W. R. BOWMAN.

Thill-Couplings.

No. 145,390. Patented Dec. 9, 1873.

Fig 1

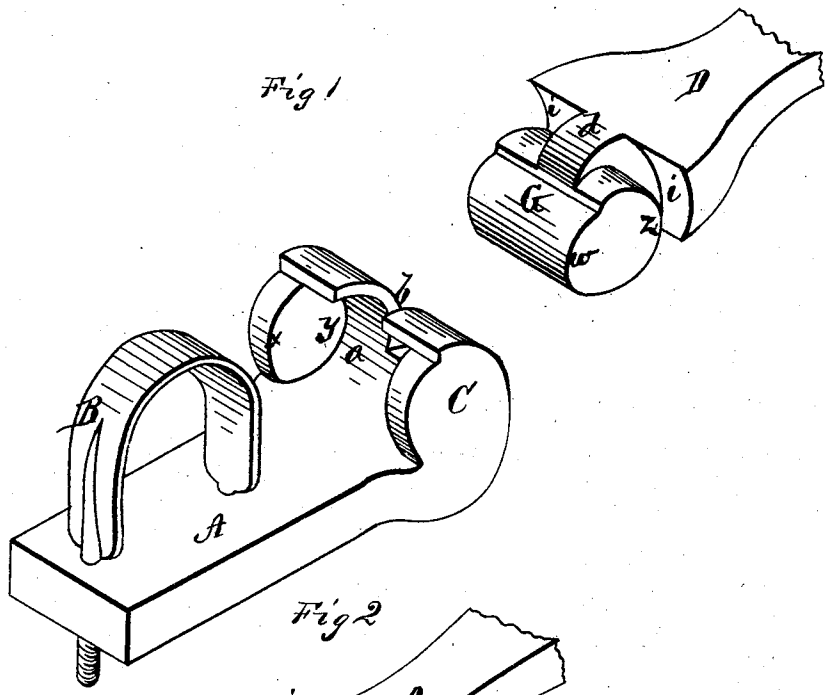


Fig 2

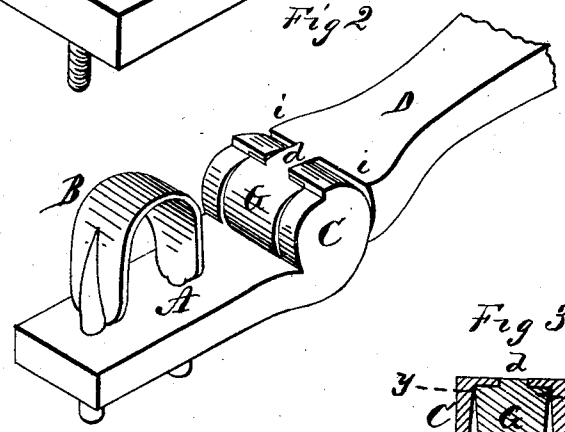
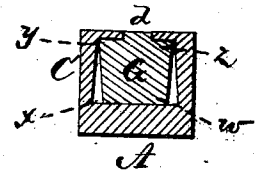


Fig 3



Witnesses:
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UNITED STATES PATENT OFFICE.

WILLIAM R. BOWMAN, OF DANVILLE, KENTUCKY.

IMPROVEMENT IN THILL-COUPLINGS.

Specification forming part of Letters Patent No. **145,390**, dated December 9, 1873; application filed July 2, 1873.

To all whom it may concern:

Be it known that I, WILLIAM R. BOWMAN, of Danville, in the county of Boyle and in the State of Kentucky, have invented certain new and useful Improvements in Thill-Coupling; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of a thill-coupling, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a perspective view, showing the two parts of the coupling detached. Fig. 2 is a similar view, showing the parts united; and Fig. 3 is a transverse section of the coupling.

A represents a flat bar of any suitable dimensions secured to the under side of the axle by means of an ordinary clip, B. At the outer end of the bar A is formed a clutch, C, having a recess, *a*, which is open on the rear side, and a central slot, *b*, extending downward on the front side for a suitable distance. The inner side of the recess *a* is larger at the opening in rear than forward; or, in other words, the end pieces of the recess are beveled on their inner sides, as shown in *x y*, Figs. 1 and 3. D represents the thill-iron, provided at its rear end with a tenon or shank, *d*, and round head G, as shown. This head is made of such size as to fit in the recess of the clutch, and the ends of the head are beveled, as shown in *w z*, Figs. 1 and 3, in such a manner that when the thill-iron is elevated to a perpendicular position and the head inserted in the recess the beveled ends of the head will correspond with the beveled interior of the recess and enter freely. As the shaft and thill-iron are turned down the shank *d* will pass into the slot *b* and the head G wedge within the recess. At the same time the shoulders *i i*, formed at the end of the thill-iron on each side of the shank *d*, will wedge on the outer side of the clutch C, and thus the coupling will be made perfectly noiseless.

The thill-coupling thus constructed is easily coupled and uncoupled, as desired.

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

The clutch C beveled on its inner faces from *x* to *y*, as shown, and provided with the slot *b*, in combination with the head G beveled from *w* to *z*, as shown, and connected to the thill-iron D, having shoulders *i i*, by the shank *d*, all as and for the purposes set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 10th day of June, 1873.

W. R. BOWMAN.

Witnesses:
CLIFTON RONES,
WM. G. PROCTOR.