J. M. DUSENBERRY.

THILL COUPLING.

No. 181,562. Patented Aug. 29, 1876.

Fig. I.

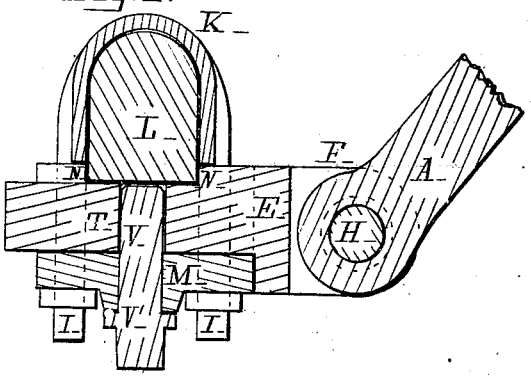
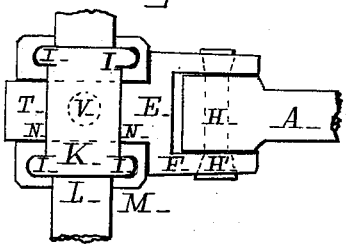


Fig. II.



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JAMES M. DUSENBERRY, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN THILL-COUPLINGS.

Specification forming part of Letters Patent No. **181,562**, dated August 29, 1876; application filed May 28, 1875.

To all whom it may concern:

Be it known that I, JAMES M. DUSENBERRY, of Chicago, Cook county, Illinois, have invented a new and useful Improvement in Thill-Couplings for Carriages, &c., which is made substantially as set forth hereinafter, referring to the drawings accompanying this, in which—

Figure I is a vertical section of the apparatus; and Fig. II, a plan view of same.

This invention relates to a detachable thill-coupling for carriages, buggies, &c. The thill end A is inserted in a holder, E, in the usual way, fitting closely between the side jaws F, but turning loosely in a vertical plane. It is held by the bolt H passing through the jaws and thills, shown by dotted lines in Fig. II. This bolt H fits in the thill A so closely that it cannot play loosely thereon, and, by preference, so that it cannot turn thereon to wear loose. The bearings in the jaws F are countersunk from the outsides, and the bolt H has heads riveted up in them to hold it in place. When they wear loose in their bearings they are made tight and snug by light additional riveting. The heads are left slightly projecting for this purpose, and when the bolt must be removed in repairing, one head can be cut so as to drive through. The part K fits on the axle L in the usual way, and it is connected to part M below the axle by projections I at its four corners, passing down through and held by screw-nuts below. The part M has shoulders N against the two sides of the axle to help hold solidly, and has a passage cut back through its center under the axle for the projection from part E. The part E has a projection, T, backward, made to fit snugly in the passage in part M. This has shoulders in front fitting against part M, and is fitted so closely therein and with such long bearings as not to work and wear. The part M has a screw-bolt, V, with a long bearing, which projects up through a hole in projection T to hold it in its place. This bolt has jam-shoulders V′, against which it can be screwed up tightly to secure it from getting loose.

This arrangement enables the thills to be connected and disconnected with great ease and quickness for removing and for exchanging the single pole and shafts, &c., and without the difficulties of the usual connections. It makes a neater connection than where the connecting bolt has large head and nut projecting to catch mud, &c., and makes a tight joint without the necessity for rubber springs therein, though they might be used.

I claim—

The combination of the clip K, the bottom part M, the projection T from the coupling E, having shoulders and solid bearings in part M, and cross-bolt holder V, substantially as and for the purpose set forth.

JAS. M. DUSENBERRY.

Witnesses:

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