

P. B. HIRSCH.  
Tug-Coupling.

No. 216,410

**Patented June 10, 1879.**

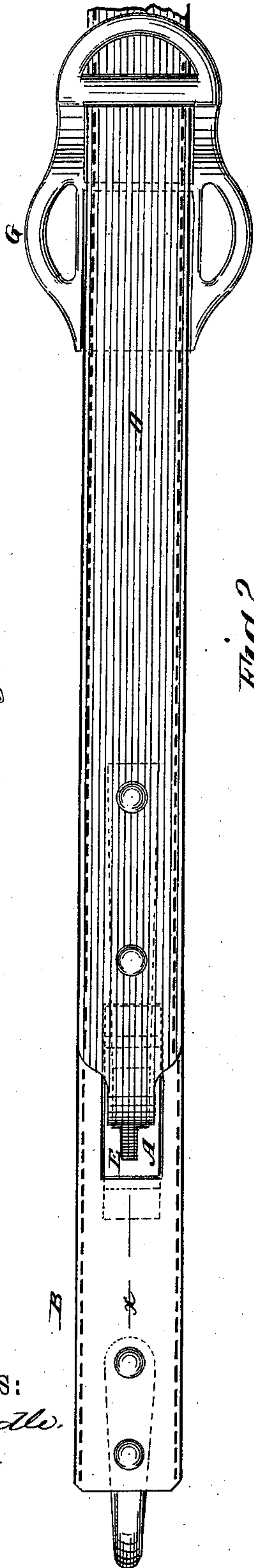
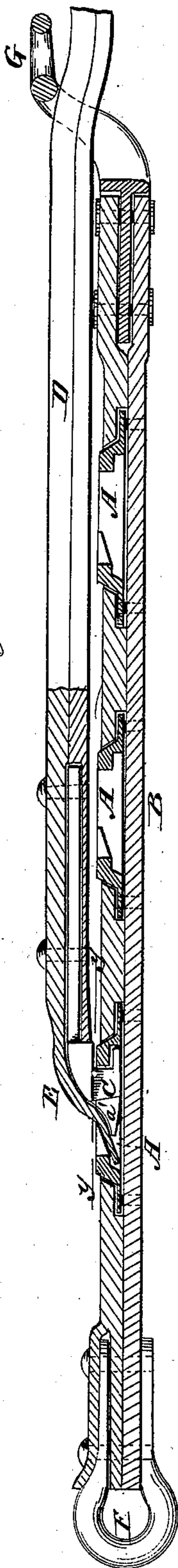


Fig. 1.



*Fig. 2*

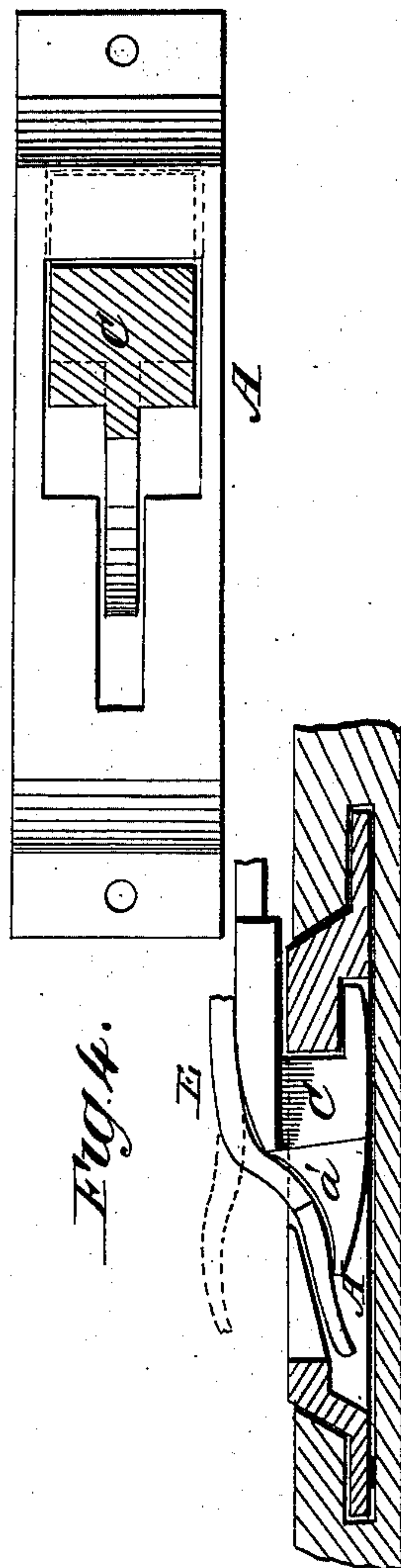


Fig. 4.

WITNESSES:

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# UNITED STATES PATENT OFFICE.

PETER B. HIRSCH, OF DENVER, COLORADO.

## IMPROVEMENT IN TUG-COUPPLINGS.

Specification forming part of Letters Patent No. **216,410**, dated June 10, 1879; application filed March 5, 1879.

*To all whom it may concern:*

Be it known that I, PETER B. HIRSCH, of Denver, in the county of Arapahoe and State of Colorado, have invented a new and Improved Tug-Coupling, of which the following is a specification.

Figure 1 is a plan of the tug-coupling. Fig. 2 is a longitudinal section on line *xx* of Fig. 1. Fig. 3 is a section on line *yy* of Fig. 2. Fig. 4 is a sectional elevation of box A and tongues C and E.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish a cheaper, stronger, more durable, and more easily adjusted tug-coupling than any now in use.

In the drawings, A represents one or more metal boxes, firmly embedded and riveted in the cockeye portion B of the coupling, and these boxes are slotted and recessed so as to receive and hold the hooked metal tongue C, that is secured to the end of the trace portion D of the coupling. I substitute this device for the buckle or buckles in general use for this purpose.

It will be seen that the tongue C, whose shank is firmly riveted in the part B, turns downward and inward, forming a strong hook, and that it is also provided with a spur, *a'*, that has a curved upper edge.

When the tongue is inserted into the box A, that is recessed and slotted to conform to its shape, and pulled so that the hook shall engage in a recess of A, the adjustment is complete; and then the flexible leather tongue E, which is a prolongation of the upper side of D, is thrust down into the widest part of the slot in A over the spur *a'*, so as to prevent accidental disengagements of the hook.

In the drawings, F represents the cockeye of the tug-coupling, and G the retaining loop or billet.

By the use of my device the punching of holes in the trace for the reception of the buckle-tongue is avoided, and hence much strength gained. Loops on the hame-tug for the reception of the trace ends are dispensed with, and there are no trace ends to hang down or stick out and present an unsightly appearance; but, on the contrary, they are always properly and firmly secured in their places.

Because there need be no loose ends when my coupling is used, the traces can be made from eight to ten inches shorter than buckling-traces, and consequently will be cheaper to construct.

I am aware that other couplings have been devised that bear some resemblance to mine—such, for instance, as those in which the part B is one piece of metal covered with leather and having sockets fashioned in it. But the objections to these are that they are stiff and heavy, and do not hang well, and that they are easily broken by the accidental falling of a horse upon them.

In my coupling the metal boxes are set at some distance apart from each other, so that the part B retains all needed flexibility, while its strength is increased.

If one part of my coupling breaks by chance the broken part can be replaced at small cost; but if the one piece of metal in the other style of coupling breaks the whole hame-tug must be replaced. This coupling, too, is the only one with which I am acquainted, excepting the buckle-couplings, that can be coupled or uncoupled without twisting or turning the trace, or bringing it to an incline or at right angles with the hame-tug.

These are a few of the advantages that my improved coupling possesses over all others with which I am acquainted, and their importance will readily be understood by all acquainted with the use or manufacture of harness.

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

1. The metal box A, slotted and recessed, as shown and described, and the metal hooked tongue C, provided with the spur *a'*, having a curved upper edge, in combination with the parts B D of a tug-coupling, substantially as and for the purpose set forth.

2. The part D of a tug-coupling, provided with the metal tongue C and the leather tongue E, in combination with the part B, provided with the metal box A, substantially as and for the purpose set forth.

PETER B. HIRSCH.

Witnesses:

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