No. 648,653. Patented May 1, 1900.

J. N. CLOUSE.

RUNNING GEAR FOR WAGONS.

(Application filed Sept. 6, 1898.)

(No Model.)

Fig. 1.

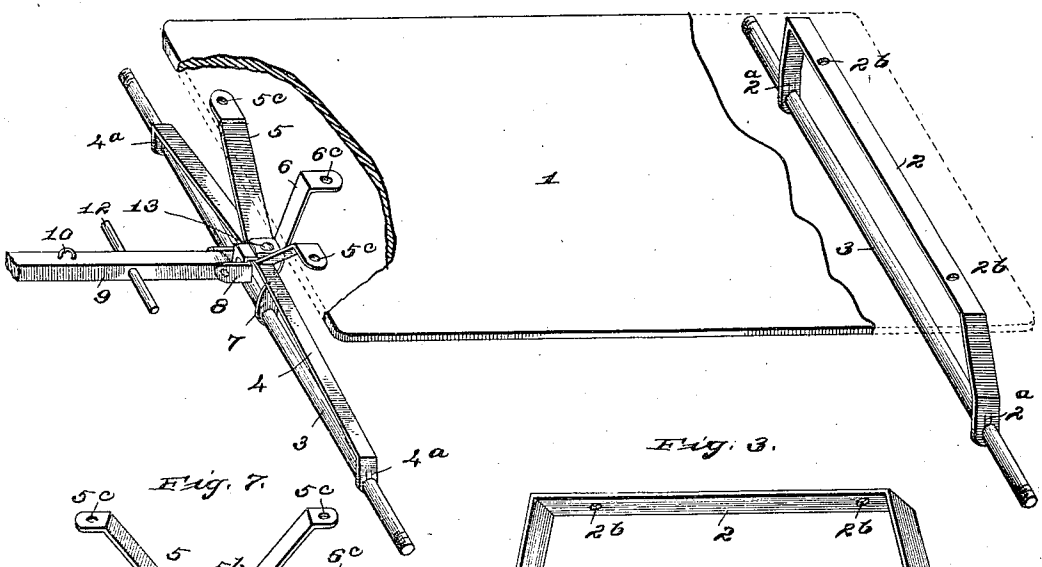


Fig. 7.

Fig. 8.

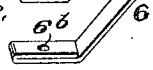


Fig. 3.

Fig. 4.



Fig. 9.

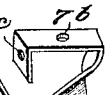


Fig. 10.

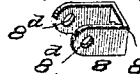


Fig. 11.



Fig. 12

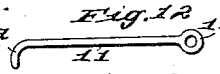


Fig. 13.

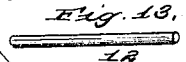


Fig. 5.

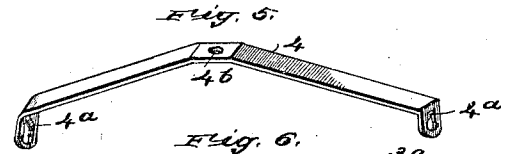


Fig. 6.

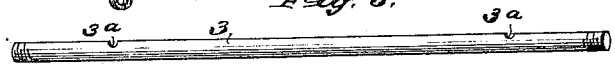


Fig. 14.

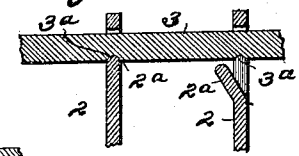
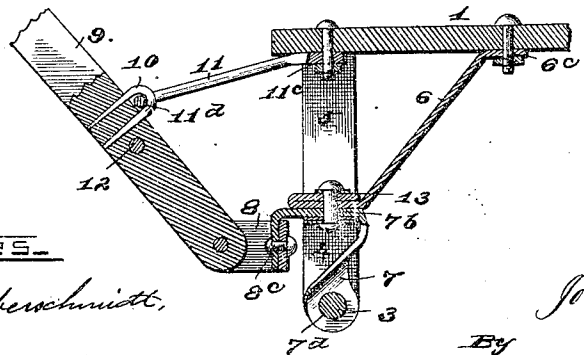


Fig. 2.



Witnesses.

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UNITED STATES PATENT OFFICE.

JOSEPH N. CLOUSE, OF ST. LOUIS, MISSOURI, ASSIGNOR TO ANTON BOEKER, OF SAME PLACE.

RUNNING-GEAR FOR WAGONS.

SPECIFICATION forming part of Letters Patent No. 648,653, dated May 1, 1900.

Application filed September 6, 1898. Serial No. 690,276. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH N. CLOUSE, a citizen of the United States of America, and a resident of the city of St. Louis, State of Missouri, have invented certain new and useful Improvements in Steel Running-Gear for Wagons, of which the following is a specification.

My invention relates to improvements in wagons for children's use, such as are made of malleable iron, wrought-iron, and steel; and the objects of my improvements are, first, to produce a wagon running-gear made entirely of steel; second, to construct it out of the ordinary stock sizes of steel; third, to construct it without either forging or welding its parts; fourth, to produce the same by the cutting, bending, punching, and riveting of its parts cold, and, fifth, to produce a cheaper wagon which is stronger and simpler in its construction. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of my invention complete. Fig. 2 is an enlarged vertical cut section of the front part complete. Fig. 3 is a perspective view of the back bench. Fig. 4 is a view of the back axle. Fig. 5 is a perspective view of the front bolster. Fig. 6 is a view of the front axle. Fig. 7 is a perspective view of the front bench. Fig. 8 is a perspective view of the brace to the front bench. Fig. 9 is a perspective view of the front axle and bolster's turn-clip. Fig. 10 is a perspective view of the tongue-clip. Fig. 11 is a view of the tongue-staple. Fig. 12 is a view of the tongue-support and guide-hook. Fig. 13 is a view of the guide-bar, and Fig. 14 is an enlarged sectional view showing a portion of the axle and a portion of the back bench and the manner of locking the two together.

Similar figures refer to similar parts throughout the several views.

In Fig. 1 the bottom board of the wagon box or bed is represented by 1, to the under side of which are attached the front and back portions of the running-gear by means of bolts or screws.

The rear portion of the running-gear consists of a flat strip of steel, which is bent so as to form the back bench 2. The straight portion of it above that forms a batten across the bottom board 1 is provided with bolt-holes 2^b 2^b to secure it to the bottom board 1 and the two end portions that are bent down from the knees that give elevation to the bottom board 1 above the back axle 3. These two knee portions are provided with holes at their ends, through which the axle 3 is inserted. These holes are punched round for the most part, excepting a flat side, which forms the end of a little tongue of the metal 2^a 2^a, which is slit and turned out, so as to allow the axle 3 to be inserted. The axle 3 at these two points is provided with indentations 3^a 3^a, which correspond to the flat sides in the holes, and when the axle is in the proper position in the holes these little tongues 2^a 2^a are to be pressed back and into their original position and seat themselves firmly into the indentations 3^a 3^a in the axle 3, thus locking the axle 3 firmly to the bench 2, the same being done with the front axle 3 and bolster 4. The ends of the axles are provided with threads for nuts to retain the wheels on them, and the inside ends of the wheel-hubs find their stop and bearing always the same against the ends of the back bench 2 and the front bolster 4, thus providing for the four wheels and their bearings, the wheels and the bed or box complete not being shown in the drawings, as they do not form a part of my invention in this case.

The front part of the running-gear consists of the axle 3, on which is mounted the bolster 4, the two being secured together, as already described. The center of the bolster 4 is provided with a pivot-hole 4^b, which matches the pivot-holes in the three other parts.

7, as shown separate in Fig. 9, is a turn-clip which forms a center bearing on the axle 3, which is inserted in a hole 7^d, provided for it. This piece (being a flat strip) is given a one-fourth turn above the axle 3 and below the top of the bolster 4. It is then bent over at an acute angle, so as to lie flat across the top of the bolster and form a long flat bearing-surface to turn on it, being also provided with a pivot-hole 7^b. The front end of it is bent down at a right angle and provided with a rivet-hole 7^c. To this portion of it is secured the

tongue-clip 8 by means of the rivet 8^e through its central flat portion. The other two flat portions standing forward and being provided with holes 8^d 8^d form ears between which the end of the tongue 9 is pivoted, so as to move up and down and guide the wheels as desired by its lateral motion. On top of this turn-clip 7 is placed the brace 6 to the front bench 5. This brace is provided at its lower end with a flat bearing-surface and a pivot-hole 6^b and at its upper end with a bolt-hole 6^c, by means of which it is bolted to the bottom board 1, so as to form a lengthwise brace, and on top of this brace 6 is placed the front bench 5, which is provided below with a pivot-hole 5^b and above on each arm with bolt-holes 5^c 5^c, by means of which it is bolted to the bottom board 1 and forms lateral braces, and, together with the several parts below it, all held together by the rivet 13, give the support and proper elevation to the front end of the bottom board 1, as shown in Fig. 2. Thus the front part of the running-gear is formed into two sections, which turn on a pivot on each other, the lower section, which is built up rigidly, consisting of the axle, the bolster, and the turn-clip and the upper section consisting of the brace and the bench secured rigidly to the under side of the bottom board 1, as shown clearly in Figs. 1 and 2.

I further design to pivot a hook 11 to the under side of the bottom board 1 on a vertical line over the pivot-rivet 13 by means of a bolt through the hole or eye 11^e, the other end of which, 11^d, hooks into a staple 10 or other catch on the tongue 9, thus retaining the tongue in an elevated position and at the same time leaving it free to turn with the axle. Then I pivot a short bar on the under side of the tongue or put a pin 12 through the tongue 9, so that it projects from each side enough to form a foot-support. By this arrangement a child can sit in the wagon and put his feet on these support-pins and ride downgrade and guide the wagon as desired by the motion of his feet and legs, thus making a coaster of the wagon. I do not design to confine myself to any particular size or any particular curves or angles to the various parts.

I have thus described and illustrated my invention, so that any one skilled in the art could construct and operate the same. I am aware that metal wagons have been made in various ways, mainly of malleable iron. I therefore do not claim such a construction, broadly; but

What I do claim as my invention, and desire to secure by Letters Patent, is—

1. In a steel running-gear for wagons the axles provided with slots or indentations in combination with the knees and bolster provided on their ends with holes and projecting tongues adapted to engage with each other substantially as shown and described.

2. In a steel running-gear for wagons the combination of the front lower and upper sections pivoted together, consisting below of the axle, the bolster, the turn-clip and the tongue-clip rigidly held together, and above the brace and the bench rigidly held to the bottom board, substantially as specified.

3. The tongue provided with a pin or bar for foot-rests and a staple or eye in combination with a hook inserted in the staple and pivoted to the bottom board for the purpose of holding up the tongue and guiding the wagon in riding or coasting downgrade as set forth and specified.

4. In a steel running-gear for wagons the combination of the rear bench 2, axles 3, 3, bolster 4, front bench 5, brace 6, turn-clip 7, tongue-clip 8, and its rivet 8^e, and the pivot-rivet 13, all substantially as illustrated and described.

Signed by me at St. Louis, State of Missouri, this 2d day of September, 1898.

JOSEPH N. CLOUSE.

Witnesses:
J. G. FERTIG,
JENNIE REID.