

W. TRUAX.  
King-Bolts for Wagons.

No. 166,323.

Patented Aug. 3, 1875.

Fig. 1.

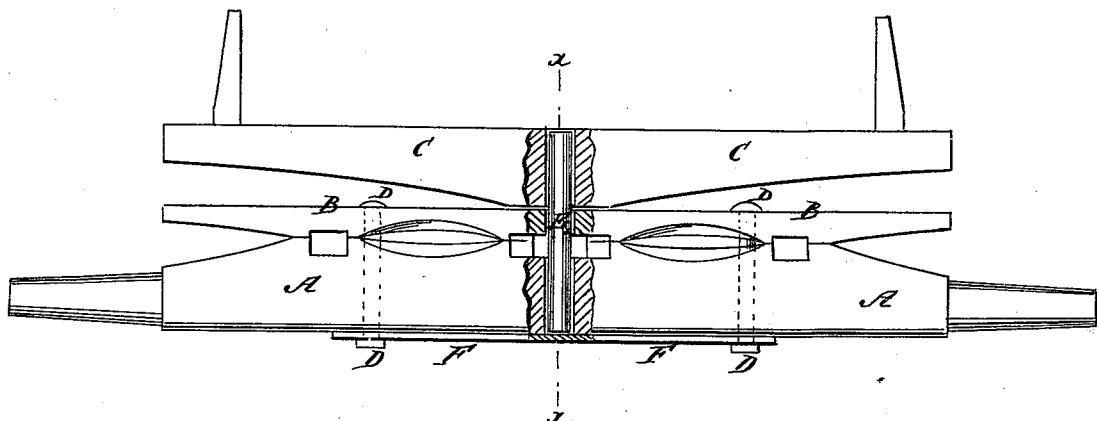
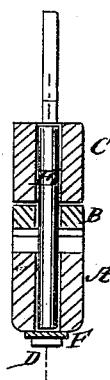


Fig. 2.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

WILLIAM TRUAX, OF HAMILTON, MICHIGAN.

## IMPROVEMENT IN KING-BOLTS FOR WAGONS.

Specification forming part of Letters Patent No. **166,323**, dated August 3, 1875; application filed July 3, 1875.

*To all whom it may concern:*

Be it known that I, WILLIAM TRUAX, of Hamilton, Allegan county, Michigan, have invented a new and useful Improvement in King-Bolts for Wagons, of which the following is a specification:

Figure 1 is a front view of an axle-tree, sand-board, and bolster, to which my improved king-bolt has been applied, part being broken away to show the construction, and Fig. 2 is a cross-section of the same, taken through the line *xx*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved king-bolt for wagons, which shall be so constructed as not to wear the bolster and wagon-box, as an ordinary king-bolt does, while at the same time being simpler in construction and less expensive in manufacture.

The invention consists in the headless king-bolt and its plate, in combination with the axle-tree, the sand-board, the bolster, and the sand-board bolts, as hereinafter fully described.

A is the axle-tree, B is the sand-board, and C is the bolster of the wagon, all of which parts are constructed in the ordinary way. D

are the bolts, by which the sand-board B and its irons are secured to the axle-tree A, in the usual way. E is the king-bolt, which is made without a head, and which is placed in a hole that passes through the axle-tree A, sand-board B, and bolster C.

The lower end of the king-bolt E rests upon the plate F fitted to the lower side of the axle-tree A, and secured in place by the bolts D, that fasten the sand-board B to the said axle-tree A.

By this construction the king-bolt E will be held securely in place, and being made without a head, will not wear the bolster C and the wagon-box, as an ordinary king-bolt does.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The headless king-bolt E and the plate F, in combination with the axle-tree A, the sand-board B, the bolster C, and the sand-board bolts D, substantially as herein shown and described.

WM. TRUAX.

Witnesses:

THOMAS MOON,  
EDWARD GEAR.