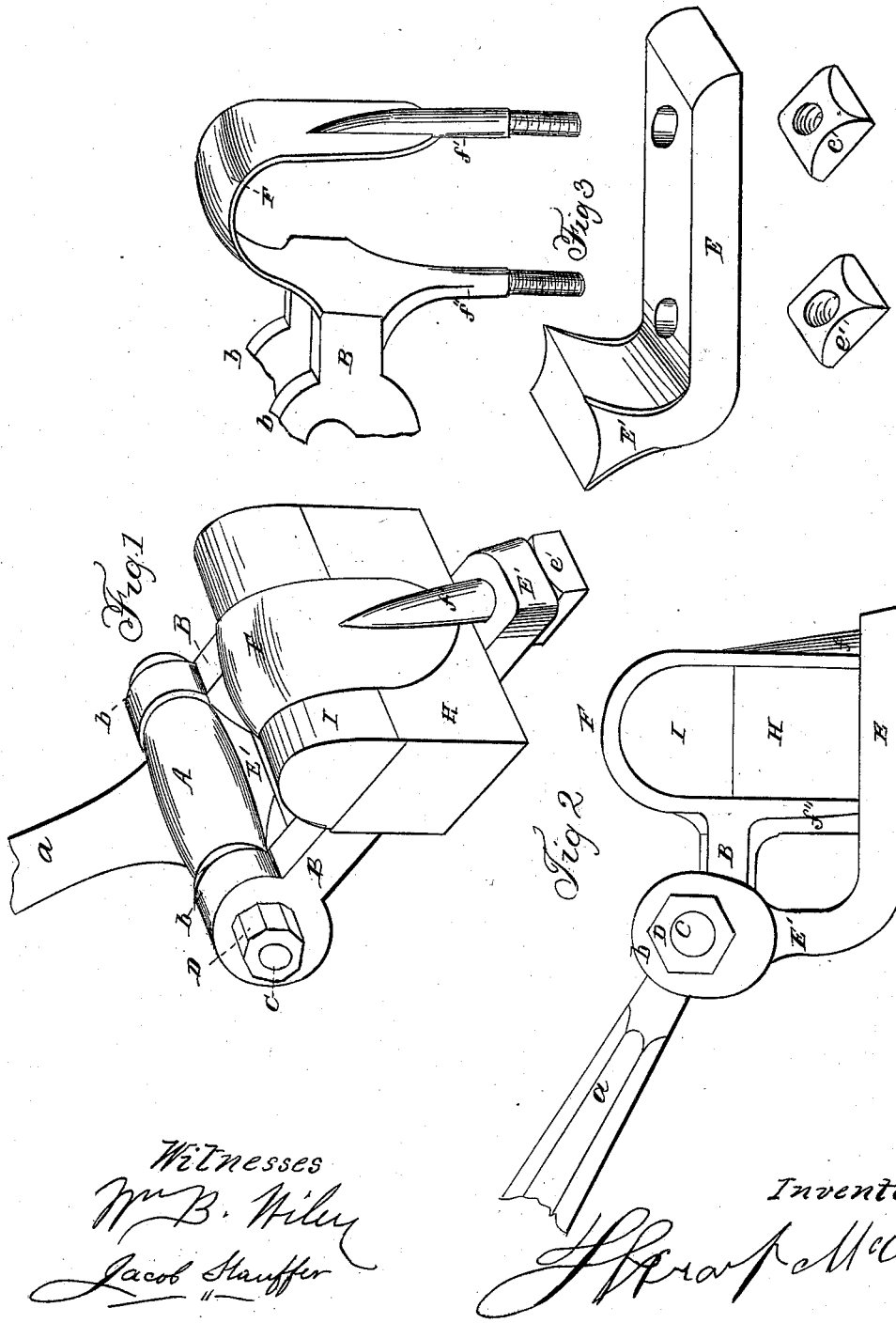
F. McCOY.

Thill-Coupling.

No. 54,574. Patented May 8. 1866



Witnesses
Wm B. Wiley
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UNITED STATES PATENT OFFICE.

FRANCIS McCOY, OF WEST PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN ATTACHING THILLS TO VEHICLES.

Specification forming part of Letters Patent No. **54,574**, dated May 8, 1866.

To all whom it may concern:

Be it known that I, FRANCIS McCOY, of West Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and Improved Safety-Yoke for the Protection and Support of the Coupling of Shafts on Vehicles; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view of my improvement in place; Fig. 2, a side view of the same; Fig. 3, a view of the yoke E detached, with its concaved supporting-base E′ turned up and portions of the coupling shown.

The object of this invention is to support the boss of the shaft in such a manner as to relieve the bolt and the constant friction and wear of the bolt, ears, and boss, which speedily induces play in the parts and a continued rattling noise, so much so that in case of other bolts becoming loose or rattling while driving they cannot attract the attention as otherwise would be the case if the coupling of the shafts did not keep up a continued clatter, which the application of my yoke prevents, as well as to give a support and security to the coupling, greatly increasing the durability and utility of the same.

The drawings clearly show the construction and application of my yoke, so that a brief explanation will enable any one skilled in the art to make and use my invention, which consists simply of a stout iron, E, curved up at one end, with a concave somewhat enlarged head, E′, for the reception of the boss or head A of the shaft *a*, held between the ears B by a headed bolt, C, and screw-nut D.

Fig. 1 shows the forward end, E′, of the yoke E centrally under the boss A of the shaft *a*, extending back under the axle H and secured by screw-nuts *e e′*.

The ears B of the coupling are connected with the band F, which is provided with a leg, *f‴*, terminated by a screw below. Above it is bent over and embraces the axle-bed I, and is forged out into another leg, *f′*, with a screw end to match, as shown by Figs. 2, 3. These screw-legs *f′ f‴* are passed through the two holes shown in the yoke E, Fig. 3, detached, with the screw-bars *e e′* beneath.

The construction of the parts and application of the yoke is so simple as to be readily comprehended.

Gum-elastic may be introduced between the rounded head A of the shaft and convex head E′ of the yoke, as also washers to the screw-bars *e e′*, in order to tighten the same and prevent friction, the yoke being sufficiently strong to support the shafts in any position desired.

I am aware that a pair of hooked clasps so constructed as to shut over and encircle the bolt connecting the shaft or pole of a carriage with the band or clip attached to the axle have been employed, as also a center-piece, strap, elastic tube, and pin to gripe and hold the bolt; others with a piece or strap attached to the lower side of the ears, extending inward, so as to form a flange on each side of the support of the head of the shaft, between the ears of the clip; also, of clips being extended below the axle, entering a straight piece, to which they are affixed by screws, all of which I disclaim; but I am not aware that a yoke was ever constructed and applied as mine.

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

The yoke E, with one end curved upward, forming a concave bed, E′, for the head A of the shaft, between the ears B of the band or clip F, constructed and applied in the manner and for the purpose specified.

FRANCIS McCOY.

Witnesses:
WM. B. WILEY,
JACOB STAUFFER.