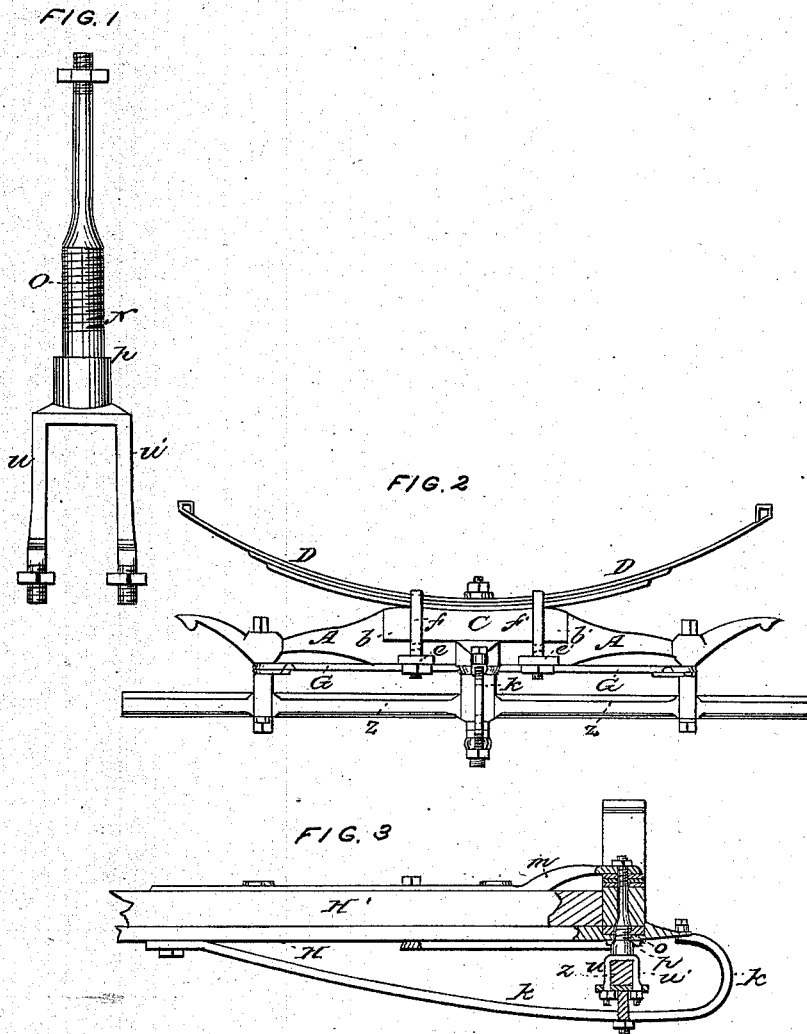


W. VONDERSAAR.

King Bolt.

No. 112,517.

Patented March 7, 1871.



WITNESSES:

Cha. H. Knapton  
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# United States Patent Office.

WENDEL VONDERSAAR, OF INDIANAPOLIS, INDIANA.

Letters Patent No. 112,517, dated March 7, 1871.

## IMPROVEMENT IN KING-BOLTS.

The Schedule referred to in these Letters Patent and making part of the same.

### *To all whom it may concern:*

Be it known that I, WENDEL VONDERSAAR, of Indianapolis, in the county of Marion and State of Indiana, have invented a new and valuable Improvement in Vehicle-Bolts and Head-Block; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of my king-bolt.

Figure 2 is a front view.

Figure 3 is a central vertical longitudinal section.

The first part of this invention consists in a head-block of peculiar construction for vehicles.

The second part of the invention consists in a king-bolt of peculiar construction, designed to be used with the said head-block.

The third part of the invention consists in the combination of the aforesaid devices with other parts of a vehicle, hereinafter more fully mentioned.

The head-block A is made of iron, in the form shown in the accompanying drawing. On its upper side there is a rectangular notch, *b b'*, to receive the wooden spring-block C, upon which the spring D rests. On each side of its base it is provided with lugs *e e'*, to which are fastened, by means of nuts, the clips *f f'*, that pass around the spring D, spring-block C, and head-block A, holding them firmly together. It is neatly tapered and shaped to its extremities, and the upper plate of the fifth-wheel G is connected to it by bolts, as shown. It is provided on the under side with a central rectangular notch for the reception of the iron portion of the coupling H, which extends along the whole length of and is bolted to the wooden portion of the coupling H', and is notched near its forward end, so as to couple in the notch on the under side of the head-block A, as shown.

The front of the iron portion of the coupling H is tapered and projected a little forward of the head-block A, as a support to the iron brace K, which passes around downward and backward, and is connected to

the under side of the axle Z and iron portion of the coupling H by bolts and nuts, as shown.

The wooden portion of the coupling H' is held firmly against the spring-block C by being bolted to the iron portion of the coupling H and the iron brace *m*, which is connected to the king-bolt N above the spring D.

The king-bolt N passes through the spring D, spring-block C, head-block A, and iron portion of coupling H. It is provided with a central male-screw thread, *o*, to fit in a female screw in the iron portion of the coupling H, and with a shoulder, *p*, upon which the iron portion of the coupling H rests. It is also forked at its lower end, *u u'*, to receive the axle Q, to which it is firmly held by a plate and nuts, as shown. It is held in position by means of a screw-thread and nut at its upper end, the nut pressing upon the spring D. It is of a peculiar tapering shape and construction, which give it ample strength where the strain is the greatest.

The construction and arrangement of devices thus presented form, it is believed, a valuable improvement in vehicles.

I claim as my invention—

1. The head-block A, provided with notch *b b'*, lugs *e e'*, and constructed substantially as and for the purpose set forth.

2. The king-bolt N, provided with the male-screw thread *o*, shoulder *p*, and forks *u u'*, and constructed substantially as and for the purpose set forth.

3. The combination of the head-block A, spring-block C, coupling H H', and king-bolt N, substantially as specified and shown.

4. The combination of the head-block A, spring-block C, spring D, coupling H H', king-bolt N, axle Q, fifth-wheel G, and braces K and *m*, substantially as specified and shown.

In testimony that I claim the above I have hereto subscribed my name in the presence of two witnesses.

Witnesses:

WENDEL VONDERSAAR.

WILL W. WALLACE.

F. B. CURTIS.