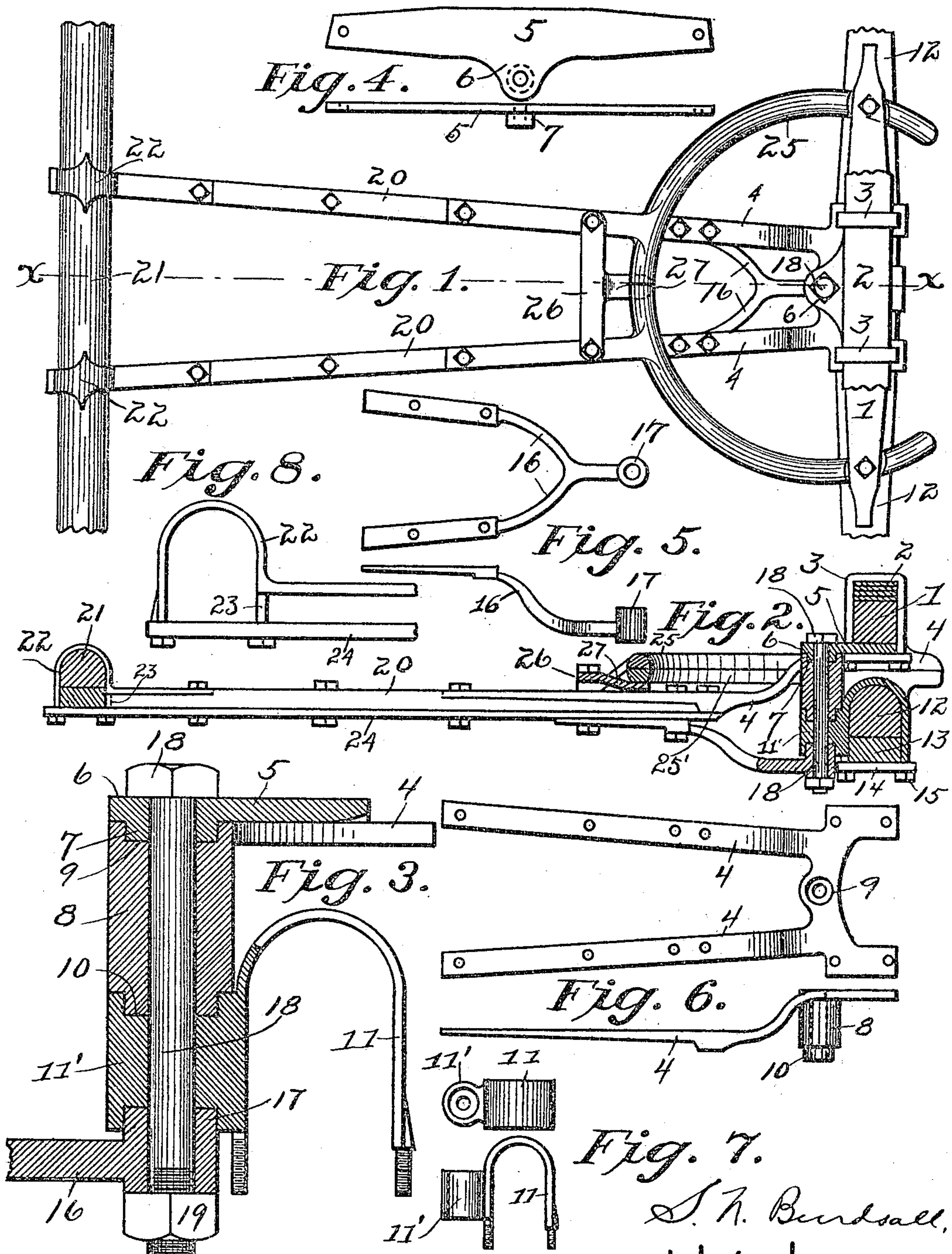


No. 808,068.

PATENTED DEC. 26, 1905.

S. N. BURDSALL.  
RUNNING GEAR FOR VEHICLES.  
APPLICATION FILED MAR. 17, 1905.



WITNESSES.

Matthew Liebler  
J. Fred Hemberger.

Fig. 7.

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# UNITED STATES PATENT OFFICE.

STEPHEN N. BURDSALL, OF DAYTON, OHIO.

## RUNNING-GEAR FOR VEHICLES.

No. 808,063.

Specification of Letters Patent.

Patented Dec. 26, 1905.

Application filed March 17, 1905. Serial No. 250,500.

*To all whom it may concern:*

Be it known that I, STEPHEN N. BURDSALL, a citizen of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Running-Gear for Vehicles; and I do 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 the figures of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in running-gear for vehicles; and the improvements relate specifically to the connection between the upper head-block plate with the reach-irons, whereby the reach-irons are supported and the front gear is centered and the head-block plate is firmly held by the connection and the necessity of making openings, shoulders, or any recesses in the head-block plate is avoided.

Preceding a detail description of the invention reference is made to the accompanying drawings, of which—

Figure 1 is a top plan view of the running-gear frame with ends of the rear axle broken away. Fig. 2 is a longitudinal sectional view of the running-gear frame on the line *x x* of Fig. 1. Fig. 3 is an enlarged vertical section through the head-block plate and the king-bolt and sockets by which the head-block plate and the lower brace and the axle-cap are connected at the middle of the axle; Fig. 4, detached views of the head-block plate; Fig. 5, detached views of the bottom brace; Fig. 6, detached views of the reach-irons; Fig. 7, detached views of the central socket-clip; Fig. 8, a detail view of the clip connecting the reach with the rear axle.

In a detail description of the invention similar reference characters indicate corresponding parts.

1 designates the head-block, connected to the upper member 25 of the fifth-wheel.

2 designates the head-block spring, which is inclosed by clips 3, connecting with lugs on reach-irons 4.

Between the head-block 1 and the reach-irons 4 the head-block plate 5 is inclosed. The head-block plate has a rearward central extension 6, from which projects downwardly an apertured boss or socket 7. This feature comprises one of the parts of the invention

in connection with the upper reach-iron 4, which has an apertured boss or socket 8, with a recess 9 in its upper end that receives the apertured boss 7 on the head-block plate 5. The lower end of said apertured boss or socket 8 terminates in a reduced diameter 10.

11 designates a central two-prong clip which embraces the upper side of the axle-cap 12; and axle 13 is made secure below said axle-cap by a clip-bar 14 and the usual nuts 15. Referring further to the central clip 11, 11' designates an apertured boss or socket projecting from said clip with its top and bottom recessed. The socket 11' is essentially on the rear prong of the clip, and its position is necessarily on the lower portion of said prong in order that said socket may occupy a position with its lower terminal adjacent to the bottom of the axle 13. The upper recess receives the reduced portion 10 of the apertured boss 8, projecting from the reach-irons 4. Projecting into the recess in the lower side of said socket or apertured boss 11' is an apertured boss 17, which is on the front end of the bottom brace 16. It will be seen from Fig. 3 that there is a continuous alined opening through these parts or socket-bosses into which a king-bolt 18 passes and is made secure against the lower side of the apertured boss 17 by a nut 19. The advantage of this manner of connecting the head-block 1 with the axle 13 consists in the fact that it dispenses with the use of one plate below the bottom of the front axle and further reduces the work very materially in assembling the gear. For example, when the socket-clip 11 is placed in the center of the front axle the whole front gear is ready to be connected without further adjustment or any measuring of distances, and, furthermore, the king-bolt remains stationary, or, in other words, does not turn with the fifth-wheel. A saving of wear on the king-bolt and a consequent looseness of the connection is avoided thereby, which obviates the possibility of rattling. There are no bolt-holes through the head-block for connecting any of the reach-irons or the king-bolt, and the appearance of the gear owing to these conditions is very materially enhanced. The bottom brace 16 is bolted to the underside of the reach-irons 4, and the reach-irons are bolted to the reaches 20, which are connected to the back axle 21 by solid clips 22, which have screw-lugs 23, which are integral parts of the clips and lie close to the axle and penetrate the lower reach-irons 24, forming a regular



clip-tie. The rearward portion of the upper member 25 of the fifth-wheel is connected to the reach-irons 4 by a cross-brace 26, said cross-brace having a lug 27 extending under 5 the lower middle portion 25' of the fifth-wheel, which prevents any rattling or noise and serves also as a support for the reaches at that point.

Having described my invention, I claim—

- 10 1. In a running-gear for vehicles, the combination with a head-block, of upper reach-irons having an apertured boss, a head-block plate secured between the bottom of the head-block and the upper reach-irons, said head- 15 block plate having a central rearwardly and downwardly apertured boss which enters the apertured boss on the upper reach-irons in the rear of the head-block, a centrally-disposed socket-clip secured to the axle and receiving 20 in its upper end the apertured boss on the up-

per reach-irons, a bottom brace or reach-iron having an apertured boss which projects into the lower end of the socket on said clip, and a king-bolt passing through said sockets, substantially as specified. 25

2. In a running-gear for vehicles, the combination with an upper fifth-wheel member having lugs projecting rearwardly therefrom, a cross-brace uniting said fifth-wheel member with the reaches, and forming a brace for said 30 reaches, said cross-brace having a forwardly-extended lug which lies below the lower member of the fifth-wheel and forms a bearing therefor, and whereby rattling is prevented.

In testimony whereof I affix my signature in 35 presence of two witnesses.

STEPHEN N. BURDSALL.

Witnesses:

R. J. McCARTY,  
C. M. THEOBALD.