

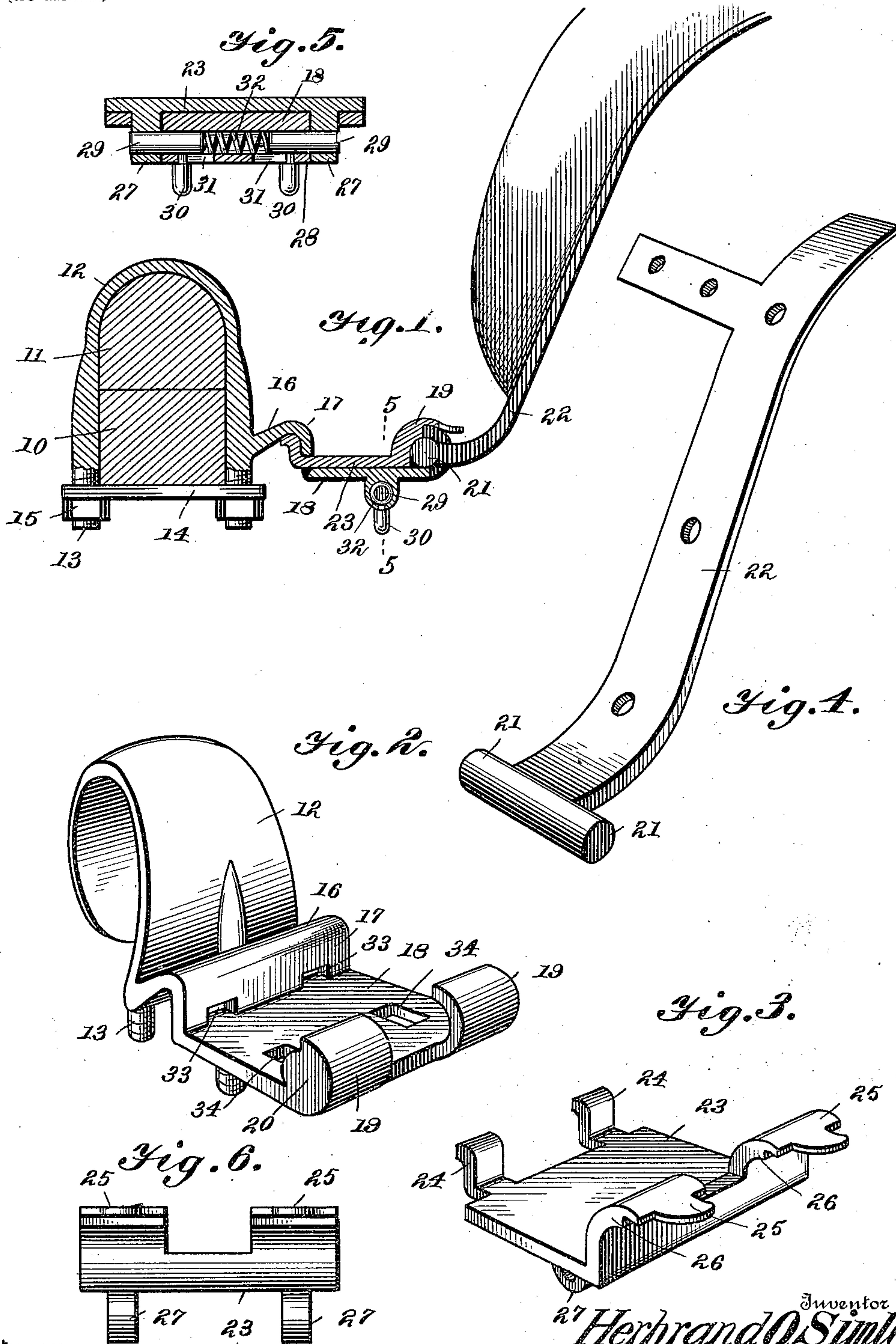
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H. O. SIMLE.
THRILL COUPLING.

(Application filed Apr. 10, 1899.)

(No Model.)



Witnesses

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UNITED STATES PATENT OFFICE.

HERBRAND OLSEN SIMLE, OF MANVEL, NORTH DAKOTA.

THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 639,780, dated December 26, 1899.

Application filed April 10, 1899. Serial No. 712,463. (No model.)

To all whom it may concern:

Be it known that I, HERBRAND OLSEN SIMLE, a citizen of the United States, residing at Manvel, in the county of Grand Forks and State of North Dakota, have invented a certain new and useful Thill-Coupling, of which the following is a specification.

My invention is in the nature of a coupling for connecting the thills or poles of vehicles to the front axle, the object of the invention being to provide an improved thill-coupling wherein all removable bolts and pins will be dispensed with, such coupling to be generally improved, simplified, cheapened, and rendered reliable and safe in operation.

With this object in view my invention consists in the improved construction, arrangement, and combination of parts hereinafter fully described and afterward specifically pointed out in the appended claims.

In order to enable others skilled in the art to which my invention most nearly appertains to make and use the same, I will now proceed to describe its construction and operation, reference being had to the accompanying drawings, forming part hereof, in which—

Figure 1 is a view of a coupling constructed in accordance with my invention, partly in longitudinal vertical section and partly in side elevation. Fig. 2 is a detail perspective view of the clip and its forward extension, which forms the base-plate of the coupling. Fig. 3 is a similar view of the top plate of the coupling. Fig. 4 is a similar view of the thill-iron. Fig. 5 is a transverse vertical sectional view on the dotted line 5 5 of Fig. 1. Fig. 6 is a view in front elevation of the top plate of the coupling.

Like numerals of reference indicate the same parts in all of the figures.

Referring to the drawings by numerals, 10 indicates the front axle of a vehicle, and 11 its bed.

12 indicates the clip, of usual form, provided with threaded extensions 13, passing through the usual plate 14 beneath the axle and secured by nuts 15. The clip is provided with a forward extension forming the main body of the coupling, comprising the part 16, forwardly and upwardly inclined from the clip, the rear wall 17 of the body of the clip, depending from said part 16, the base or bottom

plate 18 of the clip, and the upturned curved front rods 19 and end walls 20, forming the sockets to receive pins 21, projecting laterally from the thill-iron 22.

23 indicates the top or cover plate of the coupling, provided with rearwardly and upwardly projecting ears 24, upwardly and forwardly projecting ears 25 with shoulders 26, facing forward on their under sides, and depending lugs 27 with bolt-holes.

A barrel 28 is formed under the base-plate 18, in which are fitted two bolts 29 with handles 30 projecting through slots 31 in the barrel, a spring 32 between the bolts tending normally to force them outward.

In assembling the parts to connect the thills to the axle the thill-iron is placed with its pins 21 in the sockets of the base-plate, with its stem resting between them, when the top plate 23 is secured in position by first passing its ears 24 through the openings 33 in the wall 17 and then bringing the plate down on the base-plate 18, the lugs 27 passing down through openings 34 in the base-plate and ears 25 closing the rear of the sockets and covering the upwardly-curved front ends 19 of the base-plate. In placing the top plate in position the bolts 29 are pressed inward, and as soon as the holes in lugs 27 register with the barrel 28 the bolts are released and allowed to spring outward into the bolt-holes, firmly locking the top plate and securing the clips against displacement.

From the foregoing it will be seen that my improved coupling is composed of a minimum number of parts of simple form, which may all be cheaply and strongly made and readily and easily put together and taken apart. When connected, they will not rattle, but move easily and in line with each other, and will not be liable to extreme wear or easy breakage under ordinary usage.

While I have illustrated and described what I consider to be the best means now known to me for carrying out my invention, I do not wish to be understood as restricting myself to the exact forms and constructions shown, as many slight changes therein or variations therefrom might suggest themselves to the ordinary mechanic, all of which would clearly be included within the limit and scope of my invention.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. A thill-coupling comprising a base-plate
5 extending in front of the clip having openings in its center and upturned curved forward ends forming the front walls of the sockets for receiving the pins of the thill-iron, a top plate having perforated lugs adapted to
10 pass through the openings in the base-plate, and upturned forward ends to form the rear walls of the sockets, and spring-bolts mounted on the underside of the base-plate and adapted to engage in the perforate lugs and secure
15 the plates together, substantially as described.

2. The thill-coupling herein described, comprising the clip having a forward extension forming the base-plate of the coupling and

provided with central openings, rear walls with openings, and upturned forward ends 20 forming the front walls of sockets to receive the pins of the thill-irons, and a barrel on its under side with spring-bolts, and the top plate provided with rearwardly and upwardly extending ears to engage in the openings in the 25 rear wall of the base-plate, upwardly and forwardly extending ears to cover the sockets and form the rear walls, and depending lugs with bolt-holes, to pass through the central openings of the base-plate and receive the 30 spring-bolts, substantially as described.

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Witnesses:

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