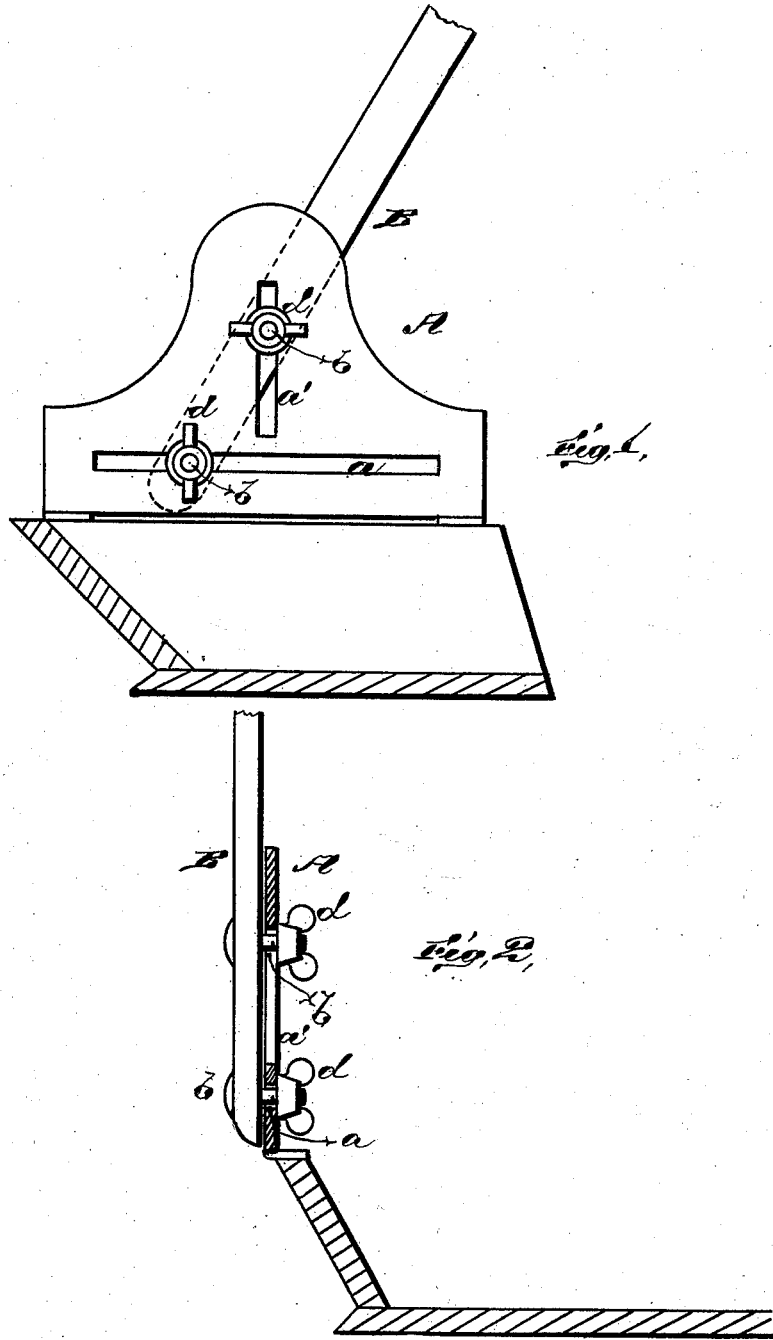


C. W. GRINNELL & F. BULCKENS.  
Vehicle-Top Adjuster.

No. 203,726.

Patented May 14, 1878.



WITNESSES  
*A. Bates*  
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ATTORNEYS.

# UNITED STATES PATENT OFFICE.

CHARLES W. GRINNELL AND FRANK BULCKENS, OF WAVERLY, IOWA.

## IMPROVEMENT IN VEHICLE-TOP ADJUSTERS.

Specification forming part of Letters Patent No. **203,726**, dated May 14, 1878; application filed April 27, 1878.

*To all whom it may concern:*

Be it known that we, CHARLES W. GRINNELL and FRANK BULCKENS, of Waverly, in the county of Bremer and State of Iowa, have invented a new and valuable Improvement in Wagon-Top Supports; and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a sectional view of a carriage-seat with our wagon-top support attached; and Fig. 2 is a sectional view of carriage-seat, showing sectional view of our wagon-top support.

The nature of our invention consists in the construction and arrangement of a device for holding the bows of an adjustable carriage top or shade, as will be hereinafter more fully set forth.

The annexed drawing, to which reference is made, fully illustrates our invention.

To each end of a carriage-seat is fastened a metal standard, A, of any suitable form and dimensions. In the lower portion of this metallic standard is a horizontal slot, *a*, and

above the center of this slot is a vertical slot, *a'*, which extends upward for a suitable distance. B represents the lower portion of the center bow of the carriage-top, which passes down on the outside of the standard A, and is fastened thereto by means of bolts *b b* and thumb-nuts *d d*, said bolts passing through the slots *a a'*, and through holes in the bow B, as shown.

By loosening the thumb-nuts *d* the top can be adjusted at any desired angle back or forward or perpendicular, and again made firm and rigid by turning up the thumb-nuts.

What we claim as new, and desire to secure by Letters Patent, is—

The combination of the standard A, formed with the horizontal slot *a* and vertical slot *a'*, the bow B, and the bolts *b b* and thumb-nuts *d d*, or equivalent fastenings, substantially as and for the purposes set forth.

In testimony that we claim the above we have hereunto subscribed our names in the presence of two witnesses.

CHARLES W. GRINNELL.  
FRANK BULCKENS.

Witnesses:

V. B. GRINNELL,  
G. C. WRIGHT.