H. J. LINGENFELTER.

Improvement in Top-Supports for Carriages.

No. 132,766. Patented Nov. 5, 1872.

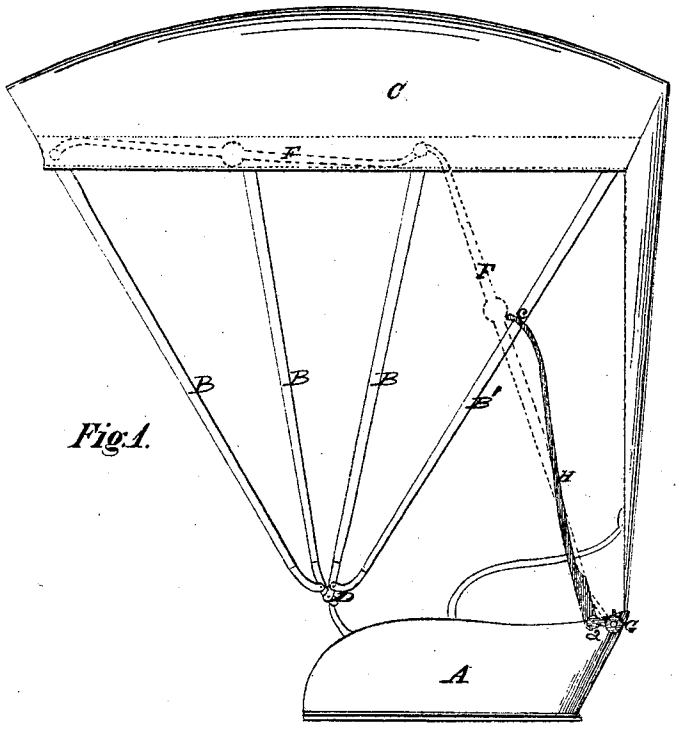

Fig. 1.

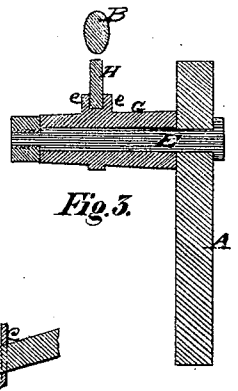

Fig. 3.

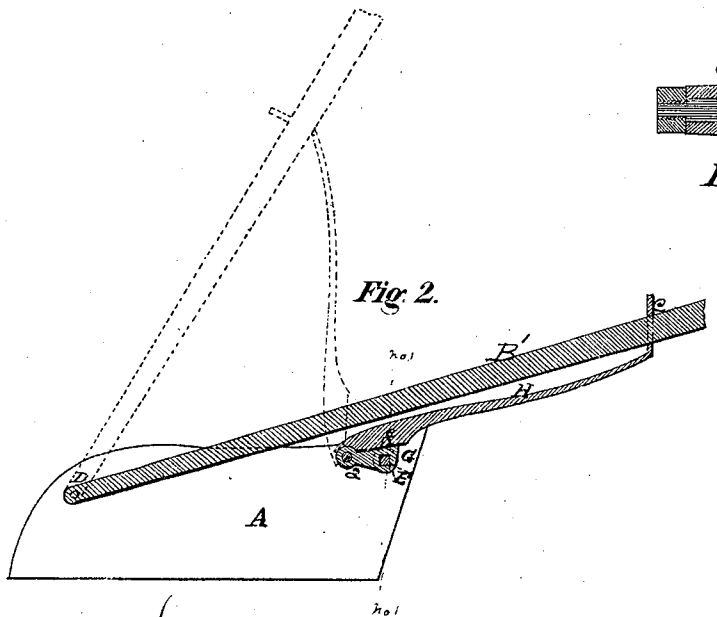

Fig. 2.

WITNESSES: Christian Wegan
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INVENTOR.

UNITED STATES PATENT OFFICE.

HENRY J. LINGENFELTER, OF GLEN, NEW YORK.

IMPROVEMENT IN TOP-SUPPORTS FOR CARRIAGES.

Specification forming part of Letters Patent No. **132,766**, dated November 5, 1872.

To all whom it may concern:

Be it known that I, HENRY J. LINGENFELTER, of the town of Glen, county of Montgomery, State of New York, have invented certain new and useful Improvements in Top-Supports for Carriages; and I do hereby declare that the following is a description thereof, reference being had to the accompanying drawing forming a part of this specification, in which—

Figure 1 represents the seat and top of a carriage embodying this invention and illustrating its application; Fig. 2 is a side view of a seat-bow and the improvements in this invention; and Fig. 3 is a cross-sectional view taken at line No. 1 in Fig. 2, on an enlarged scale.

My invention relates to the combination of a supporting-arm with the prop-block in such a manner that the said arm will be capable of supporting the back-bow of the top at a point a considerable distance from the said prop-block when the top is thrown down, and will also support the said bow when thrown up. It also consists in the combination of steadying-pins with the prop-block and supporting-arm, which will be capable of preserving the top from all lateral sway.

To enable others skilled in the art to make and use my invention, I will proceed to describe it in reference to the drawing and the letters of reference marked thereon, the same letters indicating like parts.

In the drawing, A represents the seat of a carriage; B B B B′ are the bows; C is the top; D is the slat-iron prop; E is the prop-iron; F represents the joints, all of which may be made of the usual form.

In the usual arrangements of the several parts above mentioned the back-bow B′, when the top is thrown back, rests on the usual prop-block surrounding the prop-iron E, and all the weight of the top, with its increase by leverage, is to be sustained by the said back-bow at the point of its contact with the said prop-block, which necessitates the strengthening of the said bow with iron to near its full length to strengthen the same to resist the strain it must bear.

In my invention I form the prop-block G of metal, and provide on its front side an arm, *a*. To the said arm is pivoted the bow-supporting arm H, which arm is capable of being thrown forward with the bow, as in Fig. 1, or back with the same, as in Fig. 2. When the said supporting-arm is thrown back its lower side at its forward end will ride on the prop-block G, as shown, while its rear end will be made to lie beneath the rear bow B′, as shown in Fig. 2. On the rear end of the said supporting-arm is formed a loop, *c*, which loop may be made stiff and rigid, or be pivoted, as may be desired, and may be covered with leather, padding, or rubber, as may be desired; the said loop is to receive the bow B′, as shown, and will preserve the bow and the supporting-arm in their proper positions when the top is thrown back, and when the top is thrown up, the said loop, grasping the said bow, will carry said supporting-arm up, as shown in Fig. 1. On the upper side of the prop-block G is made the two steady-projections *e e*, between which the supporting-arm H will lie when thrown down. A recess made in the said prop-block and in a cross-direction with the same; or a pin made on the said block and entering a corresponding hole in the under side of the supporting-arm; or a pin made with the arm and working in a hole made in the upper side of the block, would act as equivalents to the said steadying projections *e e*.

The manner in which the improvements in this invention operate is as follows: The back-bow B′ being made to enter the loop *c* of the supporting-arm will be retained in close contact with the end of the said arm when in all its positions, and when the top is thrown back, as in Fig. 2, the rear and far-reaching end of the said arm will bear up against the bow and prevent it from sagging down, and the weight of the top, which heretofore was supported by the prop-block, which point of support was about one-third of the length of the bow from its front pivoted end, will have its support at a point about three-quarters of the length of the bow-back, which will effectually relieve the said back-bow from the excessive strain which has heretofore attended that bow, and when the top is thrown up the said arm will tend to support the same. The steadying projections *e e*, or the prop-block acting with the sides of the supporting-arm H, prevent the ordinary lateral sway of the top, and the usual attending wear of the bows as they ride on each other.

By these improvements the bows can be

made lighter, and all necessity for plating the bows is removed, and the top is properly supported and steadied in a lateral direction, and the supporting-arm affords the convenience of a holding-rod for riders, as well as a support for the back-bow.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination of the supporting-arm H with the prop-block G, substantially as and for the purpose set forth.

2. The combination of the steadying projections *e e*, or their described equivalents, with the prop-block G and supporting-arm H, substantially as and for the purpose set forth.

HENRY J. LINGENFELTER.

Witnesses:

WALTER CROSS,

ALEXANDER WILER.