

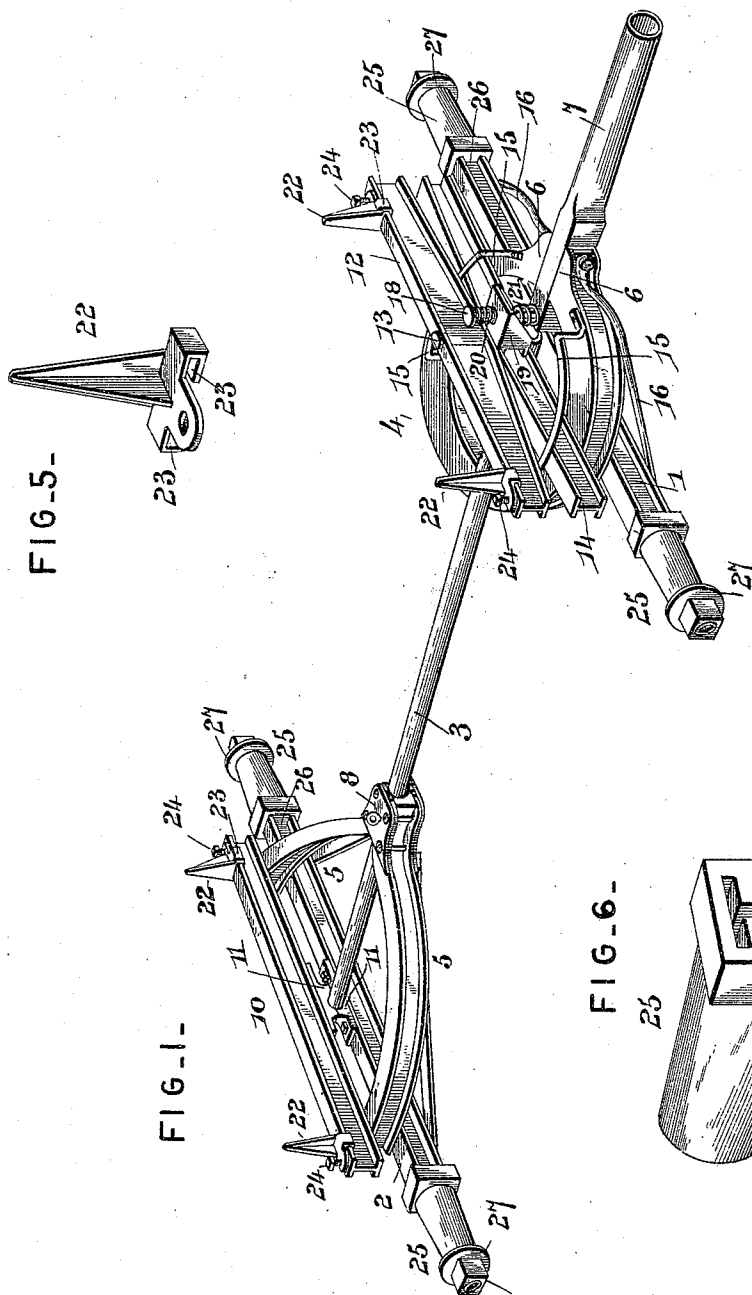
(No Model.)

2 Sheets—Sheet 1.

S. M. CABORN.
VEHICLE RUNNING GEAR.

No. 551,886.

Patented Dec. 24, 1895.



Inventor

Seth M. Caborn

Witnesses

Jas. H. McLaughlin
J. H. Riley

By His Attorneys,

Cashow & Co.

(No Model.)

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FIG. 2.

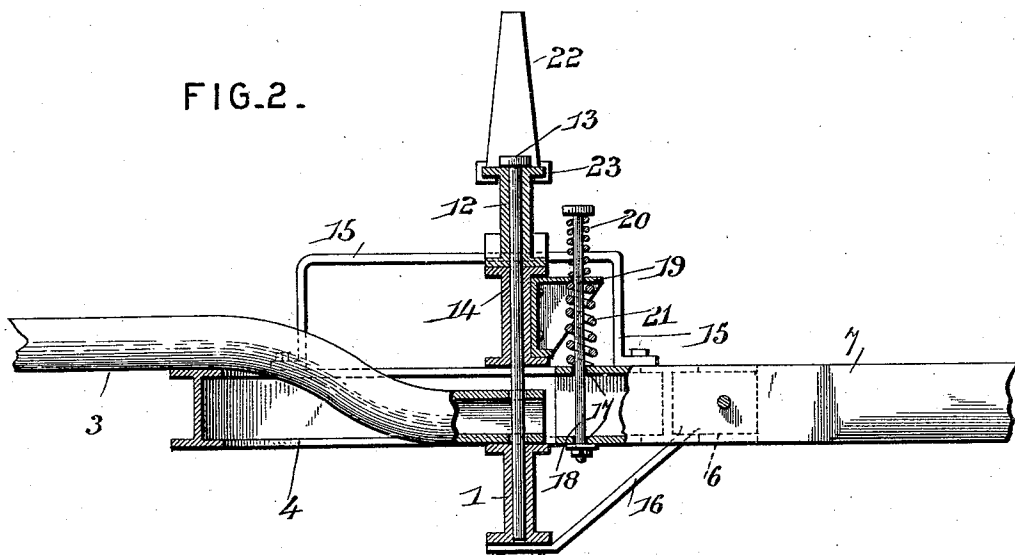


FIG. 3.

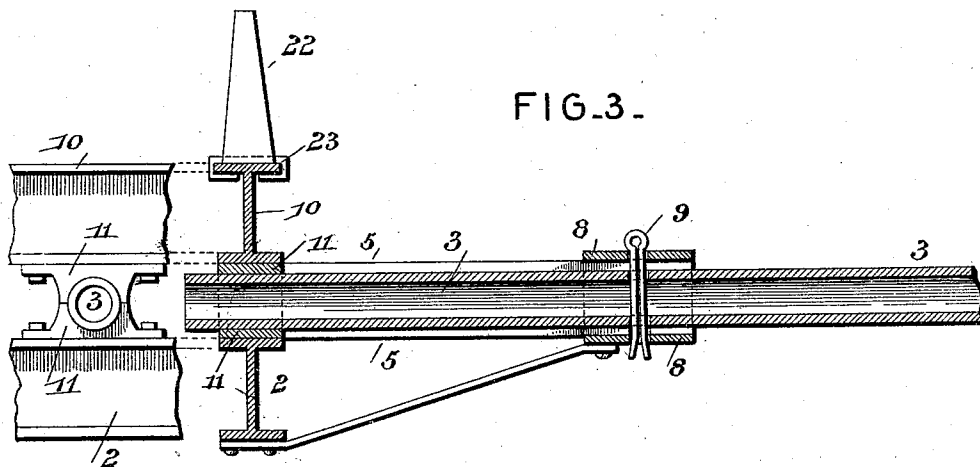
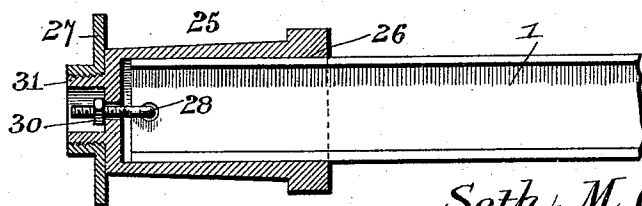


FIG. 4.



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UNITED STATES PATENT OFFICE.

SETH M. CABORN, OF CABORN, INDIANA.

VEHICLE RUNNING-GEAR.

SPECIFICATION forming part of Letters Patent No. 551,886, dated December 24, 1895.

Application filed May 4, 1895. Serial No. 548,143. (No model.)

To all whom it may concern:

Be it known that I, SETH M. CABORN, a citizen of the United States, residing at Caborn, in the county of Posey and State of Indiana, have invented a new and useful Vehicle Running-Gear, of which the following is a specification.

The invention relates to improvements in running-gears.

The object of the present invention is to improve the construction of running-gears, and to provide one which will possess great strength, durability and lightness, and in which the tongue will be supported above the ground, and will be prevented from swinging upward too far.

The invention consists in the construction and novel combination and arrangement of parts, hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a vehicle running-gear constructed in accordance with this invention. Fig. 2 is a sectional view of the front portion of the running-gear. Fig. 3 is a sectional view of the rear portion of the running-gear. Fig. 4 is a detail sectional view of one end of an axle, illustrating the manner of attaching the axle-skein to the axle-body. Fig. 5 is a detail view of one of the standards. Fig. 6 is a detail perspective view of one of the axle-skeins.

Like numerals of reference indicate corresponding parts in all the figures of the drawings.

1 and 2 designate front and rear axles, constructed of channeled metal, preferably steel, and being I-shaped in cross-section, and connected by a tubular cylindrical reach 3, and having rigidly secured to or mounted upon their upper faces front and rear hounds 4 and 5. The front hounds 4 are circular, and are constructed of a single piece of channeled metal, bent into circular form, and having its terminals 6 located at opposite sides of a tongue or pole 7, and slightly enlarged and pivoted thereto.

The rear hounds 5 are constructed of channeled metal, and are slightly curved, and have their front ends located at opposite sides of the reach 3 and connected by plates 8, arranged above and below the reach. The front

terminals of the rear hounds have their inner faces slightly concaved to conform to the configuration of the tubular reach, and the latter is secured at the desired adjustment by a vertical fastening device 9, passing through perforations of the upper and lower plates 8 and the reach.

A rear bolster 10 constructed of channeled metal is mounted upon the rear hounds 5, and the reach is supported between the bolster 10 and the rear axle 2 by oppositely-disposed guide-plates 11, mounted on the upper face of the axle and the lower face of the bolster, and provided with oppositely-disposed recesses, receiving and conforming to the configuration of the reach.

A front bolster 12 is pivotally mounted by a king-bolt 13 on a sand-bolster 14, which is rigidly secured to the circular front hounds. The bolsters 12 and 14 are constructed of channeled metal, and the front hounds have mounted upon them oppositely-disposed supporting-frames 15, each constructed of a single piece of metal, and consisting of an upper horizontally-disposed curved portion and depending arms or legs secured at their lower terminals to the hounds 4. The front ends 6 of the front hounds are supported by inclined braces 16, diverging rearwardly and extending at an inclination to the lower face of the front axle and secured to the same.

The tongue or pole may be constructed of any suitable material, but is preferably made of tubular steel. Its front portion is rounded, and its rear portion is rectangular and fits snugly between the front hounds. The rear end of the tongue or pole is provided with a vertical perforation 17, receiving a pin or bolt 18, which loosely passes through the pole and through a perforation of a bracket or support 19. Upper and lower springs 20 and 21 are arranged on the pin or bolt 18, and are disposed above and below the bracket or support, which extends forward from and is rigidly secured to the sand-bolster 14. These springs hold the tongue or pole at the desired elevation and prevent the same from swinging upward too far.

On the upper flanges of the front and rear bolsters 10 and 12 are adjustably mounted standards 22, constructed of flanged metal and provided at their bases with depending

inwardly-extending flanges 23, engaging under the upper edges of the bolsters. The standards are adapted to be moved inward and outward on the bolsters, and they are secured at the desired adjustment by vertically-disposed set-screws 24, mounted in threaded perforations of the bases or bottom portions of the standards and arranged to engage the upper faces of the bolsters. Each standard consists of a horizontal bottom portion, an inner vertical plate or flange, and an outer tapering web, which connects and supports the bottom plate and the vertical plate or flange.

The axles, which are constructed of channeled metal, have secured on their terminals tubular skeins 25, each of which is provided at its inner end with a substantially I-shaped opening 26 to receive the axle, and the extremity of the axle fits snugly within the extreme outer end of the main portion of the skein. As the axle-skeins are tubular and the body of the axle is I-shaped in cross-section, of course there are spaces at opposite sides of the web of the axle. The skein is of the usual configuration and is adapted to receive an ordinary wheel, which is retained on the skein by an axle-nut 27. The skein is secured to the axle by means of a hook 28 passing through a perforation at the outer end of the skein, and engaging a perforation of the web portion of the axle, and having a threaded shank receiving a nut 30. The nut 30 is arranged at the outer end of the shank and fits within an annular flange 31, located at the outer end of the skein and exteriorly threaded for the reception of the axle-nut. In assembling the parts of the axle, the hook is first arranged in the perforation of the axle-skein, and the latter is partially placed on the body of the axle, and the perforation of the axle-skein is sufficiently large to permit the hook to be manipulated to engage the opening of the web of the axle, and there is sufficient space in the axle-skein at each side of the body of the axle to manipulate the hook. After the hook has been engaged in the perforation of the web, the nut is applied and the parts are securely clamped together. By this construction the axle-skeins are rigidly and detachably mounted on the channeled-metal axles, and there is no liability of their becoming accidentally loose or leaving the axle.

It will be seen that the running-gear possesses great strength and durability, that it is cheap and easily constructed, and that at the same time it is comparatively light. It will also be apparent that the tongue is supported at the desired elevation, and is prevented from swinging upward too far, and

that the standards are adjustable, and may be readily and firmly secured at any desired point on the bolsters.

Changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

What I claim is—

1. In a running gear, the combination of an axle, constructed of channeled metal, I-shaped in cross-section, an axle skein arranged on the axle and provided at its inner ends with an I-shaped opening and having spaces between it and the web of the axle, and a fastening device passing through the outer end of the skein and detachably engaging the web of the axle, substantially as described.

2. The combination in a running gear, of an axle constructed of channeled metal I-shaped in cross-section and provided in its web portion with a perforation, an axle skein having an I-shaped opening at its inner end and arranged on the axle and having spaces between it and the web of the axle, a hook having a threaded shank and passing through a perforation of the outer end of the skein and engaging the perforation of the axle, and a nut arranged on the threaded shank of the hook and located at the outer end of the skein, substantially as described.

3. In a running gear, the combination of a pole or tongue provided at its rear end with a perforation, a supporting bracket located above the front axle and connected rigidly with the same and extending over the rear end of the tongue and provided with a perforation, a pin or bolt passing through the said perforations, and springs arranged on the pin or bolt and located above and below the bracket, substantially as described.

4. In a running gear, the combination of the front axle, circular front hounds secured to the front axle, a pole pivoted between the terminals of the front hounds, a sand bolster mounted on the front hounds, the forwardly extending bracket rigidly secured to the sand bolster and provided with a perforation, a pin or bolt mounted on the pole and passing through the perforation of the bracket, and springs disposed on the pin or bolt and located above and below the bracket, substantially as described.

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

SETH M. CABORN.

Witnesses:

GEORGE S. PRITCHETT,
WM. F. HARTIG.