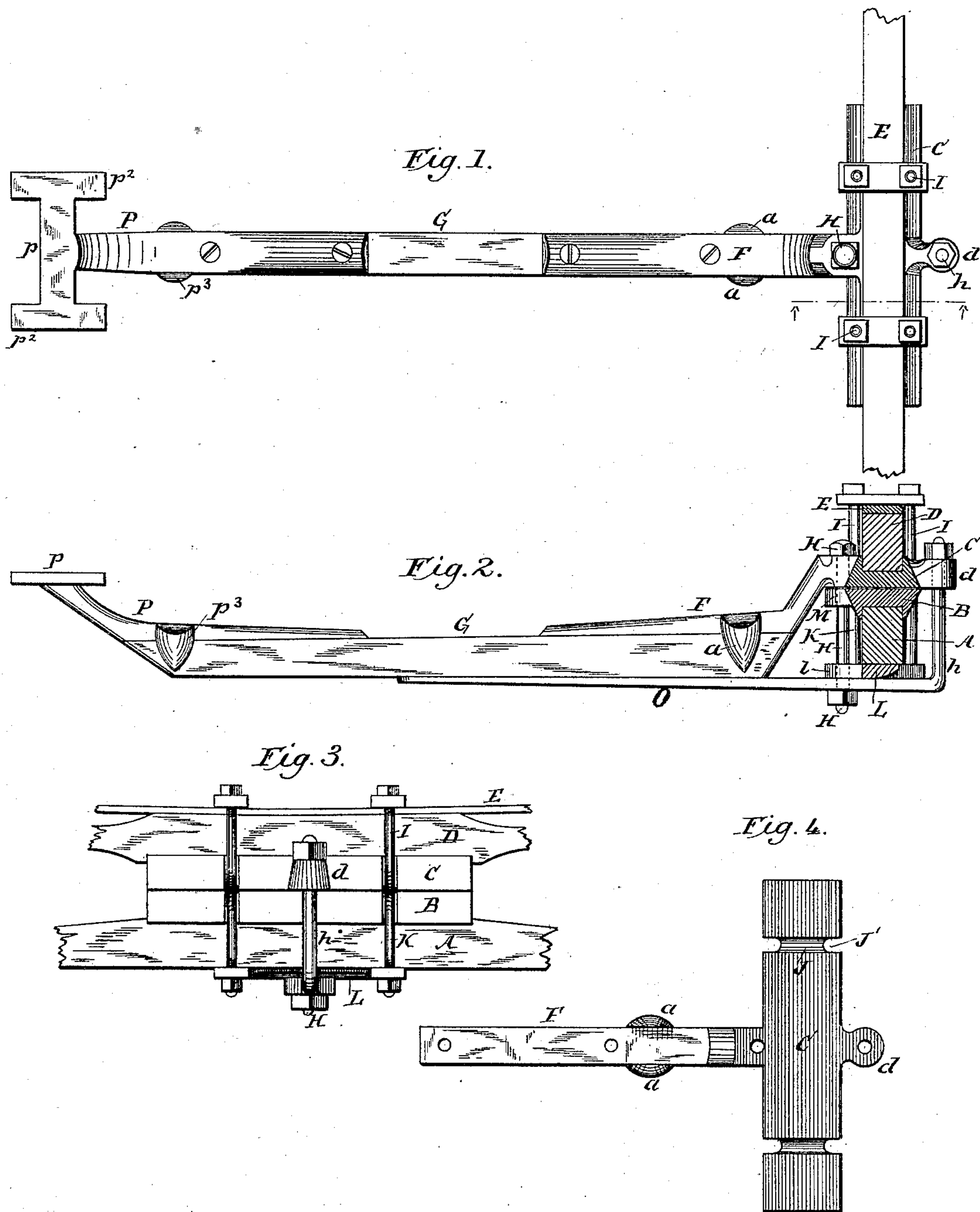


(No Model.)

J. HERBRAND.
RUNNING GEAR FOR VEHICLES.

No. 277,725.

Patented May 15, 1883.



Attest.
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UNITED STATES PATENT OFFICE.

JACOB HERBRAND, OF FREMONT, OHIO, ASSIGNOR TO THE HERBRAND COMPANY, OF SAME PLACE.

RUNNING-GEAR FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 277,725, dated May 15, 1883.

Application filed May 25, 1882. (No model.)

To all whom it may concern:

Be it known that I, JACOB HERBRAND, a citizen of the United States, residing at Fremont, in the county of Sandusky and State of Ohio, have invented certain new and useful Improvements in Running-Gears for Vehicles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as 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 or figures of reference marked thereon, which form a part of this specification.

The present invention belongs to that class of running-gears for vehicles exemplified in patents granted to me December 25, 1879, and July 19, 1881, numbered, respectively, 222,904 and 244,599.

The improvements herein presented will first be fully described, and then set forth in the claims.

In the accompanying drawings, Figure 1 is a plan view of a running-gear embodying my improvements. Fig. 2 is a side elevation of the reach and a sectional view of the axle, fifth-wheel, head-block, and spring. Fig. 3 is a front view of the front gear. Fig. 4 is a face view of the upper fifth-wheel plate, showing the grooves therein for the reception of the spring and head-block retaining-clips.

The letter A designates the front axle; B, the lower fifth-wheel or turn-plate seated thereon, and C the upper member of the fifth-wheel, secured to the head-block D, that supports the spring E. The upper fifth-wheel plate is constructed with a rearwardly-extending arm, F, which is secured to the top face of the reach G by screws or other fastening devices. This arm is made angular when the reach is of the "drop down" pattern, and straight when the reach is located in a higher plane. Downwardly-extending lugs or ears *a* on the sides of the arm F embrace the wooden reach G, and serve to strengthen or brace the same by acting as lateral stays and prevent it from splitting. The reach may be single or double. If double, then the arm F and the plate or bar H are forked to correspond. A lug or apertured ear, *d*, projecting from the front of the upper fifth-wheel plate receives the upwardly-bent arm *h* of the plate or bar O, which

is secured to the lower face of the reach, and extends beneath the axle, so as to permit the arm *h* thereof to be connected with the upper fifth-wheel plate by a nut on the upper end of said arm. Both members of the fifth-wheel are provided with lateral flanges for receiving and retaining the axle and head-block between the same. The spring E, seated on the top of the head-block, is secured thereto by means of clips or yokes I, which encompass the spring, head-block, and upper fifth-wheel plate, as is shown in Figs. 2 and 3. In order to permit the clips to pass around the fifth-wheel plate without projecting therefrom or interfering with the free movement thereof, I make grooves J in the lower face thereof, which grooves are in alignment with vertical grooves J' on the front and rear edges of the plate, as is shown in Fig. 4. It will be manifest that the clips let into these grooves are not subjected to wear, and serve to hold the respective parts together. The face of the lower fifth-wheel plate is also provided with grooves made precisely like those of the upper plate, and clips or yokes *k* are let into these grooves and secured to a plate, L, on the under side of the axle. In other words, the screw-threaded shanks of the clips K are preferably passed through end ears of said plate L and held by screw-nuts, whereas the shanks of the upper clips are passed through small plates bearing upon the lower leaf of the spring. The plate L is also constructed with a central rearwardly-extending eye or apertured lug, *l*, which is directly in line above or with an opening made in the reach-bar H. A lug or eye, M, projecting from the rear of the lower fifth-wheel plate is located below or in line with an opening in the rearwardly-extending arm of the upper fifth-wheel plate, so as to permit the king-bolt N to be passed through these parts, and through the eye of the plate L and the bar H, as is shown in Fig. 2. By this construction and arrangement it will be apparent that the king-bolt is located in rear of head-block and axle, so that it can be easily applied and removed, and that all the parts comprising the front gear are firmly and properly connected together without the necessity of cutting or boring the axle and head-block, thereby impairing the strength of the same.

Vehicles constructed with my improved run-

ning-gear can turn in a shorter space, and the wheels can be moved farther apart than others in common use, making it more convenient to get in and out. The rear end of the reach is
5 connected to the rear axle-bar by means of the plate P, which has an upwardly-bent neck, and a short top plate, *p*, resting under said axle, and secured thereto preferably by clips or yokes passing through or encircling ears or
10 lugs *p*², formed on said plate. The plate P also has downwardly-projecting ears or lugs *p*³, which embrace the wooden reach and serve to stay or brace the same.

It will be evident that in the use of the main
15 feature of my invention—to wit, the construction of the parts in such a way that the king-bolt can come behind the axle—it will not be necessary to follow all the details of construction above specified, and other well-known
20 forms of clips, lugs on the plates for receiving the clips, or other devices for securing the springs and head-blocks can be used.

Having thus described my invention, what I

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

1. In a running-gear for vehicles, the combination, with the fifth-wheel plates, axle, head-block, and reach, of a king-bolt connecting said fifth-wheel plates in rear of the axle and head-block, and an arm or stay extending
25 30 from the reach and secured to the upper fifth-wheel plate, as and for the purpose set forth.

2. The combination of the upper fifth-wheel plate having the rearwardly-extending apertured arm, the lower fifth-wheel plate having
35 the apertured lug or eye, the bottom axle-plate having the eye or apertured lug, and the apertured reach-bar with the king-bolt, the axle, and the reach, as and for the purpose set forth.

In testimony whereof I affix my signature in
40 presence of two witnesses.

JACOB HERBRAND.

Witnesses:

E. LOUDENSLEGER,
J. L. GREENE.