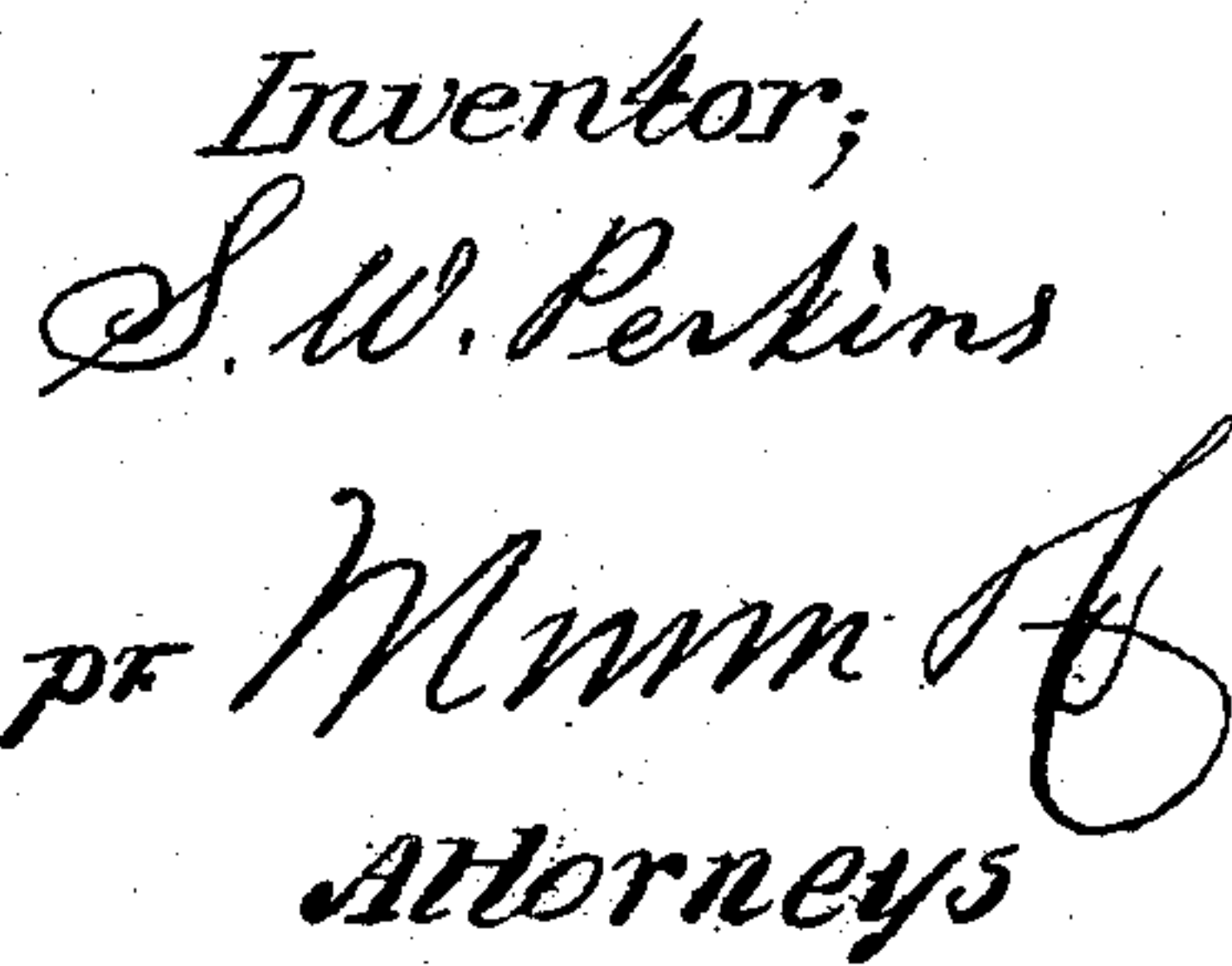


Thill Coupling.

Patented Aug. 17, 1869.



Witnesses
alex F. Roberts
I'm a morgan

United States Patent Office.

S. W. PERKINS, OF GENESEO, ILLINOIS.

Letters Patent No. 93,741, dated August 17, 1869.

IMPROVED THILL-COUPLING.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, S. W. PERKINS, of Geneseo, in the county of Henry, and State of Illinois, have invented a new and useful Improvement in Hinge-Coupling; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to a new and useful improvement in a hinge-coupling for the thills, shafts, or poles of single or double carriages, as buggies or coaches, and for various other purposes; and consists in the construction and arrangement of parts as hereinafter described.

In the accompanying sheet of drawings—

Figure 1 represents a vertical section of the coupling, showing its position when in use, or attached to the buggy.

Figure 2 represents the thill-portion detached, and in position for detaching the thills from the buggy.

Figure 3 is a vertical section of fig. 1, through the line *x x*.

Figure 4 is a detail of a piece for completing the circle of the joint.

Similar letters of reference indicate corresponding parts.

In this example of my invention, the hinge-coupling is shown as adapted to coupling buggy-thills, but the coupling is applicable to many other uses, as, for instance, coupling eveners, whiffletrees, neck-yokes, reins, and making other connections on a harness, as well as for other purposes.

A represents the hinge-coupling.

A' is the part which is attached to the buggy or carriage.

This consists of the shank B, which is bolted to the buggy.

A' is one-half of the hinge-coupling, formed of two disks, C and D, between which the movable portion of the coupling works.

On the inside of these disks are two bars, E F, which are placed about parallel with the shank B, with a space between them, as seen in the drawing.

G is the thill-portion of the hinge-coupling.

H is the part attached to the thill or pole.

The part G is seen in blue color in fig. 3.

I is a screw-nut, for fastening H to the coupling G.

G is circular in form, with a recess on each of its sides, leaving a central plate, which passes in between the bars E F when the parts are coupled, as seen in the drawing.

J is a flange on each side of G.

The part A' is so formed, or recessed out, opposite the shank B, that the flanges J pass back of the bars E F, and the draught comes at this point, that is, against the inside of the flanges and the inner ends of the bars.

To allow of this adjustment of the parts, the flanges J are cut away for a distance equal to the width of the bars, as seen at K, fig. 2.

It will be seen that when the hinge is placed in the position seen in fig. 2, the parts of the coupling can be slipped together from either side.

As the movable part G is brought down to proper position, the flanges will pass in back of the bars, and the coupling will be complete, a perfect hinge being formed, which can only be detached when the parts are in a certain position.

For the purpose of filling the space K, and making the circle of the flanges J complete, there is a loose cap, L, confined by grooves *n*, on the inside of the disks C D, which occupies the space K, when the parts are coupled, and is free to move around the circle as the hinge is moved.

By this arrangement a perfectly secure and durable hinge-coupling is made, free from all noise, and allowing the parts to be separated, when desired, with the greatest ease.

The parts can be coupled together from either side, thus adapting it for a hinge-connection for all the purposes intended.

Instead of the shanks B and H, flanges or collars, or any other device, may be cast on the parts of the hinge, for attaching the coupling and making the desired connection.

Having thus described my invention,

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

The improved hinge-coupling above described, its several parts being constructed and fitted together in the manner shown and described.

S. W. PERKINS.

Witnesses:

WESLEY NISWENDER,
JAMES WITHROW.