H. F. Willson,

Breast-Strap Shield,

No. 47,485. Patented Apr. 25, 1865.

Fig. 1.

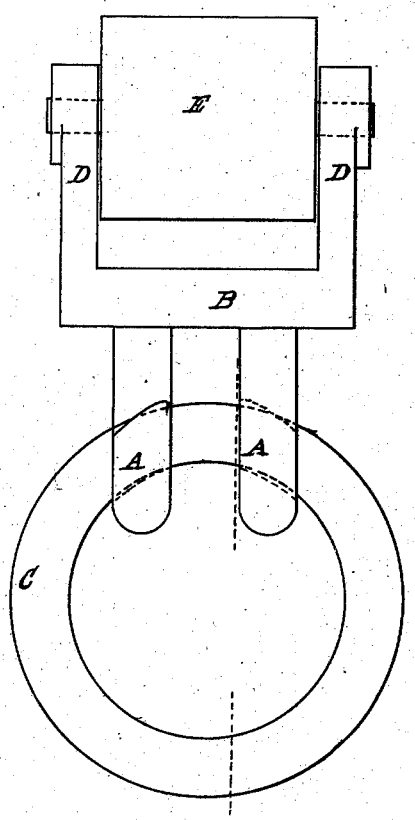
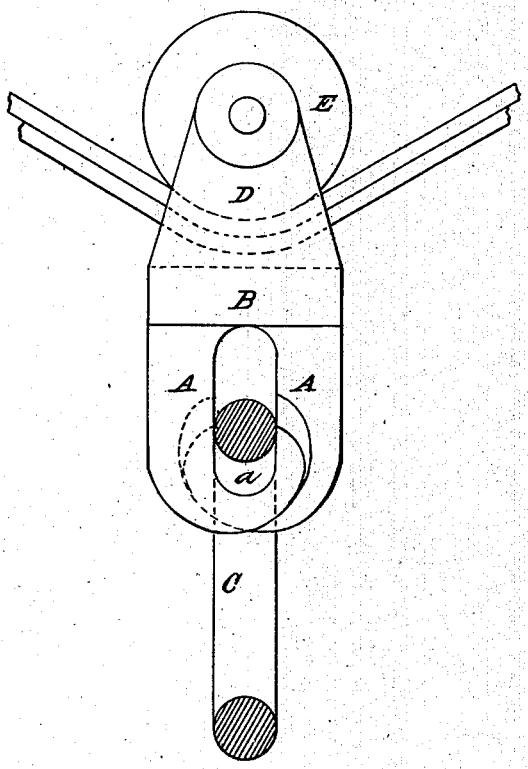


Fig. 2.



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UNITED STATES PATENT OFFICE.

HENRY F. WILLSON, OF ELYRIA, OHIO.

IMPROVEMENT IN SHIELDS FOR BREAST-STRAPS.

Specification forming part of Letters Patent No. **47,485**, dated April 25, 1865.

To all whom it may concern:

Be it known that I, HENRY F. WILLSON, of Elyria, in the county of Lorain and State of Ohio, have invented a new and useful Improvement in Shields or Rollers for Breast-Straps for Harnesses; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, in which—

Figure 1 is a side elevation. Fig. 2 is an end elevation.

The nature of my invention consists in constructing a shield or roller for breast-straps for harnesses, which is provided with reversed hooks for the purpose of securing it to the ring of the neck-yoke and enabling the operator to remove it with great facility without the use of snaps, springs, or other unreliable devices, and also for clamping the ring firmly by said hooks, so as to prevent any side or lateral motion of said ring when in operation.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

A A represent the hooks, which are reversed, they being attached to the under surface of the bed-plate B, and are crooked in opposite directions, said directions being transverse to the said bed-plate. The points of said hooks are chamfered outwardly, so that the upper end of them forms a curve corresponding to the inner circle of the ring, as will be seen in Fig. 1. The object of said chamfer is for the purpose of admitting the ring, while at the same time it gives them the greatest length possible for them to have and admit the ring, as will be readily seen and understood on referring to the drawings, Fig. 1. The inside walls of the hooks are flat and parallel, and the space between the walls is just sufficient to admit the ring snugly. The seat in which the ring rests is curved, so as to fit the inner circle of the ring, as seen in dotted lines in Fig 1 and at *a* in Fig. 2.

C is the ring resting in its position in the hooks.

D is a metallic frame, which is provided with a suitable roller, E, and is free to roll on the breast-strap, and thus prevent all friction and consequent wear.

The operation of this apparatus is as follows: It is suspended on the strap, (see Fig. 2,) the neck-yoke is elevated to its position, the apparatus is then raised up so as to allow it to be turned or twisted a quarter of a revolution, so as to bring the space between the hooks parallel to the sides of the ring, which is then inserted edgewise between the hooks until it strikes the bed-plate in the center, then the apparatus may be turned back to its natural or original position, and the ring will easily fall into its seat, and the machine is ready for use.

The ring cannot, as will readily be seen, be removed by accident or otherwise without the directing hand of the operator in raising it up and twisting the strap. It follows, therefore, that this method of fastening is at once perfectly secure, cheap, and much more expeditious than any now in use.

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

The reversed hooks having their upper ends curved so as to correspond to the inner circle of the ring for the purpose of giving the greatest possible length to the hooks, and at the same time admit the ring freely, the whole being constructed and operating in the manner and for the purpose described.

H. F. WILLSON.

Witnesses:

L. BRECKENRIDGE,

JOHN O. HOUGHTEN.