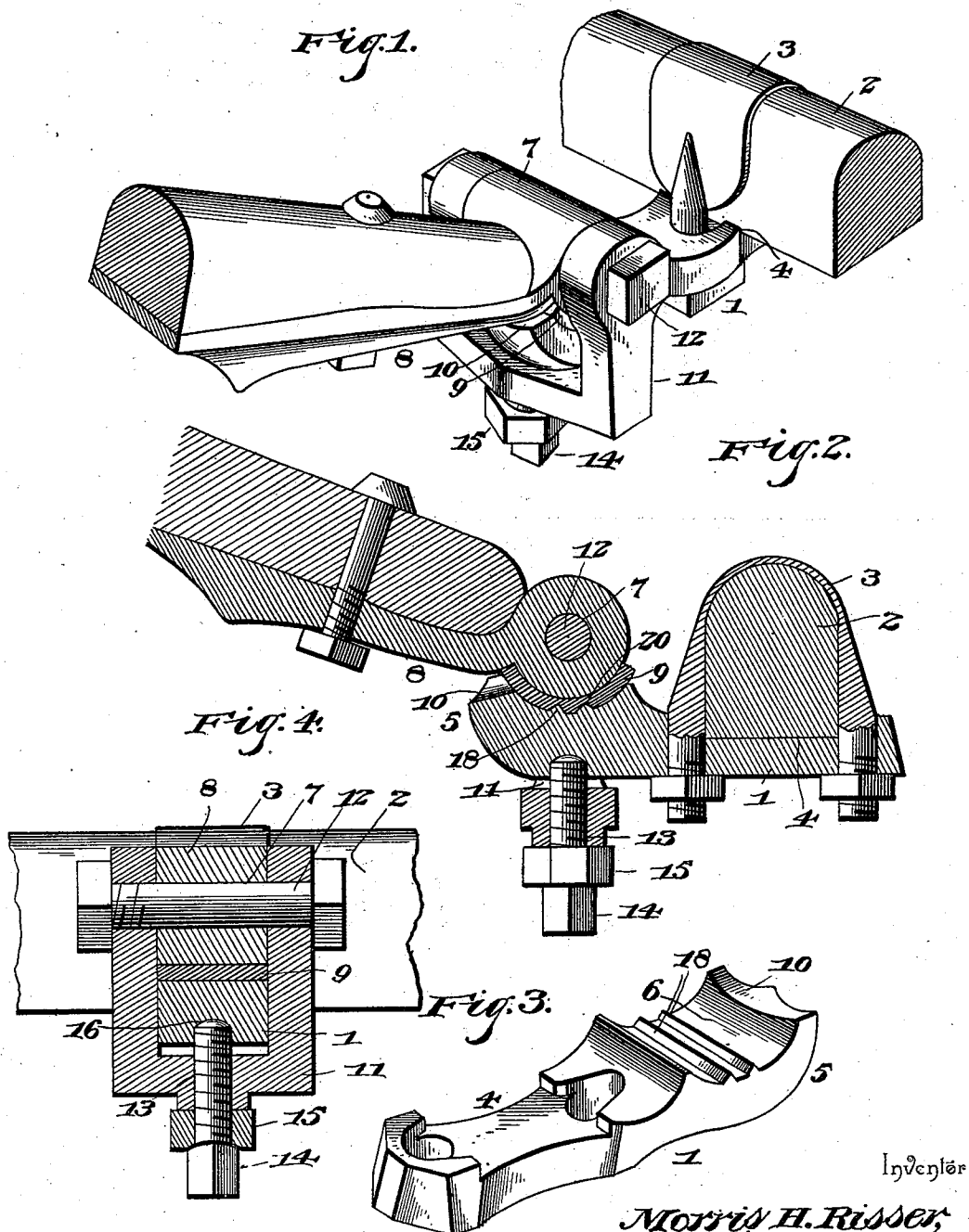


(No Model.)

M. H. RISSE.
THILL COUPLING.

No. 510,093.

Patented Dec. 5, 1893.



Inventor

Morris H. Risse,

Witnesses

B. L. Oakes
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UNITED STATES PATENT OFFICE.

MORRIS HENRY RISSER, OF ASHLAND, OHIO, ASSIGNOR OF ONE-HALF TO
JOHN HARVEY RUSSELL, OF SAME PLACE.

THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 510,093, dated December 5, 1893.

Application filed July 15, 1893. Serial No. 480,652. (No model.)

To all whom it may concern:

Be it known that I, MORRIS HENRY RISSER, a citizen of the United States, residing at Ashland, in the county of Ashland and State of Ohio, have invented a new and useful Thill-Coupling, of which the following is a specification.

The invention relates to improvements in thill couplings.

The object of the present invention is to improve the construction of thill couplings, and to provide a combined thill coupling and anti-rattler, which will be simple and inexpensive, strong and durable, and which will enable either thills or a pole to be readily attached to or detached from the running gear of a vehicle without removing and replacing coupling bolts.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings and pointed out in the claim hereto appended.

In the drawings—Figure 1 is a perspective view of a thill coupling constructed in accordance with this invention. Fig. 2 is a vertical longitudinal sectional view of the same. Fig. 3 is a detail perspective view of the clip plate. Fig. 4 is a transverse sectional view of the thill coupling.

Like numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates a clip plate, secured to an axle 2 by a clip 3, and having its upper face recessed at 4 to receive the lower face of the axle and to provide shoulders for fitting against the front and rear faces of the axle to prevent it twisting, and to relieve the axle clip 3 of the strain, and to cause the latter to be directly communicated to the axle which prevents any liability of the axle clip becoming loose. The clip plate 1 is provided with a forward extension 5, which is curved, and which is provided at its upper face with a curved recess 6 to conform to the configuration of an eye 7 of a thill iron 8, and to receive a cushion 9 of rubber, leather or similar material interposed between the eye 7 and the curved upper face 6 of the extension of the clip plate. The

lower face of the clip plate is provided with a strengthening rib arranged at the curved extension; and the front end of the latter at its upper face has a transverse recess 10, which is curved.

The thill iron is secured to the clip plate by an approximately U-shaped or rectangular yoke 11, receiving within it the extension of the clip plate and projecting above the same and provided with perforations through which passes a coupling bolt 12, which is also arranged in the eye of the thill iron. The eye 7 is of the same width as the extension of the clip plate, and the sides of the yoke are parallel and fit against the sides of the extension of the clip plate and the sides of the thill iron at the ends of the eye. The bottom of the yoke is provided with a threaded opening 13 to receive an adjusting screw 14, and it is provided around the threaded opening with an annular boss located on its lower face. The adjusting screw is provided at its lower end with a head to be engaged by a wrench, and it is adapted to force the eye 7 and the clip plate into close engagement, and to be tightened from time to time to take up the wear; and it is provided with a jam nut 15. The upper end of the screw 14 is rounded or conical and engages a concavity 16 of the extension of the clip plate at the bottom thereof.

The thin cushion, which is curved to conform to the configuration of the upper face of the extension of the clip plate and the eye of the thill iron, may be readily replaced when worn, and is securely retained in proper position by the clip plate which is provided at its upper curved face 6 with transverse ribs 18 which engage corresponding grooves 20 of the cushion.

It will readily be seen that the thill coupling is absolutely noiseless, that it is simple, strong and durable and that it is capable of facilitating rapid changing from poles to thills and vice versa. It will also be apparent that the thill iron is permitted a vertical swing, but is securely held against any lateral movement.

Changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or

sacrificing any of the advantages of this invention.

What I claim is—

In a thill coupling, the combination of a clip
5 plate having a forward extension provided
with a concaved upper face and having trans-
verse ribs thereon and provided at its lower
face with a concavity, a curved cushion ar-
ranged on the upper face of the extension of
10 the clip plate and provided with transverse
grooves receiving said ribs, an iron having an
eye arranged on the cushion, a rectangular
clip receiving the extension of the clip plate
and the eye and having parallel sides fitting

against the same and provided at the upper 15
ends of its sides with perforations and having
in its bottom a threaded opening, and an ad-
justing screw mounted in the threaded open-
ing of the yoke and engaging the concavity of
the clip plate and provided with a jam nut, 20
substantially as described.

In testimony that I claim the foregoing as
my own I have hereto affixed my signature in
the presence of two witnesses.

MORRIS HENRY RISSER.

Witnesses:

J. C. SLOAN,

M. H. MOORE.