

No. 158,688.

A diagram of a beam balance. A horizontal beam, labeled *B*, is supported by two vertical pillars. On the left pillar, a component labeled *C* is attached to the beam. On the right pillar, a component labeled *C* is also attached to the beam. A vertical rod, labeled *A*, is positioned on the far left, and another vertical rod, labeled *A*, is on the far right. A curved arm, labeled *Y*, is attached to the right side of the beam. The entire setup is mounted on a base represented by a hatched area.

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UNITED STATES PATENT OFFICE.

THOMAS F. DARCY, OF NEW YORK, N. Y.

IMPROVEMENT IN TOP-JOINTS FOR VEHICLES.

Specification forming part of Letters Patent No. 158,688, dated January 12, 1875; application filed December 5, 1874.

To all whom it may concern:

Be it known that I, THOMAS F. DARCY, of the city, county, and State of New York, have invented a new and Improved Carriage-Top, of which the following is a specification:

The object of my invention is to provide a simple and efficient contrivance of a buggy and other like carriage-top, whereby the top can be readily raised and lowered by the occupant while sitting in his place on the seat. To this end I make the knuckle-joints of the braces so as to fold forward or toward the pivots of the bows, instead of backward, as heretofore, and attach them to a shaft at the lower end, having a spring or springs applied to it, so as to raise and hold the top up, and a lever to press it down, the lever being provided with a locking-catch to hold the top down, or in any intermediate position, and being arranged to lie down on the cushion out of the way when the top is down, and to stand up alongside of the back when the top is up.

Figure 1 is a side elevation of a buggy-top contrived according to my invention. Fig. 2 is a front elevation with a section of the lever. Fig. 3 is a transverse section on the line *x x* of Fig. 1, and Fig. 4 is a detail section on the line *y y* of Fig. 3.

Similar letters of reference indicate corresponding parts.

The knuckles *A* of the braces *A'* fold forward instead of backward, so that, the lower ends of said braces being rigidly attached to the revolving shaft *B*, the top can be raised

readily by turning the shaft, which it cannot be when these joints fold back, as in the common way.

To this shaft I attach one or more strong coiled springs, *C*, setting them so that they will raise and hold the top up, and I also apply a lever-handle, *D*, for pressing the top down, and to the handle I fix a spring-catch, *E*, for locking the shaft in either position by springing into holes *F* or notch *G* in one of the standards in which the shaft is mounted.

The shaft will, in practice, be arranged in the angle between the seat and its back, where it will be out of the way; but it may be arranged in any approved manner for this purpose.

A stud-pin, *I*, on one of the bows falls on the braces when the top is let down, and assists in raising the top by the braces when they are raised by the spring.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The braces of a vehicle-top to fold toward the bow-pivots, and mounted at the lower end on a revolving shaft, having a spring or springs set so as to raise the top, and a lever-handle and stop-catch for lowering and fastening the top, all combined substantially as specified.

2. The combination of stud *I* on one of the bows with a brace, *A'*, to fold as set forth.

THOMAS F. DARCY.

Witnesses:

T. B. MOSHER,
ALEX. F. ROBERTS.