

(No Model.)

T. GRASER.
King Bolt.

No. 238,283.

Patented March 1, 1881.

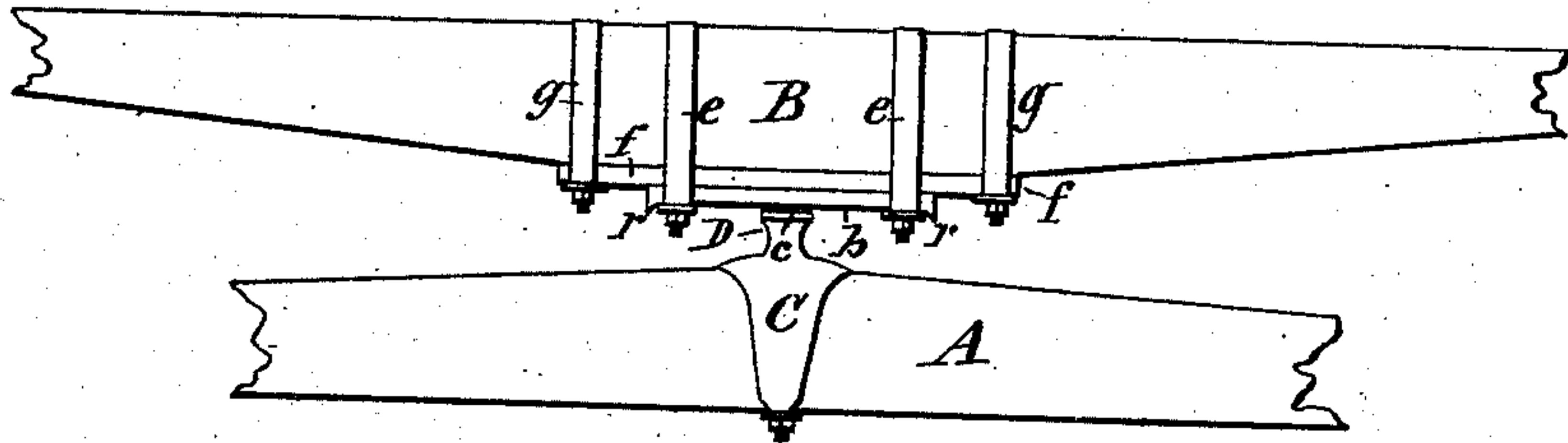


Fig. 1

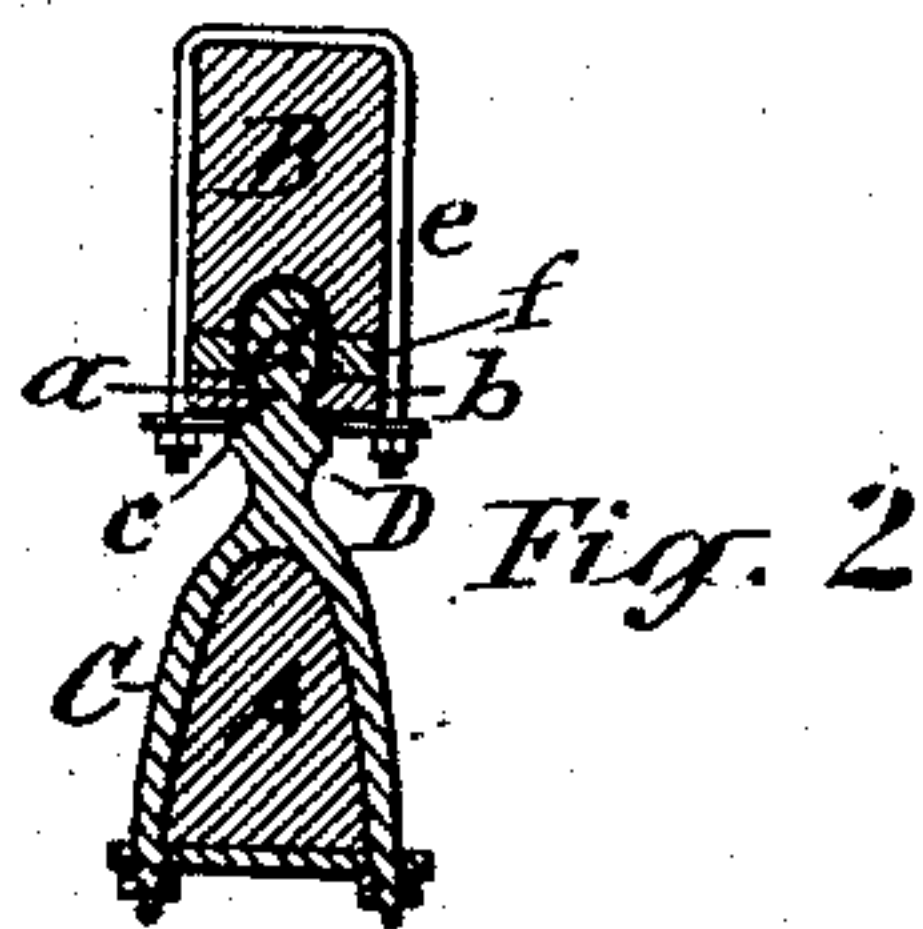


Fig. 2

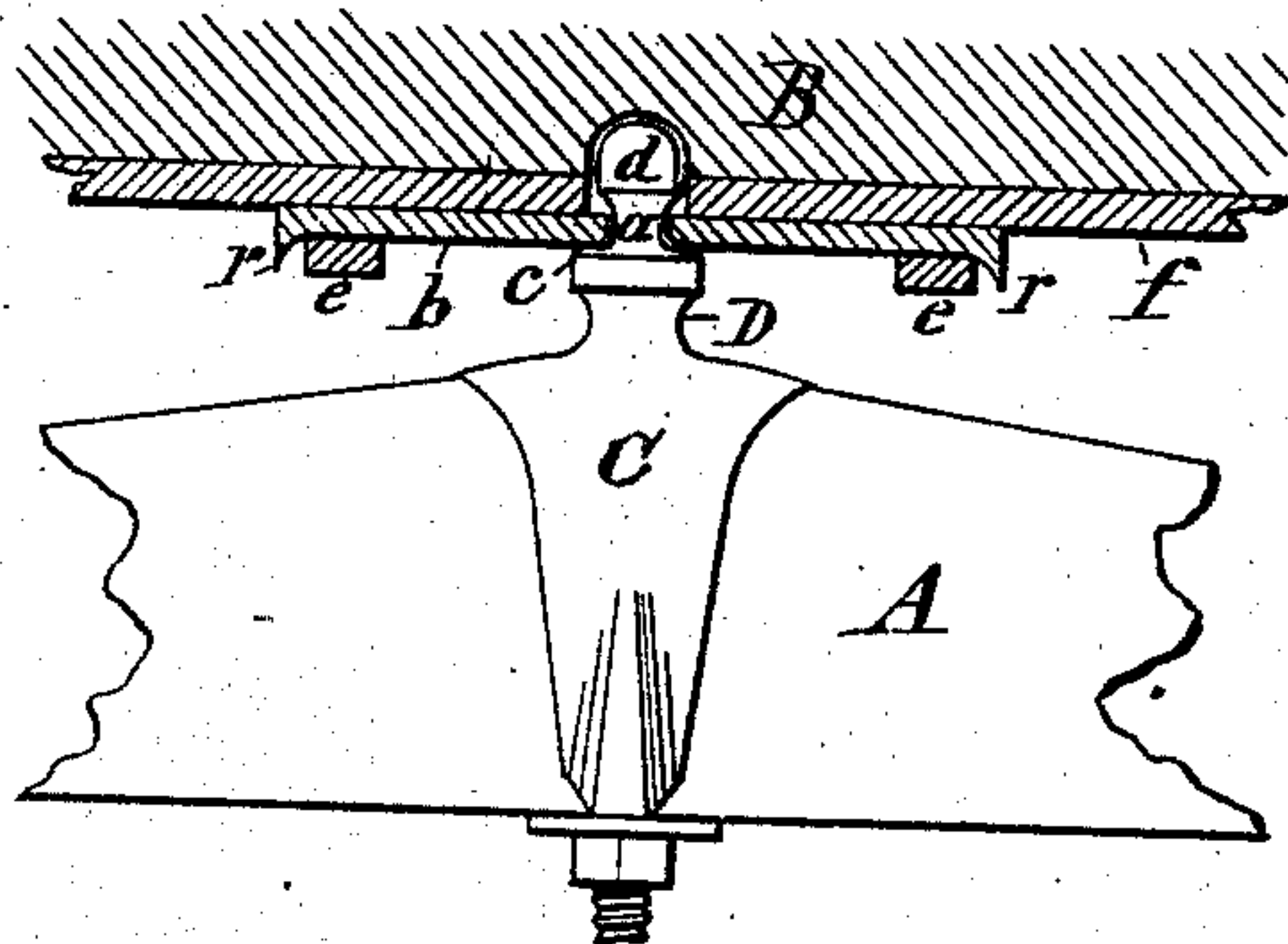


Fig. 3

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UNITED STATES PATENT OFFICE.

THEODORE GRASER, OF OSWEGO, NEW YORK, (WILLIAM BURR, EXECUTOR
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KING-BOLT.

SPECIFICATION forming part of Letters Patent No. 238,283, dated March 1, 1881.

Application filed August 10, 1880. (No model.)

To all whom it may concern:

Be it known that I, THEODORE GRASER, of Oswego, in the county of Oswego, in the State of New York, have invented new and useful
5 Improvements in King-Bolts for Carriages, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

In the drawings, Figure 1 is a front view of
10 my invention; Fig. 2, a transverse section, and Fig. 3 an enlarged longitudinal sectional view, of same.

Similar letters of reference indicate corresponding parts.

15 A represents the forward axle of a vehicle, and B the head-block, usually pivoted to the axle by the king-bolt passing through either one or both of said parts. It is to obviate this penetration and the resultant weakening of the
20 forward running-gear of the vehicle which my invention has for its object; and to that end I employ a clip, C, applied to the axle, and having on top a rigid upward-projecting stud, D, formed with a contracted neck, *a*, on which is
25 swiveled a plate, *b*, which rests on a collar or shoulder, *c*, formed on the stud D at the base of the neck *a*. The stud D terminates above the neck *a* with a head, *d*, which prevents the plate *b* being raised off the stud D. The plate
30 *b* is secured to the head-block by clips *e e* near the ends of said plate. Downward projections *r r* on the extremities of the plate *b*

restrain the clips *e e* from leaving said plate. Between the plate *b* and head-block B is interposed another plate, *f*, forming the main
35 stay of the head-block, said plate extending past the ends of the plate *b*, and being additionally secured to the head-block by clips *g g* at the extremities of said plate *f*. The head
40 *d* of the stud D protrudes through the plate *f* and part way into the head-block, as best seen in Figs. 2 and 3 of the drawings, thereby effectually preventing the shifting of the pivotal point on the head-block.

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

In combination with the axle A and head-block B, the clip C, having the stud D, formed with the collar *c*, neck *a*, and head *d*, the plate
50 *b*, swiveled on the neck *a*, plate *f*, swiveled on the head *d*, the head-block having a socket for the end of said head, and the clips *e e* and *g g*, substantially as described and shown.

In testimony whereof I have hereunto signed
55 my name and affixed my seal, in the presence of two attesting witnesses, at Syracuse, in the county of Onondaga and State of New York, this 20th day of July, 1880.

THEODORE GRASER. [L. S.]

Witnesses:

E. LAASS,

WM. F. RAYMOND.