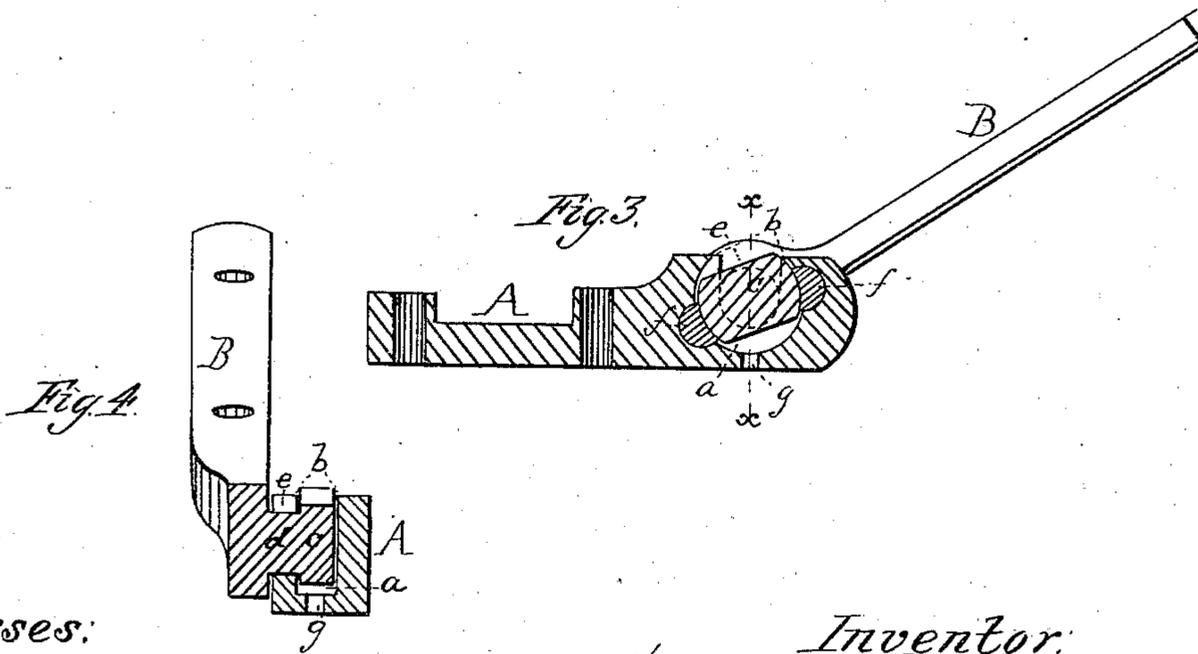
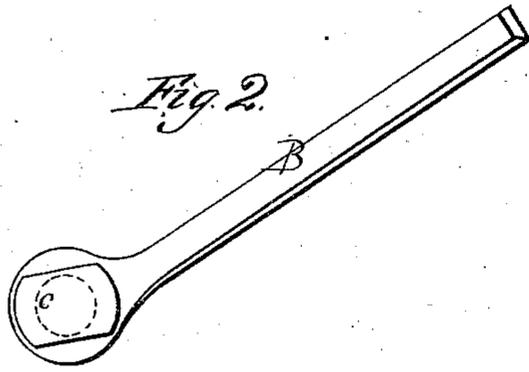
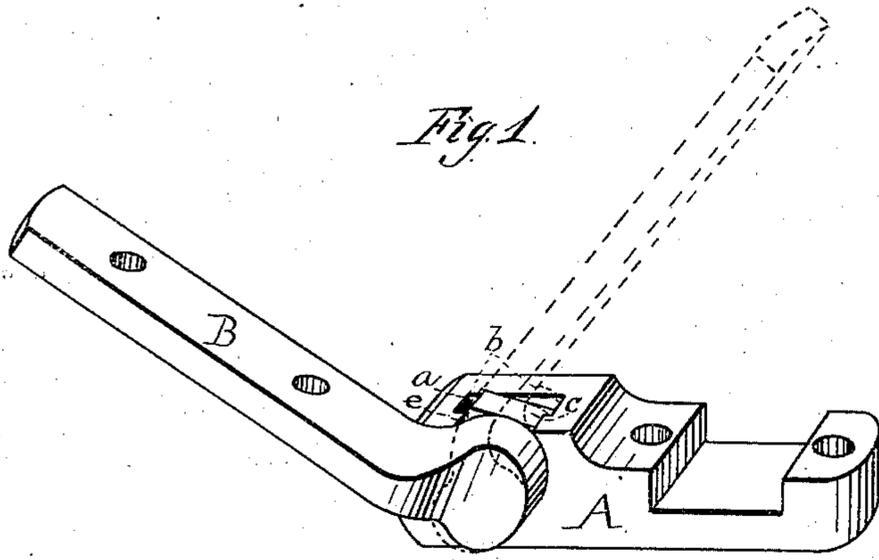


(No Model.)

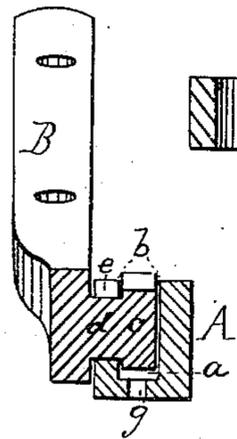
W. PFEIFER.  
Thill Coupling.

No. 232,366.

Patented Sept. 21, 1880.



*Fig. 4.*



Witnesses:  
F. B. Townsend  
Wm. Rothhoff

Inventor:  
William Pfeifer,  
per Lotz & Dyer,  
Attorneys.

# UNITED STATES PATENT OFFICE.

WILLIAM PFEIFER, OF CHICAGO, ILLINOIS.

## THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 232,366, dated September 21, 1880.

Application filed May 28, 1880. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM PFEIFER, of Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Thill-Couplings, of which the following is a specification.

The object I have in view is to produce a simple, strong, and cheap thill-coupling, which will not rattle, and will not require any bolt or pin to secure it together, and at the same time can be readily coupled and uncoupled; and my invention therein consists in the peculiar construction and arrangement of the parts composing my improved thill-coupling, as fully hereinafter explained, and pointed out by the claims.

In the accompanying drawings, forming a part hereof, Figure 1 is a perspective view of the thill-coupling; Fig. 2, an elevation of the thill-iron; Fig. 3, a sectional view of the coupling, and Fig. 4 a cross-section on line *x x*.

Like letters denote the same parts in all four figures.

A is the socket-iron, which is secured to the axle by a clip in the usual manner. This iron has a socket, *a*, entering the same from the top, which socket is in the shape of a circular flat disk, with a small segment (less than one-half a circle) cut away. This cut-away portion forms the top opening, *b*, into such socket, which is of less length than the diameter of the socket.

The thill-iron B has a flat head, *c*, which enters the socket *a*. The head *c* is of the shape of a disk having opposite segments cut away, producing a head with two flattened sides and two round ends. This head *c* is connected to the thill-iron by a round neck, *d*, which drops into a U-shaped slot, *e*, in the side of the socket-iron when the head *c* enters the socket *a*. The head *c* can be passed endwise through the opening *b*; but when turned in the socket its round ends strike the walls of the socket, locking the head in the socket until it is again turned to bring one end in the opening *b*.

Within the socket *a* are placed two small blocks, *f*, of india-rubber, which press on the round ends of the head *a* and prevent the coupling from rattling in use. A dirt-hole, *g*, is made through the bottom of the socket to permit the escape of any dirt that may work into the same.

The thill-iron may be placed on the outside or inside of the socket-iron, and the parts of the coupling will be made in pairs, so that the thills will draw equally upon the axle.

What I claim as my invention is—

1. In a thill-coupling, the socket-iron A, having the circular socket *a* opening only through the top and one side of the same, in combination with the thill-iron B, having a flattened head, *c*, which works in and is inclosed by said socket, and a connecting-neck, *d*, resting in the side opening of the socket, substantially as described and shown.

2. In a thill-coupling, the socket-iron A, having the circular socket *a* opening only through the top and one side of the same, and provided with the rubber blocks *f* within the socket, in combination with the thill-iron B, having a flattened head, *c*, which works in and is inclosed by said socket, and a connecting-neck, *d*, resting in the side opening of the socket, substantially as described and shown.

3. In a thill-coupling, the iron A, having slot *e*, socket *a*, and dirt-hole *g*, in combination with the thill-iron B, having head *c*, substantially as described and shown.

4. The thill-coupling described, consisting of socket-iron A, having circular socket *a*, U-shaped slot *e*, rubber blocks *f*, and dirt-hole *g*, and the thill-iron B, provided with flat head *c*, having round ends and straight sides, and neck *d*, all constructed, arranged, and combined substantially as set forth and shown.

WILLIAM PFEIFER.

Witnesses:

WILLIAM ROTTHOFF,  
EMIL H. FROMMANN.