No. 725,658. PATENTED APR. 21, 1903.

C. E. BERRY.

COMBINED SHAFT LOOP AND BUCKLE.

APPLICATION FILED JAN. 10, 1903.

NO MODEL.

Fig. 1.

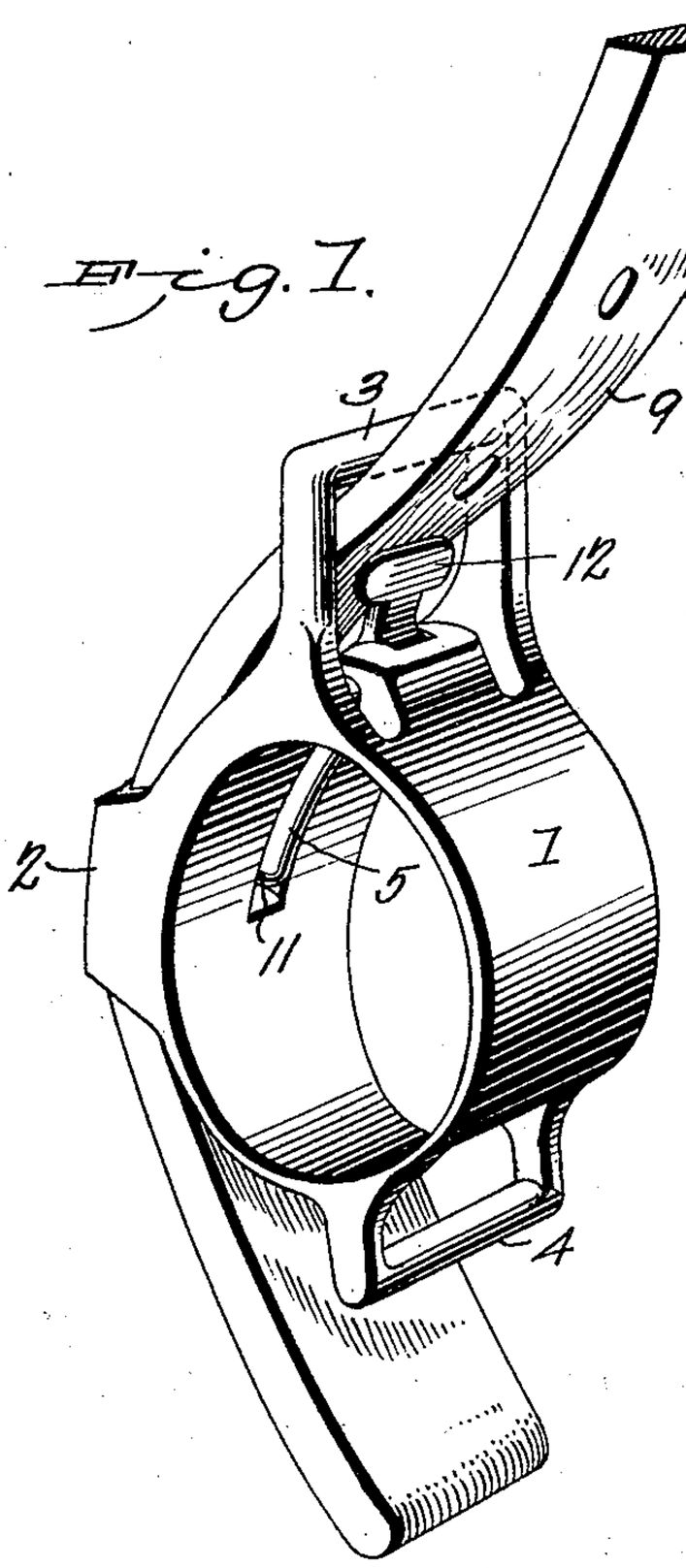
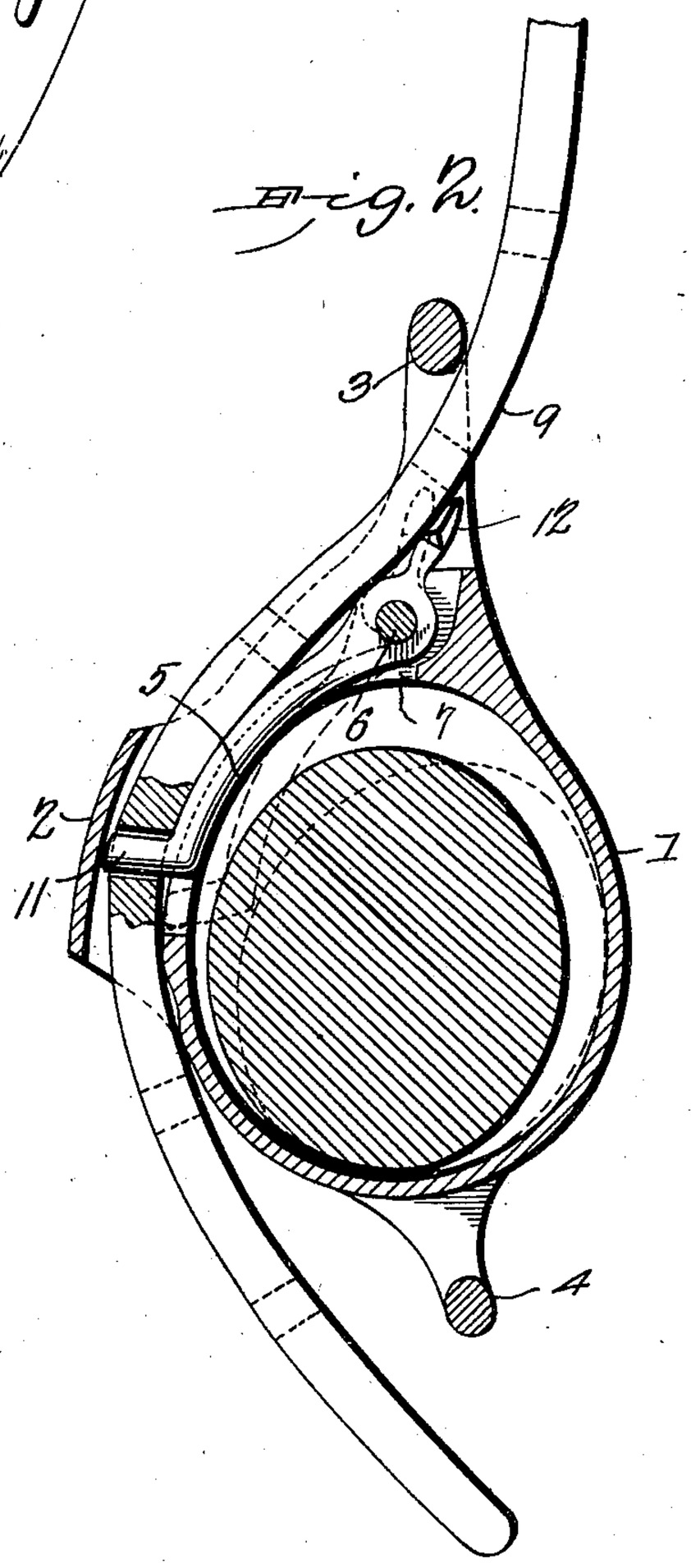


Fig. 2.



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UNITED STATES PATENT OFFICE.

CHARLES EDWARD BERRY, OF SOMERVILLE, MASSACHUSETTS.

COMBINED SHAFT-LOOP AND BUCKLE.

SPECIFICATION forming part of Letters Patent No. 725,658, dated April 21, 1903.

Application filed January 10, 1903. Serial No. 138,561. (No model.)

To all whom it may concern:

Be it known that I, CHARLES EDWARD BERRY, a citizen of the United States, residing at Somerville, in the county of Suffolk and State of Massachusetts, have invented a new and useful Combined Shaft-Loop and Buckle, of which the following is a specification.

My invention relates to combined shaft-loops and buckles; and it consists of the structures hereinafter fully described and claimed, and shown in the accompanying drawings.

The object of my invention is to produce a device of the class mentioned in which the wear upon the harness-strap will be reduced to a minimum and which while it cannot be accidentally detached from the harness while the shaft is in position in the loop may be very readily disengaged when the shaft is withdrawn from the loop.

Referring to the drawings, Figure 1 is a perspective view of my invention with the strap secured by the buckle. Fig. 2 is a sectional view showing both shaft and strap in position in the device.

Similar characters of reference indicate corresponding parts in both figures.

The body portion of the loop is indicated by the reference character 1.

2 is a strap-guide at the side of the loop, 3 another strap-guide at the top of the loop, and 4 a secondary loop for attachment to the belly-band of the harness.

5 is the buckle-tongue, pivoted at 6 and having a limited swinging movement in the slot 7 in the outer side of the main portion of the loop, its outward movement being limited by the strap-guide 2 and its inner movement limited by the end of the slot 7, against which the outwardly-turned end of the tongue strikes. The portion of the buckle-tongue which passes through the strap 9, which, it will be understood, passes upward over the back of the horse, is the outwardly-turned end 11. This outwardly-turned portion is set at an oblique angle to the main portion of the buckle-tongue, for reasons that will hereinafter appear. Opposite the end 11 the buckle-tongue is prolonged beyond the pivot 6 to form a flattened portion 12, which rests against the strap 9 when the buckle is closed.

In operating my combined shaft-loop and buckle the strap which is to be secured in position is passed downward through the strap-guide 3. The lower end of the buckle-tongue is then pressed inward sufficiently to allow the end of the strap to pass through the strap-guide 2 until the hole in the strap at which it is desired the buckle-tongue shall engage lies over the outwardly-turned portion 11. The buckle-tongue is now passed through the strap and moved outward until its inner surface lies approximately flush with the inner surface of the loop 1. The shaft 13 is now passed through the loop 1, and the tongue 5 is held in engagement with the strap as long as the shaft lies at the bottom of the loop. When the weight of the shaft is thrown on the bottom of the loop 1, the strap 9 is drawn taut and presses against the flattened portion 12 of the buckle-tongue, serving to aid in holding the end 11 of the tongue in engagement with the strap. When it is desired to release the strap from the buckle, the shaft must first be withdrawn from the loop or pushed to one side sufficiently to permit the tongue 5 to be swung inward far enough to disengage from the strap. In order to disengage the tongue from the strap, when the shaft has been moved out of the way it is only necessary to seize the lower end of the strap and pull it sharply downward. The upper inclined surface of the outwardly-turned portion 11 of the tongue is at such an angle to the direction in which the strap is pulled that the tongue is forced inward by the pull upon the strap, and the tongue is disengaged from the hole in which it has been engaged. The tongue having been forced out of engagement with the strap, the latter may be drawn upward through the two guides in the usual way.

It will be seen from the foregoing description that when a strap is engaged by the tongue-buckle in my device, there is no appreciable wear upon the strap anywhere except at the hole through which the tongue passes, for the reason that the strap is not strained across either of the guides through which it passes, and hence does not rub on either one of them.

That my combined shaft-loop and buckle is very secure is evident from the fact that in order to release the strap the shaft in the loop must either be withdrawn or pushed upward and to one side to give enough play to

the tongue to permit it to be withdrawn from engagement with the strap.

Having now fully described the construction and operation of my combined shaft-loop and buckle, what I regard as new, and desire to secure by Letters Patent, is—

1. A combined shaft-loop and buckle comprising a one-piece loop having a slot in the wall thereof, strap-guides on said loop, a pivoted buckle-tongue mounted in the slot in the wall of said loop and adapted to swing toward the interior of said loop, said buckle-tongue having one end bent at an oblique angle to the main portion of said tongue, and the main portion of said tongue adapted to be engaged by a shaft when in position in the loop, substantially as described.

2. A combined shaft-loop and buckle, comprising a loop, strap-guides on said loop, a buckle-tongue mounted in the wall of said loop, one end of said tongue being adapted to penetrate a strap passed through the strap-guides, and the other end adapted to be engaged by the strap to prevent the penetrating end from becoming disengaged from the strap, substantially as described.

3. A combined shaft-loop and buckle, consisting of a loop, strap-guides on said loop, a buckle-tongue pivoted in the wall of said loop, said tongue having its main portion adapted to be engaged by a shaft when in position in said loop, and a prolongation adapted to be engaged by a strap passed through the strap-guide, substantially as described.

4. In a device of the class described, a shaft-loop having in its outer wall a seat for a buckle-tongue, strap-guides at top and side of said loop, a buckle-tongue pivotally mounted in a seat in the outer side of said loop having an outwardly-bent portion at one end adapted to penetrate a strap passed through the side strap-guide, and a flattened portion at the other end adapted to be engaged by the strap when passed through the top strap-guide, substantially as described.

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

CHARLES EDWARD BERRY.

Witnesses:

LILIAN G. GREEN,

ALBERT F. BUFFUM.