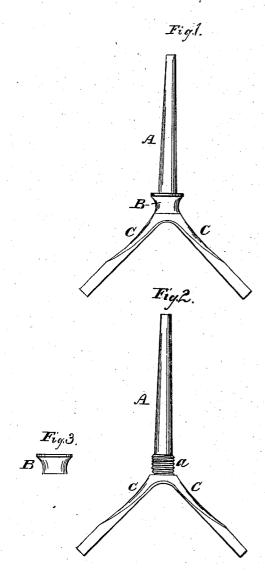
F. B. MORSE. King Bolt.

No. 87,280.

Patented Feb. 23, 1869.



Witnesses John A Shumay Muchael Byan F.B. Morse
Inventor
By his Attorney



F. B. MORSE, OF NEW HAVEN, CONNECTICUT.

Letters Patent No. 87,280, dated February 23, 1869.

IMPROVEMENT IN KING-BOLT.

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, F. B. Morse, of New Haven, in the county of New Haven, and State of Connecticut, have invented a new Improvement in King-Bolt for Carriages; and I do hereby declare the following, when taken in connection with the accompanying drawings, and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in-

Figure 1, a side view of the bolt complete; Figure 2, the bolt detached from the neck; and in

Figure 3, the neck separated from the bolt.

This invention relates to an improvement in the article of manufacture known to the trade as "kingbolts;" that is, the bolt which forms the pivot for the turning of the forward axle.

Heretofore these have been forged in a single piece,

the neck forged on.

The two prongs are left as seen in fig. 1, and the consumer forges them to the proper shape to form a "clip" around the axle, and so as to be secured thereto in the usual manner of securing carriage-clips.

The bolt is first fitted to the axle, and then the parts

set together.

It is necessary that, when the parts are so set together, the neck should come to a bearing at the same time that the fifth-wheel bears, and as this is liable to variation, it is necessary to adjust the bolt to the fifthwheel, and this has heretofore been done, either by drawing the bolt at the neck, if too short, or filing from the upper side of the neck, if too long. This necessitates the taking of the bolt from the axle to be altered and replaced. Thus it is sometimes necessary to remove the king-bolt several times, in order to a perfect adjustment, which causes no inconsiderable labor, to avoid which is the object of my invention, which con sists in forming a thread upon the king-bolt, at its base, and screwing thereon a detachable neck, made, in the first place, sufficiently long for all practical purposes, and to adjust which to different heights, it is only necessary to remove the detachable neck, and shorten it to the proper height.

In order to the clear understanding of my invention, I will fully describe the same, as illustrated in the ac-

companying drawings.

I form the bolt A upon the clip C in the usual man-

ner, and at its base, a, I cut a thread, as seen in fig. 2.

The neck, B, I make of any convenient external form, as seen in fig. 3, and tap it to correspond to the thread on the bolt, so that it may be turned freely thereon, as seen in fig. 1, making the neck sufficiently long, that it will be at least high enough for any purpose, and the bolt is complete and ready for market.

When the consumer has fixed the bolt to the axle in the usual manner, he places the parts together, and if found too high, removes the neck, and cuts it down to the required height. The removing of the neck, and convenience of cutting that down, in comparison with the old method of removing the bolt, it will be readily seen, simplifies the adjustment of the bolt to a very great extent.

Having fully described my invention,

What I claim as new and useful, and desire to secure

by Letters Patent, is-

A king-bolt, constructed with the detachable neck B, substantially in the manner described, as an improved article of manufacture.

F. B. MORSE.

Witnesses:

JOHN H. SHUMWAY, MICHAL RYAN.