(No Model.)

H. McFARLANE.

KING BOLT.

No. 262,451. Patented Aug. 8, 1882.

Fig. 1.

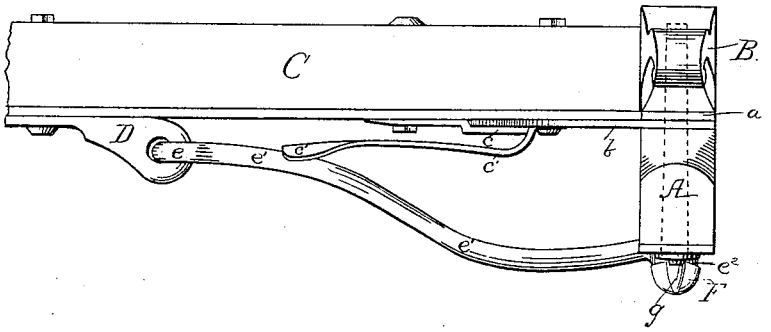


Fig. 2.

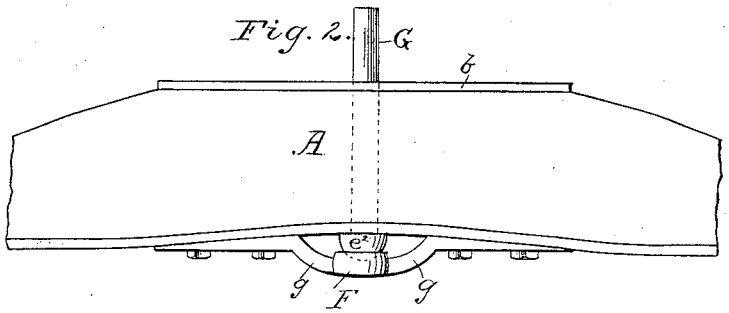
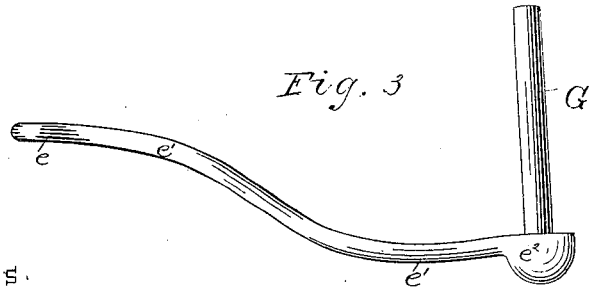


Fig. 3



Witnesses.

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UNITED STATES PATENT OFFICE.

HUGH McFARLANE, OF CHICAGO, ILLINOIS.

KING-BOLT.

SPECIFICATION forming part of Letters Patent No. 262,451, dated August 8, 1882.

Application filed December 23, 1881. (No model.)

To all whom it may concern:

Be it known that I, HUGH MCFARLANE, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in King-Bolts; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in king-bolts for wagons and similar four-wheeled vehicles, the same entering the point of oscillation from beneath, and said king-bolt and king-bolt guard being made in one piece, in contradistinction to those which enter the point of oscillation from above, and in which the king-bolt and king-bolt guard are made separate.

The object of my invention is to furnish a king-bolt for wagons and similar vehicles which will be less liable to wear itself or the contiguous parts in and against which it may be used, which is stronger and less liable to get out of order or in need of repairs, and which avoids rattling.

In the drawings, Figure 1 is a side elevation of my king-bolt as applied to a wagon. Fig. 2 is an end view of the same, and Fig. 3 is a separate view of king-bolt and king-bolt guard.

In the drawings, A represents the axle and axle-bed, B the head-block, and C the reach in connection with which my invention may be used.

Fastened to the under side of the head-block, and running a suitable distance back on the reach C, is a T-shaped plate, *a*, the same being secured by bolts and nuts and forming the engaging-surface of the D-plate or fifth-wheel.

The fifth-wheel *b* is similar to the ordinary fifth-wheel common in wagons, &c., it being semicircular in shape and having its ends connected with a strip, which is secured to the axle-bed and lies immediately under that portion of the T-plate *a* under the head-block.

Placed longitudinally on the under side of the plate *a* on the reach C, and secured thereto by bolts, is a guide, *c*, said guide being so located that it passes under and around the semicircular part of the fifth-wheel, preventing the same from vibrating.

Fastened to and projecting from that lug of the guide nearest the head-block—or, if preferred, forming a part of the same—is a flat curved spring, *c'*, which, passing downward and under that part of the guide in which operates the fifth-wheel, runs longitudinally or in the same direction as the reach and presses downward on the curved continuation or king-bolt guard of the king-bolt with sufficient pressure to prevent said king-bolt, &c., from rattling, as will be hereinafter more fully described.

D represents an eye fastened at a suitable distance from the axle on the under side of the reach, and extending downward to receive the ring or hook *e* on the end of the continuation of the king-bolt or king-bolt guard *c'*, said continuation pursuing a curved course from said eye to the center of oscillation on the under side of the axle, where it merges into a head, e^2. This head e^2 is convex on its under side, as shown in the drawings, fitting into and oscillating in a corresponding concavity in the socket F, the arms *g g* on either side of which extend in the direction of length of and are bolted to the axle A, said socket and arms thereof forming a brace and rest for the pintle and head of the king-bolt. Projecting vertically and upward from said head e^2 through the axle-bed and head-block to a level with the top of the reach, forming the center of oscillation, is a pintle, G, said pintle G, head e^2, and curved continuation *e'* being made in one piece and forming a continuous king-bolt and guard, the same being the principal feature of my invention.

It will be readily seen that my invention, as hereinbefore described, is less liable to wear, rattle, or get out of order or in need of repairs than those now in use; and being connected with the contiguous parts, it acquires their several motions, which, when contrary, are modified by the pressure of the flat spring.

What I claim as new, and desire to secure by Letters Patent, is—

1. A continuous king-bolt and guard, commencing from a position on the reach hereinbefore specified, and pursuing a longitudinally-curved course to the point of oscillation on the

under side of the axle, where it merges into a head, from which extends upward a vertical pintle, all of which is made in one piece, substantially as and for the purpose set forth.

2. A king-bolt entering the point of oscillation from beneath, at which point it is provided with a head convex on its under side to enter and oscillate in a concave or socket bearing, said socket having arms on either side extending in the length of the axle and secured to the under surface thereof by bolts or screws, as and for the purpose specified.

3. The combination, with a king-bolt having a continuation or guard extending from the point of oscillation on the under side of the axle to and secured at a given point on the reach, of a spring located above and pressing downward on said guard, as and for the purpose set forth.

4. The combination, with a wagon or similar vehicle in which king-bolts are necessary, of a continuous king-bolt and guard entering the point of oscillation from beneath, the head of which rests and oscillates in a socket secured to the under surface of the axle, and having a spring located above and pressing downward on the continuation thereof, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

HUGH McFARLANE.

Witnesses:
JAMES H. COYNE,
FRANK D. THOMASON.