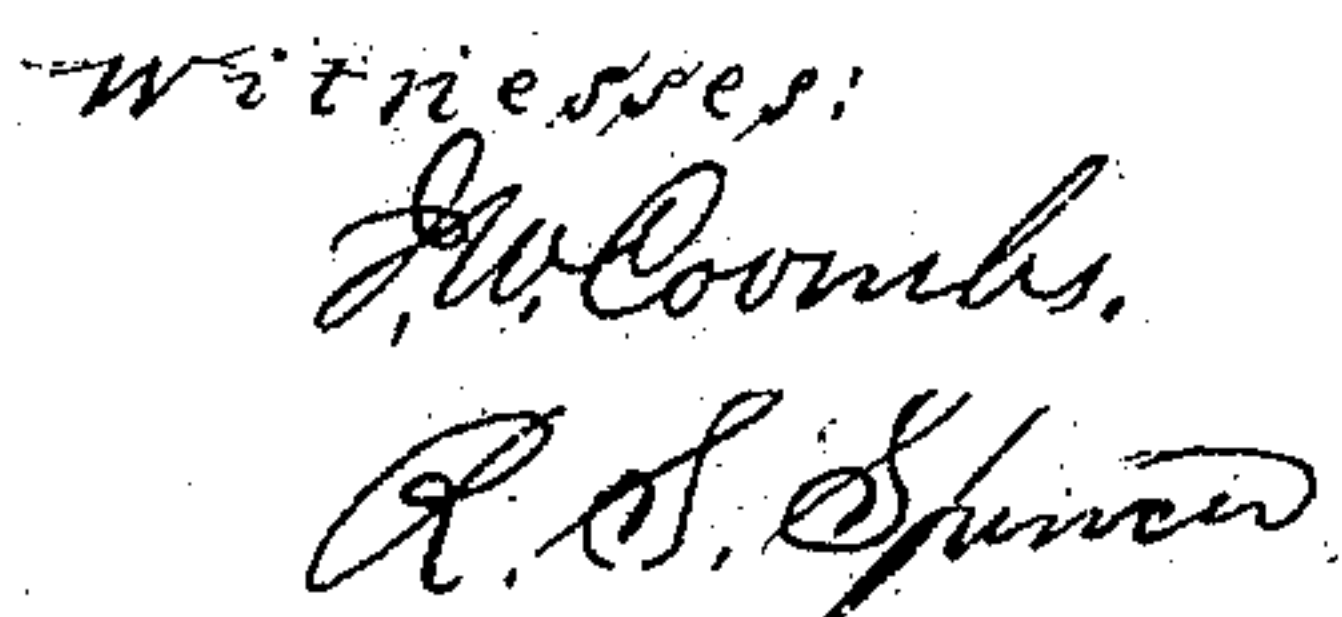


Thill-Coupling.

Patented Mar. 20, 1860.



Inventor:
A. Sherman
per Munn &
Attorneys

UNITED STATES PATENT OFFICE.

A. SHERMAN, OF POUGHKEEPSIE, NEW YORK.

ATTACHING THILLS TO VEHICLES.

Specification of Letters Patent No. 27,574, dated March 20, 1860.

To all whom it may concern:

Be it known that I, A. SHERMAN, of Poughkeepsie, in the county of Dutchess and State of New York, have invented a new and useful Improvement in Coupling Thills to Vehicles; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a cross section taken through the end of a thill-iron and the clip which is secured to the axletree, showing clearly my mode of connection, and the plan for preventing noise by wear of the parts. Fig. 2 is a back view showing the slots in the ears of the clip-head, with the pins projecting from the end of the thill-iron into them for keeping this iron in place.

Similar letters of reference indicate corresponding parts in both figures.

The object of this invention is to form a very simple and efficient arrangement for coupling shafts or thills to the clips, to make the attachment secure and to prevent a rapid wear of the parts, and to prevent noise occasioned by the wear and rattling of the thill-irons in the clip which is a great source of annoyance to both rider and horse.

For this purpose my invention consists in forming on the ends of the thill-irons, A, semi-cylindrical enlargements, B, one of which is clearly shown by Fig. 1. This enlargement has a deep transverse slot in its end, and also a hole drilled out for the reception of a plug, E, of vulcanized rubber. The thill-iron is curved and attached to the thills in the usual manner.

F is a clip, and G G are two ears projecting up from its head, each of which have slots, b, in them, which are curved in an arc described from the axis of a fixed pin, J, which pin extends across from ear to ear, and is riveted to each ear or jaw, G. In the slots are placed pins, a, which project from either side of the enlargement B. Over this pin the slot in the ends of the thill-iron is placed, and when the parts are in the position shown by Figs. 1 and 2, the draft of the horse on the thills will bring

one side of the slot in the enlargement, B, against the pin, J, and the draft will all come on this pin. The lugs or pins, a, projecting out from both sides of the enlargement serve to keep the thill-irons down in their place on the pin, J, and thus there is no strain of any consequence on these pins, still they are very important to prevent an upward thrust of the thill-irons from the clips.

Now in order to prevent rattling and noise in consequence of wear I introduce a plug of rubber, E, into a suitable hole in the enlarged portion, B, which presses against the pin, J, and by its elasticity keeps the parts from rattling and assists to some extent in preventing wear on the pin, J.

From this description it will be seen that there are only two metal parts, or three with the pin, J, but this with the clip jaws form one solid piece, the device is therefore very simple and it can be made strong and substantial. The manner of attaching and detaching the thills with this device forms an important point in my invention; and this can be done by simply placing the thills in an upright position then by placing each enlargement, B, between the jaws of the clip until the slots in the ends of the enlargement, B, are over the pin, J, and the pins, a, are in slots, b; then by drawing the thills forward they will be securely coupled.

To detach the thills, it is only necessary to raise them in a perpendicular position, when they will be disconnected.

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

The slotted semi-cylindrical enlargement, B, on the end of the thill-irons, rubber packing, E, pin, J, jaws, G, the clips, with their slots, and the pins, a, projecting from the sides of the enlarged portions, B, when the same are all combined and arranged in the manner and for the purposes herein set forth.

A. SHERMAN.

Witnesses:

A. M. BRUSH,
CHARLES BANKER.