(No Model.)

J. A. GENDRON.

SLEIGH RUNNER.

No. 455,098. Patented June 30, 1891.

Fig. 1

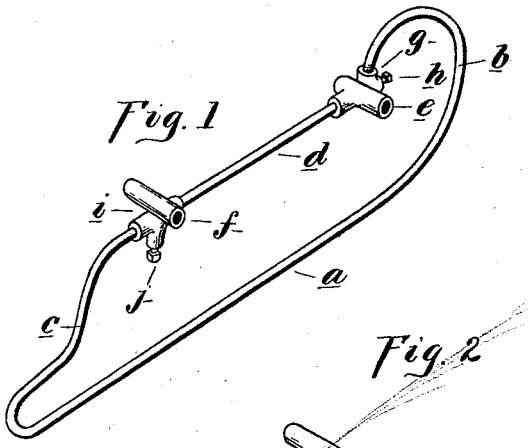


Fig. 2

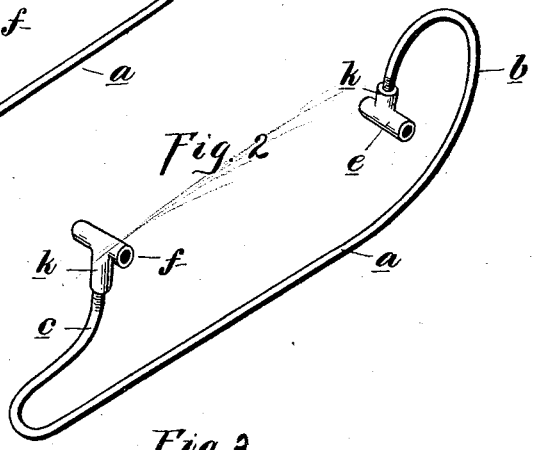
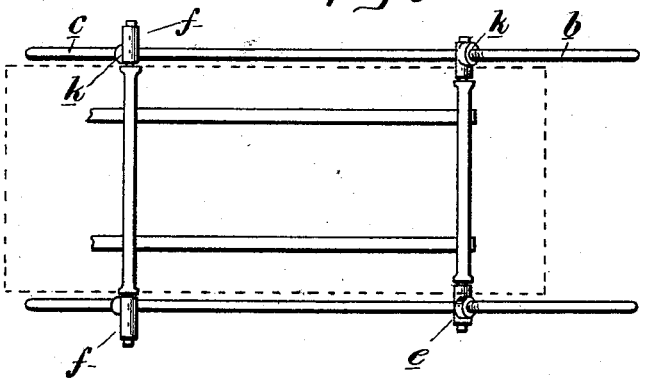


Fig. 3



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UNITED STATES PATENT OFFICE.

JOSEPH A. GENDRON, OF TORONTO, CANADA, ASSIGNOR TO THE GENDRON IRON WHEEL COMPANY, OF TOLEDO, OHIO.

SLEIGH-RUNNER.

SPECIFICATION forming part of Letters Patent No. 455,098, dated June 30, 1891.

Application filed October 16, 1890. Serial No. 368,367. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH A. GENDRON, a citizen of the United States, residing at Toronto, in the county of York and Province of Ontario, Canada, have invented certain new and useful Improvements in Detachable Sleigh-Runners, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to new and useful improvements in detachable sleigh-runners for wagons, children's carriages, &c.; and the invention consists in the peculiar construction of the runner and the boxes adapted to be engaged upon the journals of the wagon, &c., and in the peculiar means of adjusting them laterally in relation to each other, all as more fully hereinafter described.

My invention is especially intended to be applied to children's carriages, toy wagons, and other wheeled vehicles of that class.

In the accompanying drawings, Figure 1 is a perspective view of my improved runner. Fig. 2 is a similar perspective view showing a modified form of construction. Fig. 3 is a top plan view of the runner applied to a child's carriage, the body of the carriage being indicated in dotted lines.

My runner I preferably form by bending a single piece of round bar-iron into the desired shape, forming the shoe or runner portion *a*, the front vertical extension *b*, and the rear vertical extension *c*. These extensions are suitably shaped to give a graceful appearance to the device. The rod is also preferably bent to have the connecting portion *d* parallel with the runner, as shown in Fig. 1, but this may be omitted, as shown in Fig. 2.

e and *f* are transverse journal boxes or bearings attached at the front and rear, respectively. In Fig. 1 I show these boxes constructed and attached as follows: *g* is a vertical socket on the box *e*, in which the end of the front extension engages, being held thereon by means of a set-screw *h*, this socket being secured to the box at one side of the middle thereof and so arranged that either side of the journal-box may be presented in or out. The journal-box is also provided with a horizontal socket on its opposite side in which the end of the connecting-bar *d* engages. It is evident that this box may be vertically adjusted by means of the set-screw *h*.

The box *f* has formed on one side a socket *i*, adapted to engage with the connecting-bar *d*, and secured thereon at any desired point by the set-screw *j*. The securing-socket *i* is secured to the journal-box *f* at one side of the middle, and may be secured with either the long arm or short arm extending out.

My device thus constructed is intended to be applied to children's carriages, toy wagons, &c., by removing the wheels and engaging the sockets *e* and *f* upon the journals of the vehicle. It is evident that in the construction shown in Fig. 1 these boxes may be adjusted to vehicles having different distances between the axles, and the front box may be vertically adjusted, thereby correspondingly raising the rear box by means of the connecting-bar *d*, the front end of which is secured to the box *e*. This manner of connecting the boxes to the runner enables me to arrange the front and rear boxes in line or out of line, as shown in Fig. 3. This is especially desirable in applying my device to children's carriages, wherein the front axle is shorter than the rear axle. Thus a single pair of my runners may be used upon a vehicle having front and rear axles of the same or different lengths.

In the construction shown in Fig. 2 I show the front and rear extensions provided with screw-threads and the journal-boxes provided with correspondingly screw-threaded sockets *k* engaging therewith. By rotating the boxes the adjustments vertically and for different lengths of axles may be accomplished. By bending the rods the horizontal adjustment between the boxes may likewise be accomplished.

I claim—

1. In a detachable sleigh-runner, the combination, with the runner, of reversible transverse journal-boxes for the front and rear axles, and means for adjusting said boxes laterally in relation to each other, substantially as described.

2. In a detachable sleigh-runner, the combination, with the runner having front and rear vertical extensions, of reversible transverse journal-boxes upon said extensions, said bear-

ings being attached at one side of their middle, and means for securing them in their adjusted positions, substantially as described.

3. A detachable sleigh-runner comprising the runner portion and reversible transverse boxes secured thereto, substantially as described.

4. A detachable sleigh-runner comprising the runner portion *a*, the extensions *b c*, the reversible transverse boxes *c f*, having securing portions at one side of the middle, and means for retaining them in their adjusted positions, substantially as described.

5. In a detachable sleigh-runner, the reversible box *f*, having a horizontal adjustment to or from its companion *e*, substantially as described.

6. As a new article of manufacture, a detachable sleigh-runner composed of a single piece of round metal bent to form the runner portion *a*, extensions *b c*, and reversible transverse boxes *e f*, substantially as described.

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

JOSEPH A. GENDRON.

Witnesses:

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