

United States Patent Office.

GALLUS WOEBER AND AMANDUS WOEBER, OF DAVENPORT, IOWA.

Letters Patent No. 69,885, dated October 15, 1867.

IMPROVEMENT IN CARRIAGE AND BUGGY-TOP BOW-IRONS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that we, GALLUS WOEBER and AMANDUS WOEBER, of the city of Davenport, in the county of Scott, and State of Iowa, have invented a new and useful Improvement in Buggy and Carriage-Top Bow-Irons; 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 accompanying drawings, making a part of this specification, in which—

Figure 1 represents an outside view of sockets and hinge with bows attached.

Figure 2 an inside view of same, showing bow-irons as attached to bows.

Figure 3 a view in detail of socket, bow-iron, pivot and bow, as attached, with inside plate of hinge removed.

Figure 4, a vertical section of bow-iron, bow-socket, and hinge, as indicated by the line *xy* in fig. 3.

Like letters in the different figures of the drawings indicate like parts.

Our invention consists, first, in providing sockets for receiving and securely fastening the ends of the bows of buggy and carriage-tops; second, in providing and constructing flanges on the sockets or bow-irons, for strengthening and steadying the bows; third, in constructing the hinges or fasteners of the bow-irons of two plates, one of which is provided with pivots for holding the bow-irons, and the other plate attached and fastened with screws.

To enable others skilled in the art to make and use our invention, we will proceed to describe its construction and operation:

A is the outside plate of the hinge, constructed with pivots *aaaa* on inside of the plate, as shown in figs. 3 and 4. B is the inside plate, attached to outside plate by means of the screws *bbbb*, the pivots *aaaa* being provided with holes and screw-threads to receive and hold these screws. C C C C are sockets, with flanges *eeee*. D D D D are the bow-irons, constructed with holes at lower ends for receiving the pivots *aaaa*, (see fig. 3,) and attached to the bows by the screws *dddd*, and extend through the socket on the inside of the bows, as clearly shown in figs. 3 and 4. In fastening the bows to the irons, as heretofore constructed, screws were required near the ends of the bows, and screw-holes through the irons, near the lower ends thereof, which weakened the irons where there is the greatest strain and where the greatest strength is required, and if the ends of the bows were neatly finished, there was not sufficient substance for the screws, and hence the ends of the bows were liable to split in putting in the screws or by the strain in use. Both of these difficulties are avoided by our plan of using the sockets. The ends of the bows being made the proper shape and size, are fitted neatly and tightly in the sockets along with the bow-irons, which extend through the sockets, and are fastened by the screws *eeee* through the sockets, which hold the ends of the bows firmly and prevent the liability of splitting, and avoid the necessity of screw-holes in the lower ends of the irons. The flanges *eeee* are for the purpose of steadying and strengthening the bows. The pivots *aaaa*, constructed on plate A, may be of sufficient size to insure all required strength and durability, and being constructed on the inside of the plate, the face thereof presents a neater appearance, and our plan of securing the inside plate by means of screws affords greater facilities for attaching and detaching the bow-irons, while the use of the sockets affords a neater finish and greater strength and durability than the previous plan.

Having thus fully described our invention, what we claim therein as new, and desire to secure by Letters Patent, is—

1. Providing sockets for receiving and fastening the ends of the bows of buggy and carriage-tops, substantially in the manner and for the purposes as herein described.
2. The construction and arrangement of flanges on the sockets, substantially in the manner and for the purpose as herein described.
3. The hinges, as constructed, with plate A, having pivots *aaaa*, with holes in the pivots for screws, and plate B, attached by screws, substantially in the manner and for the purposes as herein described.
4. The sockets with flanges, and the hinges with pivots, as constructed and arranged, in combination with the bows and bow-irons, substantially in the manner and for the purposes as herein described.

GALLUS WOEBER,
AMANDUS WOEBER.

Witnesses:

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