

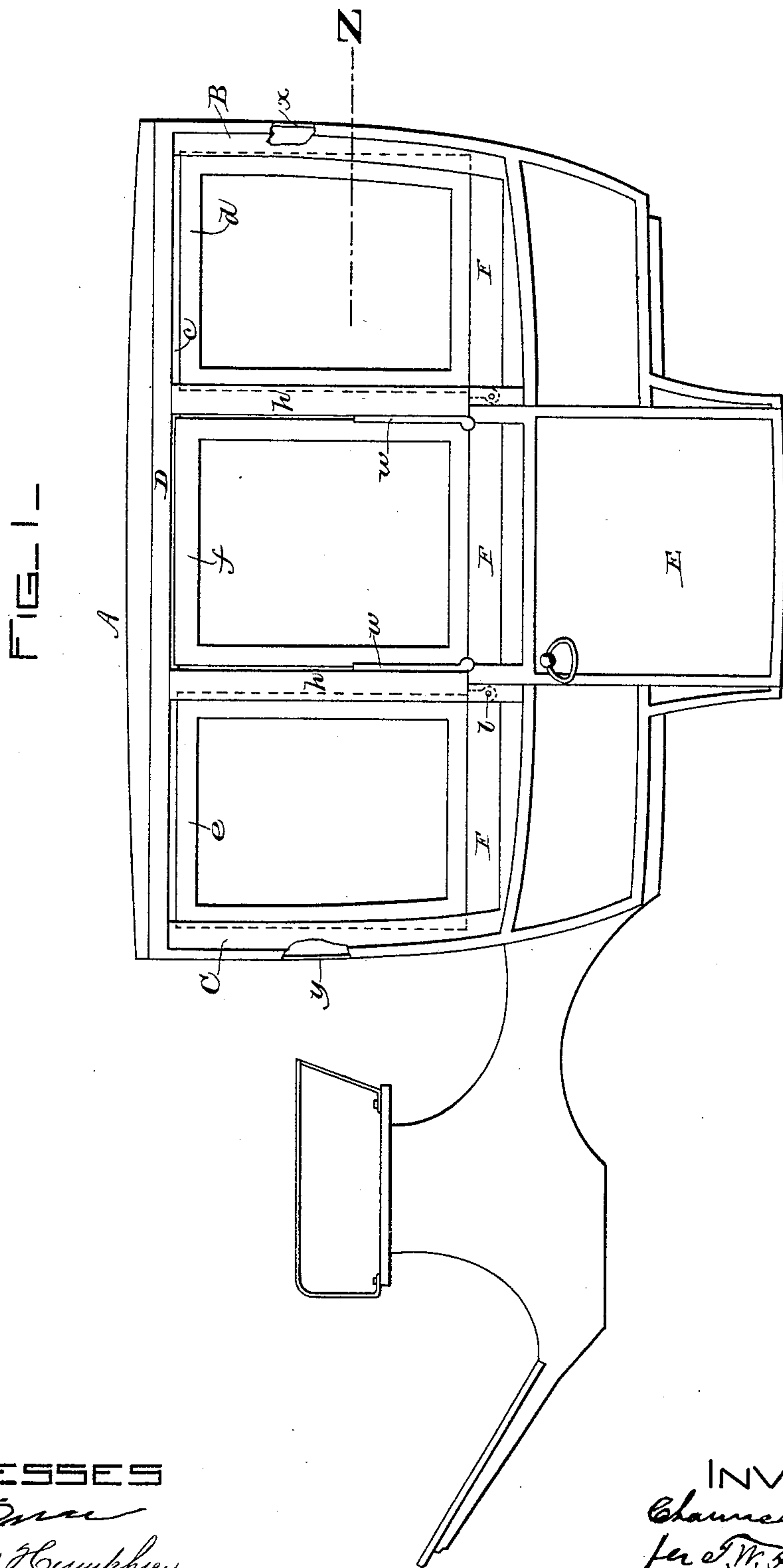
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3 Sheets—Sheet 1.

C. THOMAS.
CARRIAGE.

No. 405,723.

Patented June 25, 1889.



WITNESSES

A. C. Owen
Eugene Humphrey

INVENTOR

Chauncey Thomas
per J. M. Porter Atty

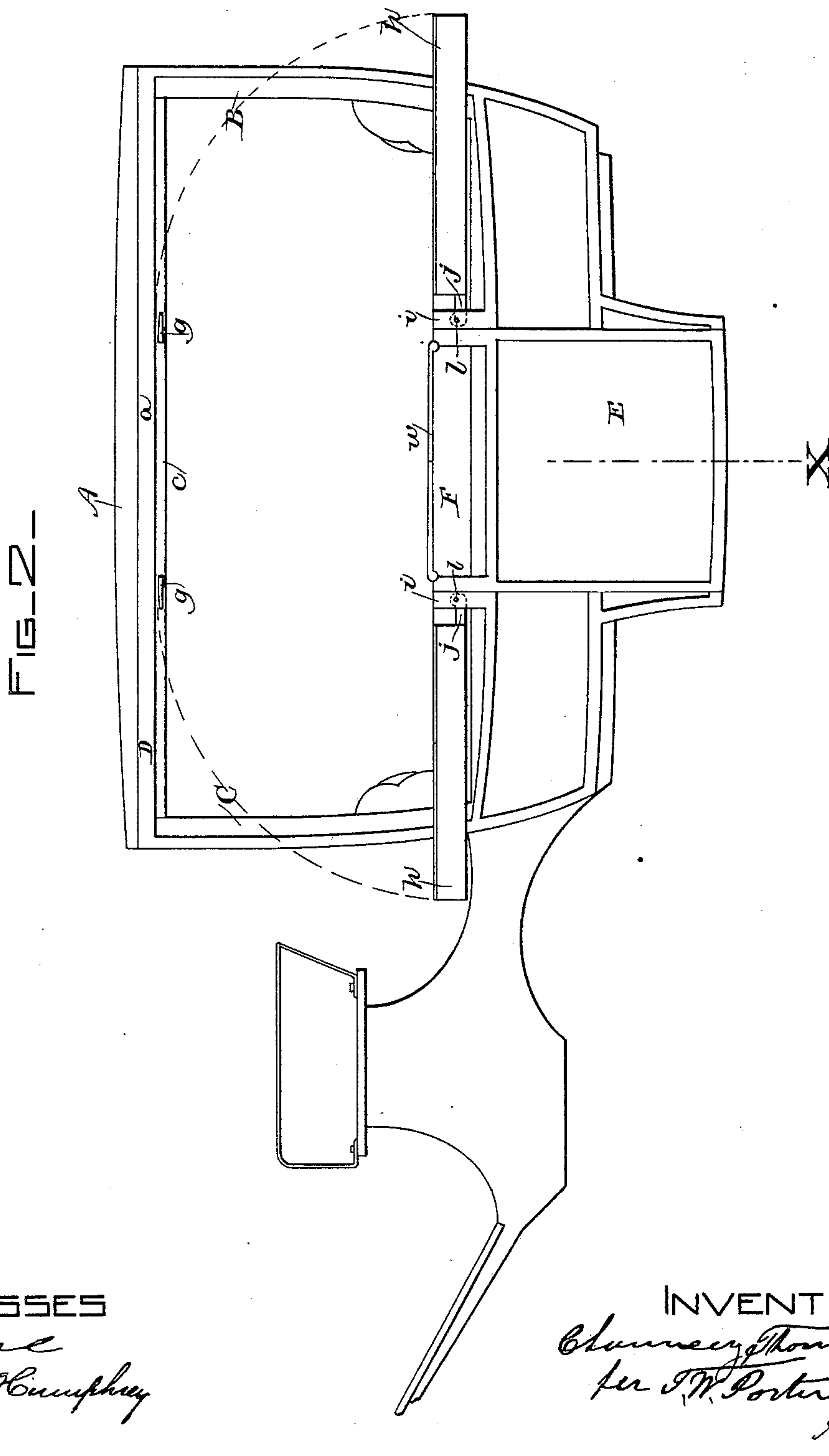
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WITNESSES

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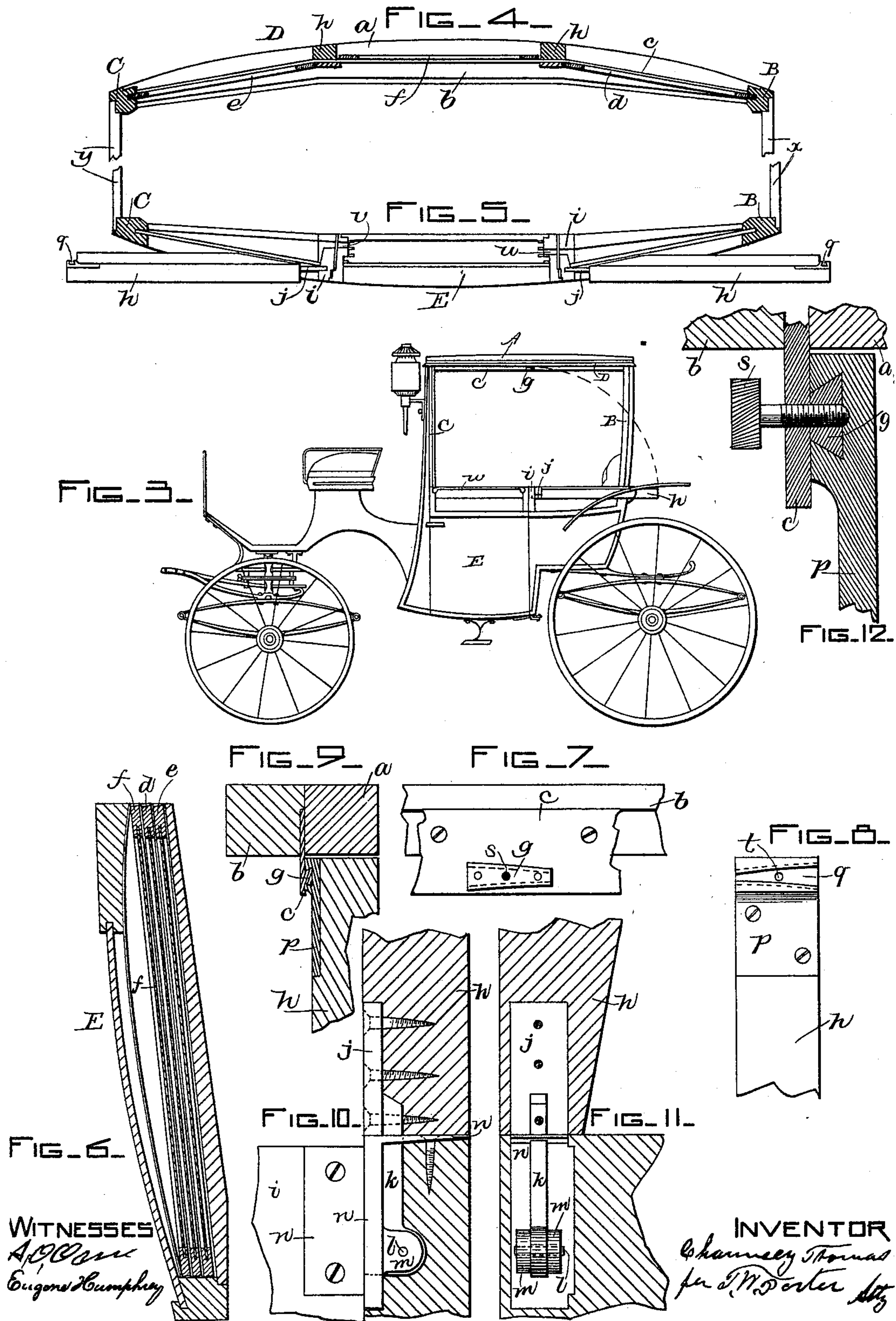
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UNITED STATES PATENT OFFICE.

CHAUNCEY THOMAS, OF BOSTON, MASSACHUSETTS.

CARRIAGE.

SPECIFICATION forming part of Letters Patent No. 405,723, dated June 25, 1889.

Application filed February 13, 1889. Serial No. 299,706. (No model.)

To all whom it may concern.

Be it known that I, CHAUNCEY THOMAS, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Carriages, which will, in connection with the accompanying drawings, be hereinafter fully described, and specifically defined in the appended claims.

In said drawings, Figure 1 is a side elevation of a four-passenger-coach body embodying my invention, the side glasses being in position for service and the falling pillars raised and connected with the top. Fig. 2 shows the same body, but with the side glasses and pillars lowered to give an open side to the body. Fig. 3 is a view similar to Fig. 2, except that it shows my invention as applied to a two instead of a four passenger carriage. Fig. 4 is a detached sectional inverted plan view, the section being taken on line Z, Fig. 1, and the view being from below that line, showing one side of the top. Fig. 5 is a sectional plan view, the section being the same as in Fig. 4, but the view is from above the section-line. Fig. 6 is an enlarged section taken on line X, Fig. 2, and showing the side glasses disposed in the door to give an open side to the body. Fig. 7 shows a portion of the top side rail with the pillar-securing dovetail secured to the iron re-enforce of the rail. Fig. 8 is an inside view of the upper portion of one of the falling pillars with its securing-plate attached to it. Fig. 9 is a detached vertical section taken through the top side rail, a falling pillar, and the dovetail by which the pillar is secured to the rail. Fig. 10 is a detached sectional elevation showing the hinge of the falling pillars in side elevation and the adjacent woodwork in vertical section. Fig. 11 is a similar view of the same parts, but viewed at right angles relatively to Fig. 10. Fig. 12 is a detailed vertical section showing the means and method of locking the falling pillars in place when raised into position for use.

The object of my invention is to produce a coach or analogous vehicle which can at pleasure be converted into a close body in cold or stormy weather or for any reason, or may have either or both sides entirely open, thus converting it into a top vehicle, with an unobstructed view from either or both sides; and it consists in a carriage having a top fixed in

position and supported at the ends thereof, with falling pillars between the ends hinged at their lower ends and interlocked at their upper ends with the top side rail, the upper portion or panel of the doors and the quarter-panels of the body being preferably of glass, and all arranged to be removed, preferably, into the lower part of the door, which is formed to receive them, the top side rail and the devices by which the pillars interlock therewith being also novel.

Referring again to the drawings, A represents the top, B the back corner pillars, and C the front corner pillars, all said parts being constructed in permanent relation to each other, as is usual in coach-building. I form the side rail D of the top with three longitudinal parallel parts or members—to wit, the outer part *a*, of wood, the inner part *b*, also of wood, and the interposed or middle part *c* of metal, this latter being preferably seated in a rabbet cut in part *b* and thereto firmly secured by screws, after which parts *a* and *b* are united by means of glue and screws.

It will be clearly seen by reference to Figs. 7 and 9 that the metal part *c* of rail D extends below parts *a* *b*, the object of this rail thus arranged being threefold. First, it affords the requisite strength and rigidity without having the bar of undesirable size; second, it furnishes a stop or lateral support for the sash of the side glasses, the top rail of the door-sash *f* closing against the outer face of *c*, while the top rails of the quarter-sashes *d* *e* bear against the inner face thereof, and, third, the dovetail locks *g*, to which the heads of the falling pillars are secured, as will be explained, are secured to said part *c*, as is clearly shown in Fig. 7.

The falling pillars *h* are arranged directly above the pillars *i*, between which the door E is arranged, said pillars *h* having secured to their lower ends a hinge-plate *j*, having an integral arm *k*, which passes down into pillar *i*, and is pivoted at *l* in ears *m* of angle-plate *n*, which is secured in the rabbet-faces of pillar *i* in a manner well known and as shown in detail in Figs. 10 and 11. At the upper ends of pillars *h* there is secured to the inner side a plate *p*, having an undercut oblique groove *q*, corresponding to dovetails *g*, and to receive the same when the pillars are raised

in position, as shown in Fig. 1, a knurl-headed set-screw *s* being threaded in plate *c* and dovetail *g* and arranged to enter seat *t* in the bottom of groove *q* to firmly lock pillars *h* in place and prevent the possibility of vertical vibration of the top or consequent rattling, as plate *p* is thereby firmly pressed against dovetail *g*. The door-glass having sash *f* is seated in and supported by the grooved metallic "clappers" *w*, which are hinged to the top part of the door *F*, which constitutes a portion of what is termed the "belt-rail."

When the door-glass is lowered into the pocket in the door, as shown in Fig. 6, said clappers are turned down, as shown in Figs. 2 and 3. The rear quarter-glass *d* is moved through runway *u* in the head of the rear pillar *i* to bring it above the door in order to lower it into the pocket therein, and glass *e* is moved in the same manner through groove *b* in front pillar *i*. (See Fig. 5.)

I am aware that it is not new to employ falling pillars at the sides of the body of other classes of carriages, nor yet is it new to so arrange the door-pocket and the quarter-glasses that the latter may be moved in ways to the door and lowered therein; but I am, I believe, the first to embody in the same vehicle a permanent top, falling pillars, and removable side glasses, for heretofore when falling pillars have been employed they, with the pivoted bows at the rear of the body, constituted the sole support of the top, and the portion of the top supported by each pair of pillars rose and fell therewith, and hence when one side of the vehicle was opened or closed, in part or in whole, the other side was necessarily in the same condition; but by combining a permanent standing top with falling pillars and removable side glasses either side of the

body may be opened entirely and the other side be closed entirely, or to any desired extent; and with permanent ends, as shown at *xy*, the occupants may in windy or stormy weather enjoy the pleasures and comfort of both an open and closed carriage by entirely closing the then windward side and opening the leeward side, or the entire carriage may be closed, or both sides entirely opened, so as to give a view at both sides unobstructed by any part of the body.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a carriage of the general class described, the combination of a top having permanent supports at the ends thereof, falling pillars hinged to the body and arranged to be secured to said top when raised, and removable side glasses arranged to close the space between the permanent lower portion of the body and said top, substantially as specified.

2. As an improvement in coach-tops, the top rail thereof formed with the outer and inner portions *a b* of wood, and the thin metallic bar *c*, interposed therein and arranged to serve as the partition or stop of the glasses, substantially as specified.

3. In combination with the falling pillars and top, the dovetail *g*, having both transverse and lineal oblique faces, and plate *t*, having a groove to receive said dovetail, substantially as specified.

4. In combination with dovetail *g* and plate *t*, grooved, as specified, the locking-screw *s*, combined and arranged as specified.

CHAUNCEY THOMAS.

Witnesses:

T. W. PORTER,
EUGENE HUMPHREY.