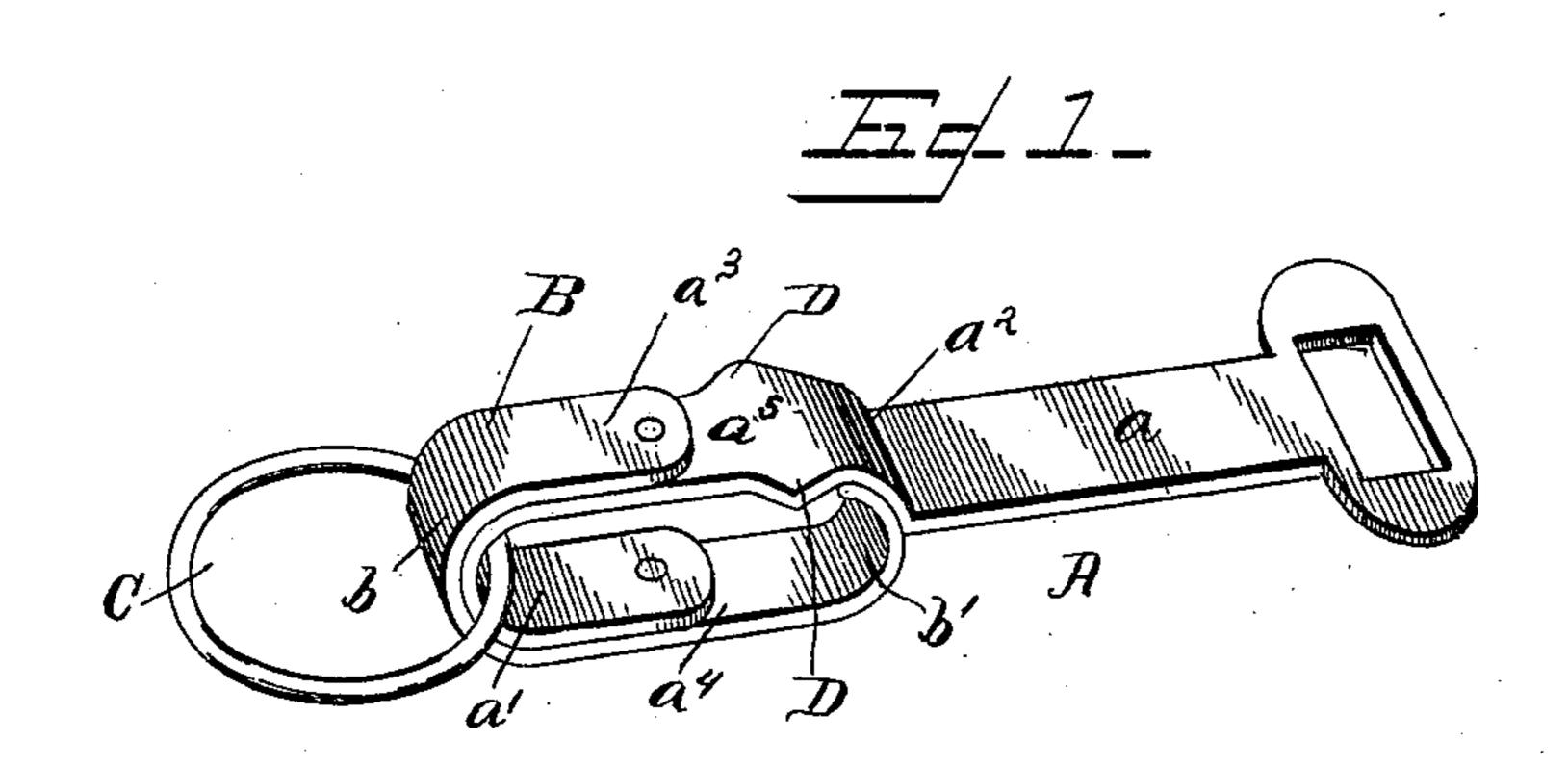
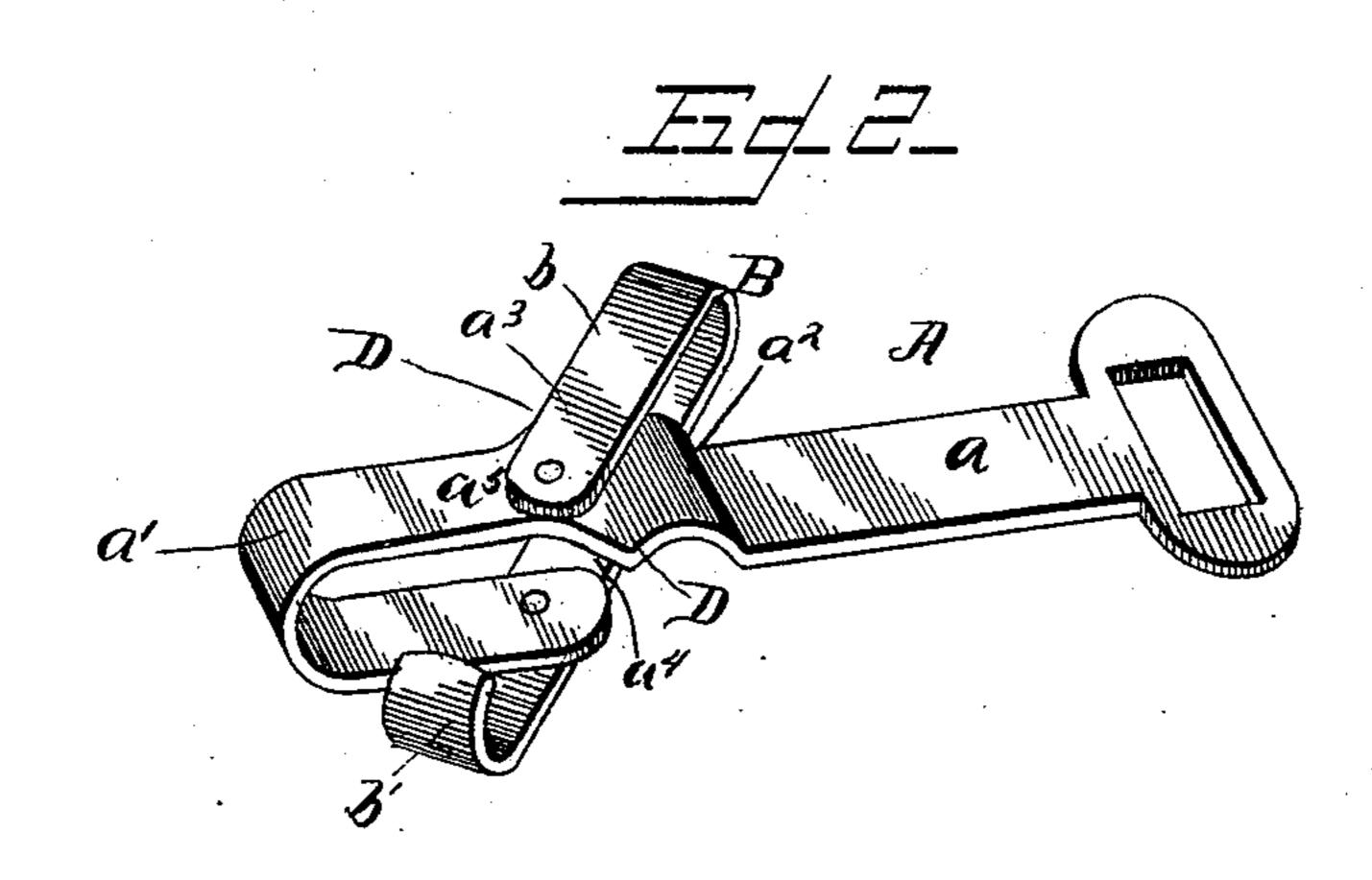
(No Model.)

## C. SMITH. SAFETY HOOK FOR HARNESS.

No. 405,055.

Patented June 11, 1889.





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By his Attorneys
Cathorneys

## United States Patent Office.

CHARLES SMITH, OF ROGERS, ARKANSAS.

## SAFETY-HOOK FOR HARNESS.

SPECIFICATION forming part of Letters Patent No. 405,055, dated June 11, 1889.

Application filed January 17, 1889. Serial No. 296,586. (No model.)

To all whom it may concern:

Be it known that I, Charles Smith, a citizen of the United States, residing at Rogers, in the county of Benton and State of Arkansas, have invented a new and useful Improvement in Snaps or Safety Hooks for Harness, of which the following is a specification.

My invention relates to a snap-hook or safety-hook for harness, &c.; and it consists in a certain novel construction and combination of devices, fully described hereinafter in connection with the accompanying drawings, and specifically pointed out in the appended claims.

In the drawings, Figure 1 is a perspective view of the hook with a ring engaged therein. Fig. 2 is a similar view showing the manner of engaging the ring therewith.

Referring by letter to the drawings, A designates the hook, having the shank a and hooked portion a', the said parts being connected by the offset  $a^2$ , which projects over the mouth of the hooked portion, in order to bring the shank in line with the center of the

25 hooked portion. B designates a yoke, which is pivoted to the hook; and it consists of the loop b and the curved closing-arm b'. The loop is slightly larger than the hooked portion a' and passes 3 under the latter, and the upwardly-extending sides  $a^3 a^4$  of the loop are pivoted, respectively, to the rear side of the hooked portion and the free end thereof, whereby the lower end of the loop may be swung out of align-35 ment with the said hooked portion, as shown in Fig. 2. The side  $a^4$  of the loop (which is pivoted to the free end of the hooked portion) is extended to form the above-mentioned closing-arm b', the upper curved end of which fits 40 under and bears against the offset or shoulder  $\alpha^2$ , thereby completely closing the mouth of the hooked portion a'. When the lower end of the loop is swung laterally, the free end of the closing arm is swung out of align-45 ment with the shank of the hook to enable

the ring C to be engaged with the hook.

The back  $a^5$  of the hook is provided just below the offset or shoulder  $a^2$  with the lat-

eral ears or projections D D, over which the free end of the closing-arm moves when the 50 latter is swung laterally, and therefore, in order to swing the free end of the closing-arm clear of the said ears or projections, the latter must be inclined slightly downward, as shown in Fig. 2.

The advantage in this construction is that the ring cannot be detached when the yoke is only slightly displaced by accident or otherwise, but the yoke must be turned through more than a quarter-revolution.

Having thus described the invention, I claim—

1. The combination, with a hook proper, of a swinging loop B, having its two arms pivoted, respectively, to the back and to the free 65 end of said hook on aligned pivots at right angles to the length of the hook, one of said arms being provided with an extension b', adapted to close the mouth of the hook when in operative position, substantially as degree b'.

2. The combination, with a hook having a curved offset  $a^2$  extending partially over its mouth, of the loop having its arms pivoted, respectively, to the back and free end of the 75 hook, and a closing-arm formed by an extension of one arm of the loop and provided with a curved free end to fit beneath the offset or shoulder  $a^2$ , substantially as specified.

3. The combination, with a hook having its 8c back  $a^5$  provided with the lateral ears or extensions D D, of the loop embracing the hook and having its arms pivoted, respectively, to the back and free end of the hook, and the closing-arm connected to one arm of the loop 85 and traveling at its free curved end over the said ears or extensions D D, substantially as and for the purpose specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in 90 presence of two witnesses.

CHARLES SMITH.

Witnesses:

THOMAS McDow, J. C. Pennington.