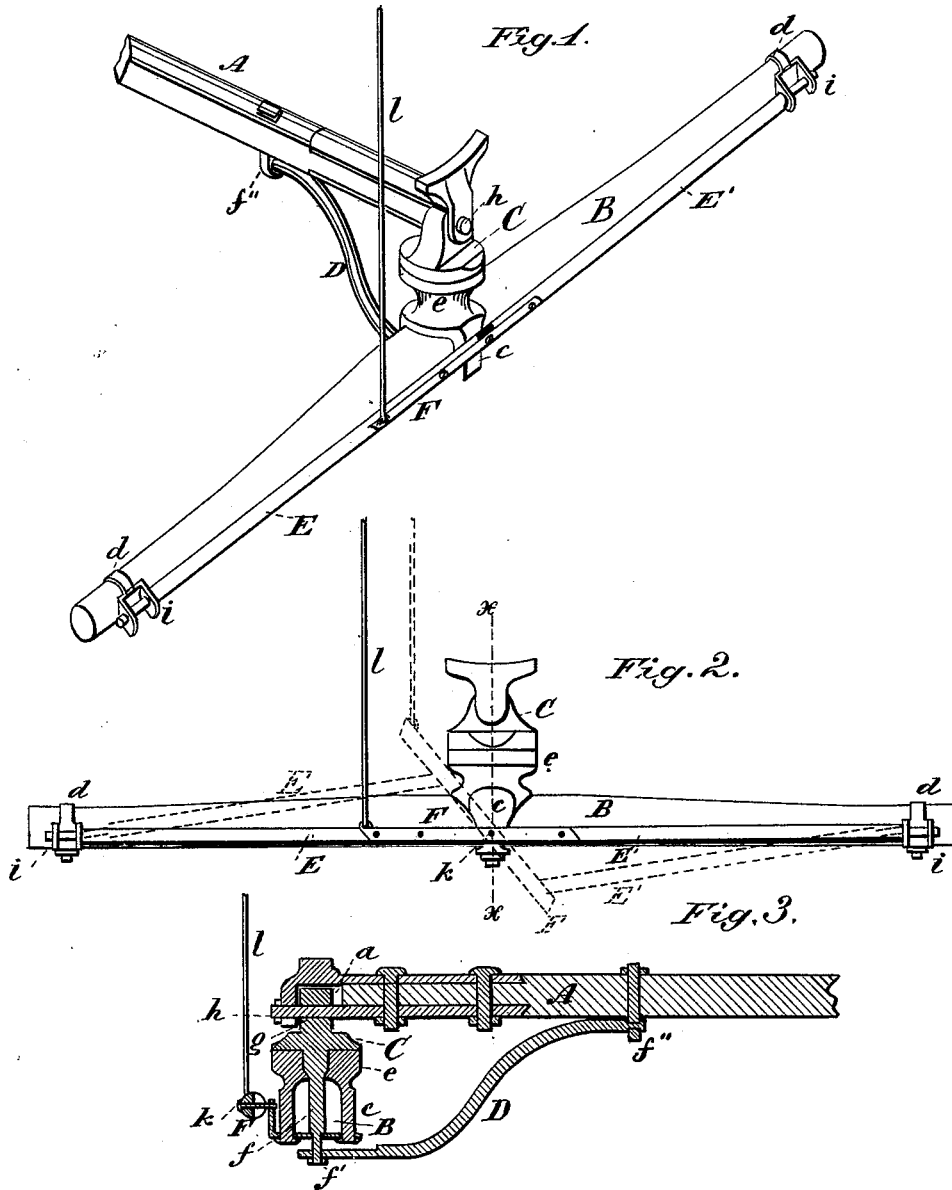


J. A. HINSON.
Vehicle Running-Gear.

No. 201,013.

Patented March 5, 1878.



Attest:
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UNITED STATES PATENT OFFICE.

JAMES A. HINSON, OF OSKALOOSA, IOWA.

IMPROVEMENT IN VEHICLE RUNNING-GEARS.

Specification forming part of Letters Patent No. **201,013**, dated March 5, 1878; application filed July 18, 1877.

To all whom it may concern:

Be it known that I, JAMES A. HINSON, of Oskaloosa, in the county of Mahaska and State of Iowa, have invented certain new and useful Improvements in the Running-Gear of Vehicles; and I do hereby declare that the following is a full, clear, and exact description thereof, 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, which form a part of this specification, and in which—

Figure 1 is a perspective view. Fig. 2 is a front view; and Fig. 3, a vertical section on line *x x*, Fig. 2.

Similar letters of reference indicate corresponding parts in all the figures.

My invention relates to the running-gear of vehicles; and it consists, first, in the combination of the reach, front axle, king-bolt, and pivoted brace; and, second, in the combination, with the axle, of a thill-detaching device, substantially as hereinafter more fully explained.

In the drawing, A is the reach, and B the front axle. The latter consists, preferably, of an upper wooden bow or bent axle, and an underlying iron or steel axle, secured to the former by the middle clip or clamp *c*, and the two end clips *d d*. The central clip *c* has a raised step or shoulder, *e*, forming a bearing-face for the king-bolt C, which is of a bell shape, as shown in the drawing, and has a shank, *f*, passing through the axle B and brace D, a nut, *f'*, being screwed onto the end of the bolt to keep it in place.

Brace D is pivoted on bolt *f*, so as to turn readily to either side, its other end being pivoted in an eyebolt, *f''*, which passes through the reach, so as to enable it to oscillate and follow the motion of the axle.

g is a slot passing horizontally through the head of king-bolt C, to receive bolt *h*, which serves as a fulcrum for the oscillating reach A. The latter has a recess, *a*, which fits over the top or head of the king-bolt, allowing it to oscillate freely from side to side.

i i are couplings for the thills, which project forward from the axle, as usual, so that the ends of the thills may be readily inserted and coupled. E E' are two rods, passing through the eyes of the couplings *i*, their rear ends being pivoted to a lever, F, which has its fulcrum in a bolt, *k*. Secured to the long arm of lever F is a slender cord or chain, *l*, which

passes up to the seat of the driver, so as to be within easy reach.

When this cord is pulled, lever F and rods E E' will occupy the position shown in dotted lines in Fig. 2, thereby withdrawing the ends of the rods from the couplings *i i*, and releasing the thills, or, in other words, affording a simple and easy method of detaching a runaway horse from the vehicle, and thus avoid accident.

The rear parts of rods E E' are recessed, so as to form a recess or receptacle for lever F, so that when the lever is down flush with rods E E' it will occupy this recess, and rods E E' and lever F will present a smooth and even appearance from the front and sides, as if made in one single piece.

I am aware that it is not new to detach the traces by withdrawing the fastening-pins; but this construction I do not claim broadly. Devices of that character are, however, as a rule, objectionable, because they detract from the appearance of the vehicle; hence many are opposed to their use. But by my improvement, which consists in recessing the rods E E', so as to form a receptacle for the operating-lever F when not in use, this objection is entirely obviated, the device presenting simply the appearance of a smooth polished rod lying in front of and parallel to the tree, and rather enhancing the appearance of the vehicle to which it is applied than otherwise.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. The combination of the reach A, recessed at *a*, and having bolt *h*, bell-shaped king-bolt C, clip *c*, having raised step or shoulder *e*, axle B, and brace D, pivoted at *f'* and *f''*, substantially as and for the purpose herein shown and described.

2. As an improvement in horse-detachers, the recessed rods E E', in combination with the operating-lever arm F, resting within the recesses in rods E E' made for its reception, substantially as and for the purpose herein shown and described.

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

Witnesses: JAMES A. HINSON,
WILLIAM V. DAVIES,
W. C. GLAIZE.