2 Sheets—Sheet 1.

M. FLETCHER.

Passenger Car.

No. 57,696. Patented Sept. 4, 1866.

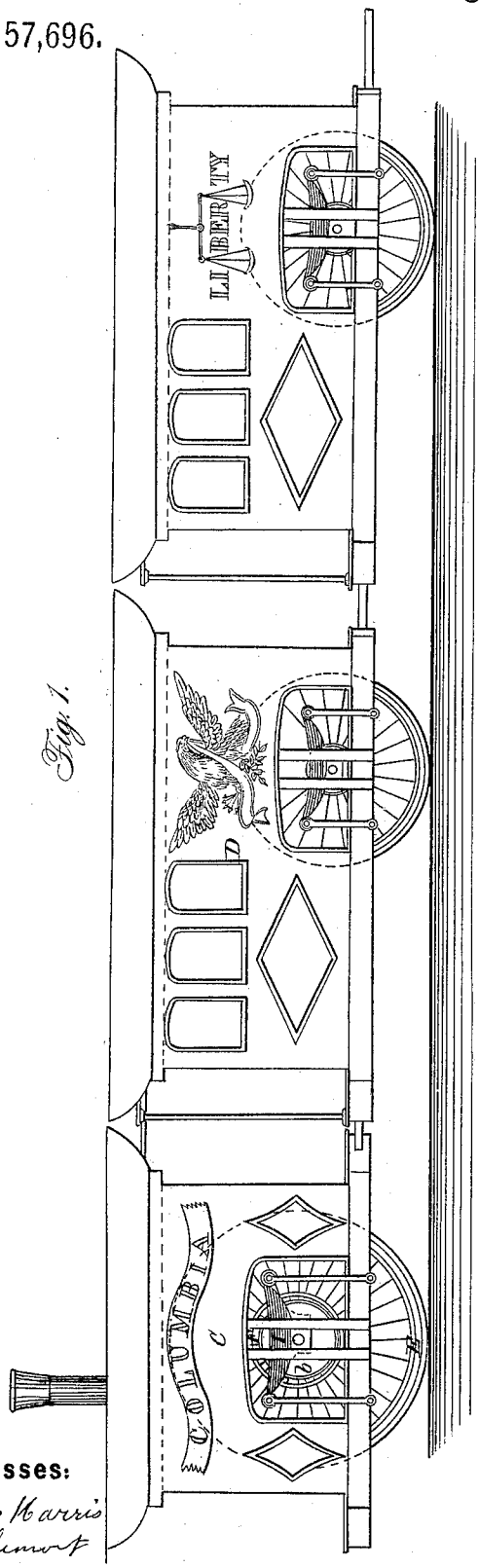

Fig. 1.

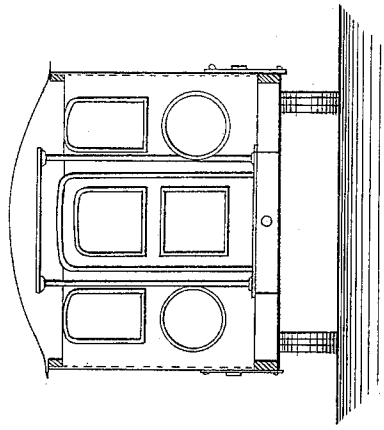

Fig. 3.

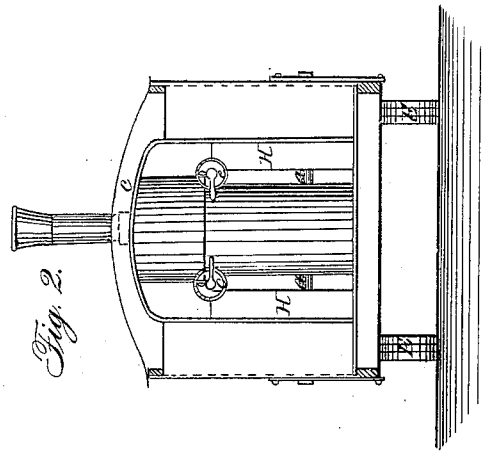

Fig. 2.

Witnesses:

James Harris
Jos Olmsted

Inventor:

Matthew Fletcher

2 Sheets—Sheet 2.

M. FLETCHER.

Passenger Car.

No. 57,696 Patented Sept. 4, 1866.

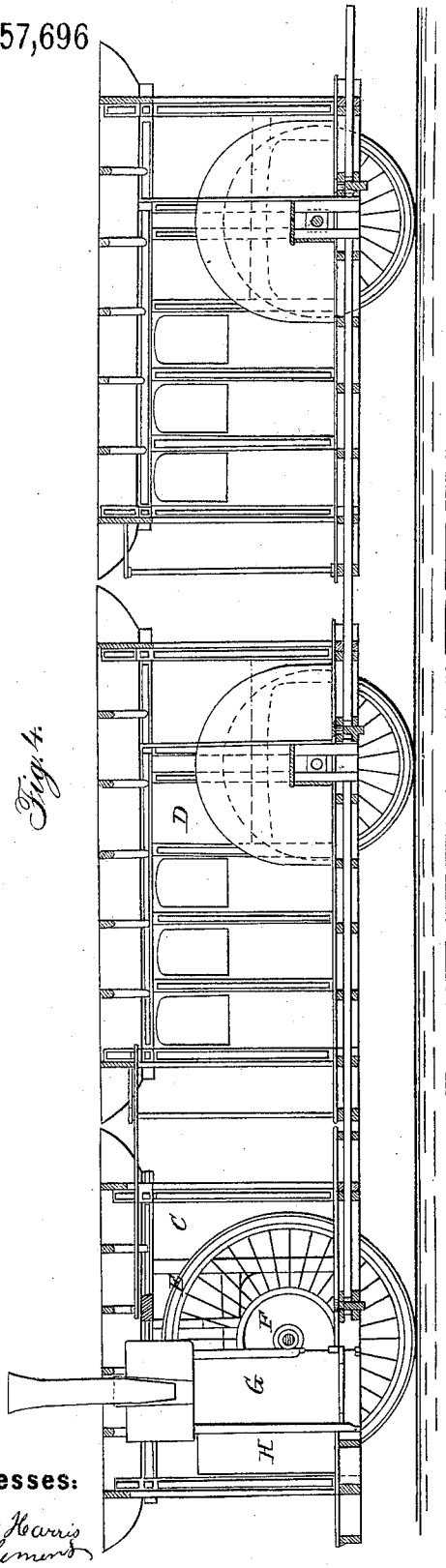

Fig. 4.

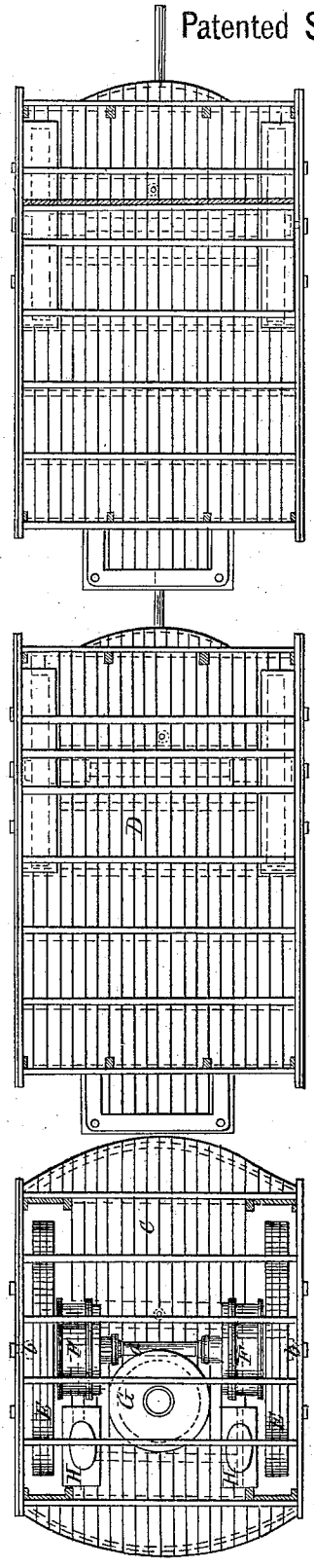

Fig. 5.

Witnesses:

James Harris
Jr. Clemens

Inventor:

Matthew Fletcher

UNITED STATES PATENT OFFICE.

MATTHEW FLETCHER, OF LOUISVILLE, KENTUCKY.

IMPROVED STEAM-CARRIAGE.

Specification forming part of Letters Patent No. **57,696**, dated September 4, 1866.

To all whom it may concern:

Be it known that I, MATTHEW FLETCHER, of Louisville, in the county of Jefferson and State of Kentucky, have invented new and useful Improvements in Steam-Carriages for common road conveyance; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and the letters of reference marked thereon, in which—

Plate A, Figure I is a side view of steam carriage and cars. Fig. II is a front view of steam carriage. Fig. III is a front view of car. Plate B, Fig. IV is an upright section of steam carriage and cars. Fig. V is a bird's-eye view of steam carriage and cars with roof off.

The nature of my invention consists in so forming a steam-carriage that the machinery has little strain on its stability, great attractive power to the road, capable of making any desirable turn or motion by the direct action of the steam, and so arranged that a desirable quantity of cars can be attached to it without the use of rail or track.

To effect this, and enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

C, Figs. I, II, IV, V, is the steam-carriage, supported by two large propelling-wheels, and kept on a level by its attachment to the two-wheeled carriage D. On the main shaft or axle-tree *a* revolve the two large propelling-wheels E E and the pistons of the two rotary steam-engines F F, which engines receive steam from boiler G and water from tanks H H. These rotary engines' pistons are substantially attached to hubs *b b*, and thereby form the bush for the large propelling-wheels E E.

The shaft or axle-tree *a* passes loosely through the hubs of wheels *b b* and piston of rotary engines, by which means each engine and propelling-wheel can be independently driven forward or backward and quicker or slower by the admission and change of steam, and regulated through the dial-handles *c c*, Fig. II, and thereby any necessary turn or backing motion obtained at the ease and demand of the driver.

As the engines and large propelling-wheels revolve and turn on the shaft, or with it, their compound weight presses on the road, and being rotary engines, and containing their fulcrum of power in themselves, they do not incline to strain on the stability of the carriage or press with their weight on the supporting-springs I I.

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

1. The application of a rotary steam-engine to each propelling-wheel for stability of carriage, avoiding dead-centers, and enabling the driver to have at his command with ease, and by the power of steam to back, turn, or advance.

2. The arrangement of the engine, piston, and wheel, operating together, or independently, with the piston and wheel on the opposite side of carriage, for the purpose set forth.

3. Suspending the whole weight of carriage and engine to the axle.

MATTHEW FLETCHER.

Witnesses:

JAMES HARRIS,

JOS. CLEMENT.