(No Model.)

J. B. FOX.

CARRIAGE BOW.

No. 383,876. Patented June 5, 1888.

Fig. 1.

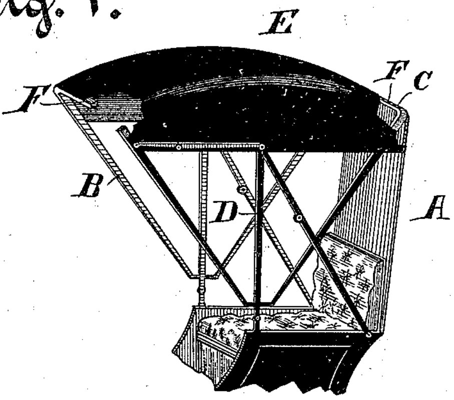


Fig. 2.

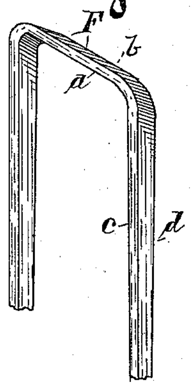


Fig. 3.

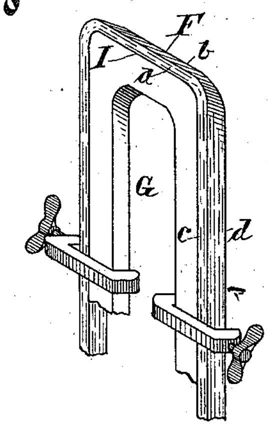
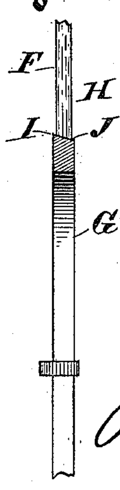


Fig. 4.



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UNITED STATES PATENT OFFICE.

JOHN B. FOX, OF MILWAUKEE, WISCONSIN.

CARRIAGE-BOW.

SPECIFICATION forming part of Letters Patent No. 383,876, dated June 5, 1888.

Application filed July 30, 1887. Serial No. 245,659. (No model.)

To all whom it may concern:

Be it known that I, JOHN B. FOX, of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented new and useful Improvements in Carriage-Bows; and I do hereby declare the following to be a full, clear, and exact description of said invention, reference being had to the accompanying drawings, and to the letters or figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in the form of the front and rear bows of carriage-tops and to the method of forming the same.

Heretofore it has been common in forming the bows of carriage-tops to bend the material of which the front and rear bows are formed in the same shape as that of the central bows upon the same form, whereby the upper surface of the horizontal central portion of the bows are, when thus made, perfectly level on top and being at right angles to their edges, in which case it has heretofore been necessary to shave off or bevel the inner upper corners of the front and rear bows, so that the upper surface of the bows will be on a line with the circle described by the cover of the top when it is stretched from the front to the rear bow above and upon the central bow, which corners are, by the inclination of the front and rear bows, thrown up out of line with the outer corners of such bows, respectively, consequently causing an unsightly elevation of the cover at the front and rear of the top.

The object of my improvement is to so form the front and rear bow in bending that their upper surface will be brought in line with that of the cover of the top without the necessity of shaving or beveling the inner corners of such bows, whereby the bows are left their full size, and are not, as heretofore, weakened by the cutting of the material.

My invention is further explained by reference to the accompanying drawings, in which—

Figure 1 represents a perspective view of the carriage-top provided with my improved form of front and rear bow. Fig. 2 represents a perspective view of one of the bows removed from the cover. Fig. 3 represents a perspective view of one of the bows in place upon the form as it is bent preparatory to being used. Fig. 4 represents a vertical section through the form upon which the bows are bent, with a bow attached to one side preparatory to being bent.

Like parts are represented by the same reference-letters throughout the several views.

A is the carriage-top. B is the front bow. C is the rear bow. D is the central bow, upon which bows the cover E is secured in the ordinary manner.

In forming the bows the material is made in the ordinary rectangular shape, having flat upper and lower surfaces, *a* and *b*, formed at right angles to its respective sides *c* and *d*, and the peculiar form of their horizontal central portion, F, is given to the bows when being bent by the peculiar shape of the form G. (Shown in Figs. 3 and 4.) Heretofore the forms G have been made with a flat central upper surface formed at right angles to its sides.

By my improved method of forming the front and rear bows the upper surface, H, of the form G is made on a bevel, as shown in Figs. 3 and 4. The angle of the surface H is made to conform to the angle desired for the cover of the top, so that when the cover is stretched across the bows formed thereon it will rest upon the entire upper surface of such bows, and the surface of the front and rear bow will conform nicely to the curved shape of the cover, and the unsightly elevation of the cover at its front and rear is thereby avoided without the necessity of shaving off the inner corners of the front and rear bows.

In forming front and rear bows the material of which they are formed is first prepared in long straight rectangular bars of the ordinary form, which bars are steamed in the ordinary way preparatory to being bent. When the material is thus prepared, one end of the bar thus prepared is clamped to one side of the form, as shown in Fig. 4, when the bar is bent at right angles to the side across the top and then downward upon the other side of the form, when it is thus secured in place by another clamp, which is attached as shown in Fig. 3. The bow thus formed is thus held in place until dry, when it is removed from the form. Bows thus prepared will thereafter retain the shape

given to them by the form, and are ready to be used in the construction of a carriage-top, as described. In thus bending the material for the front and rear bows upon the form G it has been found by practical experience that the material when bent across the upper angular surface of the form will be stretched or drawn out upon the upper side of the angle at I and will be contracted upon the lower side of the angle at J, so as to nicely fit and conform to said angular surface H without attaching thumb screws or other appliances to the central portion of the bow, and will, when held in place and dried upon the form, remain in the desired shape described, with its upper central portion bent at the desired angle to conform to the shape of the cover.

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

1. As a new article of manufacture, the carriage-bows for the front and rear of a carriage-top having their central horizontal portion bent at an obtuse angle to their respective sides or ends, whereby when said bows are secured in place at an angle to the central cover-supporting bow the upper surface of said horizontal central portion of said front and rear bows will conform to the shape of the cover of said top affixed thereto, substantially as and for the purpose specified.

2. In a carriage-top, the combination of the central top-supporting bow, D, front and rear top-supporting bows, B and C, having their horizontal central portion, F, bent at an obtuse angle to their respective sides or ends, whereby said central portion is adapted to conform to the curve or angle of the cover E affixed thereto, and cover E, secured at its respective ends to said front and rear bows and at its center to said central bow, all substantially as and for the purpose specified.

3. The method herein described for forming the front and rear bows of a carriage-top, consisting in bending the same over a U-shaped form, the upper surface of the central portion of which form is beveled at an obtuse angle to conform to the desired shape of the central portion of said front and rear bows, and in drawing said bows firmly down upon said beveled central portion of the form until said central portion of the bow is bent at an obtuse angle conforming to the shape of said form, and securing and retaining said bow in such position upon the form until by seasoning its shape becomes permanently fixed, substantially as and for the purpose specified.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN B. FOX.

Witnesses:
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