(No Model.)

J. SHURTER.

COMBINED THILL SUPPORT AND ANTIRATTLER.

No. 603,776. Patented May 10, 1898.

Fig. 1.

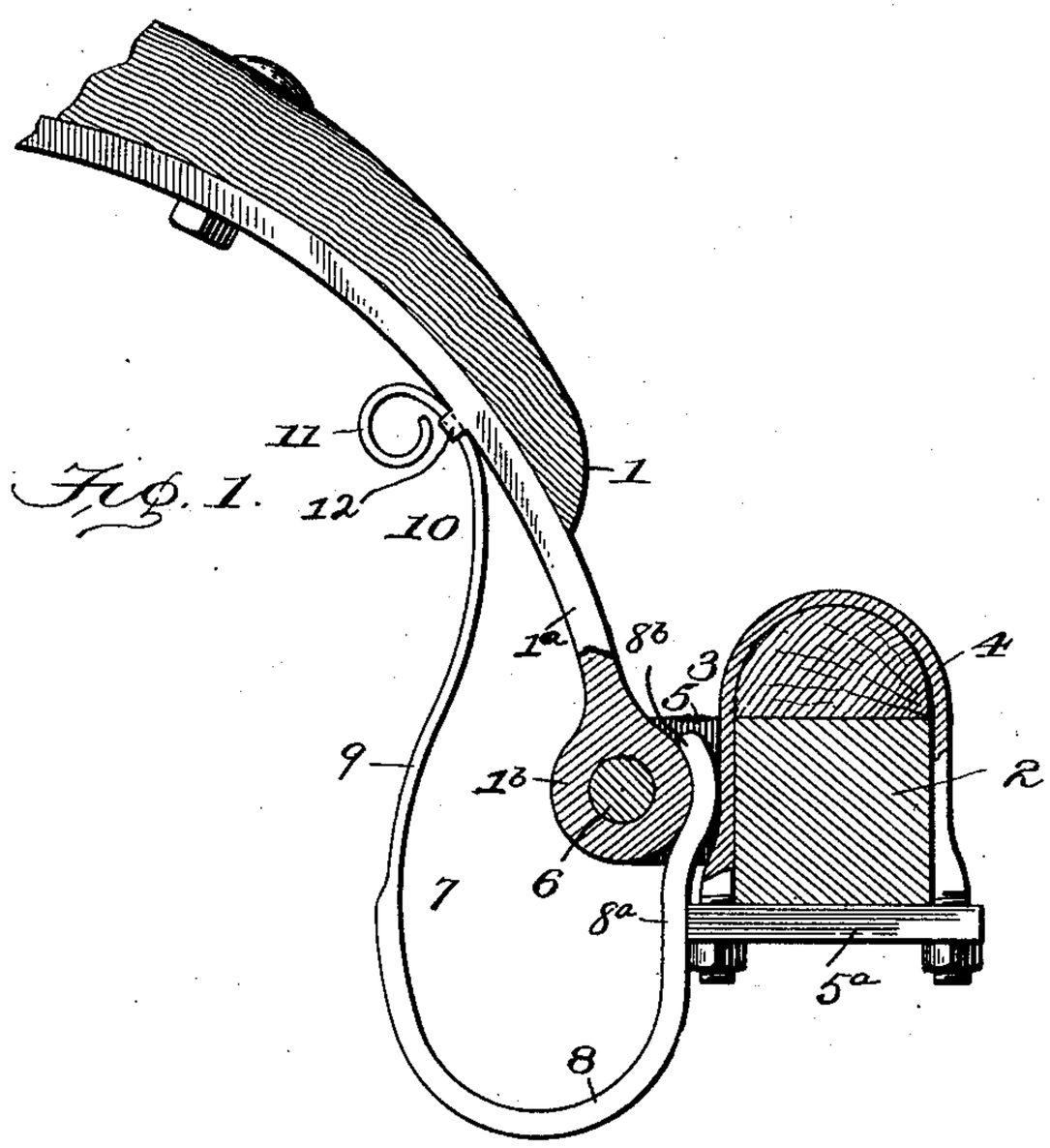
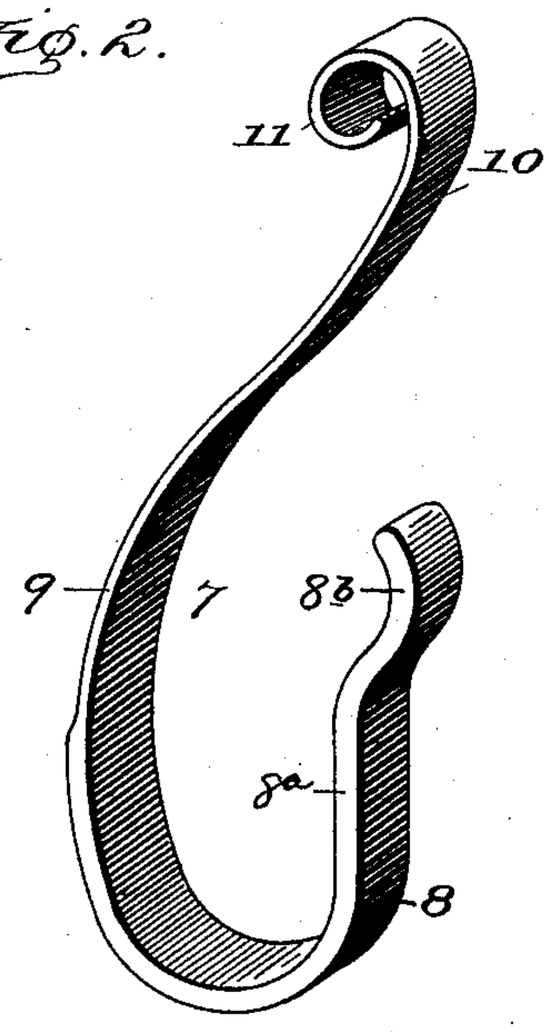


Fig. 2.



WITNESSES:

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COMBINED THILL-SUPPORT AND ANTIRATTLER.

SPECIFICATION forming part of Letters Patent No. 603,776, dated May 10, 1898.

Application filed June 30, 1897. Serial No. 642,983. (No model.)

To all whom it may concern:

Be it known that I, JUSTIN SHURTER, a citizen of the United States, residing at Rosendale, in the county of Ulster and State of New York, have invented certain new and useful Improvements in a Combined Vehicle-Shaft Support and Antirattler; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to a combined support and antirattler attachment for vehicle-shafts; and its object is to provide a simple, cheap, and effective device of this character for holding the shafts elevated and preventing rattling at the coupling parts which unite the shafts to the fore axle.

To the accomplishment of this end the invention consists in the novel constructions and combinations hereinafter more fully described, and particularly pointed out in the appended claim.

In the accompanying drawings, forming part of this specification, Figure 1 is a cross-sectional view of a fore axle and a part sectional view of a clip and shaft-iron, showing in side elevation my improved shaft-support and antirattler; and Fig. 2 is an enlarged detail perspective view of my improved support removed.

Referring to the accompanying drawings, 1 designates a thill or shaft, and 2 the fore axle, to which the shaft-iron 1^a is swiveled by a coupling 3. This coupling comprises a clip 4, engaging the axle and provided with a forwardly-projecting shank or arm 5, to which the eye 1^b of the shaft is swiveled by a cross-bolt 6 and a bottom clamping-plate 5^a, which bears against the under side of the axle.

My improved shaft-support and antirattler 7 has approximately the form of a reversely-curved letter **S**, the body portion 8 being substantially of **U** shape, as shown. One of the limbs 8^a of this **U**-shaped body portion is straight throughout its major portion and abuts against the front edge of the clamping-plate 5^a, while its extremity 8^b is bent into segmental shape to conform to the curvature of the eye portion of the shaft-iron 1^a. This segmental extremity of the limb 8^a extends between the shanks or arms 5 of the thill-coupling and is clamped firmly between said coupling and the said eye 1^b of the shaft-iron, so that the front end of the coupling and rear end of the shaft have position between the arms of said **U** body portion 8 of the device and are in direct vertical line therewith. The opposite limb 9 of the support is extended to form a reduced spring-arm 10, which is bent inwardly and outwardly and is formed at its extremity with a coil 11, as shown. Adjacent to the coil the arm passes through a guide-loop 12 on the shaft-iron 1^a and bears against the under side thereof. This guide-loop prevents the spring-arm from moving laterally and slipping out of place, and the coil 11 serves as a stop to abut against said guide-loop and prevent the spring-arm from moving rearwardly and becoming disconnected therefrom by vertical play of the shafts.

From the construction and relation of parts herein described it will be seen that the inner or rear limb of the support 7 is clamped between the swiveled end of the shaft and clip and is thereby rigidly secured and that the spring-arm 10 of the support is free to yield or give vertically to permit the shafts to have freedom of movement to a limited extent, while preventing undue play, and consequently rattling of the joint parts due to horse motion. When the vehicle is not in use, the supports hold the shafts raised in position for hitching up.

My invention, while simple in construction and effective in operation, is cheap to manufacture and may be made ornamental, if desired, to add to the attractiveness of the vehicle.

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

In shaft attachments, the combination with the fore axle and shaft, of a coupling comprising a clip 4 engaging the axle and provided with the forwardly-projecting arms 5 and bottom clamping-plate 5^a, a shaft-iron having an eye swiveled to the arms 5 and a guide-loop 12, and a combined antirattler and shaft-support 7 comprising a strip of spring metal having a **U**-shaped body portion 8 provided with a straight limb 8^a bearing against

the clamping-plate 5^a and having a segmental extremity 8^b bearing against the shaft-iron eye and clamped thereby against the clip, and a curved limb 9 extended to form a spring-arm 10 having its free end projecting through the guide-loop 12 and formed with a stop-coil 11, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JUSTIN SHURTER.

Witnesses:
CHARLES S. TILSON,
FRANK SMITH.