(No Model.)

W. HERVEY.

THILL SUPPORT.

No. 342,440. Patented May 25, 1886.

Fig. 1.

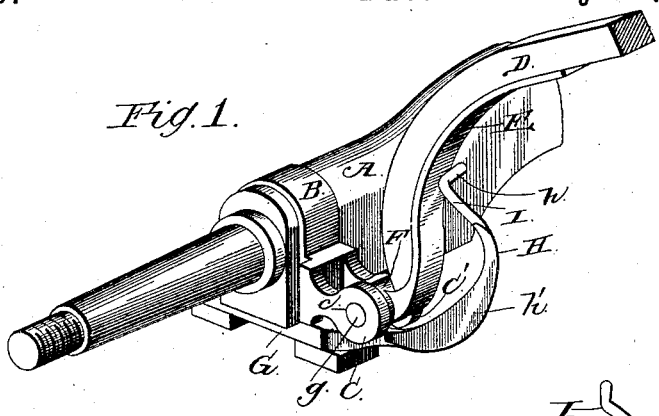


Fig. 3.

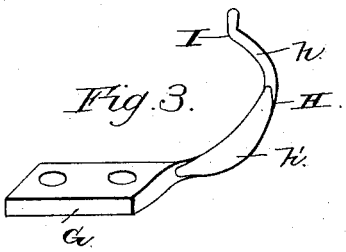


Fig. 2.

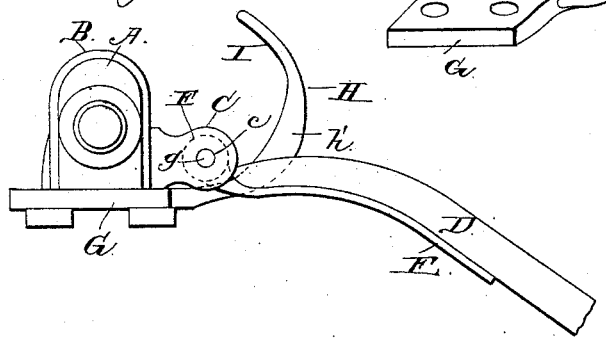
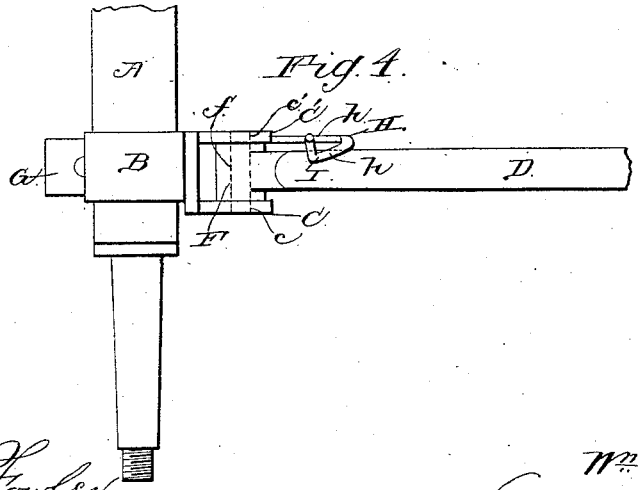


Fig. 4.



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UNITED STATES PATENT OFFICE.

WILLIAM HERVEY, OF HICKSVILLE, OHIO.

THILL-SUPPORT.

SPECIFICATION forming part of Letters Patent No. 342,440, dated May 25, 1886.

Application filed March 15, 1886. Serial No. 195,331. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HERVEY, a citizen of the United States, residing at Hicksville, in the county of Defiance and State of Ohio, have invented a new and useful Improvement in Thill-Couplings, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to improvements in thill-couplings; and it consists of the improved construction, combination, arrangement, and adaptation of its parts for service, substantially as hereinafter described and claimed.

The object of the invention is to provide a thill-coupling with an improved device for holding or supporting the shafts of the vehicle in a raised position when not in use, and at the same time permitting the shafts to be readily and easily lowered into their operative positions.

A further object is to provide a device of the character named, which will be strong and durable, inexpensive to manufacture, and thoroughly effective.

In the accompanying drawings, Figure 1 is a perspective view of a thill-coupling, showing my device supporting the shafts of the vehicle in a raised position. Fig. 2 is a side elevation, showing the shafts lowered, and Fig. 3 is a detail perspective of the clip-plate carrying the supporting device. Fig. 4 is a plan view with the thills lowered.

Referring to the drawings, in which similar letters of reference denote like parts in the several figures thereof, A designates the axle; B, the clip, provided with the usual draw-irons, C C′, having the openings *c c′*.

D designates the thill or shaft; E, the thill-iron, secured to the thill and provided with the trunnion F, which fits between the draw-irons C C′, in the usual manner, and has the central opening, *f*, which aligns with the openings *c c′* in the draw-irons. A bolt, *g*, passes through the aligned openings *f* and *c c′*, to hold or couple the shafts or thills in place.

G designates the clip or base-plate, through which the threaded ends of the clip pass and secure the base-plate to the under side of the axle by means of the usual nuts. The front portion of the clip or base-plate is provided with an upwardly-extending retaining-arm, H, which is formed integral with the said clip-plate for a portion of its length, and is out of the plane of the shafts, the upper end of the arm H being bent inwardly at *h* and then outwardly, to provide a detent, I, which catches against the under side of the thill-irons and holds the shafts suspended. This retaining-arm has its lower portion flattened at *h′*, to give it a lateral spring or elastic action.

The operation of my invention will be readily understood from the foregoing description, taken in connection with the annexed drawings.

The advantages of my device are numerous. In the old form of thill-couplings, when it is desired to attach a horse to the vehicle it is necessary to hold the shafts with one hand and back the horse with the other, or to let the shafts rest on the ground and back the horse between them, which is a very risky experiment and often results in breaking the shafts by the horse stepping on them. By the employment of my device this is overcome, for the shafts are supported above the horse and may be lowered by merely pressing down on the shafts at the proper moment. It is also designed to support the shafts in a raised position when the vehicle is in the stable, carriage-factory, and like places, to cause it to occupy a small space, and also to keep the shafts out of the way.

It will be observed that by the peculiar shape of the retaining-arm it is given a lateral spring-action, the arm in its normal position having its detent end I pressed outward in the plane of movement of the shafts to hold them in their raised position and releasing its hold or support by merely pressing down on the shafts, the latter acting against the detent, causing the arm to spring laterally out of the way, and as soon as the shaft clears the detent the latter is sprung back to its original position. When the shafts are in use, the retaining-arm does not interfere therewith, inasmuch as the lower portion of the arm is out of the plane of movement of the shafts.

I am aware that in the patent to McFail,

No. 253,875, is shown a tongue or thill support, consisting of a retaining-arm formed integral with the clip-plate and bent backward of the axle and above the same, the upper end being formed with a loop. My improvement is different from this, in that I have the retaining-arm projected forward of the axle, but out of the plane of movement of the thills or shafts, the upper end of the retaining-arm being shaped to provided a detent. In this manner I provide a simple and inexpensive contrivance, which will allow the proper movement of the shafts, and yet when the latter are raised the detent will be in position to effect the retaining of the shafts.

Having described my invention, I claim—

The clip or base-plate for a thill-coupling, having a retaining-arm for the shafts or thills, said arm having its body portion flattened to impart elasticity, and bent upward and forward in front of the coupling, but arranged out of the plane of movement of the shafts, the upper end of the arm being bent inward into the said plane of movement and then turned outward to provide a detent, I, as set forth.

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

WILLIAM HERVEY.

Witnesses:
ABE HERVEY,
JOHN COURTNEY.