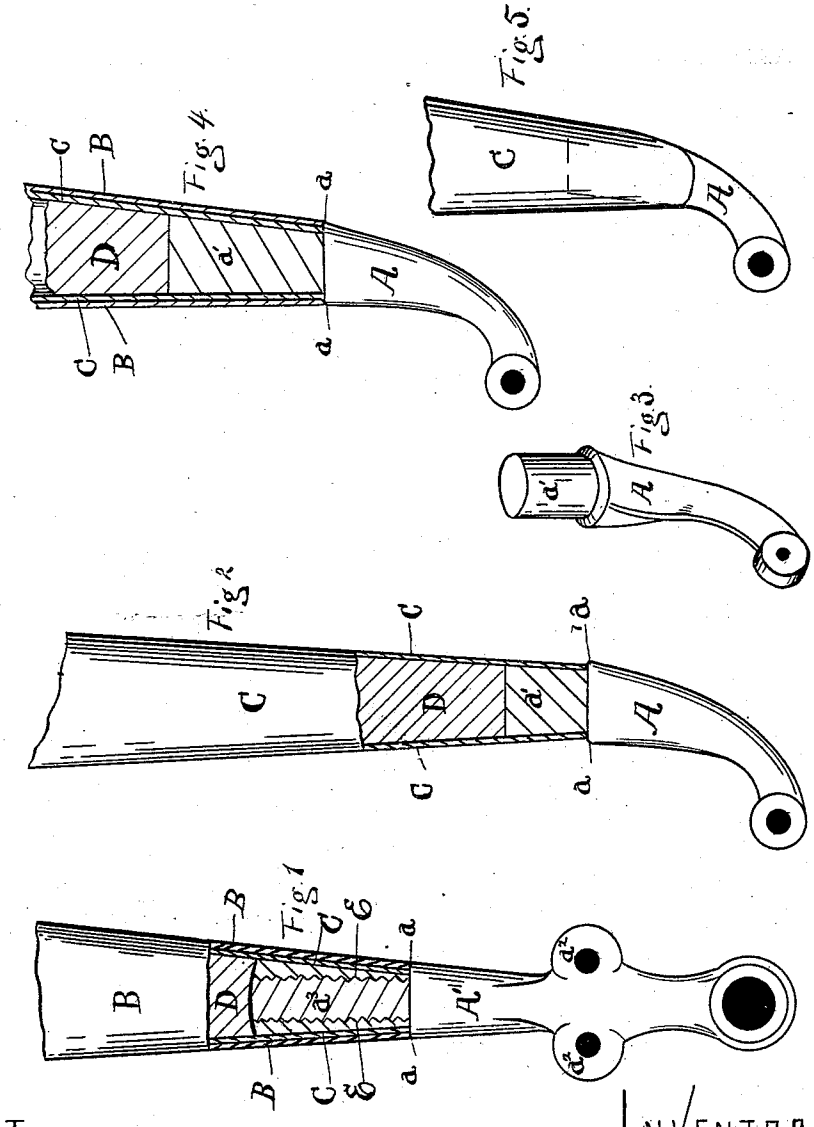
(No Model.)

I. N. TOPLIFF.

CARRIAGE BOW.

No. 423,460. Patented Mar. 18, 1890.



ATTEST

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UNITED STATES PATENT OFFICE.

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CARRIAGE-BOW.

SPECIFICATION forming part of Letters Patent No. 423,460, dated March 18, 1890.

Application filed August 9, 1889. Serial No. 320,218. (No model.)

To all whom it may concern:

Be it known that I, ISAAC N. TOPLIFF, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga, State of Ohio, have invented a certain new and useful Improvement in Carriage-Bows; and I do hereby declare the following to be a specification of my said invention.

My invention relates to leather-covered tubular bow-sockets.

The object of my invention is a construction of bow-socket whereby the edge of the leather covering at the lower end of the socket may be protected to save its being roughed and torn by usage, and which also will secure at all times a straight edge to the leather covering around the socket at its lower end, and always of uniform distance from the end of the slat-iron, and also form a smooth surface to the socket at the point of articulation between the leather covering and slat-iron, thus increasing the wear of the covering and giving the socket a neater appearance.

To accomplish the object in view my invention consists in certain details of construction described herein, and pointed out in the claims.

In the drawings, Figure 1 is a sectional view which illustrates my invention as adapted to the main socket of a set of carriage-bows. Fig. 2 is a sectional view of a front or back socket of my invention with the leather cover omitted. Fig. 3 is a perspective view of the slat-iron. Fig. 4 is a sectional view of a front or back socket of my invention with the leather covering. Fig. 5 is a broken section of the bow-socket heretofore in use, and is introduced to give a clearer understanding of the features which constitute my invention.

Heretofore in the manufacture of tubular bow-sockets the slat-iron has been formed first nearly as illustrated by Fig. 3. It was then inserted in the metal tube and welded, and after swaging was of the form illustrated by Fig. 5. After welding and swaging no shoulder was left on the slat-iron, the shoulder having been compressed, and the tube by the process of welding and swaging being brought down to the shank of the slat-iron, so that the socket was tapering to the eye of the slat-iron, as illustrated by Fig. 5. In covering such a socket it is impossible, without trimming the end of the cover after it is on the socket, to get the edge of the leather straight around the shank or to have the covers of uniform length in different sockets; besides the raw edge of the leather is left without protection, so that by wear and usage it becomes roughed and torn, so as to present a ragged appearance.

I will now describe my invention.

In the different figures of the drawings, A represents the slat-iron of the front and back sockets.

A′ represents the slat-iron of the main socket.

B is the leather cover.

C is the metal tube, and D is the wood filler.

The slat-iron A of the front and back sockets is formed with a tenon a', which enters the metal tube C and is brazed or welded in the tube, leaving a shoulder a broad enough to be flush with the outer surface of the leather cover B at the point of articulation. The filler D is formed and inserted into the socket-tube C in the ordinary way. The leather cover B is cut and sewed in any well-known way, the bottom end being straight, and is then pulled on, after covering the tube with a suitable paste, till the lower end of the cover comes inside of but fits snugly against the extended shoulder a of the slat-iron. The slat-iron should be made of such shape that when the parts of the socket are assembled a continuously smooth and tapering form from the upper part of the socket to the shank of the slat-iron will be given.

The main socket (illustrated by Fig. 1) is provided with a ferrule E, which is welded, brazed, or driven in the lower end of the metal tube C and is threaded. The tenon a^3 of the slat-iron A′ is also threaded to screw into the socket, as shown. The leather cover of the main socket is put on before screwing to it the slat-iron A′. The object of screwing in the slat-iron of the main socket instead of brazing or welding it is that the cover may be sewed to its lower end before putting it on the socket. If the slat-iron is united to the socket before putting the cover on, the cover would need to be left open a great part of its length, so that it could pass over the ears a^2 a^2, and it would afterward have to be sewed by hand when upon the tube. The shoulder a is broad

enough to come flush with the leather cover as in the other sockets.

It will be observed that in my improved construction of bow-socket the edge of the leather cover is protected, so that it cannot be rubbed against and roughed up. The lower end of the cover can always be made straight around the socket and of uniform height from the lower end of the slat-iron in the different sockets, and that it also presents a better appearance than the leather-covered sockets of other constructions.

What I claim as my invention is—

1. The combination, in a carriage-bow, of the metal tube C, the wood filler D, the leather cover B, and the slat-iron provided with a shoulder *a*, and being of such form that when said parts are assembled the socket will be continuously smooth and tapering from its upper leather-covered part to the shank of the slat-iron, substantially as described.

2. The combination, in a main carriage-bow, of the metal tube C, the wood filler D, the ferrule E, secured within the lower end of the tube C and having a female screw-thread, the leather cover B, and the slat-iron A′, having a tenon a^3, provided with a male thread, said slat-iron having the shoulder *a*, and being of such form that when the parts of the socket are assembled the socket will be continuously smooth and tapering from its upper leather-covered portion to the shank of the slat-iron, substantially as described.

3. In a carriage-bow, the combination of the metal tube C, the leather cover B, and the slat-iron having the shoulder *a*, and being so formed that when the parts of the socket are assembled it will be continuously smooth and tapering over the point of articulation between the said cover and slat-iron to the shank of the slat-iron, substantially as shown and described.

ISAAC N. TOPLIFF.

Witnesses:
W. P. TODD,
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