No. 735,154. PATENTED AUG. 4, 1903.

E. C. RISHEL.

NECK YOKE WEAR PLATE.

APPLICATION FILED MAR. 17, 1903.

NO MODEL.

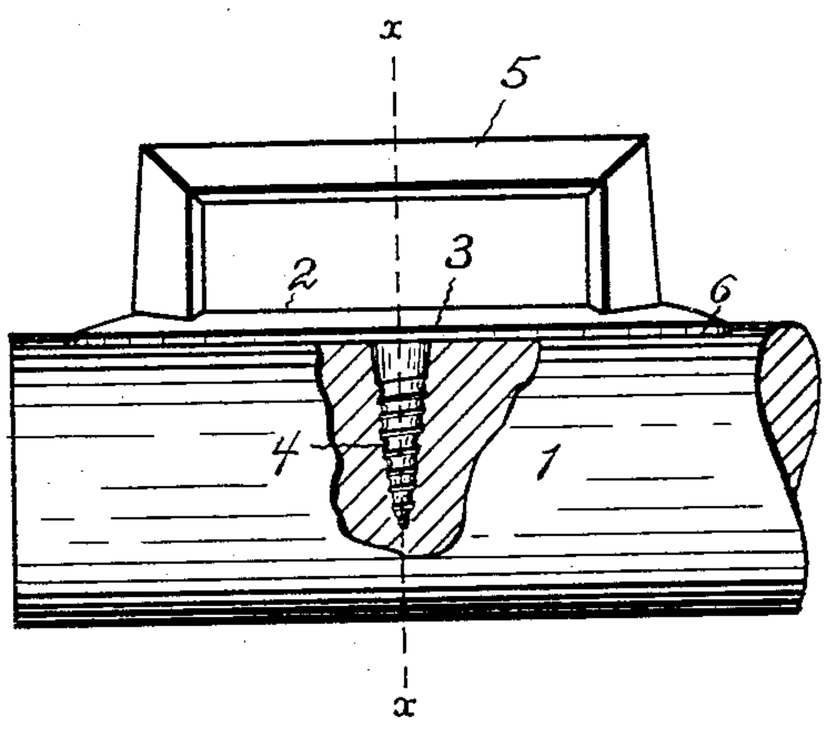


Fig. 1.

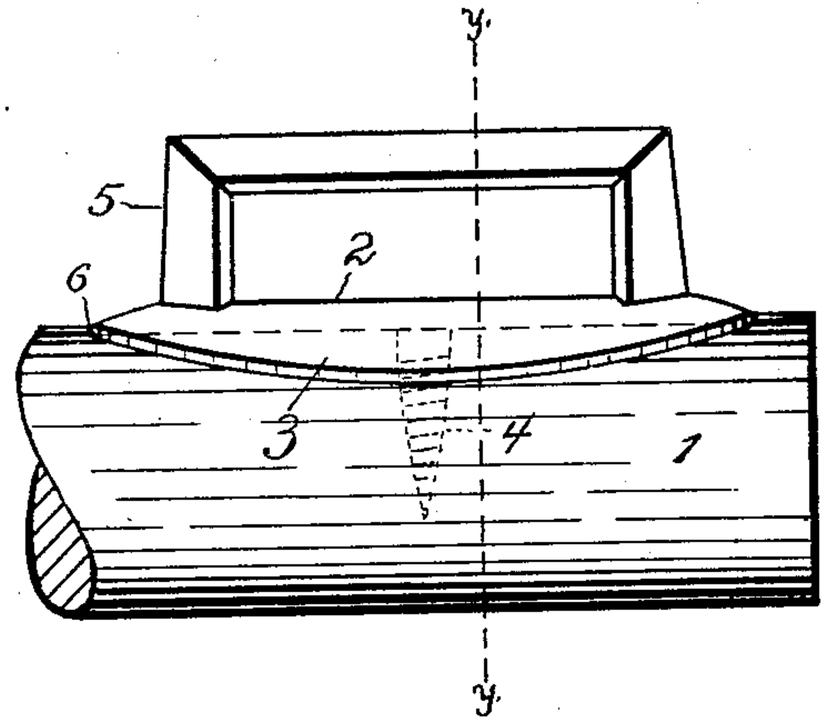


Fig. 2.

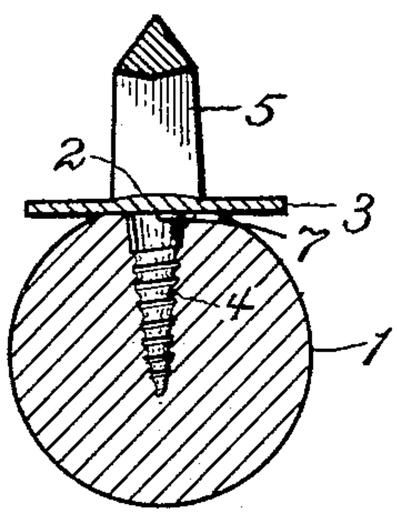


Fig. 3.

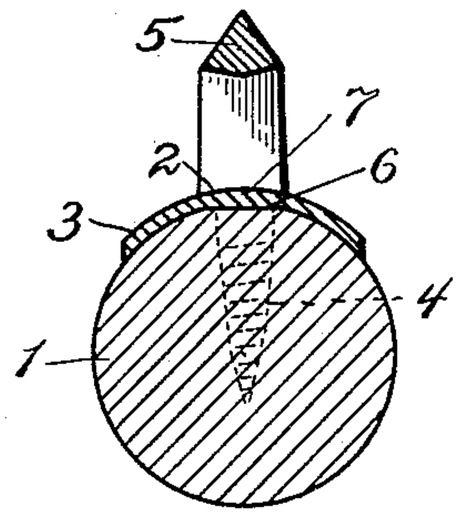


Fig. 4.

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No. 735,154. Patented August 4, 1903.

# UNITED STATES PATENT OFFICE.

ELIAS CLARK RISHEL, OF ATHENS, PENNSYLVANIA.

## NECK-YOKE WEAR-PLATE.

SPECIFICATION forming part of Letters Patent No. 735,154, dated August 4, 1903.

Application filed March 17, 1903. Serial No. 148,194. (No model.)

*To all whom it may concern:*

Be it known that I, ELIAS CLARK RISHEL, a citizen of the United States, residing at Athens, in the county of Bradford and State of Pennsylvania, have invented certain new and useful Improvements in Neck-Yoke Wear-Plates; 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.

My invention relates to an improvement in neck-yoke tip-loops and the like.

The object of my invention is to provide a tip-loop that may be fastened to the neck-yoke without the use of separate screws, rivets, &c.

Another object lies in forming the wear-plate of the tip with an integral screw which is turned into the yoke and with flexible wings which may be bent down upon the surface of the yoke to rigidly secure the tip thereto and which wings provide additional wearing-surface.

Still another feature resides in composing the wear-plate and wings of such shape and of such a malleable metal that the wings may be bent down upon the yoke to snugly fit the contour of the same and prevent the tip from turning.

Of course it is to be understood that although I have illustrated my device as applied to a neck-yoke it is within the scope of my invention to apply the same wherever the result accomplished is sought to be obtained.

Finally, the object of my invention is to provide a device of the character described that will be strong, durable, efficient, and simple and comparatively inexpensive to manufacture and one that will not become accidentally detached when in use.

With the above and other objects in view my invention consists in the novel details of construction and operation, a preferable embodiment of which is described in the specification and illustrated in the drawings, wherein—

Figure 1 is a side elevation of a portion of the outer end of a neck-yoke, showing my tip screwed thereon and the flexible wings before they are bent down upon the yoke. Fig. 2 is a similar view showing the wings bent down upon the yoke. Fig. 3 is a transverse sectional view taken on the line $x\ x$ of Fig. 1, and Fig. 4 is a transverse sectional view taken on the line $y\ y$ of Fig. 2.

In the drawings the numeral 1 designates the neck-yoke or other part to which the tip is secured. The tip comprises a wear-plate 2, having flexible wings 3 and a screw 4, formed integral therewith and projecting from the under side of the wear-plate. I have shown a loop 5, supported upon the upper surface of the wear-plate 2; but any fastening means might be used, whether formed integral or otherwise, although I preferably form the fastening means integral with the wear-plate. The tip is composed of some malleable metal which is pliable and readily bent, but yet stiff enough to hold the shape in which it is formed.

The screw 4 is formed integral with the wear-plate 2 and of sufficient diameter to securely hold the plate on the yoke. The screw being located in the central portion of the plate may be readily screwed into the yoke without liability of splitting the same, as it will impinge the yoke some distance from its end and secure a better hold for the tip than if the latter were fastened by separate screws.

In applying the tip the neck-yoke or other part is flattened on its upper surface, as indicated at 6, so that when the wear-plate 2 is screwed down upon the same its central portion 7, which is too rigid to bend, will closely contact with the surface of the yoke or part, thus causing the wings 3, which are bent down in any suitable manner, to more snugly fit the contour of the neck-yoke or other part to which the tip is applied.

It will be noticed by observing the drawings that the wings are especially designed for bending from the base of the loop, and that the portion 7 of the wear-plate directly beneath the base of the loop is flat on its under side, and that the gage of the plate is reduced at the beginning of the wings, so as to facilitate the necessary sharp bending at this point to make a close fit between the plate and the neck-yoke. The upper side of the central portion of the wear-plate is convex in cross-section; but when the wings are bent down upon the yoke a practically uniform curvature of the plate and wings is obtained,

as shown in Fig. 4. It will also be observed that without the flexible wings the wearing-surface of a plate attached by a screw formed integral with it would necessarily be narrow and insufficient for the proper protection of the wood of the neck-yoke.

From the above it will be apparent that after the tip has been screwed upon the yoke or other part and the wings bent down to lock it in position it will be impossible for the tip to become loosened and rattle and finally disengaged from the yoke, as is common with tips which are secured by screws, rivets, and the like. When the wings are bent down, the device cannot turn until they are again bent up. A rigid yet very simple fastener is thus obtained.

As before stated, I may apply my device to other uses than a neck-yoke tip, and I do not wish to limit myself to the same; nor do I desire to confine my invention to the details of construction herein set forth, as I may make various changes in the device without departing from the spirit of my invention.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a device of the character described, a plate composed of malleable metal provided with a flattened central portion on its under face, and its upper face being convex in cross-section, an inverted-U-shaped loop formed integral with the said plate, an integral screw projecting from the said plate, and flexible wings formed integral with the said central portion of the said plate, the said wings adapted to be bent upon a body which the said screw impinges, as and for the purposes set forth.

2. In a device of the character described, a plate composed of malleable metal provided on its under face with a flattened central portion, and its upper face being convex in cross-section, an inverted-U-shaped loop formed integral with the said plate, and provided with tapering sides and top, an integral screw projecting from the said flattened portion of the said plate, and flexible wings formed integral with the said plate and adapted to be bent upon a body which the said screw impinges to rigidly hold the device upon the said body, the upper faces of the said wings tapering from the said central portion to their edges, as and for the purposes set forth.

3. In a device of the character described, a plate composed of a malleable metal and having a flattened central portion, a loop or the like supported upon the plate, a screw projecting from the under side of the plate, and wings formed integral with the plate and extending from the said flattened central portion, the said wings adapted to be bent upon a body which the screw impinges, substantially as described.

4. In a device of the character described, a wear-plate having a central portion flat on its under side and convex on its upper side, a screw projecting from the plate, wings formed integral with the plate and adapted to be bent upon a body, the said wings having a reduced gage at the point where a sharp bend is necessary to produce a close contact with the body and arranged to produce a uniform wearing-surface when bent upon the body, substantially as described.

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

ELIAS CLARK RISHEL.

Witnesses:

M. P. MURRAY,

J. M. ELY.