

UNITED STATES PATENT OFFICE.

ALONZO GANDY AND HENRY W. WILSON, OF FREEPORT, OHIO.

IMPROVEMENT IN THILL-COUPPLINGS.

Specification forming part of Letters Patent No. **193,863**, dated August 7, 1877; application filed June 18, 1877.

To all whom it may concern:

Be it known that we, ALONZO GANDY and HENRY W. WILSON, of Freeport, county of Harrison, and State of Ohio, have invented a new and Improved Thill-Coupling, of which the following is a specification:

In the accompanying drawings, Figure 1 represents a side elevation, partly in section, on line *x x*, Fig. 2. Fig. 2 is a top view, and Fig. 3 a vertical transverse section on line *y y*, Fig. 1, of our improved thill-coupling.

Similar letters of reference indicate corresponding parts.

The invention relates to an improved thill-coupling that admits the ready removing and replacing of the shafts, and also the support of the same in raised position, which forms an important feature of our thill-coupling, the same combining, furthermore, neatness, lightness, and durability.

The invention consists of parallel supports or lugs of the axle-clip, of which one support has an eye and extension recess or notch; the other a rigid pivot-pin, extending centrally into the eye, and carrying the sleeve attached to the shaft end. The sleeve has a shoulder, and fits into the eye, turning on the pivot when inserted into the supporting-plates.

In the drawings, A represents the axle-clip, which is secured, in the customary manner, rigidly to the axle, and provided with forward-extending parallel supports or lugs B, between which the sleeve C is placed, the same being attached to the end of the shaft. One of the supports B has an eye, *a*, that extends around a central pivot-pin, *b*, attached rigidly to the opposite support or lug B. The eye *a* is open at the top, and has at the lower end a backwardly-inclined recess, *a'*, into which a shoulder, *d*, of the sleeve C fits, so that by raising the thill until the shoulder *d* is in line with the recess the sleeve may be easily removed from the supports of the clip by being moved sidewise until the sleeve clears the pivot-pin and eye.

The shaft is replaced by bringing the shoulder *d* into the recess or notch *a'*, and sliding the sleeve B back on the pivot-pin.

By allowing the shoulder to rest in the notch the thill is supported in raised position, which forms a very convenient feature of the same, as the shafts may be retained in raised position, and lowered when the horse or horses are harnessed.

By pushing the sleeve in so that the shoulder is between the supporting-plates, the shaft may be lowered, and is thereby securely coupled.

The sleeve turns in the eye around the pivot, which facilitates the coupling, while the front part of the recessed support secures the desired resistance to the draft.

The shafts are, by the use of this coupling, easily coupled and uncoupled, and also supported in raised position, when required.

Having thus fully described our invention, we claim as new and desire to secure by Letters Patent—

A thill-coupling in which the lug *d* on shaft-sleeve C fits a recess, *a'*, in one of the clip-lugs B, as shown and described, whereby the thills may be upheld.

ALONZO GANDY.
HENRY W. WILSON.

Witnesses:

JACOB M. DERRY,
THOMAS W. LANE.