(No Model.)

G. L. CRANDAL. BOX LOOP.

No. 419,643.

Patented Jan. 21, 1890.



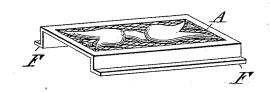


Fig.2.

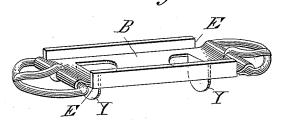


Fig. 3.

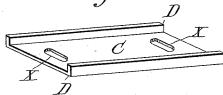
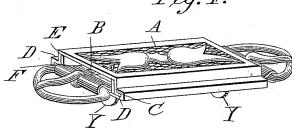


Fig.4.



Witnesses:

6. E. Titchener

Inventor: Levige L. Candal B. Charustone

UNITED STATES PATENT OFFICE.

GEORGE L. CRANDAL, OF BINGHAMTON, NEW YORK.

BOX-LOOP.

SPECIFICATION forming part of Letters Patent No. 419,643, dated January 21, 1890.

Application filed June 24, 1889. Serial No. 315,448. (No model.)

To all whom it may concern:

Be it known that I, GEORGE L. CRANDAL, of Binghamton, in the county of Broome and State of New York, have invented an Improvement in Box-Loops for Carriage-Tops, of which the following is a specification.

My improved device relates only to boxloops which are made in part of leather or other pliable material. Where the loop is nade entirely of metal, a more simple device can be employed, as shown and described in Letters Patent No. 199,798, issued to me January 29, 1878. Leather loops, as now most generally used, are made with four 15 sides, and are stitched or tacked to the material. In some cases a metal strip or piece has been inserted in the loop with clinches projecting through the leather bottom for the purpose of attaching the loop to the material.

In the drawings, Figure 1 represents the loop, A being the top or main part of my improved box-loop for carriage-tops. Fig. 2 represents the inside metal lining B. Fig. 3 represents the metal plate C, which forms the bottom of the completed loop. Fig. 4 represents the boxloop complete and ready for use.

The loop A is made of leather or other pliable material, and has flanges F projecting

30 outwardly from its lower edges. The inside lining B is made of sheet metal, and has upwardly-projecting sides E and clinches Y projecting downward, by which the entire completed loop is to be attached to the carriage-top. The buckles are also at-tached to this metal lining in the usual manner of attaching buckles to the ordinary metal buckle-loops. The metal lining B is placed inside the loop A, and then the clinches Y are passed through the openings X in the metal plate C. (Shown in Fig. 3.) The upward-turned flanges D of the sheet-metal plate C. are then pressed down firmly upon the flanges F of the loop A, and in this way the three 45 parts A, B, and C are held firmly together and the loop is complete, as shown in Fig. 4. It is much better, and I prefer to turn up the flanges D of the metal plate C just high enough so that when they are closed down 50 on the flanges F of the loop A the tops of the flanges D will also press the sides of the loop A firmly against the turned-up metal

sides E of the inside lining B. In this way an additional hold is obtained and the leather of the loop is held much more securely. 55 Small ornamental indentations or corrugations, as shown in Fig. 3, may be made on the flanges D, and in this way improve the appearance of the loop; but this feature I do not claim, as such improvement is claimed by 60 me in Letters Patent No. 199,798, granted

January 29, 1878.

Sometimes a loop with a buckle at one end and with the other end closed or pointed is used instead of the loop shown in the draw- ϵ_5 ings. This style of loop can be made in accordance with my invention by making the loop A closed or pointed at one end, and the metal lining B with only one buckle attached and the other end shaped the same as the 70 loop A. The metal piece C is also shaped at one end to correspond with the closed end of the loop. The flanges F and D extend around the closed end, and are then pressed down together in the same manner as already de- 75

My method of construction makes it possible to use a much thinner sheet metal and of a better quality in making the metal plate C than is necessarily used in making the stiff 80 and strong metal lining B. This advantage is very important, as in this way a much better appearing loop can be made.

Having fully described my invention, what I claim as new, and desire to secure by Letters 85

Patent, is-

1. In a box-loop for carriage-tops, the combination of the loop A, made of leather or other pliable material and having the flanges F, with the metal lining B and metal plate C 9c made with the flanges D, substantially as shown and described.

2. In a box-loop for carriage-tops, the combination of the loop A, made of leather or other pliable material, and metal lining B, 95 with the metal plate C, made with the flanges D just long enough to press and securely hold the sides of the loop A against the upturned sides E of the metal lining B, substantially as described.

GEORGE L. CRANDAL.

Witnesses:

CHAS. M. STONE, CHAS. E. TITCHENER.