(No Model.)

R. H. PFAFF.

CARRIAGE BOW SOCKET.

No. 410,561. Patented Sept. 3, 1889.

Fig. 1.

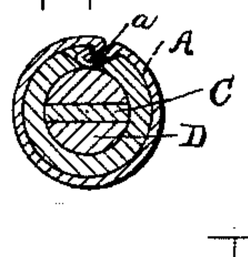


Fig. 2.

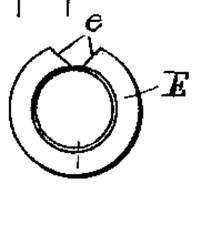


Fig. 3.

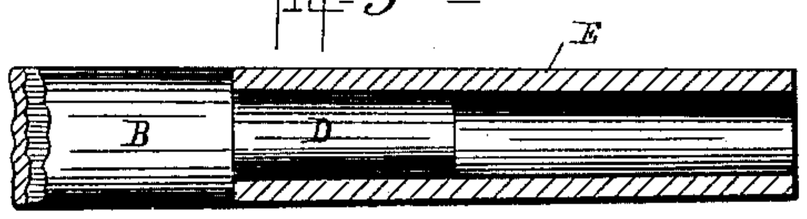


Fig. 4.

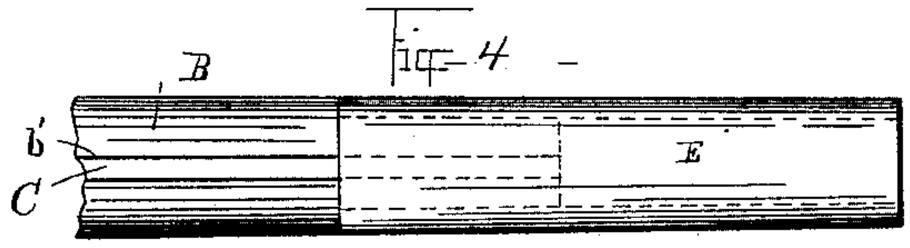


Fig. 5.

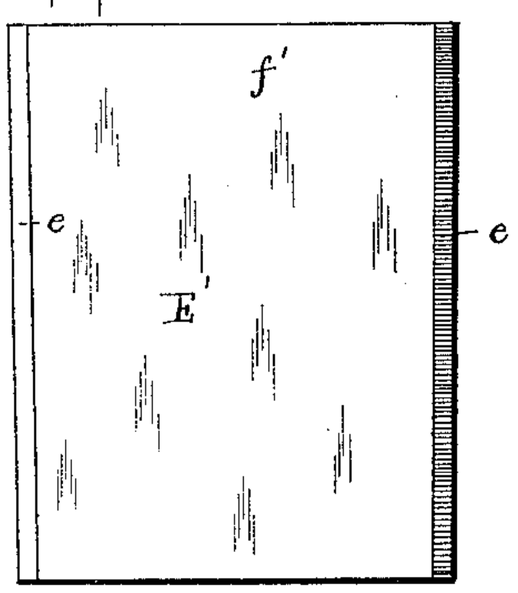


Fig. 6.

Fig. 7.

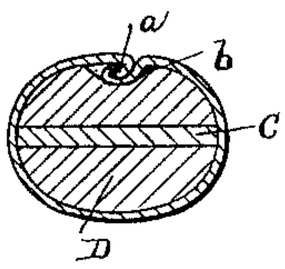


Fig. 8.

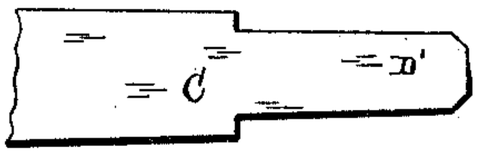
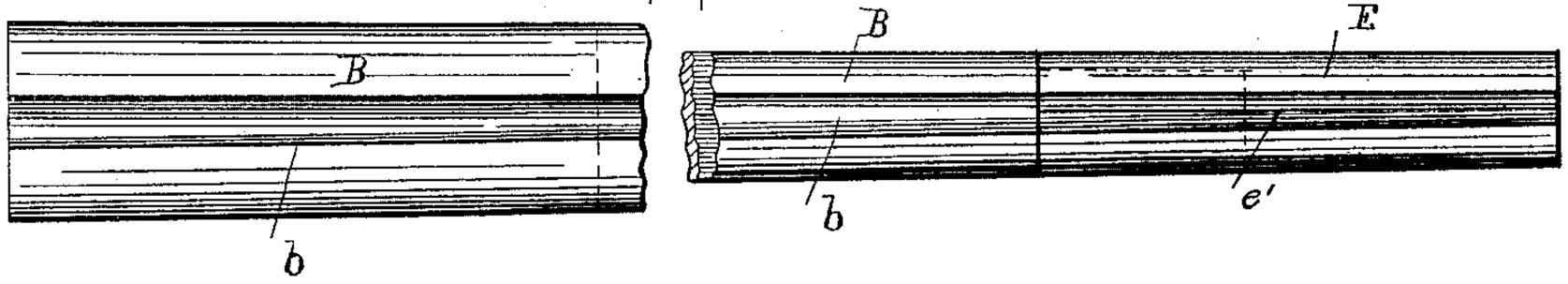


Fig. 9.



Witnesses
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J. B. Fay

Inventor
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By his Attorney
Thos. S. Hall

UNITED STATES PATENT OFFICE.

RUDOLF H. PFAFF, OF ASHTABULA, OHIO, ASSIGNOR TO THE ASHTABULA CARRIAGE BOW COMPANY, OF SAME PLACE.

CARRIAGE-BOW SOCKET.

SPECIFICATION forming part of Letters Patent No. 410,561, dated September 3, 1889.

Application filed June 27, 1889. Serial No. 315,827. (No model.)

To all whom it may concern:

Be it known that I, RUDOLF H. PFAFF, a citizen of the United States, and a resident of Ashtabula, county of Ashtabula, and State of Ohio, have invented certain new and useful Improvements in Carriage-Bow Sockets, of which the following is a specification, the principle of the invention being herein explained and the best mode in which I have contemplated applying that principle, so as to distinguish it from other inventions.

My invention has for its object an improved form of ferrule for carriage-bow sockets and an improved joint or mode of connecting the stiffener, filler, and socket together.

Heretofore in certain classes of bow-sockets, the weakest point of the socket has been the point of juncture between the stiffener and filler and the ferrule; but by my improved construction this point of juncture will be quite as strong and rigid as any other point of the socket.

Referring to the drawings, Figure 1 is a transverse sectional view taken through the ferrule and bow-socket. Fig. 2 is an end view of the ferrule. Fig. 3 is a view, partly in section, showing the joint between the filler-stiffener and ferrule. Fig. 4 is a plan view showing a portion of the filler and stiffener and ferrule. Fig. 5 is a plan of the piece of metal from which the ferrule is to be formed. Fig. 6 is a plan view of the finished ferrule. Fig. 7 is a transverse view through the socket. Fig. 8 is a view of the stiffener-tenon. Fig. 9 is a view of the groove side of the filler and ferrule, the joint between the two being shown in dotted lines.

A is the usual form of metal bow-socket, adapted to be covered with enameled leather, which is not herein shown, as it plays no part in this invention. Said socket is provided with the interior rib *a*, caused by the joining together of the two edges of the metal.

B is a wood filler that extends from a point a few inches from the top of the socket to the ferrule, said filler provided with the groove *b*, in which the rib *a* is inserted to prevent the filler turning in the socket, and it is also provided with the central slot *b'*, in which is inserted the flat metal stiffener C. Said filler and stiffener are each provided at their lower extremities with a tenon, respectively, D D', that lie in the same transverse plane with one another.

My improved form of ferrule E is made as follows: A flat piece of rolled metal, as E', is cut to the required size, and the two opposite edges *e* of the same are cut angularly to each other, as shown, so that the superficial area of the face of the metal that is to be the interior of the finished ferrule is greater than the face *f'*, which is to be the exterior face of the finished ferrule. By this construction a longitudinal groove *e'* is formed when the projecting extremities of the angular meeting edges are brought into contact with each other. This is a much cheaper way of making the groove than cutting or planing it out, and it is equally effective. When the ferrule is inserted in the bow-socket, it is so turned that the rib of the socket will fit into the said groove *e'* to prevent the turning and diametrical displacement of the ferrule. The tenons of the wood filler and the stiffener are then inserted in the ferrule, forming a strong joint therewith, and the ferrule is then brazed to the metal bow-socket and the stiffener at the same time brazed to the ferrule. A very strong and effective joint is thus formed between the stiffener and the ferrule and filler, and the ferrule as thus formed is equally effective with the more expensive ferrules heretofore used for like purposes.

The foregoing description and accompanying drawings set forth in detail mechanism the embodiment of my invention. Change may be made therein, provided the principles of construction respectively recited in the following claims are employed.

I therefore particularly point out and distinctly claim as my invention—

1. In a bow-socket, a ferrule made of a single rolled piece of metal, the meeting edges of said ferrule being cut angularly, whereby a groove is formed along said meeting edges, substantially as set forth.

2. In a bow-socket, the combination, with a stiffener provided with a tenon, of a ferrule,

said tenon fitting in said ferrule, substantially as set forth.

3. In a bow-socket, the combination, with a ferrule, of a filler and stiffener, each provided with a tenon fitting in said ferrule, substantially as set forth.

4. In a bow-socket, a ferrule made of a flat piece of metal, two of the opposite edges of which are cut angularly to each and in opposite directions, the ferrule being bent round until said angular edges meet at the inner side of the ferrule, whereby a groove is formed between the upper portion of said meeting edges, substantially as set forth.

5. In a bow-socket, the combination, with a ferrule, of a stiffener brazed to said ferrule, substantially as set forth.

6. In a bow-socket, the combination of a wood filler, a stiffener inserted therein, each said filler and stiffener provided with a tenon, and a ferrule in which said tenons are inserted, substantially as set forth.

7. The combination of a bow-socket provided with an interior rib, a filler provided with a groove in which said rib fits, a stiffener inserted in said filler, said stiffener and filler each provided with a tenon, and a ferrule provided with a groove at its meeting edges, said groove fitting around said socket-rib, said tenons fitting in said ferrule, substantially as set forth.

8. In a bow-socket, the combination, with a stiffener provided with a tenon, of a ferrule provided with an opening in which said stiffener is inserted.

9. The combination of a bow-socket provided with an interior rib, a filler provided with a groove fitting around said rib, said filler also provided with a slot, a stiffener fitting in said filler-slot, said stiffener and filler each provided at corresponding ends with a tenon, said tenons lying in the same transverse plane, and a ferrule made of a single bent piece of metal, the meeting edges of said metal cut angularly, whereby a groove is formed, said groove fitting around said socket-rib, said tenons fitting in said ferrule, said ferrule and stiffener brazed together, and said ferrule and socket also brazed together, substantially as set forth.

In testimony that I claim the foregoing to be my invention I have hereunto set my hand this 25th day of June, A. D. 1889.

RUDOLF H. PFAFF.

Witnesses:
J. B. FAY,
N. H. FAY.