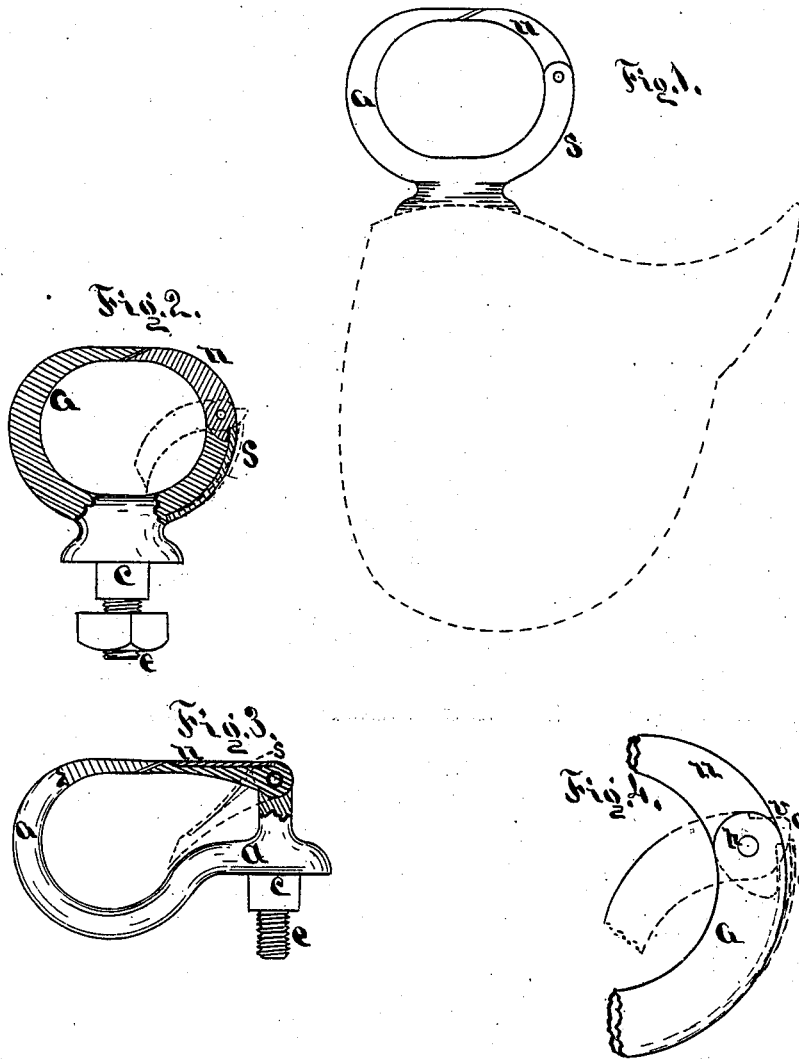


D. H. CLIPPINGER.
Check-Rein Hook.

No. 207,797.

Patented Sept. 10, 1878.



Witnesses
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UNITED STATES PATENT OFFICE.

DAVID H. CLIPPINGER, OF BRIGHTON, CALIFORNIA.

IMPROVEMENT IN CHECK-REIN HOOKS.

Specification forming part of Letters Patent No. 207,797, dated September 10, 1878; application filed April 19, 1878.

To all whom it may concern:

Be it known that I, DAVID HICKS CLIPPINGER, of the town of Brighton, county of Sacramento, State of California, have invented a new and useful Improvement in Hooks or Clips for the Check-Rein of Harnesses, of which the following is a specification:

The invention relates to an improvement in check-rein hooks for harness; and consists of a hook for check-reins with an oscillating tongue pivoted to the hook and provided with a shoulder and spring operating to cause the tongue to snap open to admit the rein and snap closed to keep the rein from being thrown cut.

Referring to the accompanying drawings, Figure 1 is an elevation of a check-rein hook embodying my invention, mounted on a harness-saddle, shown in dotted lines. Fig. 2 is a sectional elevation of the hook shown in Fig. 1.) Fig. 3 is a sectional elevation of another form of the same. Fig. 4 is a detail.

Fig. 1 shows a side elevation of a check-rein hook, *a*, connected to the saddle shown in dotted lines.

Fig. 2 is a sectional elevation of the hook shown in Fig. 1, showing *a*, the ring proper; *c*, the shank, provided at its lower end with the screw *e*, and which connects the hook to the saddle. *u* is the tongue, that swings down, as shown in dotted lines, thus opening the hook or ring, so that the rein can pass in or out. *s* is a spring, that holds the tongue *u* up in its place, making the ring continuous, as shown in Fig. 1.

Fig. 3 shows another form of a hook, similar in its operation to Fig. 1, but differing only in form and construction. In it the spring *s* is made a part of the tongue *u*, so arranged as to act upon the joint of the parts *u* and *a*, so as to hold the tongue *u* in its place, as shown in Fig. 3.

Fig. 4 is a detail of part of the ring *a*, tongue *u*, spring *s*, and the joint which connects *a* and *u* together, showing the action of the spring *s* in holding the tongue *u* in its place by means of the shoulder or corner *O*, which is a part of the tongue *u* in the case of Figs. 1 and 2, and a part of the ring *a* in case of Fig. 3. In each case the spring *s* acts upon the side *v*, which, being at such an angle from the pivot *p* as to cause it to act in the capacity of a lever against which the spring *s* presses, causes the upward pressure in the tongue *u*, thus keeping it in contact with the ring *a* and making the ring continuous.

When the tongue *u* is pressed downward, as shown in dotted lines in Figs. 2, 3, and 4, the opposite side of *o* comes in contact with the spring *s*, thereby imparting to *u* a strain in the opposite direction, causing *u* to press downward and keep in position, as shown in dotted lines.

In construction the spring *s* may be fixed in its place by means of screws, rivets, or otherwise; but I prefer to secure it by having a recess cast or cut for the spring to lie in, and having the walls of the recess riveted or forced over the fixed end of the spring, thereby rigidly securing it in its place.

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

In a harness check-hook, the combination, with the tongue *u*, pivoted to the hook at *p* and provided with the shoulder *o*, of the spring *s*, whereby the tongue *u* is held firmly in either opened or closed position, substantially as and for the purposes stated.

DAVID HICKS CLIPPINGER.

Witnesses:

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