(No Model.)

J. W. CHAMBERS.

BUGGY BOOT.

No. 485,486. Patented Nov. 1, 1892.

Fig. 1.

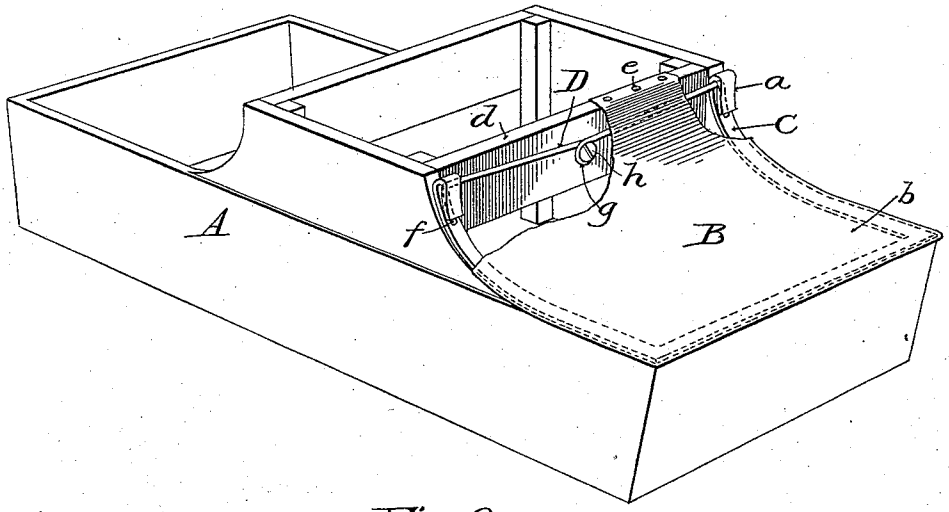
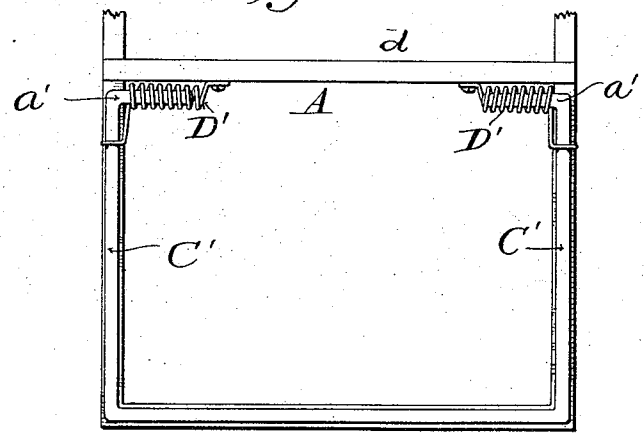


Fig. 2.



Witnesses:
James F. Duhamel.
Horace A. Dodge.

JOHN W. CHAMBERS,
Inventor,
by Dodger & Sons
Attys.

UNITED STATES PATENT OFFICE.

JOHN W. CHAMBERS, OF FORT ATKINSON, WISCONSIN, ASSIGNOR TO THE NORTHWESTERN MANUFACTURING COMPANY, OF SAME PLACE.

BUGGY-BOOT.

SPECIFICATION forming part of Letters Patent No. 485,486, dated November 1, 1892.

Application filed April 11, 1892. Serial No. 428,648. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. CHAMBERS, a citizen of the United States, residing at Fort Atkinson, in the county of Jefferson and State of Wisconsin, have invented certain new and useful Improvements in Buggy-Boots, of which the following is a specification.

My invention relates to carriage-boots; and it consists in a novel construction of the same, as hereinafter set forth and claimed.

In the accompanying drawings, Figure 1 is a perspective view, partly in section, showing my improved boot applied thereto; and Fig. 2, a view illustrating a slight modification.

A indicates the body, which may be of any desired construction, and B the boot applied thereto. This boot in its preferred form comprises a U-shaped metallic frame C, having its upper ends bent back upon themselves, as at *a*, and a covering *b*, of cloth, leather, or other suitable material, applied to the frame C, as shown. The upper or forward edge of the covering *b* is secured to the backboard *d* of the seat-frame by tacks, screws, or other fastenings *e*.

D indicates a torsion-spring which is secured to the backboard *d* and has its ends bent at an angle, as at *f*, so as to fit under the bent ends *a* of the frame C. At a point between its ends the torsion-spring, which I prefer to make in the form of a rod of wire, is bent so as to form an eye *g* to receive a screw or fastening *h* by which to secure the spring in place and prevent its turning or rotating bodily when subjected to a torsional strain. Any other form of fastening may, however, be substituted. This torsional spring acts not only as a spring to keep the boot closed, but also as a hinge or pivot connecting the boot with the carriage-body.

The frame C, before referred to, may be made of iron or steel, and when its ends *a* are bent down upon the ends *f* of the torsion-spring the latter is prevented from becoming disengaged from the frame. The frame may, however, be riveted to the spring or secured thereto in any other suitable manner.

The bent ends *f* of the torsion-spring act as levers when the rear end of the boot is raised and twist or impart to the spring a torsional strain. As soon as the rear end of the boot is released the elasticity of the spring returns the boot to its normal position and holds it closed.

I am aware that, broadly considered, a boot held closed by the action of springs is not broadly new; but I am not aware that any one prior to my invention has applied a torsion-spring to a boot, nor that a spring of any description has been applied in the manner that I apply my spring.

The construction herein shown and described is cheap, durable, and effective in operation. It will be observed that no supplemental springs or catches are required on the inside of the body and that the boot may be opened to expose the entire back part of the carriage-body, leaving it free for use to its extreme capacity without the annoyance of spring-catches and similar devices.

The torsion-spring D may be made in one piece, as shown in the drawings, or may be in two or more pieces. Where the spring is designed to form the hinge or connection between the body and the boot-frame, I may adopt the construction shown in Fig. 2, upon reference to which it will be seen that the ends *a'* of the frame C' are made cylindrical and bent inward toward each other and a spring D' coiled about the ends *a'* and secured to the end of the frame C' and at the other end to the rear board *d*.

Having thus described my invention, what I claim is—

1. In combination with the carriage-body, a boot and a spring secured to the carriage-body and acting as a hinge for the boot.

2. In combination with the carriage-body A and the boot B, a torsion-spring hinging the body to the boot, all substantially as shown and described, whereby the spring is adapted to act not only as a hinge for the boot, but also to keep the boot closed.

3. In combination with body A, a boot B, having a frame C, provided with the bent ends *a* and a cover *b*, and a torsion-spring D, secured to the body and provided with bent ends *f*, adapted to be inserted under the bent

ends of the frame C, all substantially as shown and described.

4. In combination with body A and boot B, the spring D, provided with an eye *g* and secured at its ends to the boot-frame, and a screw *h*, passing through the eye and connecting the spring to the carriage-body.

In witness whereof I hereunto set my hand in the presence of two witnesses.

JOHN W. CHAMBERS.

Witnesses:
L. B. CASWELL, Jr.,
G. L. COLE.