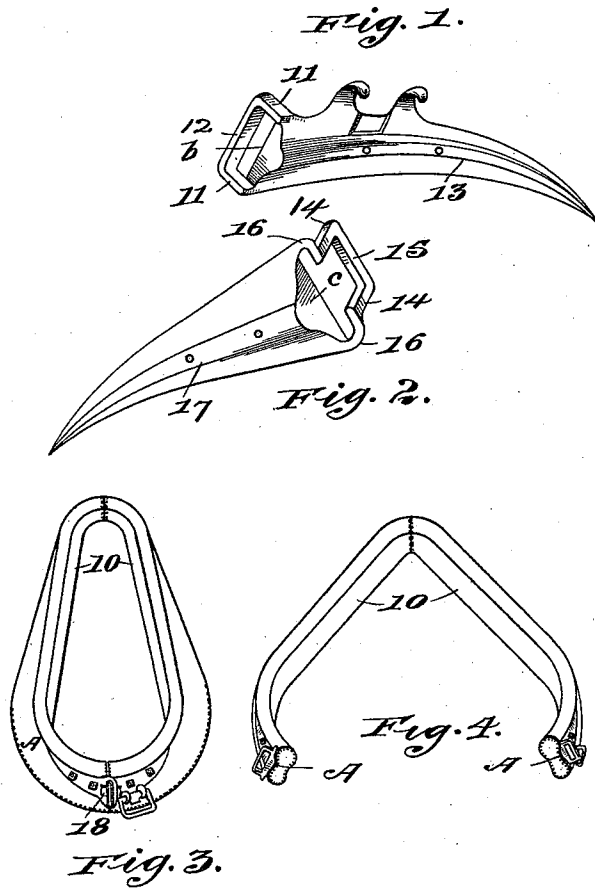


(No Model.)

H. W. COOPER.  
HORSE COLLAR FASTENER.

No. 527,142.

Patented Oct. 9, 1894.



Witnesses,

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# UNITED STATES PATENT OFFICE.

HERBERT W. COOPER, OF MOLINE, ILLINOIS.

## HORSE-COLLAR FASTENER.

SPECIFICATION forming part of Letters Patent No. 527,142, dated October 9, 1894.

Application filed February 11, 1892. Serial No. 421,215. (No model.)

*To all whom it may concern:*

Be it known that I, HERBERT W. COOPER, a citizen of the United States, residing at Moline, in the county of Rock Island and State of Illinois, have invented certain new and useful Improvements in Horse-Collar Fasteners, of which the following is a specification.

My invention relates to that class of horse-collars formed in two parts, hinged together at the top of the collar, so that they may be opened or separated at the bottom or throat portion, and the object of my improvement is to provide a cheap, simple and secure fastening for separable collars.

I am aware that it is old to provide caps at the separable ends of the horse-collar, which in cross section, correspond in form with the lower portion of the horse-collar, that is to say: their sides form a continuation of the groove or cavity which is formed on the outside of a horse-collar for the reception of the hames. Such arrangement of parts is shown in Letters Patent to M. F. McIntire, of date May 25, 1869, No. 90,374; also Letters Patent to E. Webber, of date April 14, 1868, No. 76,858; also Letters Patent to M. T. Hayes, of date May 11, 1880, No. 227,431, and also Letters Patent to M. T. Hayes, of date March 30, 1886, numbered 339,098. In the last device, the greater portion of the shell, is cut away, leaving only one side arranged to fit in the groove or cavity of the horse-collar, and secured thereto in any suitable manner. I am aware that in all of these devices the caps have supported and carried at their meeting ends, the respective fastening devices by means of which these separable collar ends have been secured together. I am also aware that it is old to provide one of the parts of a separable horse collar with a slot and the other with a staple adapted to enter and project through said slot to receive a key, and thus hold the fasteners together. Such construction of parts is shown in Letters Patent to J. A. Sutherland, of date September 22, 1868, No. 82,361; also in Letters Patent to M. T. Hayes, of date May 11, 1880, No. 227,431, and also in Letters Patent to M. T. Hayes, of date, March 30, 1886, No. 339,098. I do not broadly seek to claim any of these features, but confine myself to my specific device.

In the drawings forming part of this specification, Figures 1 and 2, are detail views of

the fastening. Fig. 3 is a perspective view of a horse-collar embodying my invention, 55 closed, and Fig. 4, is a similar view of the same, open.

Similar letters and numerals of reference refer to similar parts throughout the several views. 60

My invention embodies the interlocking of two staples, such staples being respectively secured to a separable end of the horse-collar, one staple however, being so attached to the separable end of the horse-collar as to 65 leave a space at the rear thereof for the insertion through such space of the other staple attached to the other separable end of such horse-collar, so that in operative position, the legs and bow of one pull or operate 70 against the other to prevent the separable ends of the collar from being pulled apart, such staple also being adapted to register to accommodate the hold back or hame strap, thus preventing movement of the separable 75 ends of the collar in opposite directions.

In the drawings, 10 represents the collar which is made in two parts hinged together at their tops and provided at their lower ends with my metallic fasteners which fasteners I 80 will now describe.

A metallic staple, consisting of the legs 11, and the bow 12, is secured at the bottom of its legs to one of the separable ends of the collar, so that such legs project forward of 85 such end, and to do this, I prefer to use a metallic plate 13, formed to fit in the groove A, of the collar, securing such plate to the collar in any suitable manner, and forming the staple integral with such plate; that is, joining 90 the bottom of the legs of such staple to the front end, "b" of such plate, so that the legs of such staple project forward of the front end "b" of such plate. The other metallic staple also consists of the legs 14, and 95 bow 15, with lateral and rearwardly extending bars 16, from the bottom of such legs, which bars are suitably secured at their inner ends to the other separable end of the collar, so that a recess is left at the rear of 100 such staple and between such bars 16, sufficient to accommodate the passage of the legs 11 and bow 12 of the other staple, and in carrying out my invention, I also prefer to use another metallic plate, 17, constructed in the 105 same form as plate 13, and forming said sta-

ple integral therewith; that is, joining the inner ends of the bars 16, to the front end "c" of such plate, so that the staple projects forward of the front end of said plate, leaving a recess or opening in the rear of the staple and between the bars 16.

Figs. 1 and 2 illustrate my method of combining or joining the staples with the plates, and it will be understood the plate 17 will be similarly secured to the other end of the separable collar as described for plate 13. Figs. 3 and 4, illustrate the plates so connected to the collar.

To secure the separable collar together, the bow 12 of the staple, is passed upward through the space between the bars 16, and in the rear of the legs 14 and bow 15, of the other staple, so said staples interlock with each other and the open space between the legs and bow of each register. I then insert the key 18, through such space and thus securely clasp the two parts of the collar together. I have illustrated in Fig. 3, a section of such key 18, so inserted, and in actual practice, I prefer to use the hame strap as such key. The plates 13 and 17 may be constructed in any other desirable form and may be shells substantially in the same form as illustrated in said Letters Patent No. 90,374, heretofore cited with my staples attached or made integral therewith, as my invention consists in the interlocking staples, substantially in the form described and suitably secured to the separable ends of the horse-collar.

I am aware that in Letters Patent issued to Bowers, September 28, 1880, No. 232,590, the separable ends of the collar are held together by means of a dove tail groove in one end adapted to receive a dove tail tongue upon the other end of the separable collar; also that projecting from the bottom ends of each, are staples and when the ends of the collar are brought together and secured by means of the dovetail groove and tongue, such staples abut each other and register, so the hold-back strap may be passed through the same. The function of the dovetail groove and tongue is to prevent the separable ends of the collar from being pulled apart and the function of the staples and strap is to prevent opposite movement of the separable ends in the line of said tongue and groove. I am also aware that in Letters Patent issued to Emerson, March 18, 1890, No. 423,676, the separable ends of the collar have projecting from the bottom, loops or staples, which abut each other when the separable ends of the collar are brought together, and also register, so the hold back or hame strap may be passed through the same, and in order that the loops or staples, and separable ends of the collar may be held so as to abut each other, the legs or uprights of one of the loops or staples have projecting overlapping flanges, adapted to receive therein the legs or uprights of the other loop or staple, and which latter loop or staple has from its bow, or cross piece, lateral pro-

jections adapted to act as stops by being brought in contact with the projecting overlapping flanges of the opposite loop or staple. The function of the overlapping projecting flange is to prevent the separable ends of the collar from being pulled apart, the function of the abutting loops or staple and strap is to prevent opposite movement of the separable ends of the collar in the line of said overlapping projecting flange, and the function of the lateral projections or stops is also to prevent opposite movement of the separable ends of the collar in one direction. I am also aware that in Letters Patent issued to Armstrong, May 10, 1892, No. 474,712 the separable ends of the collar have a coupling or fastening device, one of such ends being provided with a projecting tongue, at the end of which is a rectangular bar at right angles thereto, perforated for the reception of the hame strap, and which is designed in the patent as a box loop—while the other end of the collar is provided with a projecting plate, having at its end also a rectangular bar at right angles thereto, which is also perforated for the reception of the hame strap. Both said bar and plate are provided centrally with a groove or slot adapted to receive the aforesaid tongue, these parts being designated in the patent as a "split box loop" and having a slot to receive the tongue on the other part of the coupling. I do not broadly claim these features, but seek to accomplish the same results by means of a more simple device, less expensive to manufacture, and more effective and certain as to practical results.

My device consists in securing a staple to each end of the separable collar adapted to interlock with each other so that when in an operative position, the legs and bow of one pull or operate against the other to prevent the separable ends of the collar from being pulled apart, such staples also being adapted to register to accommodate the hold back or hame strap, thus preventing movement of the separable ends of the collar in opposite directions.

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

A collar fastener comprising in combination two metal plates adapted to be secured respectively to the separable ends of a horse collar, each of said plates having a staple at its end and projected at substantially right angles from its body, and one of said plates being transversely apertured in the rear of its staple to permit the passage of the other of said staples, whereby the two parts may be interlocked and the legs and bow of one staple pull or operate against the other and the apertures thereof register to accommodate a key to prevent vertical separation of the parts, substantially as described.

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Witnesses:

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