(No Model.)

S. BURDSALL.

RUNNING GEAR FOR VEHICLES.

No. 343,296. Patented June 8, 1886.

Fig. 1.

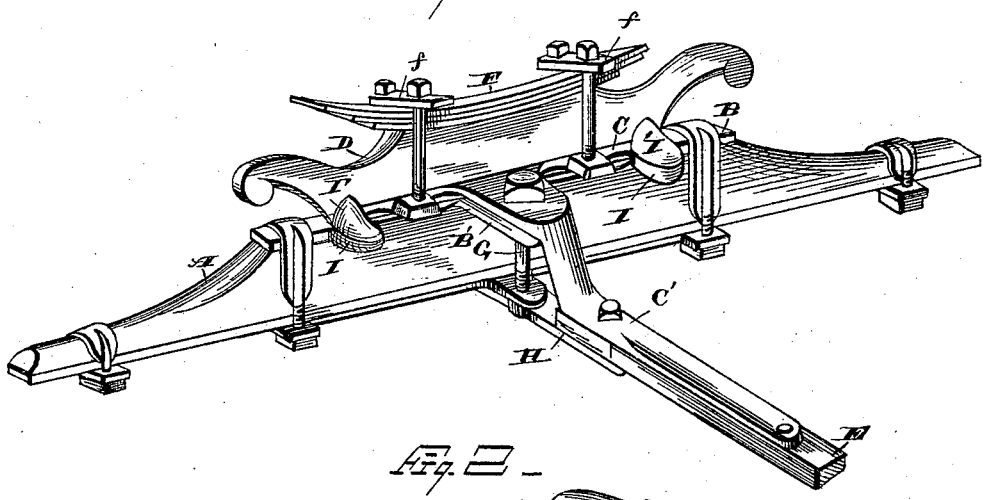


Fig. 2.

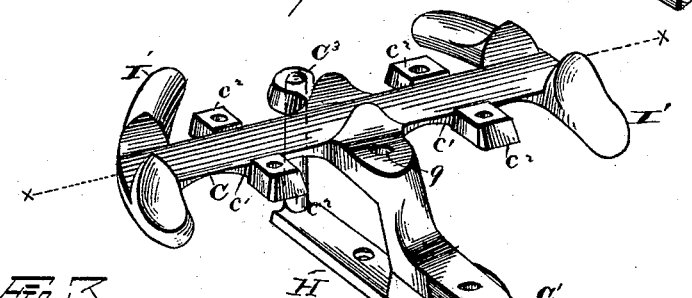


Fig. 3.

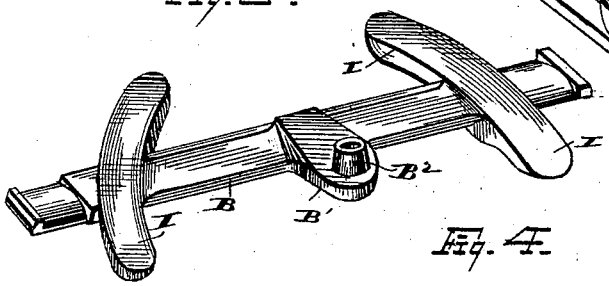
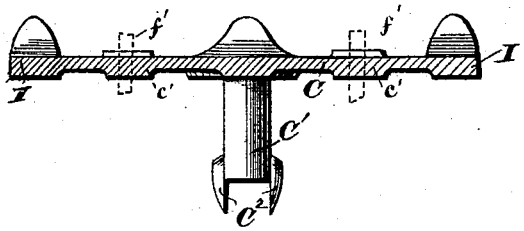


Fig. 4.



WITNESSES

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UNITED STATES PATENT OFFICE.

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

RUNNING-GEAR FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 343,296, dated June 8, 1886.

Application filed February 15, 1886. Serial No. 191,969. (No model.)

To all whom it may concern:

Be it known that I, STEPHEN BURDSALL, of 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 pertains to make and use the same.

My invention relates to improvements in running-gears for vehicles in which the upper fifth-wheel plate is made thin, with ribs extending laterally across the under side of the plate to re-enforce the same at the points where the bolts are inserted that secure this plate to the head-block and spring, to the end that with such construction this plate is made lighter and at a less initial cost, and at the same time has the adequate strength. With this class of fifth-wheel, in which the king-bolt is located rearward of the axle, the segmental lugs or rub-irons connect with the respective fifth-wheel plates and extend forward and rearward of these plates, to the end that with such construction the said lugs support the axle more firmly from rocking than when the lugs extend only forward of the fifth-wheel plates, and present a better appearance, and being shorter can be made lighter and cheaper.

With these objects in view my invention consists in certain features of construction and in combination of parts hereinafter described, and pointed out in the claims.

The present invention is designed more especially as an improvement on devices for which Letters Patent of the United States were granted May 15, 1883, No 277,725, on a class of running-gear in which the king-bolt is located rearward of the axle—a peculiarity that proves to be very desirable.

In the accompanying drawings, Figure 1 is a view in perspective of my improved running-gear connected with the forward axle. Figs. 2 and 3 are enlarged views, in perspective, of fifth-wheel plates detached. Fig. 4 is an elevation in longitudinal section of the upper fifth-wheel plate, taken on the line *x x*, Fig. 2.

A represents the axle; B, the lower and C the upper fifth-wheel plates; D, the head-block; E, the reach, and F the spring. The plate C has an arm, C′, extending rearward and secured on top of the reach with lugs C^2, for embracing the latter, and a hole, *g*, through which passes the king-bolt G. The plate C has a lug, C^3, extending forward, that receives the bolt end of the strap H, that leads under the axle, receiving the lower end of the king-bolt, and is attached underneath the reach. The plate B has a rearwardly-projecting arm, B′, and hub B^2, the latter extending into the lower and enlarged portion of the hole *g*, the king-bolt passing through a bore in the said hub, all of which construction is fully described in my Letters Patent aforesaid.

Heretofore the upper fifth-wheel plate has usually been made of considerable and uniform thickness, in order that it would have sufficient strength where it was cut away for receiving the ends of the bolts that secured the spring and head-block. In case the bolts passed through the springs and head-block, or in case these parts were secured by yokes or clamps *f*, as shown in Fig. 1, requiring ears, the plate must have sufficient thickness to support such ears.

As an improvement, I make the plate C quite thin and re-enforce the same with ribs *c′*, extending laterally across the under side of the plate. An extension of these ribs and of the plate form the ears c^2, or, if these are not wanted, the ribs re-enforce the plate sufficiently in strength and thickness for screwing in the bolts *f′*, that pass directly through the spring and head-block. (See dotted lines, Fig. 4.) The other parts of the plate C, between the ribs and lugs I, and between the ribs and arm C′, may be made quite thin, thereby materially lessening the weight and cost of the plate, and giving a better appearance to the same.

Another improvement is in the segmental lugs or rub-irons I and I′, that are connected, respectively, with the plates B and C. In my former patent these lugs extend forward for same distance, but did not extend rearward of the plates. I find that short lugs extending both forward and rearward, as shown more clearly in Figs. 2 and 3, being short, can be made light, and that they give better support to the axle in preventing the latter from rocking than the former device.

What I claim is—

1. In a running-gear for vehicles, the combination, with fifth-wheel plates each having segmental lugs or rub-irons extending in front and behind the same, and each provided with a rearwardly-extending arm, of the strap H, secured to the reach and connected at its front end to the upper plate of the fifth-wheel in front of the axle, and the king-bolt passing through said rearwardly-projecting arms and through the strap, substantially as set forth.

2. In a running-gear for vehicles, the combination, with fifth-wheel plates, the upper plate being provided on its lower or bearing face with transverse ribs integral therewith, and each provided with a rearwardly-extending arm, of a reach secured to the rearwardly-projecting arm of the upper plate of the fifth-wheel, a strap, H, secured to the reach and connected to said upper plate in front of the axle, and a king-bolt passing through both of said rearwardly-projecting arms and through the strap, substantially as set forth.

In testimony whereof I sign this specification, in the presence of two witnesses, this 7th day of December, 1885.

STEPHEN BURDSALL.

Witnesses:

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