

(No Model.)

S. P. HANEY.
HARNESS BUCKLE.

No. 556,538.

Patented Mar. 17, 1896.

Fig 1.

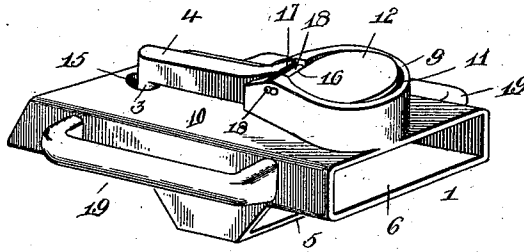


Fig. 2.

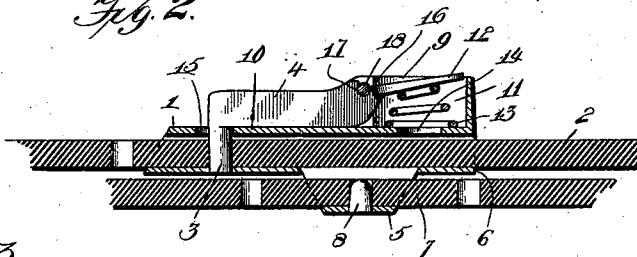


Fig. 3.

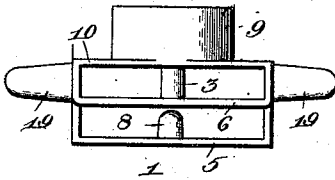


Fig. 4.

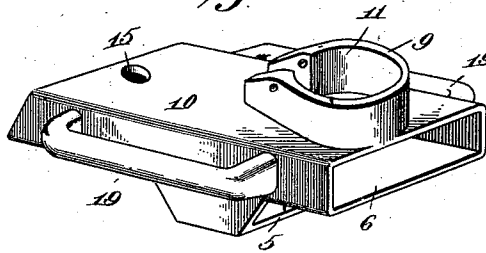
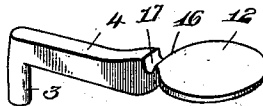


Fig. 5.



Inventor

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UNITED STATES PATENT OFFICE.

STERLING P. HANEY, OF IONE, OREGON.

HARNESS-BUCKLE.

SPECIFICATION forming part of Letters Patent No. 556,538, dated March 17, 1896.

Application filed August 19, 1895. Serial No. 559,818. (No model.)

To all whom it may concern:

Be it known that I, STERLING P. HANEY, a citizen of the United States, residing at Ione, in the county of Morrow and State of Oregon, have invented a new and useful Harness-Buckle, of which the following is a specification.

This invention relates to harness-buckles, and aims to provide a buckle for use in connection with tugs, hame-straps, and other parts of harness, and which will obviate any projecting ends of tongues and avoid the necessity of drawing the straps tighter than is required to engage the tongue with the opening in the strap at the desired point.

Other objects and advantages are contemplated and will be apparent from the accompanying drawings and the following description.

Figure 1 is a perspective view of a harness-buckle constructed in accordance with this invention. Fig. 2 is a central longitudinal section thereof, showing it applied. Fig. 3 is a rear end view of the same. Fig. 4 is a detail perspective view of the buckle-frame, the catch being removed. Fig. 5 is a detail view of the catch.

The buckle-frame 1 is in the form of a box or casing, and the end portion of one of the straps, as 2, passes therethrough and is retained therein by the tongue 3 of the catch 4 entering an opening punched or otherwise provided in the said strap in the usual manner. A cross-bar 5 is arranged between the ends of the buckle-frame and opposite an opening formed in the bottom plate, 6, and this cross-bar is connected at its ends with the sides of the said frame and is placed at a distance from the plane of the bottom plate, so as to provide a space for the passage of a strap, as 7, when the buckle is in use. A projection 8 is formed on the cross-bar 5 and extends across the space formed between the said cross-bar and the bottom plate, 6, and is designed to engage with one of a series of openings in the strap 7, so as to retain the latter in the adjusted position. The opening in the bottom plate, 6, opposite the cross-bar 5 is of greater width than the said cross-bar, so as to facilitate the engagement and disengagement of the strap 7 from the projection 8 in the proper adjustment of the parts.

When placing the strap 7 in position or adjusting the same it is necessary to fold or deflect that portion opposite the cross-bar so as to clear the projection 8, as will be readily comprehended, and after the required adjustment is attained the said strap 7 is straightened out, thereby causing the opening therein opposite to the projection 8 to engage with the latter and secure the strap in the located position.

A flange or wall 9 projects at right angles from the top plate of the buckle-frame and incloses a space 11, in which is located the rear expanded end 12 of the catch 4, and this flange is arranged at the rear end of the said top plate, 10. The space 11 is circular in outline to correspond with the shape of the expanded end 12 and receives a coil-spring 13 which exerts an outward pressure on the end 12, thereby holding the tongue 3 projected across the space between the top and bottom plates of the buckle-frame. An opening 14 is formed in the top plate, 10, opposite the space 11 to provide an escape for rain or wet in the event of the same entering the said space 11.

The front portion of the flange or wall 9 is removed, and the extremities of the flange or wall bordering upon the space thus provided are expanded, so as to obtain an extended bearing against the sides of the catch 4 and direct the latter in its movements when it is actuated to withdraw the tongue 3 from engagement with the strap 2.

The catch 4 is a short bar having its rear end expanded to provide an extended bearing for the finger when pressing upon the rear end of the catch to overcome the force of the spring 13 and withdraw the tongue 3 from across the space between the top and bottom plates of the buckle-frame. The tongue 3 is an integral part of the bar or catch and is slightly curved and projects at about right angles to the length of the catch and operates through registering openings 15 in the said top and bottom plates. Thus it will be seen that the tongue obtains a support on each side of the strap 2 and is not liable to be broken off, and the strain or stress upon the strap is sustained by the buckle-frame and is not imposed upon the pivotal connection between the catch and the flange or wall 9. The shoul-

der 16 formed at the base of the expanded end 12 is rounded and forms a bearing for the catch to rock upon when operating the said catch to actuate the tongue 3. A groove 17 5 extends transversely of the catch and receives a pin 18, by means of which the catch is retained in operative relation, the ends of the pin 18 being let into the expanded or intercepted ends of the flange or wall 9. By removing the pin 18 the catch and its actuating-spring can be readily removed for any 10 desired purpose.

When it is required to use the buckle as a shaft-carrier or in connection with the hip- 15 straps, the same will be provided with side loops 19. If desired, these side loops 19 may be entirely dispensed with; but it is preferred to provide the same, as thereby the usefulness and range of application of the buckle are increased. The buckle-frame with the 20 flange or wall 9, the cross-bar 5, and the side loops 19 is an integral casting, thereby obviating joints and enabling it to be formed commercially and to be sufficiently light and neat to meet all requirements of harness-buckles. 25 By having the tongue 3 operate across the space between the top and bottom plates of the buckle-frame the strap 2 can be engaged thereby the instant the opening therein comes 30 opposite and in line with the registering openings 15, thereby obviating the necessity for drawing the strap tighter than is required to bring the desired opening opposite the tongue 3.

The buckle when not in service will not catch or snap into parts of the harness when the horse is in motion, thereby obviating the annoyance and the inconvenience attending 35 buckles of ordinary formation which become engaged with and entangle the harness. 40

Having thus described the invention, what is claimed as new is—

1. A harness-buckle comprising a box-shaped frame having an opening in its bot- 45 tom plate and having a cross-bar opposite to the said opening and connected at its ends with the sides of the said frame, said cross-bar being located at a distance from the plane of the bottom plate and having an inwardly- 50 extending projection, a flange or wall projecting substantially at right angles from the top plate of the frame, the front ends of the flange or wall being expanded and separated, a catch held between the intercepted ends of 55 the flange or wall and having its rear portion expanded and located in the space circumscribed by the aforesaid flange or wall, and having a tongue at its front end which extends across the space formed between the top 60 and bottom plates, and which tongue operates in registering openings formed in and is

supported by the aforementioned plates, and a spring placed in the said space and exerting an outward pressure on the expanded end of the catch, substantially as set forth for the 65 purpose described.

2. The combination with a box-shaped buckle-frame having a flange or wall on its top plate, of a catch having a tongue at its front end to extend across the space formed 70 between the top and bottom plates of the frame and operating in registering openings formed therein, and having its rear end expanded and operating in the space 11, and having the shoulder at the base of the ex- 75 panded end made rounding for the catch to rock upon, said catch being located in the space formed at the front side of the flange or wall and held therein by a pin, and a spring for operating on the catch to hold its tongue 80 normally projected across the space between the top and bottom plates of the frame, substantially as set forth.

3. The herein shown and described harness-buckle, comprising a box-shaped frame hav- 85 ing oppositely-disposed side loops and having an opening in its bottom plate between its ends, a cross-bar arranged opposite to the said opening and connected at its ends to the sides of the frame and placed at a distance from 90 the said bottom plate, and having an inwardly-extending projection, a flange or wall projecting at right angles from the top plate of the frame, the front ends of the flange being separated and expanded in the length of the frame, 95 the top plate having an opening opposite the space circumscribed by the said flange for the purpose described, a catch having a tongue at its front end to extend across the space between the top and bottom plates of the frame 100 and be supported by said plates on each side of the space comprised therebetween, said catch having its inner end expanded and operating in the space circumscribed by the said flange, and having the shoulder at the base of 105 the expanded end rounded for the catch to rock upon, and having a transverse groove on its outer side, a pin supported by the intercepted ends of the flange or wall and entering the transverse groove in the catch, and a 110 spring located in the said space and exerting an outward pressure against the expanded end of the catch, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as 115 my own I have hereto affixed my signature in the presence of two witnesses.

STERLING P. HANEY.

Witnesses:

F. J. HALLOCK,
D. V. DICKSON.