

(No Model.)

W. LEECH.

REMOVABLE FOLDING FRAME FOR WAGON TOPS.

No. 474,390.

Patented May 10, 1892.

Fig. 1.

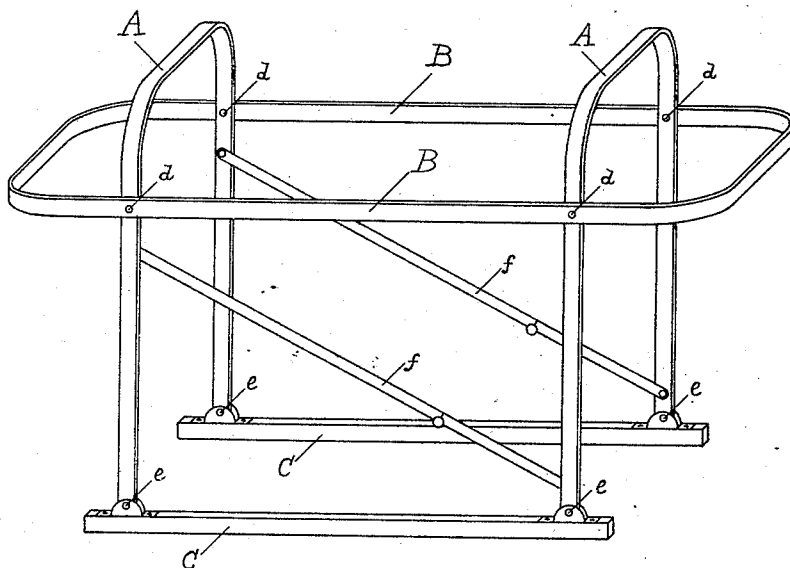
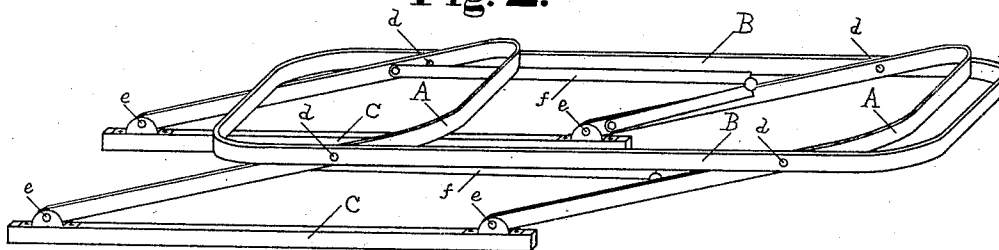


Fig. 2.



WITNESSES:

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REMOVABLE FOLDING FRAME FOR WAGON-TOPS.

SPECIFICATION forming part of Letters Patent No. 474,390, dated May 10, 1892.

Application filed January 4, 1892. Serial No. 416,916. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM LEECH, a citizen of the United States, residing at New Haven, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in Removable Folding Frames for Wagon-Tops, of which the following is a specification.

My invention relates to folding frames for wagon-tops.

The object of my invention is to provide a frame for a wagon-top capable, when properly covered, of use in open business or grocery wagons to protect the articles therein from the weather, but removable from the wagon, and when removed capable of closely folding without removing the covering from the frame.

In the drawings, where the frame is shown without the covering, Figure 1 represents a device embodying my invention in position for use in a wagon, and Fig. 2 represents the device folded.

Similar letters of reference indicate corresponding parts.

In the drawings, C C are the two side bars or slats, which rest on the bottom of the wagon-body and are pressed against the upright sides of the wagon by the outward spring of the two or more supporting-bows A A, the ends of which are securely pivoted to said bars or slats at *e e e*.

B B is a horizontal continuous bow securely pivoted to each of the several supporting-bows at *d d d*, so as to be substantially parallel with the bars or slats C C and so that the portions of the supporting-bows above those pivots will fold within said continuous bow. A suitable cloth or flexible covering is permanently attached to the horizontal bow

and so as to allow the parts of the supporting-bows above the horizontal bow to come inside of and press against the covering when the frame is set up for use. Two or more braces F F are removably or pivotally fastened, one end to one of the supporting-bows and the other to the adjacent supporting-bow or to the bar C. When "knuckle-joint" braces are used, the greatest rigidity is given the frame by pivotally securing one end to a supporting-bow near the bar and the other end to the adjacent supporting-bow near the horizontal bow, with the hinge side down, as shown in the drawings.

The frame being folded, as shown in Fig. 2, it is set up for use as follows: The supporting-bows are raised, turning on their pivots *e e e* until they are substantially vertical. The horizontal bow being pivotally attached to the supporting-bows is raised by them, remaining substantially parallel with the bars C C. The free ends of the braces F F are then secured in their appropriate positions; or, if knuckle-joint braces are used, the joints are straightened in the usual manner by pressure, and the frame is thus made rigid.

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

In a removable folding frame for a wagon-top, the combination of a continuous bow B, pivoted to and folding outside of two or more supporting-bows A A, the ends of which supporting-bows are pivoted to side bars C C, and folding braces F F, extending between said supporting-bows, substantially as described.

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Witnesses:

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