

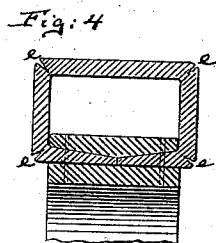
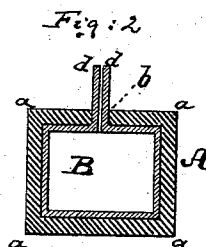
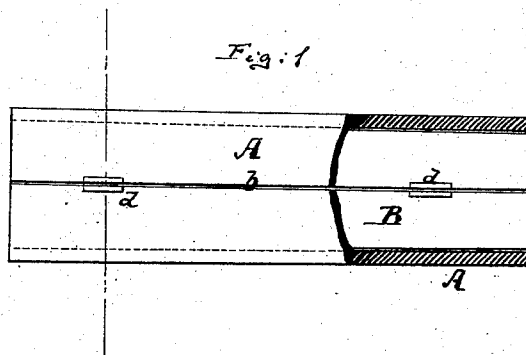
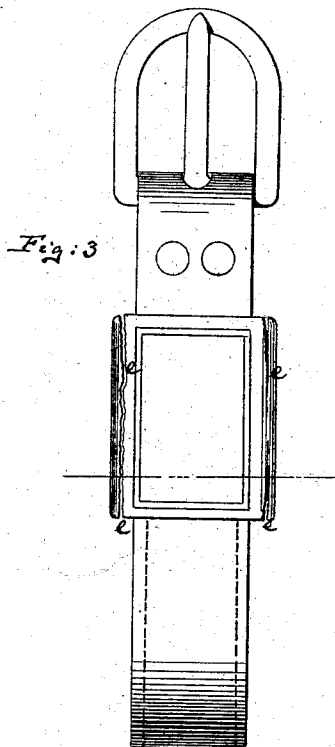
(No Model.)

J. WATTERS.

BOX LOOP.

No. 269,977.

Patented Jan. 2, 1883.



WITNESSES:
Gustave Kauterich
John M. Spear.

INVENTOR
John Watters
BY *Briesen & Betts*
his ATTORNEYS

UNITED STATES PATENT OFFICE.

JOHN WATTERS, OF NEW YORK, N. Y.

BOX-LOOP.

SPECIFICATION forming part of Letters Patent No. 269,977, dated January 2, 1883.

Application filed November 18, 1882. (No model.)

To all whom it may concern :

Be it known that I, JOHN WATTERS, of New York city, county and State of New York, have invented an Improved Box-Loop, of which the following is a specification.

Figure 1 is a face or bottom view, partly in section, of my improved box-loop; Fig. 2, a cross-section of the same; Fig. 3, a top view, and Fig. 4 a cross-section, of an ordinary box-loop.

This invention relates to a new box-loop for carriage-curtains, harness, and other purposes.

The invention consists in making the loop of an angular form, molded of india-rubber or analogous substance, and slit on one side.

It also consists in the combination of said slit rubber loop with an inner metal loop whose prongs project through the slit of the rubber loop.

In the drawings, the letter A represents the rubber loop molded to form angles *a a*, and made with a slit, *b*, along the bottom. This rubber loop may be slipped over an inner loop, B, of metal or other material, which has clinching-prongs *d d* projecting through the slit *b*, for the purpose of serving as fasteners. A buckle or buckles may be applied to the ends of the loop B or of a plate connected with the slit loop A.

The special advantage of the molded angular loop A over the leather and metal loops of ordinary construction can be seen from an in-

spection of Figs. 3 and 4. An ordinary leather loop is made by bending and pressing the leather to the angular form; but the outer circumference of the loop being greater than the inner, the result is that the leather is either torn, as at *e*, at the outer corners or materially weakened at those places, or that it is unduly wrinkled on the inner side. The same objections apply to loops that are made of bent metal.

In molding the slit loop A out of india-rubber or any other substance the requisite excess of material can be given at the outer corners, *a*, as indicated in Fig. 2, without weakening any part of the structure or marring its appearance.

The loop A can be molded directly on the loop B, which would constitute the core of the mold.

I claim—

1. The molded angular loop A, having longitudinal slit *b*, substantially as herein shown and described.

2. The slit rubber loop A, combined with inner loop, B, having prongs *d*, that project through the slit *b*, substantially as herein shown and described.

JOHN WATTERS.

Witnesses:

GUSTAV SCHNEPPÉ,
JULIUS HUELSEN, Jr.