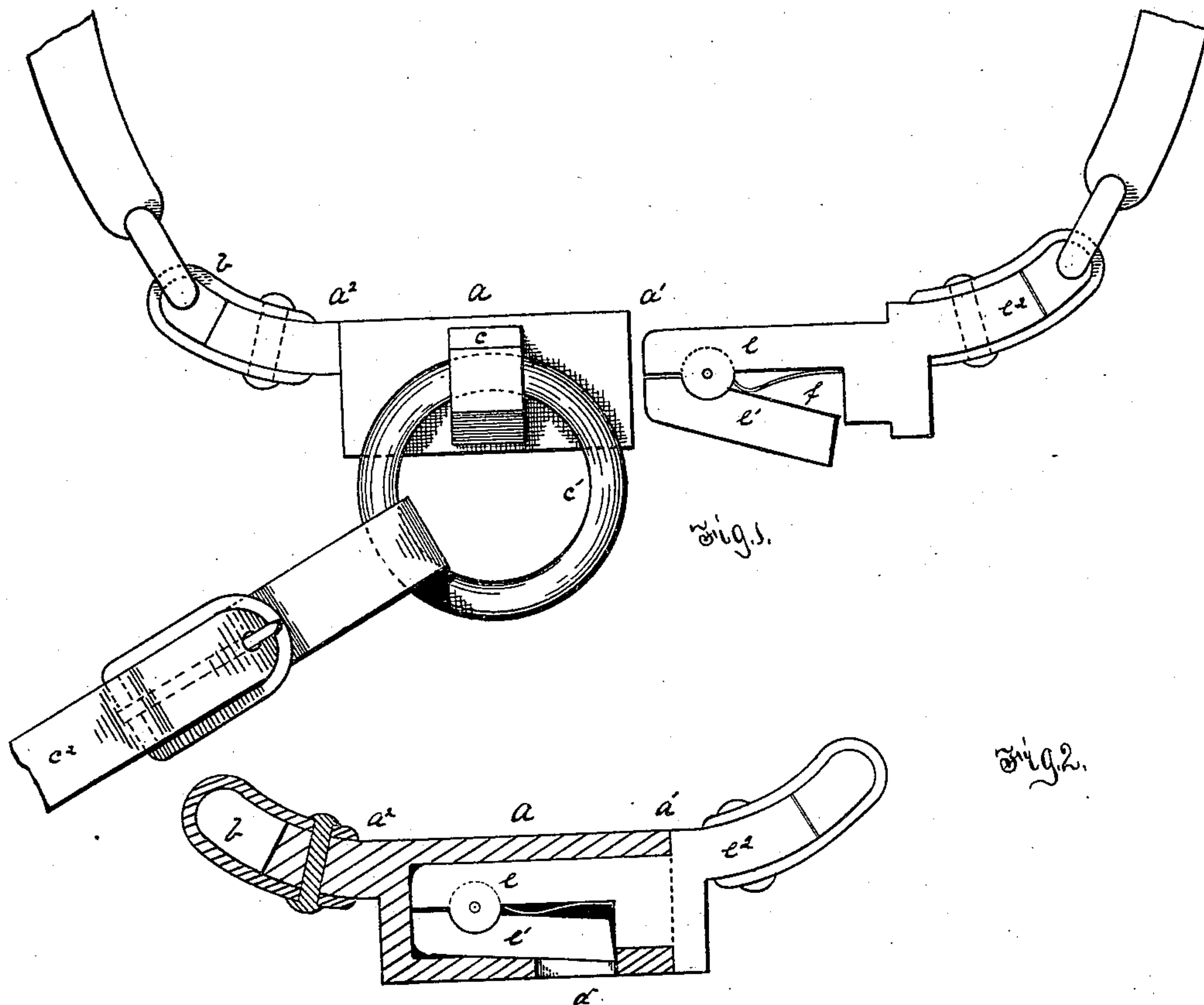


(No Model.)

R. HUDIE.
Harness Fastening or Coupling.

No. 236,435.

Patented Jan. 11, 1881.



Witnesses.
John Smith
L. C. Titler.

Inventor.
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UNITED STATES PATENT OFFICE.

ROBERT HUDIE, OF ALLEGHENY, PENNSYLVANIA.

HARNESS FASTENING OR COUPLING.

SPECIFICATION forming part of Letters Patent No. 236,435, dated January 11, 1881.

Application filed October 20, 1880. (No model.)

To all whom it may concern:

Be it known that I, ROBERT HUDIE, of Allegheny city, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Harness Fastenings or Couplings; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, forming a part of this specification, in which:—

Figure 1 is a plain view of my improved coupling as adapted to harness-hames. Fig. 2 is a sectional view of the same.

Like letters of reference refer to like parts wherever they occur.

My invention relates to an improvement in fastening for harness-hames; and it consists in a snap or coupling composed of an open-ended box or case having a slot near one end thereof, in combination with a tongue having a bit pivoted near its extremity, and adapted to fall and engage in the slot of the box when the tongue is introduced, and also in details of construction, all as will hereinafter more fully appear.

It is especially adapted and constructed to be used in connection with fire-engines, hose-carriages, &c., where a saving of time in placing the harness on the horse is an object to be secured.

I will now describe my invention, so that others skilled in the art may manufacture the same.

In the drawings, *a* represents a rectangular metal box, open at one end, *a'*. From the other end of the box *a* extends a projection or lug, *a²*, curving slightly backward, so as to conform to the shape of the horse's collar. To the outer end of the lug *a²* is riveted a U-link, *b*, which passes through the eye of one of the hames. On the front of the box *a* is a lug, *c*, through which passes a ring, *c'*, through which ring the breast-strap *c²* passes to the tongue of the vehicle. On the lower side of the box *a*, near the open end *a'*, is a slot, *d*, which extends through to the inside of the box *a*. Fitting inside of the box *a*, through the open end *a'*, is a tongue, *e*, having a bit, *e'*, pivoted near to the end of the tongue. The other end of the bit is held apart from the tongue by the spring *f*, so that it projects in the slot *d* below the surface of

the inside of the box *a*. From the end of the tongue *e*, outside of the box *a*, extends a projection, *e²*, similar to the projection *a²* on the box *a*. To this projection *e²* is riveted a U-link, which passes through the eye of the other hame.

The hames are coupled together by inserting the tongue *e* on one of the hames into the opening *a'* in the end of the box *a* on the other of the hames. The spring *f*, while it keeps one end of the bit *e'* apart from the tongue *e*, keeps the other and front end of the bit close against the tongue, so that before the tongue is inserted in the box *a* the tongue and bit together are wedge-shaped, and the front end passes easily into the box when past the pivotal point *e*. The other end of the bit is pressed close against the side of the tongue *e* until the end of the bit passes the slot *d*, when it drops down or is forced down by the spring *f*, and prevents the tongue *e* from being withdrawn from the box *a*, and makes the coupling secure. The bit *e'* may easily be disengaged and the tongue *e* withdrawn by pressing with the finger upon the extended end of the bit *e'* through the slot *d*. The spring *f*, although a safeguard, is not absolutely necessary, as, the bit *e'* being on the lower side of the tongue *e*, the end would drop of its own weight as soon as it passes the edge of the slot *d*.

When applied to harness used in fire service, the hames being hung above the pole of the engine, the horse is driven under the harness, the hames are pulled down upon the collar of the horse, and are fastened securely by snapping the tongue *e* into the box *a*, the breast-strap being already fastened to the hames through the ring *c*.

The advantages of my invention are, that the hames can be fastened together securely, so that they will not pull apart in a very short period of time, and can be easily unfastened when desired. The breast-strap can remain fastened to the hames and the pole of the fire-engine, thereby saving material time in harnessing the horses. The coupling cannot be unfastened by the horse, as is the case with certain of the couplings for hames now in use.

This coupling, although designed for the hames, may be used on other portions of the harness.

I am aware that couplings or fasteners for hames, &c., have been heretofore devised wherein a tongue having a spring-catch has been used in conjunction with a box or case 5 notched upon its interior; but such devices are difficult to disengage; and I am also aware that a notched tongue has been used in conjunction with a shell or case having a thumb-latch or spring-catch projecting through or beyond the box; but such devices are too liable 10 to be accidentally disengaged. Therefore I do not claim such devices; but,

Having thus described my invention, what I claim, and desire to secure by Letters Patent, 15 is—

1. A snap or coupling for harness, composed of a tongue having a bit pivoted near its ex-

tremity, in combination with a box open at one end for the reception of the tongue and slotted to receive the pivoted bit, substantially as and 20 for the purpose specified.

2. The combination, in a snap or coupling for harness, of a box, *a*, having an open end, *a'*, and slot *d*, a tongue, *e*, having a pivoted bit, *e'*, and a spring, *f*, between the tongue and 25 bit, substantially as and for the purpose specified.

In testimony whereof I have hereunto set my hand.

ROBERT HUDIE.

Witnesses:

JAMES H. PORTE,
JOHN K. SMITH.