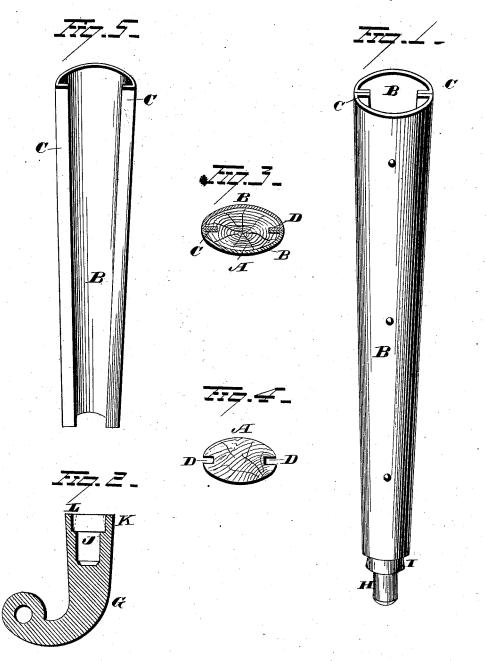
(No Model.)

F. A. WITTICH, C. R. STANHOPE & P. W. STRADER. CARRIAGE BOW.

No. 261,287.

Patented July 18, 1882.



S. G. Nottingham. Jes. as. Sezmour

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## UNITED STATES PATENT OFFICE.

FREDERICK A. WITTICH, CHARLES R. STANHOPE, AND PETER W. STRADER, OF ASHTABULA, OHIO.

## CARRIAGE-BOW.

SPECIFICATION forming part of Letters Patent No. 261,287, dated July 18, 1882. Application filed May 22, 1882. (No model.)

To all whom it may concern:

Be it known that we, F. A. WITTICH, C. R. STANHOPE, and P. W. STRADER, of Ashtabula, in the county of Ashtabula and State of Ohio, have invented certain new and useful Improvements in Carriage-Bows; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which 10 it pertains to make and use the same.

Our invention relates to an improvement in side pieces for carriage-bows, and more particularly to that class of side pieces wherein a filler of wood is inclosed in a case of sheet 15 metal, the object of the invention being to provide a case of novel and improved construction, and also to provide means for uniting the case of a side piece to the slat-iron thereof.

A further object of the invention is to pro-20 vide a side piece which shall combine simplicity and cheapness of construction with durability, lightness, and strength.

With these objects in view our invention consists in certain details of construction and 25 combinations of parts, as will be hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in perspective of a side piece constructed in accordance with our invention, the slat-iron 30 being detached. Fig. 2 is a view in vertical cross-section of the slat-iron. Fig. 3 is a view in transverse section through the side piece. Fig. 4 is a similar view of the filler, and Fig. 5 is a view in perspective of one of the sec-35 tions of the case.

The case which incloses the wood filler A is made up of two sections, B, of metal, formed by the appropriate manipulation of suitable blanks. These sections gradually taper from 40 their upper to their lower ends, and are nearly semicircular in cross-section, their edges C being bent inwardly at right angles and adapted to enter longitudinal grooves D, formed in the opposite faces of the filler A, said grooves be-45 ing of sufficient width to receive the contiguous edges of the respective sections. The union between the sectional case above described

and the slat iron G is effected by means of an

smaller ends of the case sections and adapted 50 to be locked in a recess formed in the slat-iron. The said tip consists of a stem, H, having a cone-shaped extension, I, formed at its base, the recess J in the slat-iron being adapted in contour to receive the said stem and its ex- 55 tension. In securing the slat-iron to the case the stem is introduced into the recess J, and the parts are put into a suitable press, which closes the upper edge, K, of the slat iron around the extension I, thus uniting the two 60 parts and making a rigid connection between them. The construction of the slat-iron is such that when its upper edge is compressed, as described, it will be flush with the contiguous edges of the case-sections; but if it is de-65 signed to apply a flexible cover to the side pieces, the upper edge of the slat-iron is provided with a shoulder, L, upon which the lower edge of the cover rests, and which is flush with the outer face thereof.

By following the invention above described a very stiff side piece may be constructed by the use of very light metal for the case, such metal being readily punctured for the insertion and attachment of suitable screws, knobs, 75 and buttons. Neither is it necessary to re-enforce the side piece by inserting strips of metal into the filler, for it is sufficiently rigid to withstand all ordinary strain without such stiffening devices. The side piece, being symmetri- 80 calin contour, may be finished either by a coating of lacquer or japan or by a flexible cover applied in any approved manner.

To engage the case sections with the filler their edges are brought in contact, and it is 85 driven into the space inclosed by the sections in such manner that the edges U thereof will be received in the longitudinal grooves D aforesaid. The filler should be so much shorter than the said sections that they will project suffi- 90 ciently beyond it to form a space E for the introduction of the end of the curved portion of the carriage-top, which may be secured to the projecting ends of the case-sections by rivets, screws, or the equivalents thereof. Rivets, 95 passing through the filler and uniting the casesections, are employed to aid in strengthening iron tip welded, brazed, or soldered to the and in giving rigidity to the side piece.

It is apparent that in practicing our invention changing circumstances may require some slight deviations from the construction herein described. We would therefore have it understood that we hold ourselves at liberty to make such changes and alterations as fairly fall within the spirit and scope of our invention.

Having fully described our invention, what we claim as new, and desire to secure by Let-

10 ters Patent, is-

1. In the side piece of a carriage-bow, the combination, with a filler having longitudinal grooves formed in its opposite faces, of two case-sections having inwardly-bent edges, said edges being adapted to be received within the grooves in the filler, substantially as set forth.

2. In the side piece of a carriage bow, the combination, with a case, of a tip secured to the lower end thereof, and a slat-iron recessed to receive the tip, and adapted to have its upper edge closed around the same to lock the two parts together, substantially as set forth.

3. In the side piece of a carriage bow, the combination, with a case, of a tip welded to

the lower end thereof, and consisting of a stem 25 provided with an extension, and a slat-iron recessed to receive the tip, and adapted to have its upper edge closed around the extension of the same to lock the two parts together, substantially as set forth.

4. In the side piece of a carriage-bow, the combination, with a case, of a tip welded to the lower end thereof, and a slat-iron recessed to receive the tip, adapted to have its upper edge closed around the same to lock the two 35 parts together, and provided with a shoulder which extends around its upper edge, substantially as set forth.

In testimony whereof we have signed this specification in the presence of two subscribing 40

witnesses.

FREDERICK A. WITTICH. CHAS. R. STANHOPE. PETER W. STRADER.

Witnesses:

R. N. SOWDERSON, L. B. SHERMAN.