2 Sheets—Sheet 1.

J. W. POST.

CARRIAGES.

No. 186,615. Patented Jan. 23, 1877.

Fig. 1.

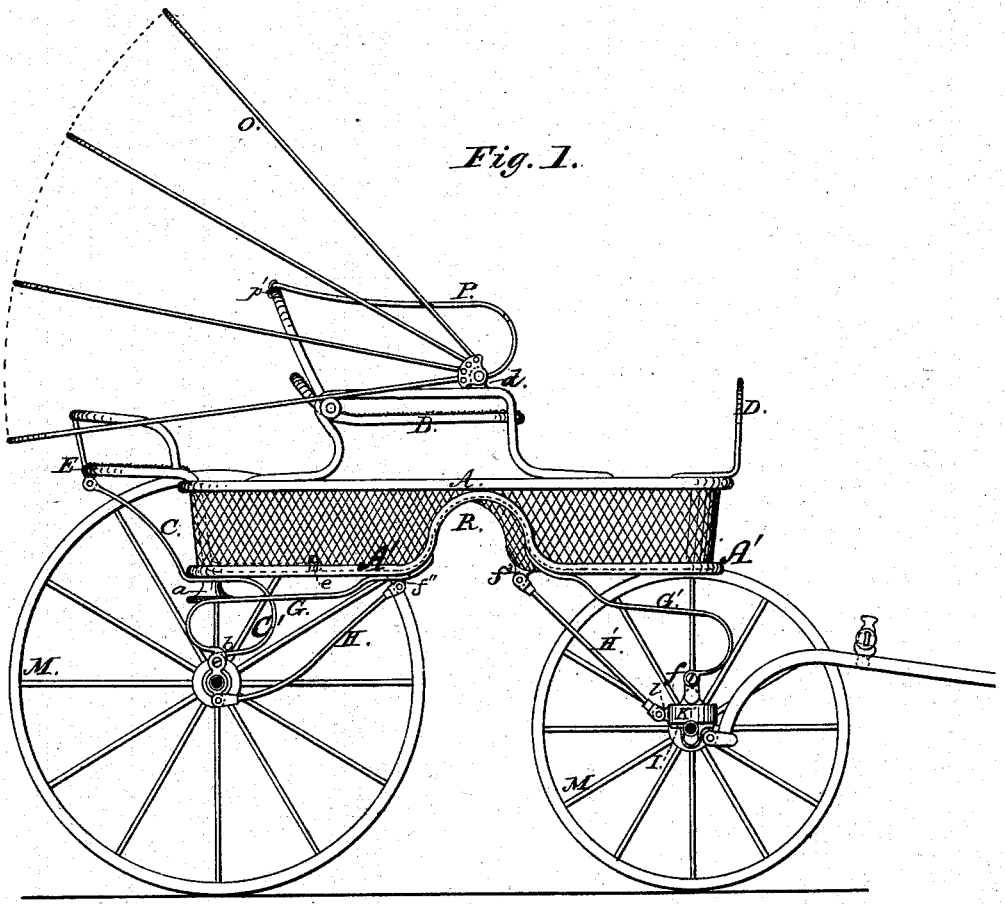
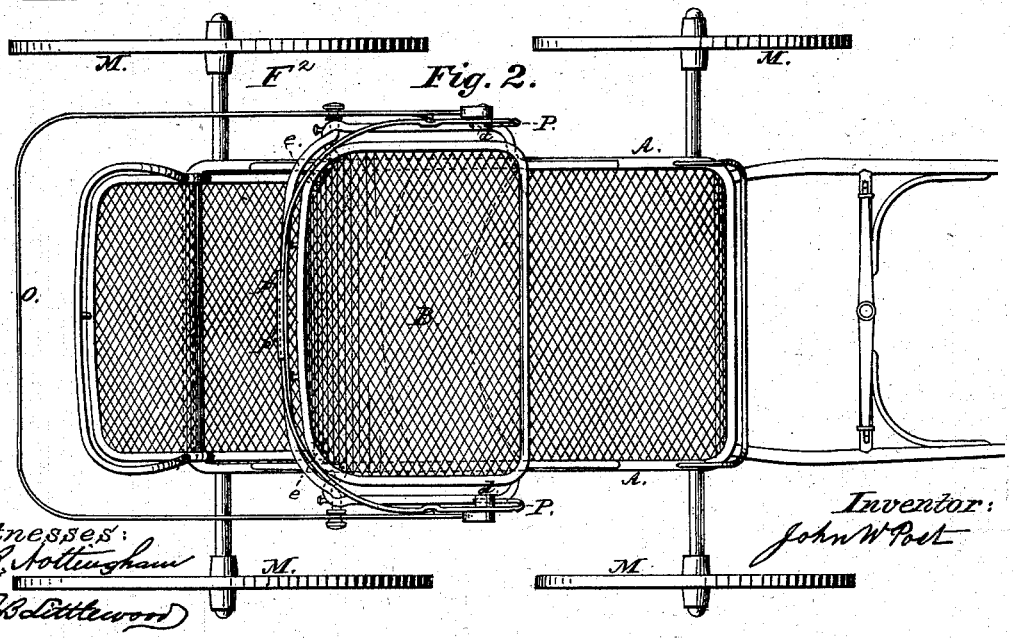


Fig. 2.



Witnesses:
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J. B. Littlewood

Inventor:
John W. Post

2 Sheets—Sheet 2.

J. W. POST.

CARRIAGES.

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Patented Jan. 23, 1877.

Fig. 3.

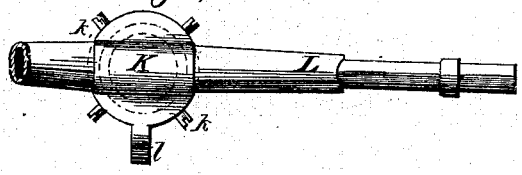


Fig. 4.

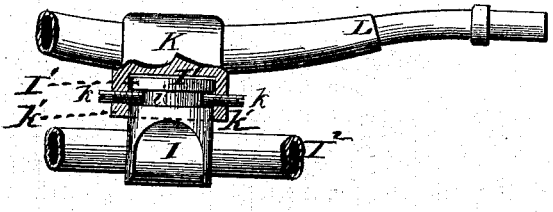


Fig. 5

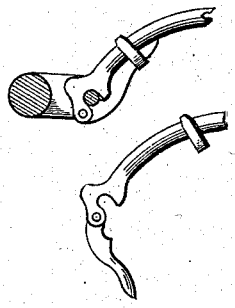


Fig. 6.

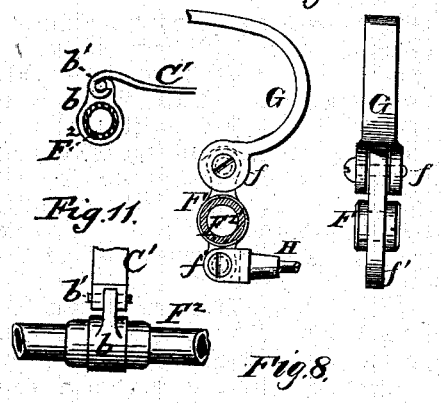


Fig. 11.

Fig. 8.

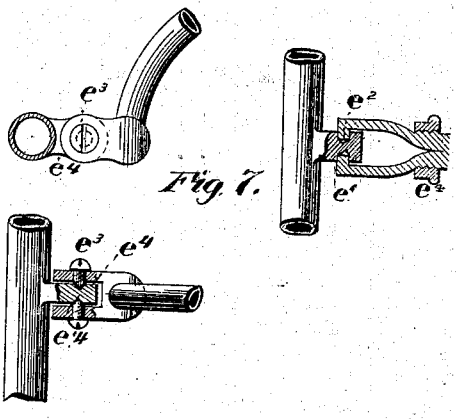


Fig. 7.

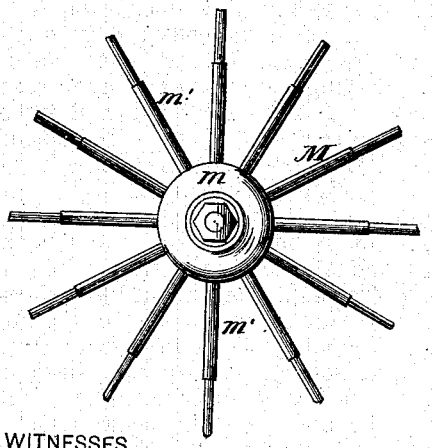


Fig. 9.

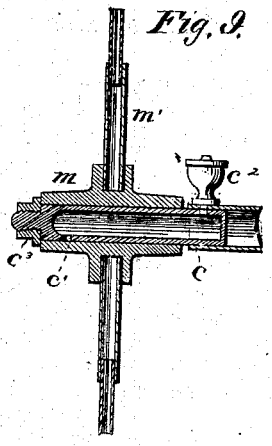
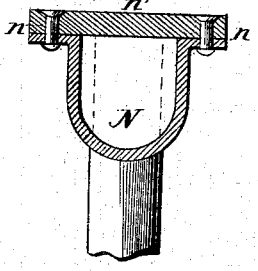


Fig. 10



WITNESSES

J. R. Stottinghem

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UNITED STATES PATENT OFFICE.

JOHN W. POST, OF NEW YORK, N. Y.

IMPROVEMENT IN CARRIAGES.

Specification forming part of Letters Patent No. **186,615**, dated January 23, 1877; application filed October 4, 1876.

To all whom it may concern:

Be it known that I, JOHN W. POST, of New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Buggies or other Vehicles; and I do hereby declare that the following is a full, clear, and exact description thereof, which 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 letters of reference marked thereon, which form a part of this specification.

In the construction of my improved wheeled vehicle great strength, durability, and comparative lightness are designed; and to this end I make the entire structure of the buggy, phaeton, or other vehicle of metal tubing or pipe. The framing of the body of upper and lower tubing or pipe, with the braced archway in the lower frame for the front wheels to turn under, is of special advantage in connection with a tubular seat-frame, in the particulars of lightness and economy, as tubing and pipes of all sizes and forms are readily obtained, and the joining in completeness of all the parts easily made. Particular features of novel construction and combination are found in a removable rear seat and its detachable supporting spring-brace device and its fastenings; in the fifth-wheel, having a shouldered seat-bearing and an upper telescoping or inclosing section, with locking pins or screws, which admit of the free turning movement of the upper embracing section upon the lower shouldered bearing-seat section, to obtain the advantage of an easy and full range of turning for the front wheels, and to effectually exclude dust and dirt from the bearing and locking points; in the combination, with the body-supporting springs, of couplings, free to turn upon the axle, to ease the action of the springs; in the combination, with the body-supporting springs and their easing rocking couplings, of the braces connecting the body with the spring-couplings, whereby to obtain a yielding brace-connection for the body directly with the springs at the points of their axle-couplings; and in the combination, with the removable rear seat and its supporting spring-brace device, of a coupling constructed and adapted to allow of the attachment and detachment of the supporting spring-brace with its seat, and to have an easing movement for the spring upon the axle, the advantage being to have the removable seat carry its own spring and brace attachment, and thus partially, if not entirely, relieve the main rear springs of the weight of the rear-seat occupants.

In the accompanying drawings, Figure 1 represents an elevation of a buggy embracing my invention; Fig. 2, a top view of the same. Figs. 3 and 4 are detail partial section and top views of the fifth-wheel and connections; Figs. 5 and 7, detail views of the thill and pole couplings; Fig. 6, a detail view of the spring and brace couplings, fitted to turn upon the axle; and Figs. 8, 9, and 10 are side and sectional views of the wheel and of the felly or tire.

As the thill-couplings, the wheel, and the top are separate and distinct devices, I shall give no particular description of these devices; but they are shown as parts of a complete metallic buggy of tubes or pipes.

The framing of the body is formed of a top and bottom pipe or tubing, A A′, the bottom tubing having the archway R, upon which the top frame A rests, and which allows of the turning of the front wheels. The bottom and side spaces or panels of these pipe-frames are of wire-cloth or other suitable light material, forming a cheap, light, and neat body. The main seat B has its back and side arms of tubes, and is secured upon the top body-tubes. The body is supported upon tubular axles by springs G G′, secured to the bottom tubular frame A, and arranged in any suitable manner. The several parts of the wheels M and of the thills are of metallic tubular construction. The body has the usual dash-board. The fifth-wheel (shown in Figs. 3 and 4) connects the bent tubular cross-bar L with the front tubular axle. It is composed of two parts, I and K, the part I being permanently secured upon the axle I^2, and has an upper shouldered bearing-seat, I^1, which forms an annular groove, *i*, while the part K is fixed to the cross-bar L, and, projecting downward, forms a socket, *k′*, to receive the shoulder-bearing I^1 and a cover for its groove *i*, the

two parts connecting in a telescoping manner, so as to inclose the bearing-surfaces and keep them from dirt and dust. This construction gives an easy turning movement, with full range, to the front wheels, while the locking of the parts is effected by means of pins or screw-bolts *k*, passing through the sides of the socket *k'* and into the annular groove *i*, making a secure and free-turning connection for the fifth-wheel. The socket part K of the fifth-wheel has a rearward-projecting lug, *l*, Fig. 3, to which the brace H' is attached, and, extending upward, is fastened to a cross-brace of the bottom tubing A' by a lug, f^3, as shown in Fig. 1.

A detachable auxiliary seat, E, is arranged at the rear end of the body, and is fastened in place by its tubular frame bent downward, and passing through staples *e* on the bottom tubing, while the overhanging seat is supported and held in position by means of a spring-brace, C C', hinged to the seat-tube, and detachably connected to the rear axle F^2 by means of a coupling, *b*, Figs. 1 and 11, an intermediate connection of the spring-brace C C' with the body-frame being made by a clamp-screw, *a*, which is removed in detaching the seat and its spring-brace. The coupling-connection is made detachable by providing the end of the spring C' with an open socket, and the coupling *b* with side pins *b'*, which, when interlocked, with the coupling turned up, and the clamp-screw *a* in place, is secure; but upon removing the clamp-screw and pressing down the coupling, the separation is effected and the seat-frame withdrawn from the body-loops. The spring C' assists in supporting the extra weight of persons in the rear seat, and relieves the main springs, which are usually adapted for a two-seat vehicle, while the brace C' supports the seat. The main seat B has a detachable top and a hand-rail or arm, P, with notches and connections, by which the top O can be adjusted to different positions, not only in relation to the main seat, but in relation to the rear seat, so as to inclose it when the top is turned down, without interfering with the occupants, while both seats can be left unobstructed or the main seat alone covered.

The top and arms of the main seat can be removed, if desired, and the extra back and side arms P can be used without the top, if desired; but the top is adapted for convenient use with both seats. The main springs G G' are connected by couplings F, Fig. 6, to the rear axle and the front cross-bar, to ease the action of the springs. The couplings for the axle-springs are fitted to turn upon the axle F^2 between collars, and they connect with the springs G, and with the braces H on opposite sides of the axle, whereby a yielding connection is effected directly between the body-braces and the springs. The couplings for the front springs G' are only connected at *f*, and turn upon the cross-bar without brace-connection. Thus the body is mounted upon springs which have rocking couplings directly with the hind axle and cross-bar. If the vehicle is made of iron tubing, it is nickel-plated, and the panels of the body may be japanned.

The top O is designed for use without a back cover, in order to adapt it for adjustment in relation to the rear seat.

I claim—

1. The body of the vehicle, constructed of the top and bottom metallic-tube frames A A', the latter having the archway R, and supporting the top tubing, with its tubular frame seat or seats, substantially in the manner and for the purposes herein set forth.

2. The combination, with the removable auxiliary seat E and the body A A', of the detachable hinged spring-brace C C', for supporting the additional weight directly upon the axle and bracing said seat.

3. The combination, with the removable auxiliary seat E, the body, and the hinged spring-braces, of the clamp-screw *a*, arranged between the spring-connection with the axle and the bracing-connections with the seat, whereby said seat and spring-brace are removably secured.

4. The combination, with the removable auxiliary seat E, the body, and the hinged spring-brace clamped to said body, of the rocking coupling *b*, having a detachable socket-connection with said spring, whereby both the spring and brace points of attachment are made detachable.

5. The fifth-wheel having a socket-section, *k'*, in combination with a shouldered bearing-seat section, I^1, inclosed and covered by said socket, and the fastening pins or screws *k*, arranged beneath said bearing-seat, substantially as herein set forth.

6. The combination, with the couplings F, of the body-springs G and the braces H, the connections of the springs and the braces being upon opposite sides of the axle F^2, for the purpose stated.

In testimony that I claim the foregoing as my own I hereby affix my signature in presence of two witnesses.

JOHN W. POST.

Witnesses:

J. R. NOTTINGHAM,

J. B. LITTLEWOOD.