(No Model.) 3 Sheets—Sheet 1.

J. F. HURTIG.

CARRIAGE.

No. 303,933. Patented Aug. 19, 1884.

Fig. 1.

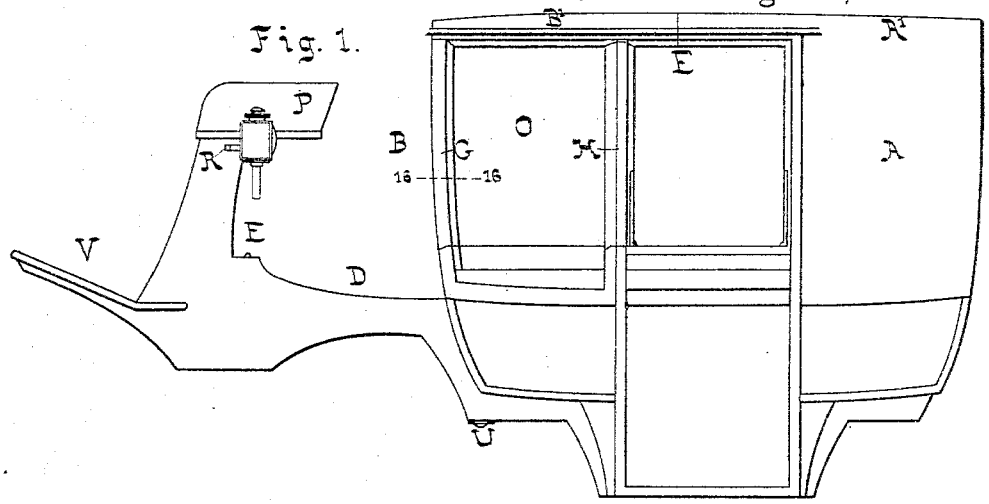


Fig. 2.

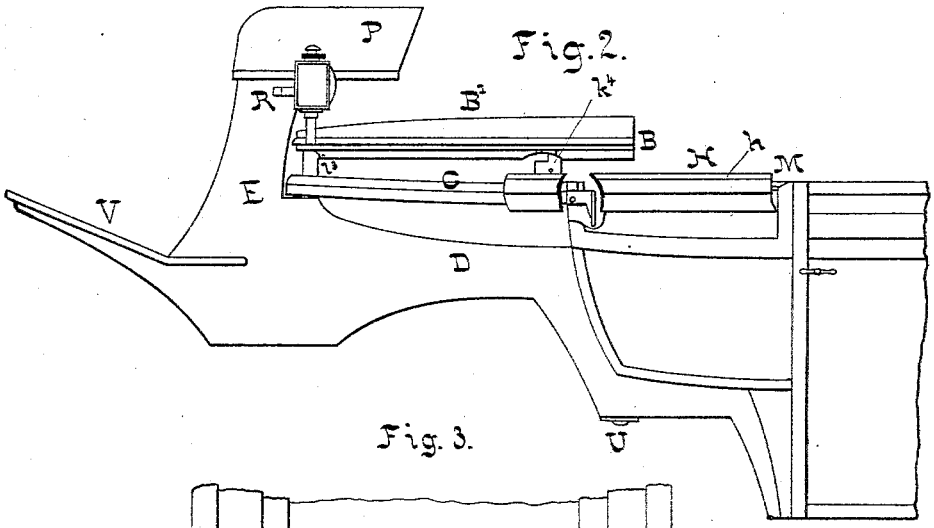
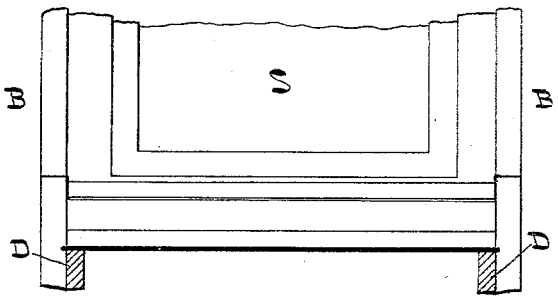


Fig. 3.



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J. F. HURTIG.

CARRIAGE.

No. 303,933. Patented Aug. 19, 1884.

Fig. 4.

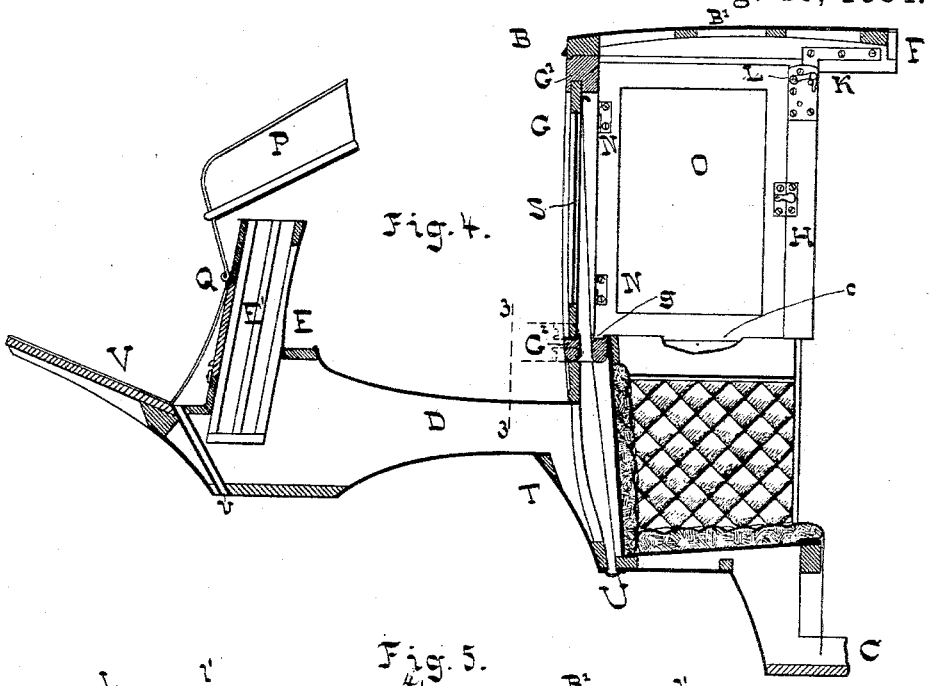
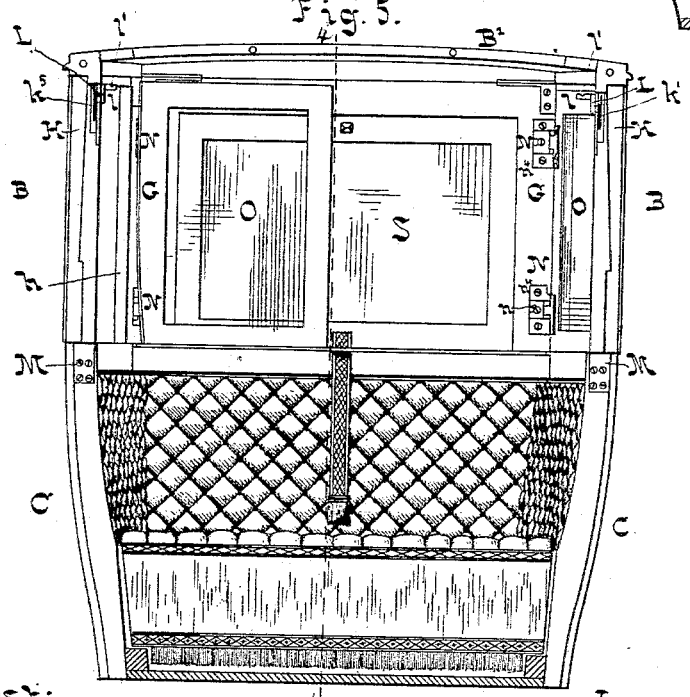


Fig. 5.



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CARRIAGE.

No. 303,933. Patented Aug. 19, 1884.

FIG. 6.

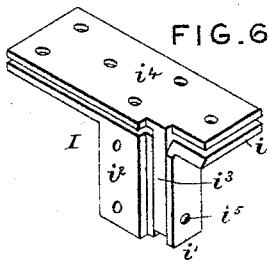


FIG. 7.

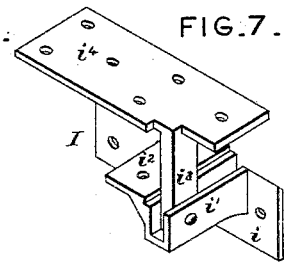


FIG. 8.

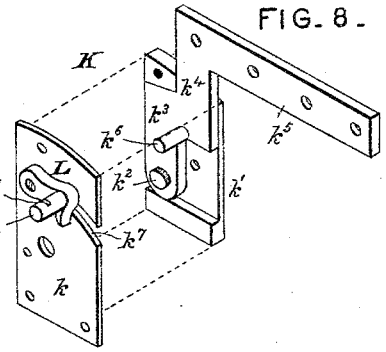


FIG. 10.

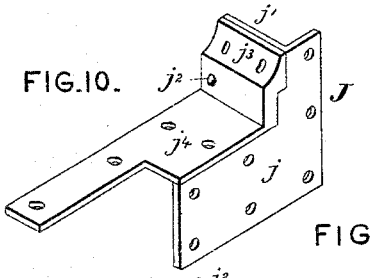


FIG. 14.

FIG. 9.

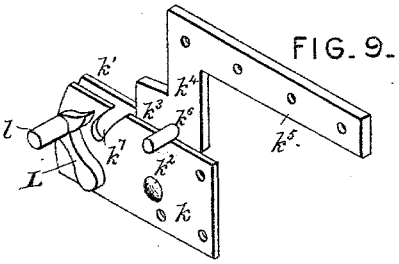


FIG. 11.

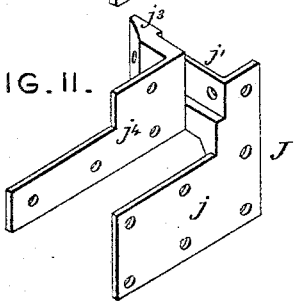


FIG. 12.

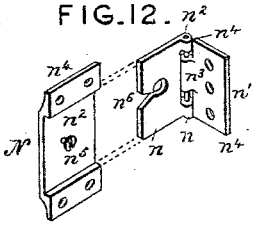


FIG. 16.

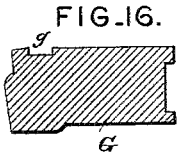


FIG. 13.

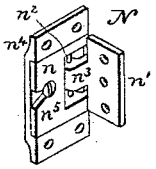
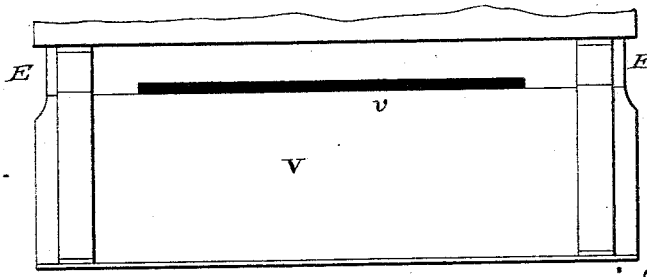


FIG. 15.



Attest.

Geo. F. Smallwood.

Walter Allen

Inventor

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By Knight Bros.

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UNITED STATES PATENT OFFICE.

JOHN FRIED. HURTIG, OF ST. LOUIS, MISSOURI.

CARRIAGE.

SPECIFICATION forming part of Letters Patent No. 303,933, dated August 19, 1884.

Application filed April 30, 1884. (No model.)

To all whom it may concern:

Be it known that I, JOHN FRIED. HURTIG, of the city of St. Louis and State of Missouri, have invented a certain new and useful Improvement in Carriages, &c., of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My improvement relates to that class of close carriages whose top is constructed to be thrown open when desired, whose driver's seat is hinged to tilt forward, and whose sash-cavities are open at the bottom to permit water to escape.

The first part of my improvement relates to the peculiarly-constructed hinges, as hereinafter set forth, by which the front portion of the falling top is hinged to the body-base and the cover to the pillars, the construction being such that the cover is not moved forward so great a distance as the tops of the pillars, so that the distance of the boot from the body may be shortened, as set forth.

The second part of my improvement consists in the described manner of making the front side window-sashes removable, the hinges being made with a tongue hinged to the sash-leaf that fits as a dovetail in the stile-leaf of the hinge, so that the tongue may be drawn out, as set forth hereinafter.

The third part of my improvement consists in the attachment of the lamp-brackets to the boot and hinging the seat to the boot above the brackets, so that the seat can be tilted forward to open the boot and allow the front side sashes to be put in compartments provided for them therein.

The fourth part of my improvement consists in forming passages for the escape of water from the foot-rest and a perforated bottom plate for the cavities into which the window-sashes are let down.

Figure 1 is a side view of a carriage-body with my improvement applied thereto. Fig. 2 is an enlarged side view of part of a carriage-body, showing the part of the top to which my invention applies in its lower position. Fig. 3 is an enlarged transverse section at 3 3, Fig. 4, looking backward. Fig. 4 is a longitudinal section at 4 4, Fig. 5. Fig. 5 is an elevation of that shown in Fig. 4, looking forward, and showing the interior of the carriage. Figs. 6 to 13, inclusive, are enlarged perspective views of the hinges. Fig. 14 is a bottom view of the perforate plate that closes the bottom of the cavity into which the front window drops. Fig. 15 is an enlarged top view of the foot-rest. Fig. 16 is a section at 16 16, Fig. 1.

A is the rear part of the carriage-top. This may have the usual construction.

B is the front part of the top, which is connected together and to the base C by hinges of a novel construction, the part B being arranged to be let down upon the bridge D connecting the boot E with the body. The cover is made in two parts, A′ and B′, forming parts of the back portion, A, and the front portion, B, respectively, and meeting on a transverse line, F, at the middle of the carriage, as usual. The portion B consists of pillars or posts G G and H H, hinged to the body-base C, and the top or cover B′, hinged to the pillars. There are also connecting sill and strip extending from one of the pillars G to the other one. The pillars form the window-stiles.

I will now describe the construction of the hinges I, by which the upper ends of the pillars G and the connecting-strip G′ are connected to the top or cover B′. One member of this hinge has a flat leaf, i, and a part, i', extending at right angles therefrom, with a mortise to receive a bar, i^3, of the other member. The mortised part i' has a side leaf, i^2. The bar i^3 extends at right angles from the leaf i^4. The leaves i and i^2 are attached to pillar G and strip G′, and the leaf i^4 is attached to the under side of the cover or top B′ by screws passing through the leaves. The hinge I is shown closed in Fig. 6 and open in Fig. 7.

i^5 is the pintle.

The hinge J, connecting the lower ends of the pillars G and the connecting-sill G^2 to the base, is shown closed in Fig. 10 and open in Fig. 11. This hinge has a leaf, j, attached by screws to the base C, with a part, j', extending at right angles from the leaf and having screw-hole therein. The part j' is connected by the pintle-pin j^2 to the part j^3 of the other member, which extends at right angles from the leaf j^4, which is secured to the pillar G and sill G^2 by screws, as usual.

The hinge K, connecting the upper ends of

the pillars H with the top or cover B′, is shown closed, but with one of the plates separated in Fig. 8 and open in Fig. 9. The member of this hinge that is attached to the pillar H has two parallel plates, k k', secured together by the pintle k^2, and by screw or screws or other means the plate k' is formed with distance projections that hold the plates a distance asunder, leaving a space in which works the other member of the hinge. This latter member consists of a flat bar having three parts, k^3 k^4 k^5. The parts k^4 and k^5 are at right angles with each other, and the part k^3 is an offset from part k^4. The pintle k^2 passes through the part k^3, and the part k^5 is attached to the top or cover B′ by screws. The position of this hinge upon the pillar G is such that the bar k^3 k^4 k^5 is in line with the sash-groove g of the stile or pillar G, the bar opening into this groove when the parts are lowered down.

k^6 is a pin extending from the inner side of the bar k^3 k^4 k^5, and entering, as the portion of the top B is raised, a curved slot at k^7 in the plate k, reaching the end of the slot when the top attains its full elevation.

L is a hook pivoted to the plate k, and arranged to engage the pin k^6 when at the inner end of the slot to hold the parts in their elevated position. On the side of the hook L is a stud, l, having a notch, l', that forms the journal-bearing of the gudgeon of the blind-roller.

The hinges M, by which the lower ends of the pillars H are connected to the body-base C, may be of the ordinary or any suitable construction.

I will now describe the construction of the hinges N, by which the front side sashes, O, are connected to the pillars G.

The hinge proper consists of two leaves, n and n', with a connecting-pintle, n^2. The pintle-lugs n^3 n^4 do not occupy the whole length of the pintle, so that the leaf n', with the sash O, to which it is attached, may be raised to lift its lower edge from the sill-grooves g of the sill G^2 or c of the body, to allow the sash to be swung from one position to another. The leaf n is not directly attached to the pillar G, but is made to enter a recess, n^3, of a plate, n^4, that is let into and made fast to the pillar. The leaf n is held in the recess n^3 by a screw, n^5, that passes through a slot, n^6, in the leaf n and open to the side of the leaf. The construction is such that when the screw is turned outward a short distance, so as to remove its head from the countersink at the inner end of the slot n^6 the leaf may be drawn from the recess n^3. When the sashes O are disconnected from the body, they may be placed in the boot E, which is made with an open-topped cavity, E′, closed by the seat P, which is hinged to the boot at Q, so that it can be turned over forward to open the boot-cavity. (See Fig. 4.)

It is usual to secure the lamp-brackets R to the seat, and when this is the case the seat cannot be turned over without first removing the lamps from the brackets. To avoid this difficulty I secure the brackets to the boot instead of the seat.

S is the front sash. This is made to fall into the cavity T, and it descends so low that its upper bar does not interfere with the movement of the sill G^2 in the movement of lowering the part B of the top, or in raising the same. Some amount of rain is liable to enter the cavity T, and to allow its free escape therefrom I close the bottom of the cavity with a perforated plate, U. An equivalent contrivance is used to allow the water to escape from the foot-rest V, a water pipe or duct, v, being introduced for this purpose.

I claim as my invention—

1. Connecting the cover B′ to the pillars G and H by hinges having bars i^3 or k^4 extending downward from the cover and connected rigidly thereto and hinged or pivoted to the pillars below the upper ends of the pillars.

2. The combination, with the pillar G and top or cover B′, of the hinge I, composed of leaf i and mortise part i', secured to the pillar and leaf i^4, and bar i^3, secured to the cover and connected by a pintle at i^5.

3. The combination of the body-base C and falling pillar G with a connecting-hinge, J, composed of leaf j and projection j', secured to the body and leaf j^4, and projection j^3, secured to the lower end of the pillar, and a pintle, j^2, connecting the parts j' j^3, so as to lift the lower end of the pillar G as it is being turned down.

4. The combination, with the cover B′ and pillar H, of the hinge K, composed of parallel plates k k', connected to the pillar, interposed bar with projection k^3 k^4, secured to the cover B′, and connecting-pintle k^2, passing through plates k k' and part k^3.

5. The combination, in the hinge K, of the stud k^6 on the bar k^3 k^4 k^5 and the plate k, provided with a slot at k^7, to receive the pin k^6, and the hook L to retain the stud in the slot.

6. The combination, with the hook L, substantially as set forth, of the stud l, having a bearing-notch, l', to receive the gudgeon of the curtain-roller.

7. The combination, with the front side sash, O, of the detachable hinge, having leaves n n', connected by pintle n^2, and the plate n^4, with recess n^3, constructed to receive the leaf n, and the holding-screw n^5, passing through a slot at n^6.

JOHN FRIED. HURTIG.

In presence of—

BENJN. A. KNIGHT,

JOSEPH WAHLE.