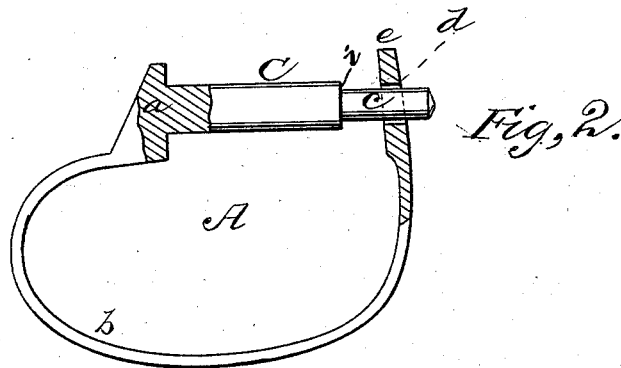
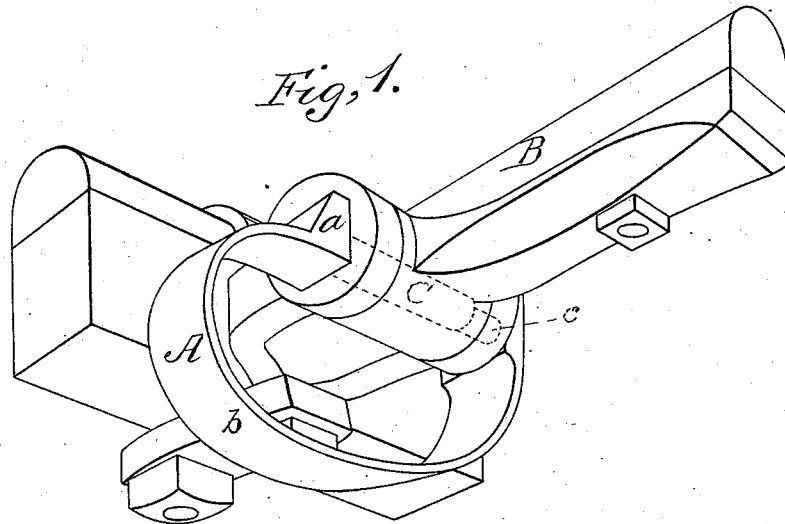


M. H. RISSE.
Thill-Coupling.

No. 216,458.

Patented June 10, 1879.



WITNESSES

Villette Anderson.
A. J. Masi.

INVENTOR

Morris H. Risser.
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UNITED STATES PATENT OFFICE.

MORRIS H. RISSE, OF HOMERVILLE, OHIO.

IMPROVEMENT IN THILL-COUPINGS.

Specification forming part of Letters Patent No. **216,458**, dated June 10, 1879; application filed April 21, 1879.

To all whom it may concern:

Be it known that I, MORRIS H. RISSE, of Homerville, in the county of Madison and State of Ohio, have invented a new and valuable Improvement in Spring Coupling-Pins for Thills and Poles; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a perspective view of this invention. Fig. 2 is a partial sectional view of the pin.

This invention has relation to means for coupling the thills or poles of wagons or carriages; and it consists in the construction and novel arrangement of parts, as hereinafter shown and described.

In the accompanying drawings, the letter A designates the shackle, and B the end of the thill or pole gear. C represents the coupling-pin, made with a broad bearing-head, *a*, from which extends a flat spring portion, *b*, in loop form, around to the point *c* of the pin, with which it engages by means of a perforation, *d*, made in the thickened or re-enforced end *e* of the spring.

The point *c* is small in diameter to the body of the pin, and forms therewith a shoulder, *i*, by which means the body of the said pin that receives the strain may be made very strong, and, the point *c* being of comparatively small diameter, the hole *d* in the free end of the loop-spring may be made so small as not to weaken it unduly. This perforated end of the spring passes over the point of the pin, which is beveled, and bears by its elastic force against the side of the shackle-arm, thereby taking up all slack and preventing the pin from working or

rattling in its bearings, and effectually securing it in its place.

This pin is introduced into its place by disengaging the spring from its point, and passing the pin through the cockeyes and the thill or pole bearing and the spring portion underneath the same, and then engaging the spring end with the point of the pin. This is readily and quickly done without wrench or tool, and saves much time, especially in changing from thills to pole, as the removal of the pin from its bearings is effected with equal facility.

As the spring constantly presses against the cockeye it keeps the pin tight, and there can be but little wear, especially as the spring is cast-steel and the cockeye usually of iron.

The entire coupling or shackle and pin is made in one piece of untempered cast-steel.

I am aware that a spring-fastening, in connection with the thill-eye and axle-clip eyes, are not broadly new, and I do not claim such invention.

What I claim as new, and desire to secure by Letters Patent, is—

As a new article of manufacture, a pivot fastening for thill or pole couplings, consisting of the pin C, having the rabbeted point *c* at one end, and the enlarged spring *b*, extending in loop form from the head *a* to point *c*, and having a re-enforced end, *e*, provided with a perforation designed to spring over the point *d*, the whole made in one piece of untempered cast-steel, as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

MORRIS HENRY RISSE.

Witnesses:

JOHN H. BARNES,
ELIAS HANES.