(No Model.)

C. C. SCHWANER.

NECK YOKE COUPLING.

No. 419,223. Patented Jan. 14, 1890.

Fig. 1

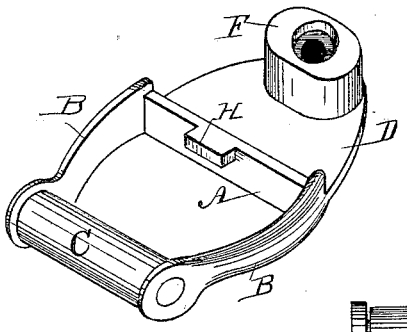


Fig. 2

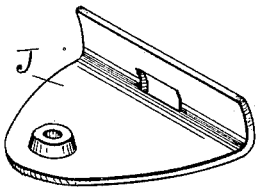
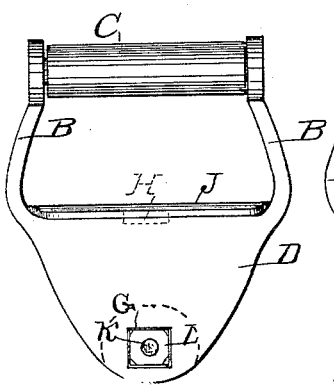


Fig. 3



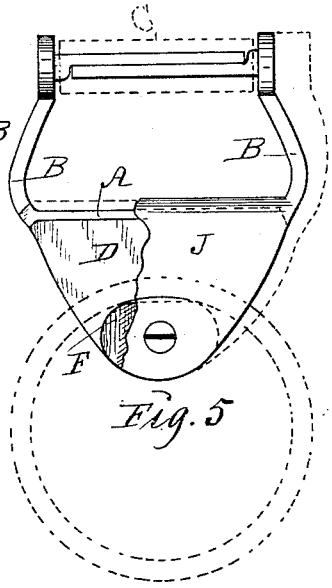
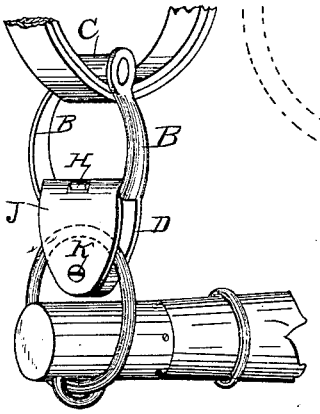


Fig. 5

Fig. 4



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UNITED STATES PATENT OFFICE.

CHRISTIAN C. SCHWANER, OF WINTERSET, IOWA.

NECK-YOKE COUPLING.

SPECIFICATION forming part of Letters Patent No. 419,223, dated January 14, 1890.

Application filed May 16, 1889. Serial No. 310,974. (No model.)

To all whom it may concern:

Be it known that I, CHRISTIAN C. SCHWANER, a citizen of the United States of America, and a resident of Winterset, in the county of Madison and State of Iowa, have invented an Improved Neck-Yoke and Breast-Strap Coupling, of which the following is a specification.

Heretofore a breast-strap roller and snap-hook have been combined and used for detachably coupling a breast-strap with a neck-yoke in such a manner that the device could be disconnected from the neck-yoke and remain attached to the breast-strap.

My object is to prevent the annoyances incident to carrying a roller and snap-hook on a breast-strap when not in use, and to provide a device that can be easily attached to a neck-yoke to remain there, so that a breast-strap can be readily connected and disconnected at pleasure.

My invention consists in the construction and combination of a frame and a roller and a ring-receiver, as hereinafter set forth, in such a manner that the complete device will be a neat, strong, durable, and efficient coupling specially adapted for the purpose contemplated.

In the accompanying drawings, Figure 1 is a perspective view of the frame, having a roller attached at one end and an integral ring-connecting extension at the other end. Fig. 2 is a perspective view of a detachable part of the coupling. Fig. 3 is a face view, showing the complete device ready for use. Fig. 4 is a perspective view, illustrating the application, operation, and utility of my complete invention. Fig. 5 is a modification of Fig. 3, showing each of the overlapping parts provided with a side bar and a right-angled extension at the end of each bar to extend into the roller.

A is a cross-bar, and B B are the curved side bars of a frame. The ends of the side bars are perforated to receive a bolt as required to support a roller C. The bolt that serves as an axle for the roller may be screw-threaded and detachably fastened, or it may be rigidly and permanently secured by riveting or in any suitable way. By curving the bars B inward from the cross-bar A to support a roller that is shorter than the cross-bar a wide open space is produced in rear of the roller to admit a breast-strap and a snap-hook on its end to facilitate connecting and disconnecting the strap.

D is a flat integral extension from the side of the cross-bar A and ends of the side bars B.

F is a boss projecting at right angles from the inside face and end of the extension. It has a bore in its center and an enlargement at the end of the bore adapted to admit a dowel of corresponding form.

G is an angular cavity in the outside face of the extension D, adapted to admit and lock a nut placed therein.

H is a projection on the center of the cross-bar A, adapted to engage the detachable part of the ring-receiver and coupling.

J is a plate corresponding in size and shape with the extension D. It is curved at its large end, and adapted to overlap the cross-bar A, and has a perforation that admits the projection H. It also has a perforation that coincides with the perforation or bore of the boss F, and a swell around that perforation that will serve as a dowel in the enlargement at the end of the bore in the boss F.

K is a screw passed through the plate J, the boss F, and the extension D and fastened in a nut L, placed in the cavity G, to lock the detachable part fast.

To connect the coupling and roller with a neck-yoke I detach the plate J, place a ring on the end of the neck-yoke over the boss F, and then replace the plate J and fasten it again by means of the screw and nut; and when thus attached to a neck-yoke the end of a breast-strap can be readily passed through between the curved bars B of the frame as required to connect and disconnect the strap from the roller and coupling that remain attached to the neck-yoke.

I claim as my invention—

1. A neck-yoke and breast-strap coupling composed of a frame adapted to admit the passage of a breast-strap, a roller in one end of the frame, an extension at the other end of the frame adapted to engage a ring, and a detachable plate adapted to be fastened to the extension and frame to secure the complete

device and ring together, for the purposes stated.

2. In a neck-yoke, the bar A, having a projection H, the bars B, supporting a roller C, the extension D, having a boss F and cavity G, and the perforated plate J, constructed and combined by means of a screw and nut, substantially as shown and described for the purposes stated.

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