

(No Model.)

A. J. McCORD.

COMBINED SNAP HOOK AND BUCKLE.

No. 395,663.

Patented Jan. 1, 1889.

Fig I.

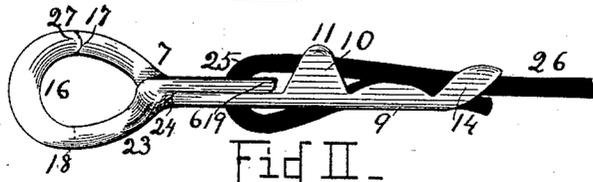


Fig II.

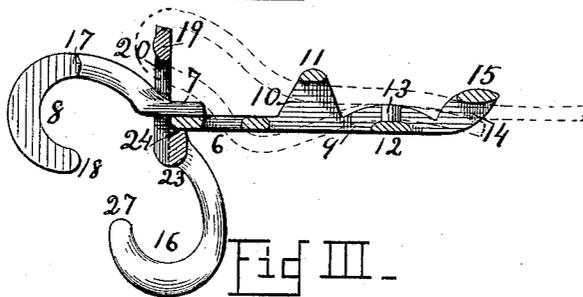


Fig III.

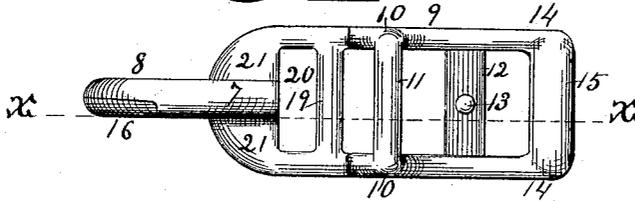


Fig IV.

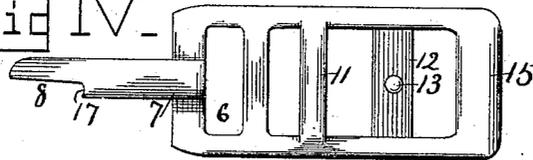
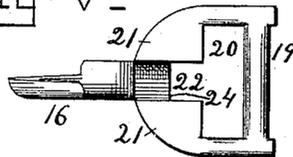


Fig V.



Witnesses.

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UNITED STATES PATENT OFFICE.

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COMBINED SNAP-HOOK AND BUCKLE.

SPECIFICATION forming part of Letters Patent No. 395,663, dated January 1, 1889.

Application filed June 23, 1888. Serial No. 277,942. (No model.)

To all whom it may concern:

Be it known that I, ANDREW J. McCORD, a citizen of the United States, residing at Louisville, in the county of Jefferson and State of Kentucky, have invented certain new and useful Improvements in Combined Snap-Hooks and Buckles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to that class of attachments for harness coming under the general head of "snap-hooks;" and the object of the invention is, first, a hook so constructed that it shall perform the usual service of a snap-hook without the aid of a spring, and so that the strap upon which it is hung shall by its normal pulling action tend to close the hook and to hold the two parts of the hook together without the aid of a pivot-pin; second, a hook comprising two parts so jointed that they may be readily cast in the desired form to be fitted together with little or no machine-work, the joint having the action of a hinge-joint, but without a pivot-pin; third, a hook comprising two parts halved together, each part being a complete hook, and the two when closed together forming a complete loop to hold a ring or strap, and, further, so jointed that the two hooks when in service tend to hold together, requiring a little effort to separate them; and, fourth, a hook comprising two complete hooks hinged together without a pivot-pin, one of the hooks having a buckle portion, whereby the device may be permanently hung upon the strap which serves to hold the two hooks together.

To this end my invention consists in the construction and combination of parts forming a combined snap-hook and buckle, hereinafter described and claimed, reference being had to the accompanying drawings, in which—

Figure I is a side elevation of my invention complete hung to a strap as in service. Fig. II is a vertical section on the line *xx*, Fig. III, the hooks being wide open and the strap shown in dotted lines. Fig. III is a plan view of the complete hook and buckle. Fig. IV is a plan view of one hook and the buckle, which

is cast integral therewith; and Fig. V is a plan view of the removable hook.

6 represents the loop portion of one hook, whose shank 7 projects from the face thereof, and whose body extends forward from the shank, forming the hook proper, 8, of a little more than a half-circle. 9 represents the frame of the buckle, extending back on a level with the loop 6 and provided with side posts, 10, across the tops of which a bar, 11, extends. 12 is a cross-bar between the sides of the buckle-frame, provided with a stud, 13, which rises from the middle of the bar 12 as a fixed tongue to the buckle. 14 represents two slanting posts or braces, across the top of which a bar, 15, extends a little lower than the plane of the bar 11.

The frame 9, posts 10, bars 11, 12, and 15, the stud 13, and the braces 14 comprise the buckle portion of this device, which portion is all cast in one piece with the loop 6 and the hook 8. 16 represents the hook proper of the removable hook, corresponding to the hook 8, with which it mates, and to which it is halved from the point 17 to the point 18, as shown.

19 is the rear cross-bar of the loop 20, and 21 the forward cross bar or plate joining the loop 20 with the shank of the hook 16. This plate is cast with a slot, 22, shaped to receive the shank 7 and to fit neatly thereto when the two hooks are closed together.

Beneath the plate 21 the shank 23 of the hook 16 is provided with a broad shoulder, 24, projecting downward to engage the front edge of the loop 6, on which it turns as a hinge in opening and closing the hooks. The shank 7, fitting neatly but freely in the slot 22, guides the two hooks to approach each other face to face at their halved joint, and the loop 25 of the strap 26 tends to pull the hook 16 to a closed position relative to the hook 8. The distance from the shoulder 24 to the shoulder 17 is a little greater than the distance from the point 27 of the hook 16 to the corresponding shoulder on said hook to shoulder 24, and the same relation exists between the shoulders and the point of hook 8, and each hook end fits into a corresponding cavity in the shoulder of the opposite hook, as shown at shoulder 17, so that the hooks spring to place on closing, and require a little force to start

them open. This keeps them from becoming separated when there is no strap attached to hold them together. The two hooks overlap each other so far that a ring hanging naturally thereby will always engage both hooks and prevent their being opened until the operator raises the ring to clear one end of a hook.

The positions of the three cross-bars 15, 11, and 25 are so related to each other that a strap passing under the first two tends to hold the other down and the hooks closed, and the act of opening the hooks draws the strap forward at the loop 25. To accomplish this the pivotal shoulder 24 of the hooks is below the level of the bar 19, and the plane of the lower faces of the cross-bars 11 and 15 is nearly level with the upper face of the bar 19 when the hooks are closed, and opening the hooks raises the bar 19 above the said plane.

The forward end of the strap 26 is secured to the buckle by being passed forward beneath the bar 15, thence over the stud 13 and under the bar 11, thence downward through the loops 20 and 6, and thence backward over the bar 12; and a hole in the strap is placed upon the stud 13. The overlying portion of the strap always tends to hold the end of the strap down upon the stud, so that it cannot be pulled off in service, and yet the bar 15 is far enough to the rear to permit the end of the strap to be easily raised and removed by hand when desired.

This combined snap-hook and buckle may be finished in any style to suit the taste of the purchaser.

The construction described, whereby it is cast with a hinge-joint without requiring machine-work, renders it very cheap; its overlapping semicircular hooks, springing together, prevent the loss of parts, and the combination with the hooks of the fixed-tongued buckle for securing the strap and for guiding the strap to close the hooks, and to hold them closed while in service, renders it an efficient equivalent of a snap-hook, without springs or other perishable mechanical parts.

The cast joint hereinbefore described would be valuable in a snap-hook comprising the

two parts 8 and 16, having the loops 6 and 20 to receive the closing strap.

Having thus fully described my invention, what I think is new, and desire to secure by Letters Patent, is the following:

1. The combination of a buckle-frame provided with the loop 6, having a shoulder, 24, extending the length of its front cross-bar and provided with a hook, 8, having a shank, 7, raised from the face of the said cross-bar, and another hook, 16, provided with a loop, 20, having a shoulder beneath its forward bar, 20, pivotally engaging the shoulder 24, the said forward bar being slotted to receive the shank 7, substantially as shown and described.

2. The combination of the hook 8, having the shank 7, the loop 6, having the shoulder 24 extending the length of its front cross-bar, the said shank being joined to the face of the cross-bar, and another hook, 16, provided with a loop, 20, having a shoulder beneath its forward bar pivotally engaging the shoulder 24, the said forward bar being slotted to receive the shank 7, and the two loops adapted to register with each other, substantially as shown and described.

3. The combination of the hook 16, provided with the cross-bar 19 and a shoulder facing rearward at 24, and the hook 8, provided with a corresponding shoulder at 24, facing forward, and further provided with a buckle at its rear end, comprising the frame 9, the posts 10, the bars 11, 12, and 15, the stud 13 on the bar 12, and the elevated cross-bar 19, the pivotal shoulder of the hooks being below the level of the bar 19 and the plane of the lower faces of the bars 11 and 15 nearly on a level with the bar 19 when the hooks are closed, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

ANDREW J. McCORD.

Witnesses:

T. E. WILSON,
JNO. Y. ROUT.