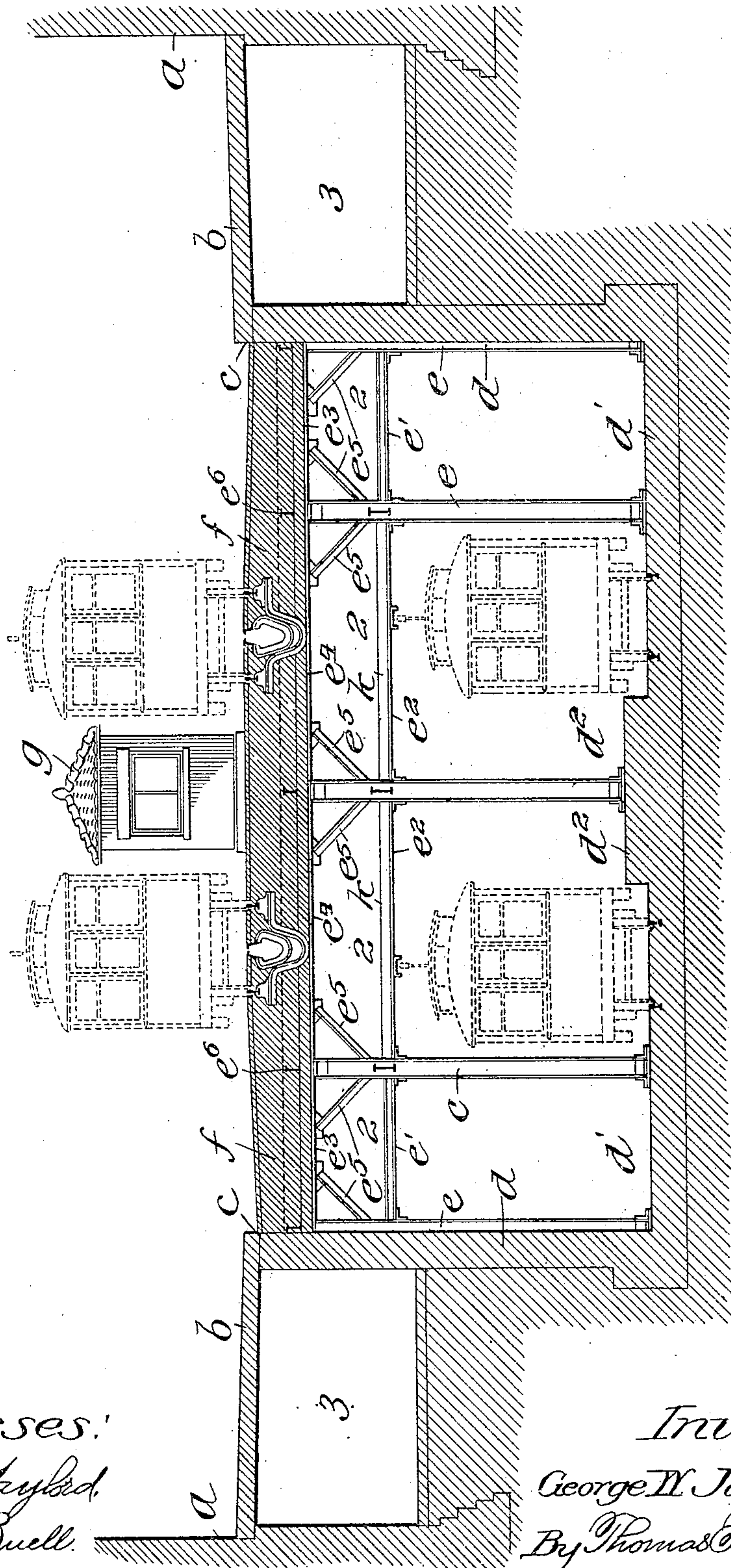


SUBWAY.

948,451.

Patented Feb. 8, 1910.



Witnesses:  
Ed. Gaylord.  
Chas. H. Buell.

Inventor:  
George W. Jackson,  
By Thomas F. Sheridan,  
Att'y.



# UNITED STATES PATENT OFFICE.

GEORGE W. JACKSON, OF CHICAGO, ILLINOIS.

## SUBWAY.

948,451.

Specification of Letters Patent.

Patented Feb. 8, 1910.

Application filed April 6, 1906. Serial No. 310,306.

*To all whom it may concern:*

Be it known that I, GEORGE W. JACKSON, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Subways, of which the following is a specification.

My invention relates to subways, and has for its object to provide an improved construction of subway for city streets in which the space beneath the streets and sidewalks shall be utilized to the best advantage; to provide a passageway for railway cars; to provide spaces for ventilation, for the carrying of conduits, pipes, cables, electric wires, and to provide space for the comfort and convenience of passengers entering and leaving the cars.

With these and other objects which will hereinafter appear in view, my invention comprises the details and combinations hereinafter set forth and claimed.

In the accompanying drawing, I show a transverse sectional view of the street having a subway constructed in accordance with my invention.

In the drawing *a a* indicates the building line of the street, *b* the sidewalks, and *c* the curb thereof, the space *c c* indicating the width of the roadway. The entire space of the street from building line to building line is excavated, the space between the building line *a* and the curb *c*, however, being excavated at a less depth than the remainder of the street. The entire width of the street is excavated to a sufficient depth so as to provide a wide subway or tunnel therein, the subway being constructed with concrete or cement side walls *d d*. A concrete base *d'* has along its longitudinal median line a raised platform *d''*. Suitable metallic posts *e* connected by lower transverse members *e' e''* and by upper transverse members *e<sup>3</sup> e<sup>4</sup>* form a support for the pavement of the street and serve to divide the subway into proper spaces for purposes hereinafter described. Suitable brace members *e<sup>5</sup>* may be provided, the metallic construction being of any suitable well-known kind commonly employed in structural work. Carried by this

metallic structure are longitudinal beams *e<sup>6</sup>*, the whole serving to support the pavement *f* of the roadway which may carry the usual conduits for the underground trolley, as is well-known and understood.

*g* indicates an entrance to the subway.

It will be seen that I have provided a subway having wide central passages for railway cars, a platform intermediate these passages for the use of passengers or persons walking through the subway, and I have provided on each side of the subway spaces between the outer posts *e* and the adjacent posts *e* for use of the city, including high water pressure, storm water drainage, fire, burglar alarm and electric light service, also corporations' pipes, cables and underground work. Above these spaces are smaller spaces indicated by the reference numerals 2 for the distribution of service pipes and electric wires to buildings, and also to permit the crossing of the city's and corporations' pipes at right angles and at street intersections. In addition to this there are formed spaces 3 beneath the sidewalk which may be utilized for any suitable purpose. The central spaces 2 are formed with a floor of concrete or cement *h*. It will be seen also that I have provided a subway in which there is ample space for ventilation, thus doing away with an objectionable feature of many forms of subways.

I claim:

1. A subway having sections for the passage of railway cars, and provided with a raised platform between these passageways, sections on either side of the car passageways for the passage of gas, water pipes and electric wires, all said sections being divided off from the whole subway by structural metallic work which serves to support the pavement, a false roof for the subway whereby ventilating and service distribution spaces are left above the railway and adjacent passageways, and additional lateral passageways of reduced depth.

2. A subway having a central platform raised above the floor and extending longitudinally, tracks on the floor on each side of the platform for railway cars, posts support-

ing the roof of the subway standing on said platform and on the floor beyond the said tracks, sections beyond the outer posts for the passage of gas pipes, water pipes and  
5 electric wires, and a false roof for the subway providing ventilating and service distribution spaces above the same, said posts

extending continuously from the floor of the subway through the said false roof to the main roof above.

GEORGE W. JACKSON.

Witnesses:

W. T. JONES,

MANLEY W. CLUXTON.