G. H. ELY.

CARRIAGE-TOP BOW-IRONS.

No. 180,332. Patented July 25, 1876.

Fig. 1.

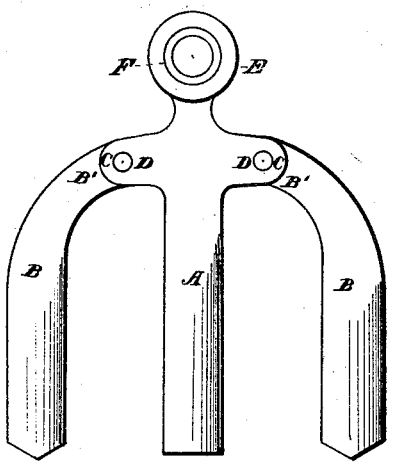
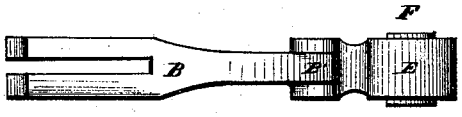


Fig. 2.



WITNESSES

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UNITED STATES PATENT OFFICE.

GEORGE H. ELY, OF ELYRIA, OHIO, ASSIGNOR OF ONE-HALF HIS RIGHT TO JOHN A. TOPLIFF, OF SAME PLACE.

IMPROVEMENT IN CARRIAGE-TOP BOW-IRONS.

Specification forming part of Letters Patent No. **180,332**, dated July 25, 1876; application filed April 19, 1876.

To all whom it may concern:

Be it known that I, GEORGE H. ELY, of Elyria, in the county of Lorain and State of Ohio, have invented certain new and useful Improvements in Brace-Iron for Carriage-Bows; and I 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 it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

The invention relates to an improvement in brace-irons for carriage-bows; and consists in forming the supporting bow-iron with jaws for receiving between them tongues which project from the side bows, and to which the side bows are hinged by passing a rivet or pintle through the two jaws and tongue.

In the drawings, Figure 1 is a plan view exhibiting the invention. Fig. 2 is a side view of same.

A is the central or supporting brace-iron. The side irons are shown at B. C are jaws, which project from the central iron and receive the tongues B′ between them, and the joint or hinge is formed by passing the rivet or pintle D through the jaws C and tongue B′.

Heretofore, in forming this joint on brace-irons, there has been simply one lug, C, instead of two, as here shown, and the tongue B′ of the side irons has been brought against it and a rivet or pintle passed through the two. This, however, makes a weak structure, liable to get out of order, and soon wearing to a condition that causes a rattle of the parts.

E is that part of the central brace-iron whereby the top is attached or pivoted upon the journal or bearing that is attached to the carriage-body or shifting-rail. F is a bushing, of brass or other similar metal, which is designed to receive the rail. This bushing projects out a slight distance beyond the plane of the faces of the central brace-iron, so that when the nut is tightened up to secure the top to the carriage, the nut will strike against the bushing F, so that the bushing receives all the strain and becomes a journal, upon which the brace-iron turns. All wear will come on this bushing F, and when it is worn out or worn loose a larger bushing can be substituted. Moreover the brace-iron will be left perfectly free to move.

It is not absolutely essential, of course, that this bushing should be made of brass or any other particular kind of metal, though the brass bushing is preferable.

It will be noticed that the brace-iron which is provided with the eye and bushing, and which has the jaws to receive the tongues B′, is itself one of the bow-irons.

It should also be observed that that supporting-brace need not necessarily be the central bow-iron, as shown in the drawings, and instead of providing for but two side braces, there may be provision for as many as may be desired.

What is claimed is—

In a carriage-top bow-iron, the combination, with the central bow-iron, formed with eye E and jaws C C, of the side bow-irons B, constructed with tongues B′ and pintles or rivets D, all constructed and arranged substantially as and for the purpose specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GEO. H. ELY.

Witnesses:

FRED. N. SMITH,

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