

(Model.)

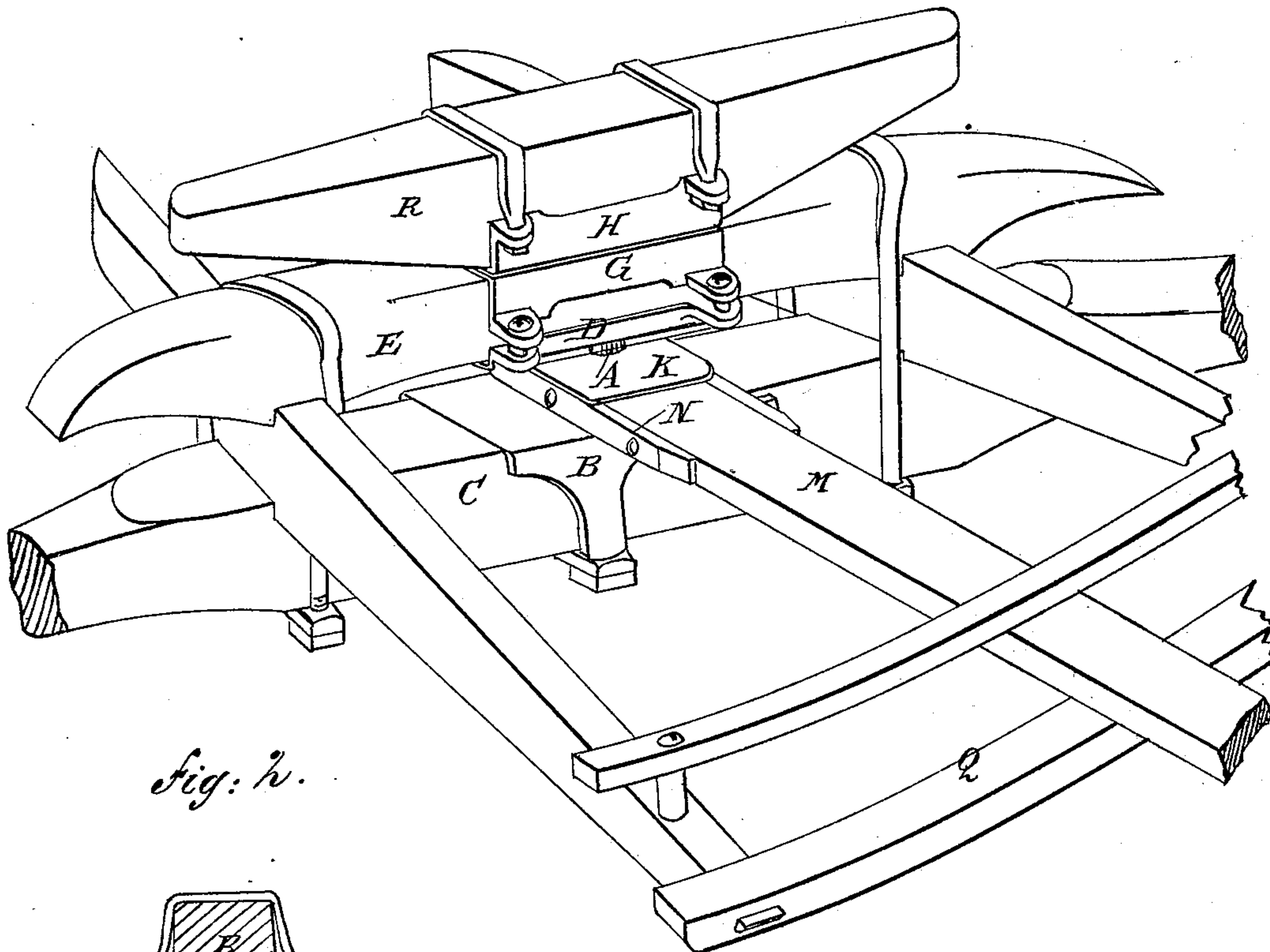
Z. DULMAINE & G. H. POOLE.

RUNNING GEAR FOR WAGONS.

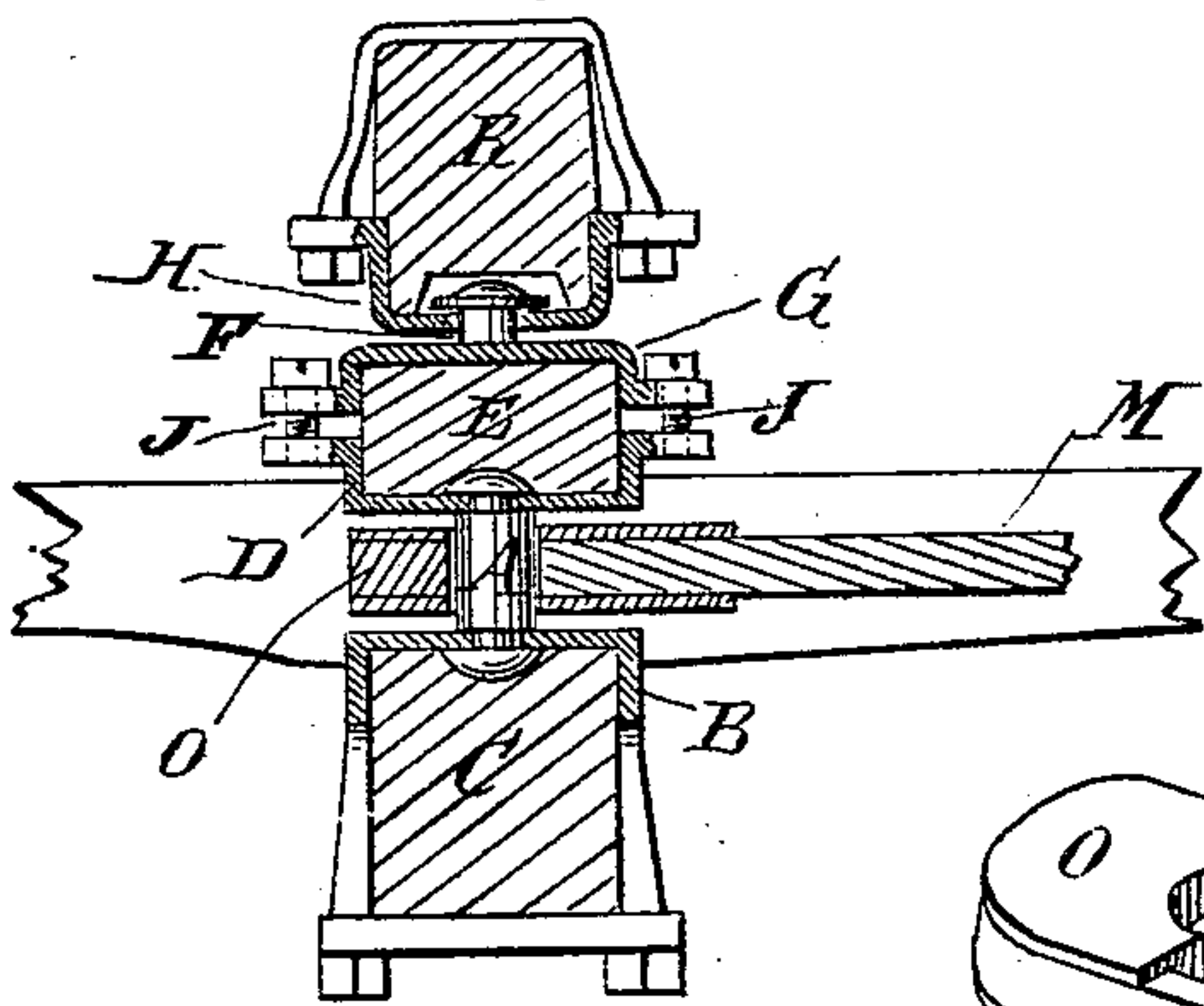
No. 251,197.

Patented Dec. 20, 1881.

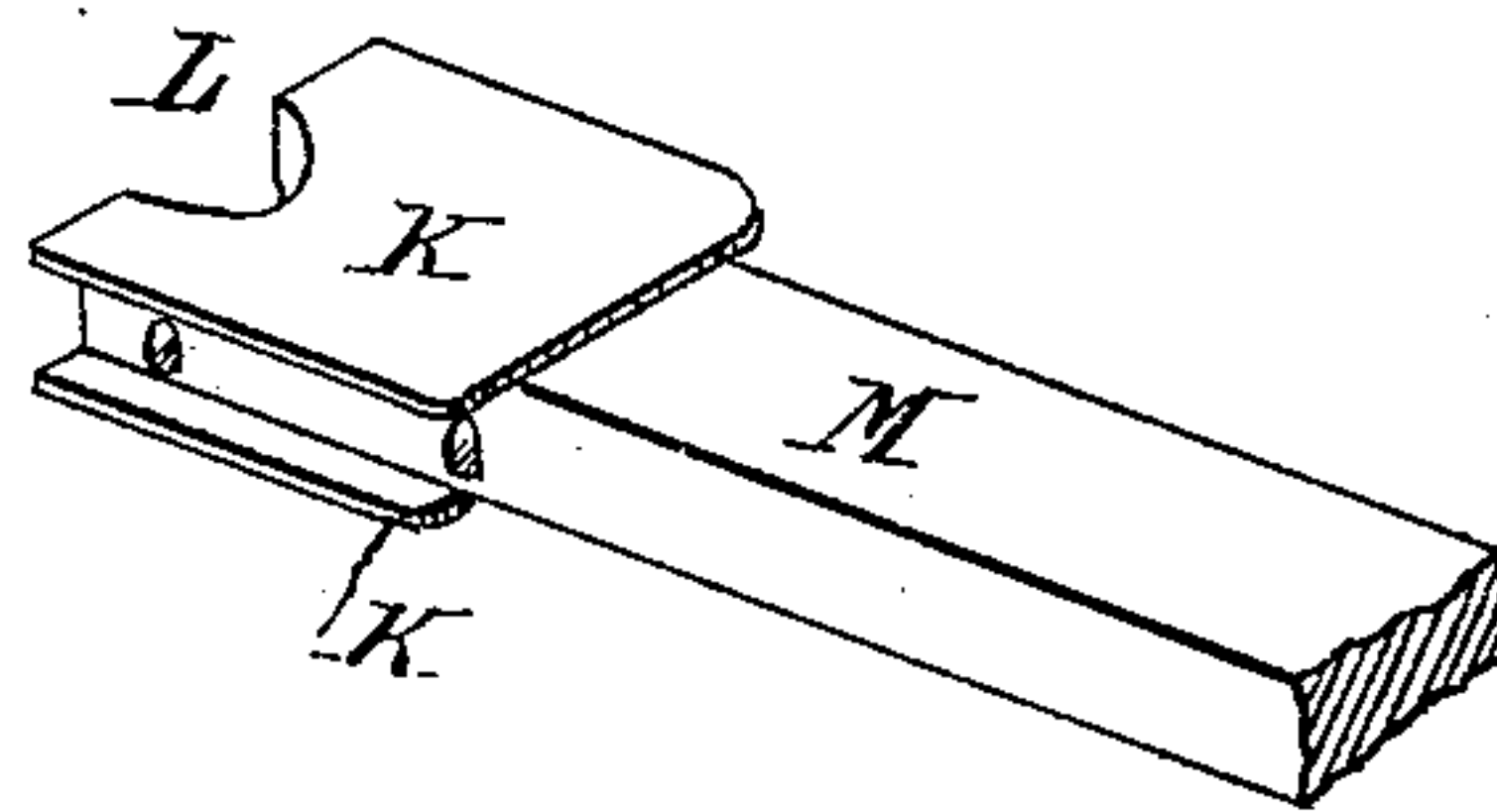
*Fig. 1.*



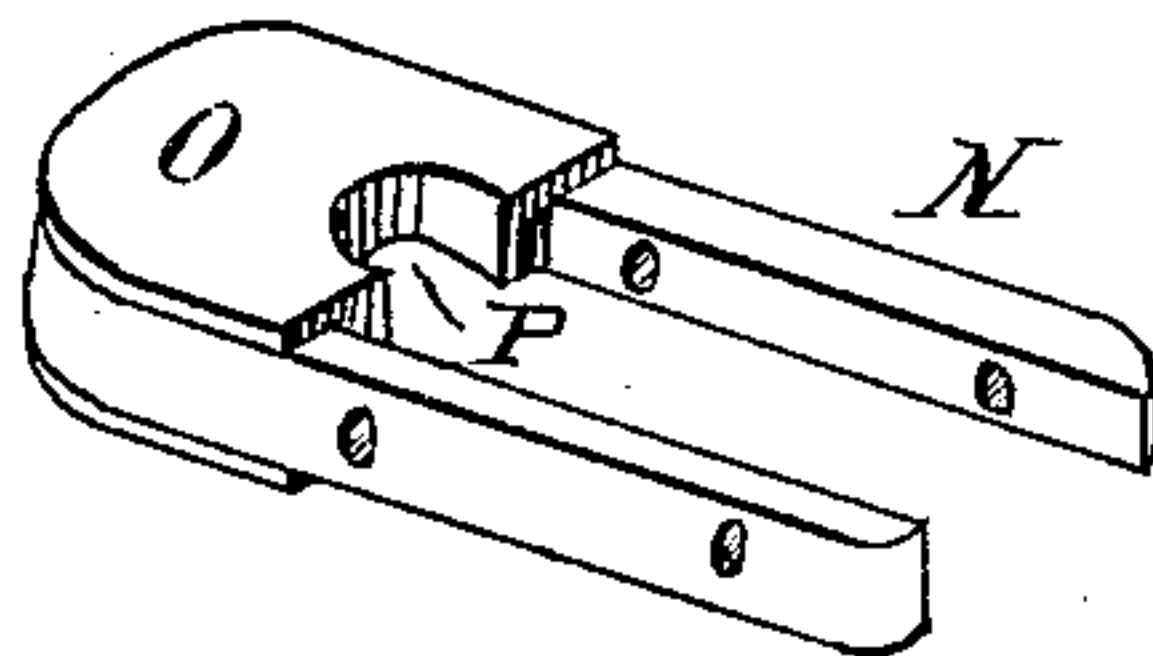
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



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# UNITED STATES PATENT OFFICE.

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## RUNNING-GEAR FOR WAGONS.

SPECIFICATION forming part of Letters Patent No. 251,197, dated December 20, 1881.

Application filed June 11, 1881. (Model.)

*To all whom it may concern:*

Be it known that we, ZEPHIRIN DULMAINE and GEORGE H. POOLE, of Laramie City, in the county of Albany and Territory of Wyoming, have invented a new and useful Improvement in Wagon-Gearing, of which the following is a full, clear, and exact description.

The object of our invention is to provide certain new and useful improvements in wagon-gearing whereby the king-bolt passing through the head-block and the axle can be dispensed with.

The invention consists in a short pintle passing through the end of the reach and fastened at the ends to plates or clips of the axle and the head-block, the head-block and bolster being also pivoted to each other by a short king-bolt secured to clips on the head-block and the bolster in a like manner.

In the accompanying drawings, Figure 1 is a perspective view of our improved wagon-gearing. Fig. 2 is a cross-sectional elevation of the same. Fig. 3 is a detail perspective view of the front end of the reach. Fig. 4 is a detail perspective view of block and clip for holding the reach on the pintle.

Similar letters of reference indicate corresponding parts.

A short pintle, A, is attached to a clip, B, on the axle C and to a clip, D, on the head-block E. This pintle, being held by means of its heads by the clips B and D, does not pass into or through the axle or head-block. The bolster R is pivoted on the head-block by means of a king-bolt, F, rigidly attached to the clip G on the upper side of the head-block E, and loosely held in a clip, H, on the under side of the bolster R—that is, the bolster can turn on the bolt or pintle F, whereas the head-block cannot turn on the axle. The two clips D and G of the head-block are held on the same by means of screw-bolts J, passing through lugs at the ends of these clips.

Plates K, with a semicircular recess, L, in the front edge, are fastened on the upper and lower surface of the reach M, at the end of the same, these plates projecting over the edges of the reach, so as to form side grooves, into which the shanks of a U-shaped clip, N, fit. A plate or block, O, with a semicircular recess, P, in its inner edge, is held by this clip.

The recessed plates K of the reach are placed against one side of the pintle A and the plate or block O on the other side, the

shanks of the clip N passing into the grooves formed on the side of the reach by the plates K K. Bolts are then passed transversely through the clip N and the front end of the reach, which is thus held to the pintle A, which passes through the aperture formed by the recesses L and P, when the block O and the reach are united. The reach M slides on and is guided by the guides Q in the ordinary manner.

The advantages of our improvement are that the axle and the head-block are not weakened by holes, which are ordinarily required to pass the king-bolt through, and a shorter and much stronger bolt can be used. Further, the reach can be attached and detached very conveniently without removing the head-block or the king-bolt.

With this construction the bolster can turn freely on the head-block and the reach can turn freely on the pintle A.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a wagon-gearing, the combination, with the axle C and the head-block E, of the pintle A and the clips B and D, substantially as herein shown and described, and for the purpose set forth.

2. In a wagon-gearing, the combination, with the head-block E and the bolster R, of the king-bolt F and the clips G and H, substantially as herein shown and described, and for the purpose set forth.

3. In a wagon-gearing, the combination, with the axle C and the head-block E, of the pintle A, the clips B and D, the reach M, and the detachable end block, O, substantially as herein shown and described, and for the purpose set forth.

4. In a wagon-gearing, the combination, with the axle C and the head-block E, of the pintle A, the clips B and D, the reach M, the plates K, with a semicircular recess, L, in the end, the block O, with a recess, P, in the end, and the U-shaped clip N, substantially as herein shown and described, and for the purpose set forth.

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Witnesses:

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