

J. FASIG.
Thill-Coupling.

No. 224.667.

Patented Feb. 17, 1880.

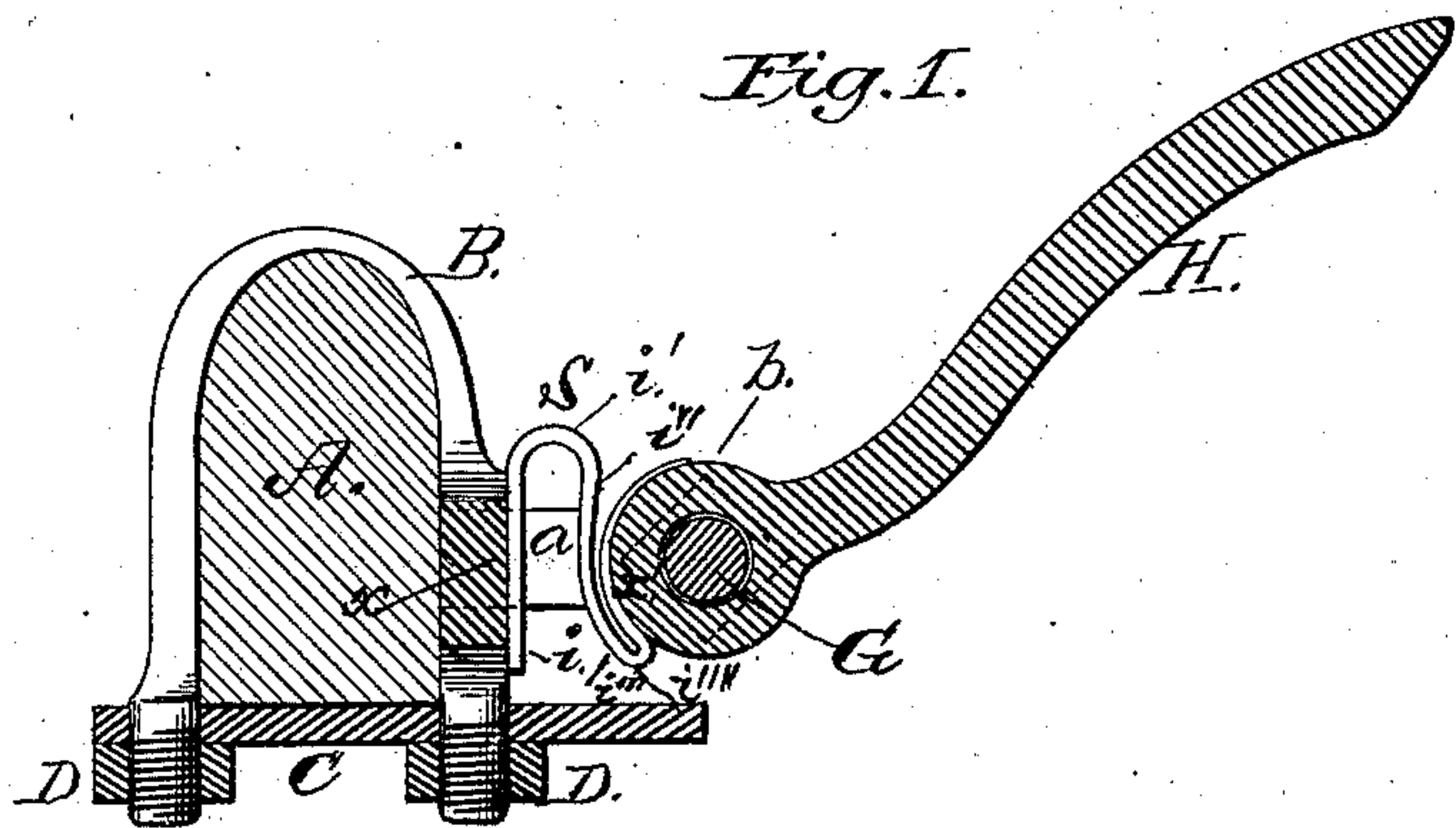


Fig. 3.

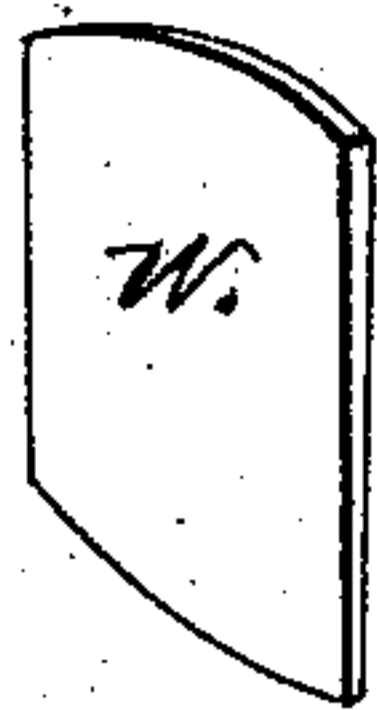
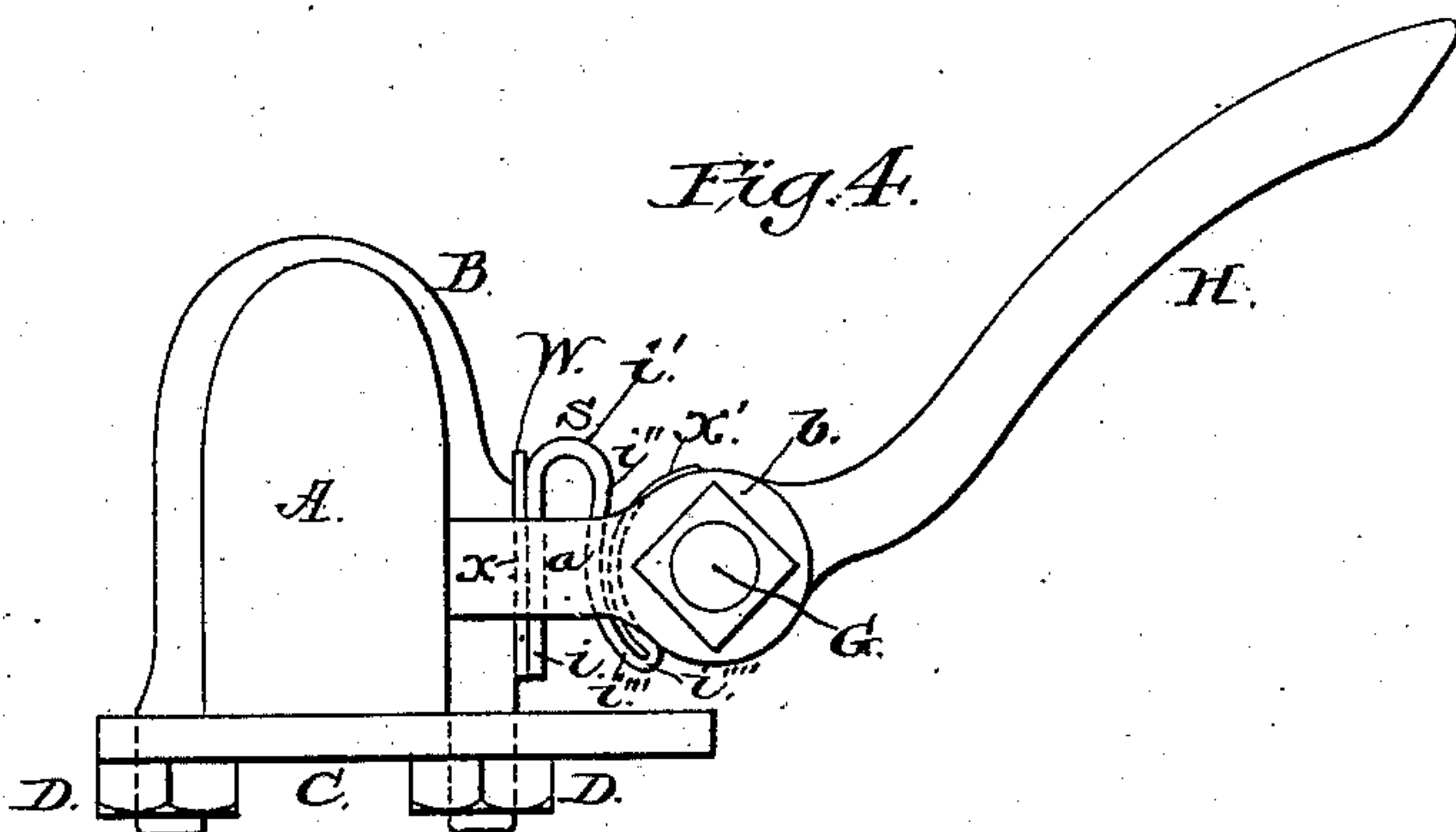
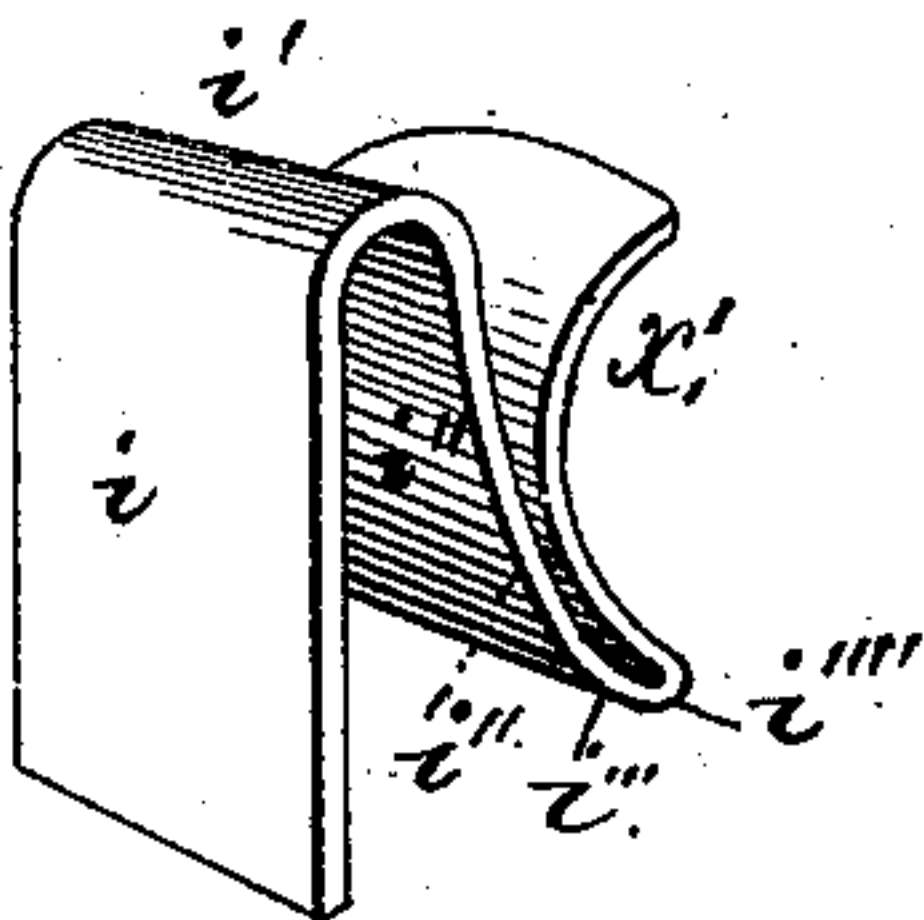


Fig. 2.



WITNESSES

John A. Ellis.
F. J. Masi.

INVENTOR

John Fasig
by *E. W. Anderson*
his ATTORNEY

UNITED STATES PATENT OFFICE.

JOHN FASIG, OF WEST SALEM, OHIO.

THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 224,667, dated February 17, 1880.

Application filed January 12, 1880.

To all whom it may concern:

Be it known that I, JOHN FASIG, of West Salem, in the county of Wayne and State of Ohio, have invented a new and valuable Improvement in Anti-Rattlers for Thills; 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 vertical longitudinal section of my improved thill-coupling. Fig. 2 is a perspective view of the anti-rattler spring. Fig. 3 is a detail view of the wedge; and Fig. 4 is a side view of the coupling, showing the wedge in position.

This invention has relation to improvements in that class of thill-couplings wherein an anti-rattling spring is interposed between the eye of the thill-iron and the shackle for the purpose of preventing jangling; and the nature of the invention consists in a spring of steel, having a broad bearing against the shackle, a broad bearing against the eye of the thill-iron, and a web connecting the said bearings, the spring being irregularly S-shaped.

It also consists in a wedge interposed between the bearing and the shackle, whereby any looseness of the said spring may be taken up, as will be hereinafter more fully set forth.

In the annexed drawings, the letter A indicates the axle; B, the shackle, having the projecting parallel arms *a*; C, the shackle-plate passing over the ends of the shackle, and D the nuts applied upon the ends of said shackle and clamping it around the axle.

The arms *a* have eyes in their ends for the reception of a bolt, G, that confines the thill-iron H to the shackle. This iron is provided with a transverse cylindrical eye, *b*, fitting snugly between the arms *a* and vibrating upon the pin or bolt G. This bolt is confined in place in the eyes by a nut applied upon its screw-threaded end.

Between the eye of the thill-iron and the contiguous plane face *x* of the shackle is a spring, S, designed to prevent rattling or jangling of the coupling. This spring is made of steel, and has a plane bearing against the face

of the shackle. It is made of a band or ribbon of steel of suitable thickness, and its bearing *i* against the shackle is rectilinear. From this springs the continuation of the spring, first in curved convex form, as shown at *i'*, with a downward continuation in the interval between the shackle and the thill-iron, lettered *i''*, ending in a curved part, *i'''*, concentric with that of the thill-iron eye. The spring is thence continued upward in a bend, *i''''*, and terminates in a bend, *x'*, concentric with the bend *i'''* and the eye of the thill-iron, and bearing against the latter.

When the thill-iron is put in place the spring is first set between the arms *a* with its bearing *i* against the shackle. The said iron is then introduced between arms *a*, and, being forced back, compresses spring S, when the pin or bolt G is slipped home. In this position the spring S is compressed and effectually prevents rattling, the curved portion *x'* bearing against the eye of the thill and the straight part *i* against the shackle, as shown. This spring has a sufficiently broad bearing on the thill-eye not only to prevent rattling, but also, by its strength, to hold the thills at any desired elevation.

Should this spring become weakened by long use, from wear, or other cause of deterioration, its original strength may be restored by introducing a wedge, W, between its bearing *i* and the shackle.

The spring S is made of a blank, of which the bearing part *i* has parallel edges, the rest gradually tapering to an obtuse point or end.

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

1. In a thill-coupling, the combination, with the shackle B, having the parallel arms *a* and the plane vertical bearing *x* between said arms, and the thill-iron H, having the cylindrical eye *b*, of the spring S, having the straight portion *i*, bearing against surface *x*, the curved continuation *i'*, the downward extension *i''* in the space between the shackle and thill-iron eye, the curved portion *i'''* at the lower part of said extension, bent upward at *i''''* and terminating in an outwardly-concave part, *x'*, bearing against the thill-eye, substantially as specified.

2. The combination, with the shackle B, the

thill-iron H, vibrating thereon, and the spring S, having the plane portion *i*, upwardly-convexed bend *i'*, downward extension *i''*, bend *i'''*, and concave bearing *x'*, of the wedge W,
5 designed to be forced between the shackle B and part *i* of spring S, substantially as specified.

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

JOHN FASIG.

Witnesses:

A. WANNAMAKER,
J. W. APP.