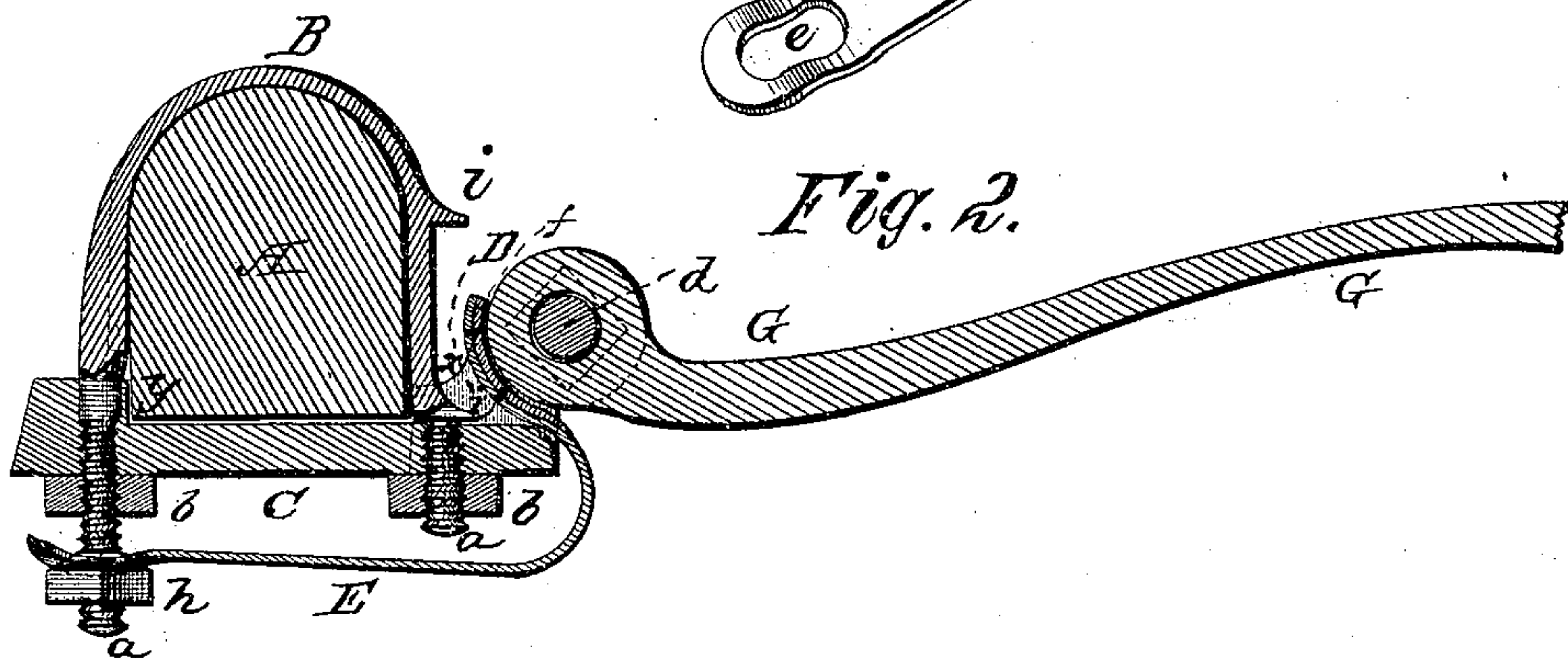
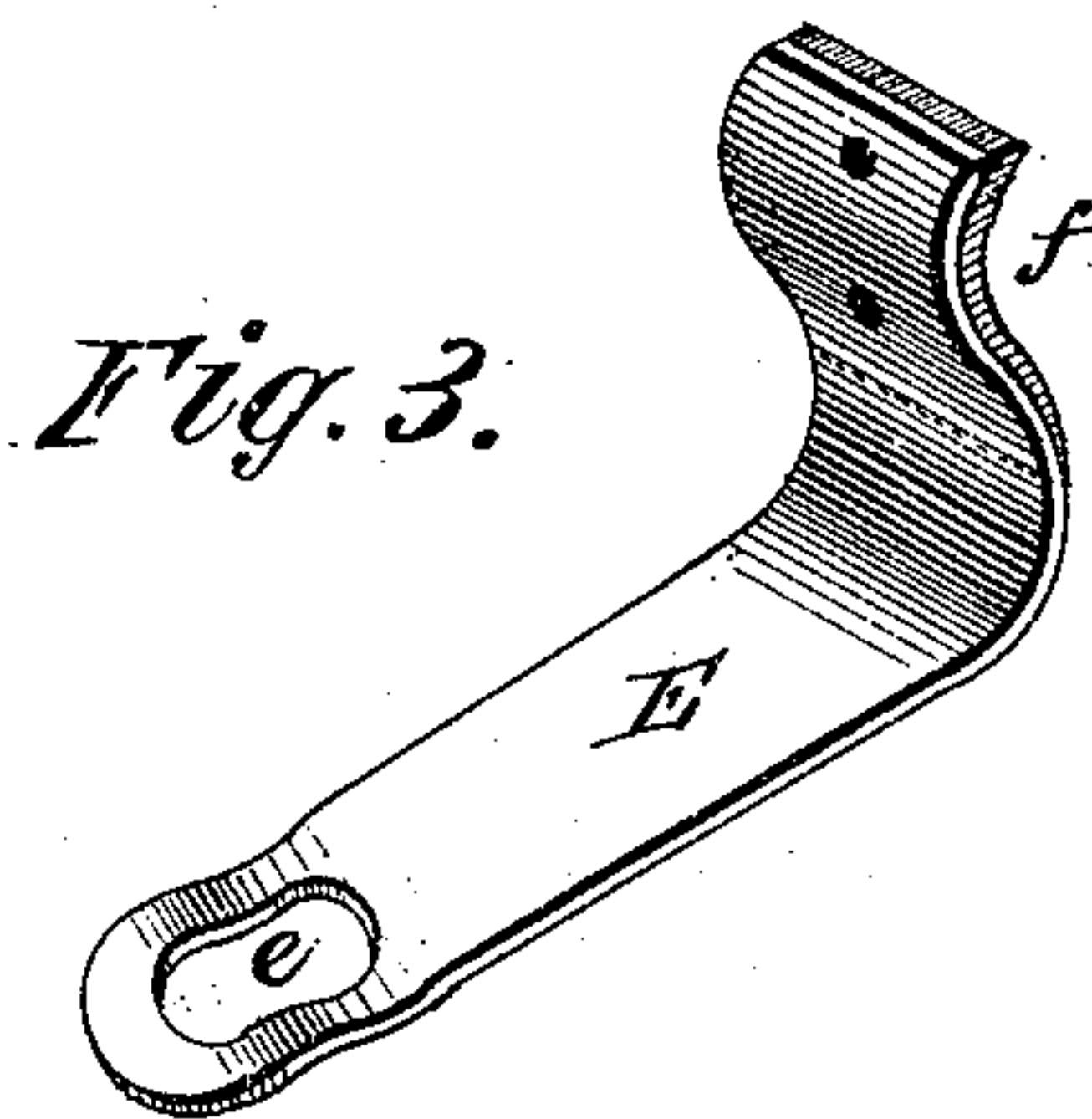
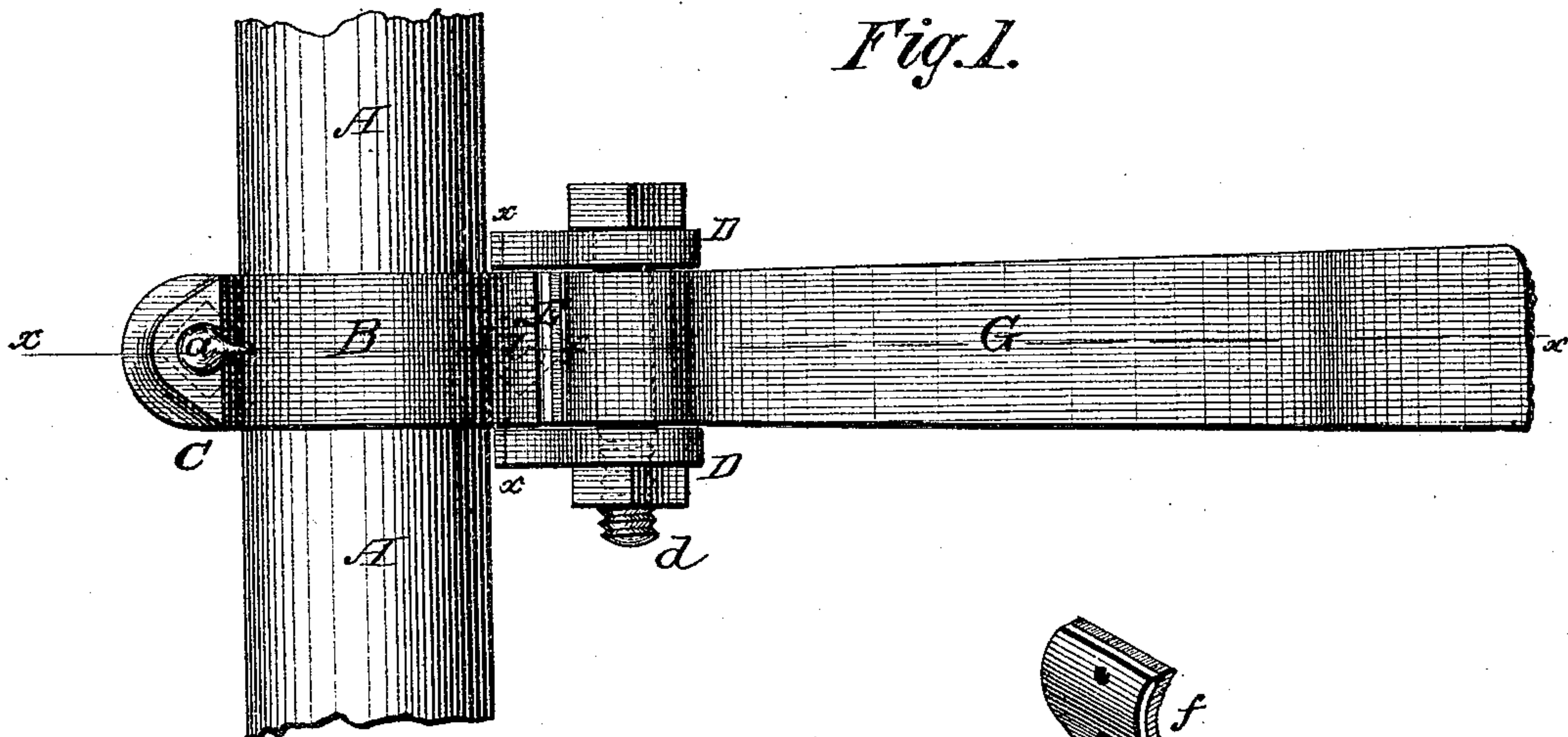


H. J. ILES.
THILL COUPLING.

No. 181,848.

Patented Sept. 5, 1876.



Witnesses:

P. C. Dieterich.
F. H. Duffy

Inventor:

Henry J. Iles

Per: *C. H. Watson & Co.* Attorneys.

UNITED STATES PATENT OFFICE.

HENRY J. ILES, OF SEYMOUR, CONNECTICUT, ASSIGNOR TO HIMSELF AND
RAYMOND FRENCH, OF SAME PLACE.

IMPROVEMENT IN THILL-COUPINGS.

Specification forming part of Letters Patent No. 181,848, dated September 5, 1876; application filed
August 9, 1876.

To all whom it may concern:

Be it known that I, HENRY J. ILES, of the town of Seymour, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Thill-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 which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form 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 the annexed drawing, Figure 1 is a plan view of my invention. Fig. 2 is a longitudinal section of the same. Fig. 3 is a perspective view of a spring used therein.

A represents the axle, over which the clip B is passed. This clip is at both ends formed with the usual bolts *a a*, which pass through the bottom plate C, and fastened by nuts *b b*. At the front end of the plate C are forwardly-projecting ears D D, between which the thill-iron is pivoted by means of the bolt *d*. The ears D D form solid shoulders *x x*, against the front side of the axle, and on the rear side of axle the bottom plate C is formed with a solid shoulder, *y*, bearing against the same. These shoulders may extend any suitable distance up both sides of the axle and take all the strain off from the clip-bolts. The rear clip-bolt *a* is extended a suitable distance, as shown, and passes through an elongated slot, *e*, in the rear end of a spring, E, the front end of which is curved upward between the ears D D, and then forward, to bear against the eye of the thill-iron

G. On the front end of the spring E is fastened a piece of leather, *f*, to prevent the metal of the spring from coming in contact with the thill-iron. The under side of the spring E around the slot *e* is beveled, as shown, and a correspondingly-shaped nut, *h*, is screwed upon the rear bolt *a*, to fasten the spring. By running this nut up and down on said bolt the tension of the spring on the thill-iron is easily regulated, and by the beveling of the spring and the peculiar construction of the nut, the nut is held from working loose. On the front end of the clip B are formed shoulders *i i*, for the purpose of holding rubber in, when such is desired to be used.

This thill-coupling is simple in construction, and yet strong and durable, and not liable to get out of order, no rattling of the coupling, and the thills may be held in an upright position simply by the friction of the springs.

I am aware of Patent No. 87,501, dated March 2, 1869, and I do not claim anything shown therein; but

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

The spring E, with single slot *e*, and beveled on the under side around said slot, and the correspondingly-shaped nut *h*, in combination with the rear clip-bolt, clip B, and plate C, all constructed and arranged as and for the purpose set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

HENRY J. ILES.

Witnesses:

S. HART CULVER,
JOSHUA KENDALL.