J. A. TOPLIFF.

Carriage-Bows.

No. 166,950. Patented Aug. 24, 1875.

Fig 1.

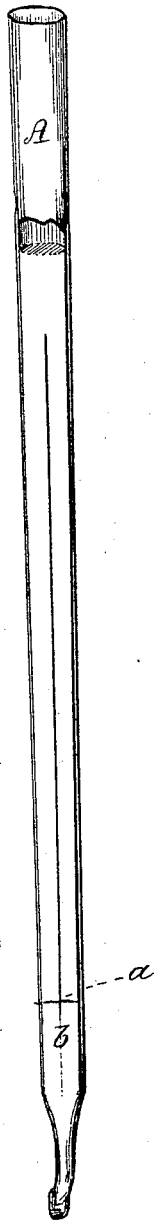


Fig 2.

Fig 3.

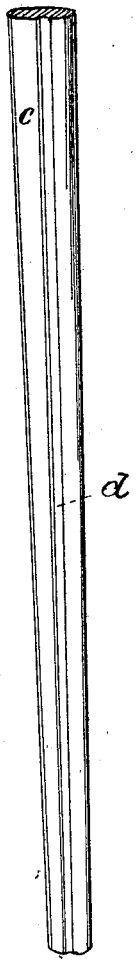
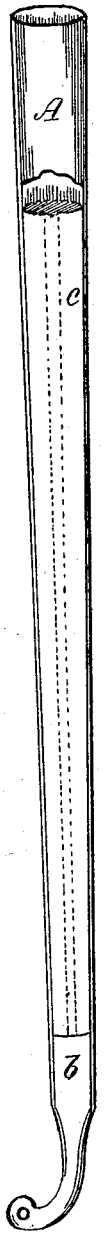


Fig 4.



Witnesses:
Herman Ely
Fred N. Smith

Inventor
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UNITED STATES PATENT OFFICE.

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

IMPROVEMENT IN CARRIAGE-BOWS.

Specification forming part of Letters Patent No. **166,950**, dated August 24, 1875; application filed November 16, 1874.

To all whom it may concern:

Be it known that I, JOHN A. TOPLIFF, of Elyria, county of Lorain and State of Ohio, have invented a new and useful Improvement in Bow-Sockets for Buggy-Tops; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a part sectional view of the bow-socket embodying my invention; Fig. 2, a detached view of the strip of steel; Fig. 3, a detached view of the wood filling, and Fig. 4 a side sectional view of my invention.

This invention has relation to bow-sockets for buggy-tops; and consists in placing a filling of wood in the tubes of the bow-sockets to strengthen the same; also, in extending the strip of steel which is inserted in the wood filling far enough down to enable it to be welded or otherwise fastened to the slat-iron.

Previous to my invention the method employed for strengthening the bows was to slit the wooden bow, placing therein a tapering piece of sheet-steel. The great difficulty in the bows constructed as above described was the continued bending or breaking of the back tubes where the steel strip ends near the slat-iron. To prevent this, in making the bow-sockets there is inserted in the back tube A a tapering strip of steel or other suitable metal, *a*, the same extending far enough down to enable it to be welded into or otherwise fastened to the slat-iron *b*, the strip of steel *a* being in reality a continuation of the slat-iron within the tube A, thus leaving no weak place to bend. I have also found that all the tubes of a bow-socket are much stronger when they are well filled with wood, and as it is difficult to properly fill them with the bows used on the buggy-top, I make small pieces of wood *c* the shape of the inside of the tube, as illustrated in Fig. 3 of the drawings, and large enough to drive in tightly, and when driven in to reach from the slat-iron *b* to within a short distance of the top of the tube, or far enough from the top to allow the buggy-bows to enter sufficiently to hold them. It is necessary that the wood filling for the back tubes be split far enough from the small end to receive the steel strip *a*. The wood filling *c* is formed with the usual groove *d* for the bead or lock upon the inside of the tube. The wood fillings can be made by machinery to fit the tubes much better than the wood bows can be fitted by hand, and very much cheaper, and, as they fit better, will make them stronger.

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

1. In combination with the back tubes of bow-sockets and wood bows or fillings, a steel or other hard-metal plate, welded or otherwise fastened within the tube to the slat-iron, substantially as and for the purpose specified.

2. The combination, with the metal tubes of bow-sockets, of a wooden filling, substantially as and for the purpose set forth.

JOHN A. TOPLIFF.

Witnesses:
HERMAN ELY,
FRED. N. SMITH.