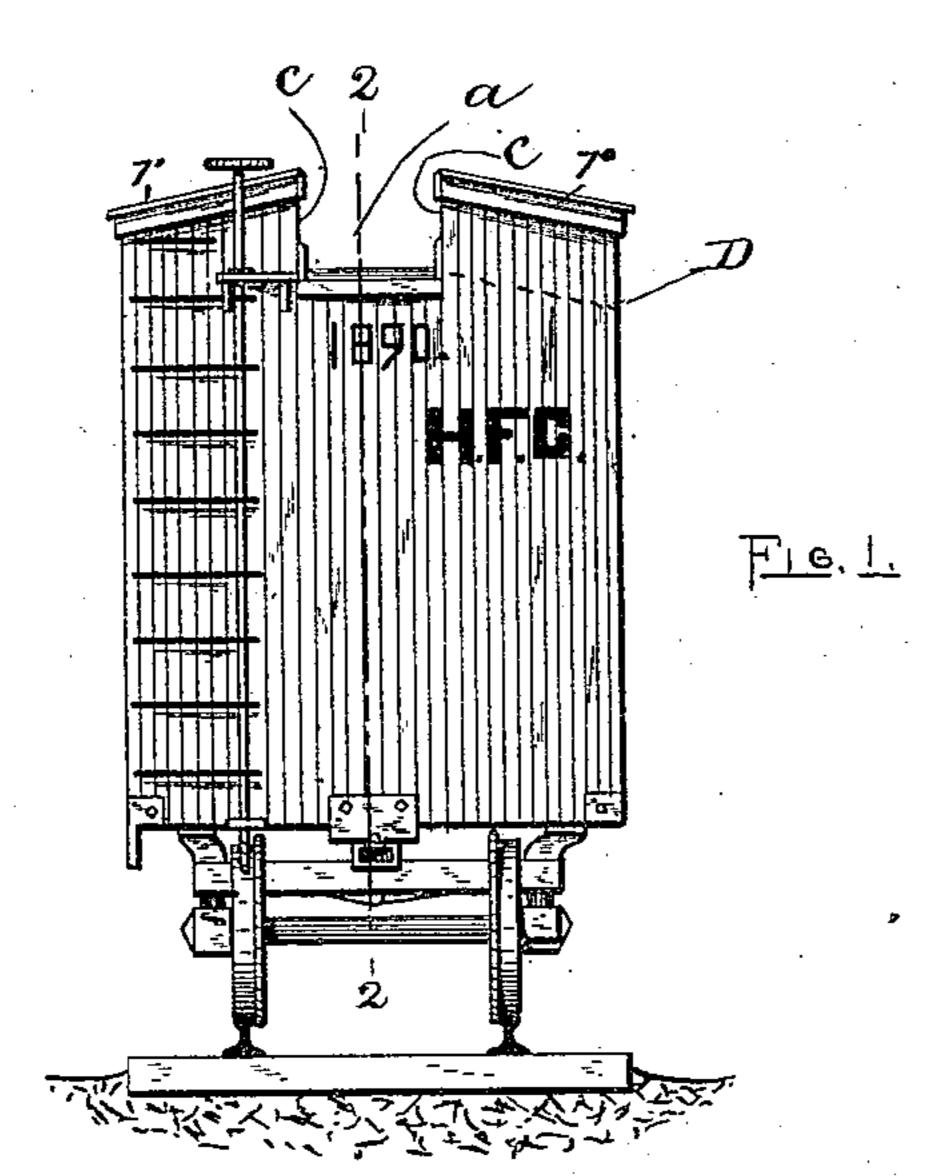
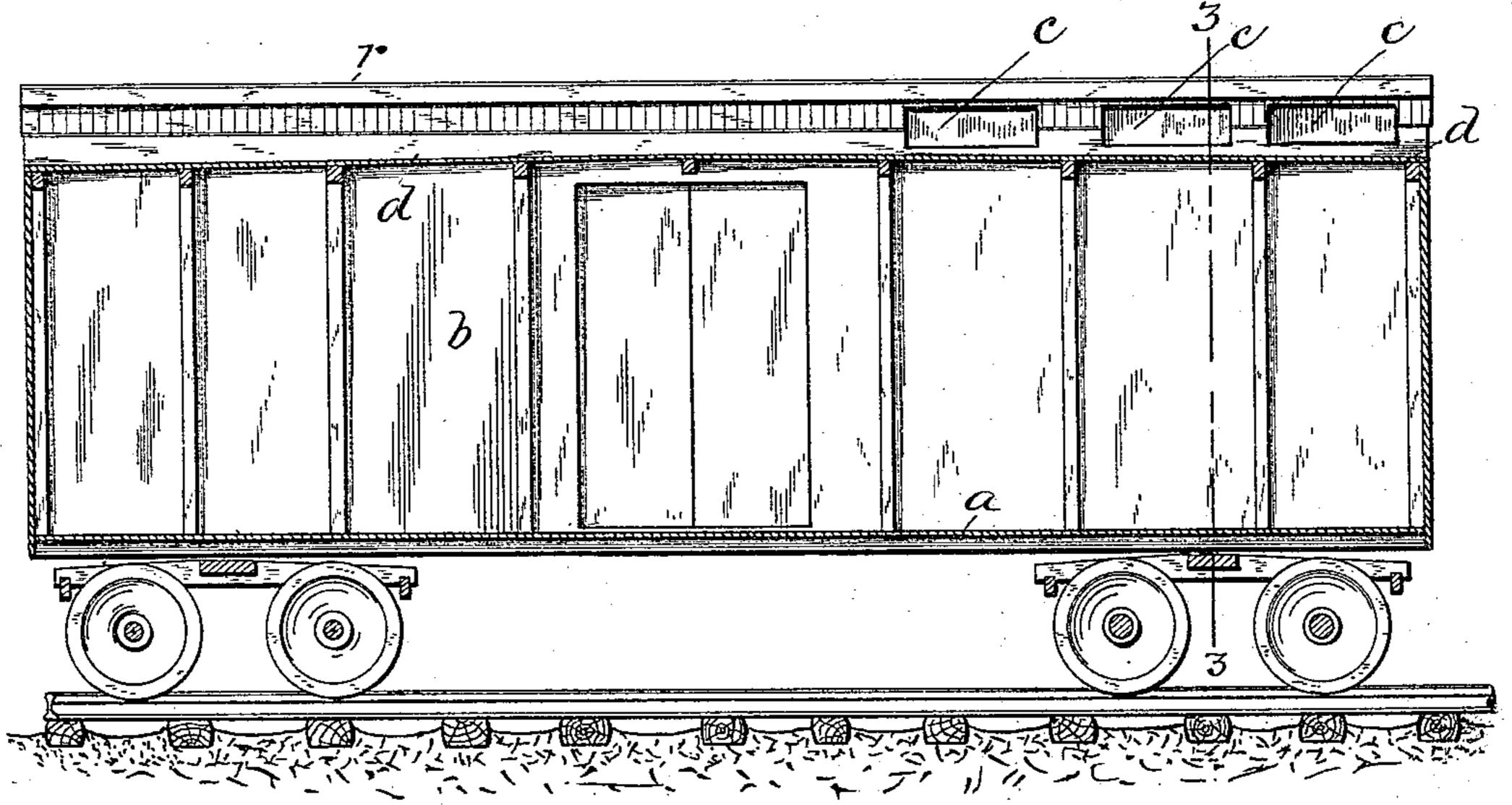
(No Model.)

# L. J. HARRIS. RAILWAY CAR.

No. 451,244.

Patented Apr. 28, 1891.





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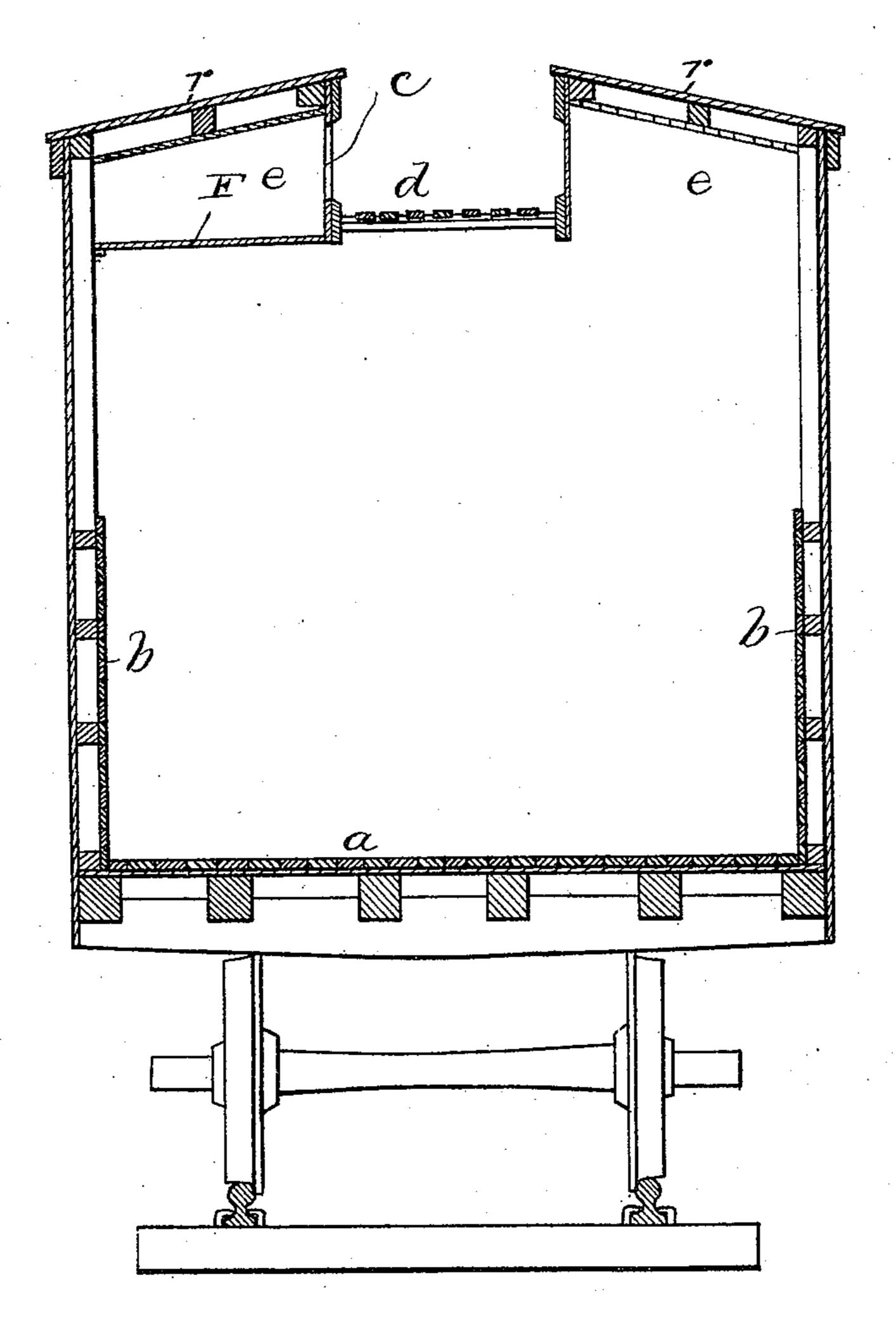
ATTORNEYS

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

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HE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

### United States Patent Office.

### LOUIE J. HARRIS, OF BOSTON, MASSACHUSETTS.

#### RAILWAY-CAR.

SPECIFICATION forming part of Letters Patent No. 451,244, dated April 28, 1891.

Application filed July 24, 1890. Serial No. 359,723. (No model.)

To all whom it may concern:

Be it known that I, LOUIE J. HARRIS, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Railway-Cars, of which the following is a specification.

It is the object of my invention to so improve freight, refrigerator, stock, and grain cars, and box-cars generally, as to greatly enhance the safety afforded to trainmen passing along on the top of the roofs of the same.

It is also the object of my invention to so improve the construction of cars of the class referred to as to render the same more efficient than heretofore by adding to the room therein.

It is also the object of my invention to provide improved means for loading cars, as also to provide separate and convenient store-room for particular kinds of freight—as, for instance, ice in refrigerator-cars and grain or other feed in stock-cars.

It is also the object of my invention to provide other improvements incidental to those hereinbefore mentioned, as will appear from the description hereinafter given.

Reference is to be had to the annexed drawings, and to the letters of reference marked thereon, forming a part this specification, the same letters designating the same parts or features, as the case may be, wherever they occur.

In the drawings, Figure 1 is an end view of a car embodying my improvements. Fig. 2 is a longitudinal sectional view of the same, taken on the line 2 2 of Fig. 1. Fig. 3 is a transverse sectional view taken on the line 3 3 of Fig. 2.

My invention consists in constructing the running-board of cars of the kind mentioned on a plane below that of the roof proper, so that walls will be formed on both sides of the running-board as a means of safety to trainmen who are obliged to pass along upon the roof of the car.

The space beyond the walls at the sides of the running-board and beneath the roof of the car I utilize in various ways.

In the drawings, a designates the floor of 50 the car, b the sides, and r the roof proper.

d designates the running-board, which is

arranged at a central point on the top of the car and extending longitudinally thereof, as is usual; but instead of being placed in the same plane as the roof proper, or, as is fre- 55 quently the case, in a plane above the roof, I construct it so that it may extend on a line considerably below the roof, building the car at the sides of the running-board higher than the latter, so that when the car is viewed from 60 the end the running-board will appear as though laid upon the bottom of a depression or trough formed in the top of the car, as shown in Figs. 1 and 3. By this means a passage-way is formed along the top of the car, 65 which passage-way is guarded on its sides with walls sufficiently high to protect trainmen passing the realong from accidentally slipping, falling, or being thrown off the roof of the car.

The space e at the sides of the running- 7c board and beneath the roof I utilize in various ways. It may form a part of the general store-room of the car, as shown at the right in Fig. 3, to be employed as circumstances or the necessities of the case may 75 suggest. Again, I may form a floor F at the bottom of the space e, substantially on the same horizontal plane as the running-board d, and thus suit the space e to receive ice, as in a refrigerator-car, or grain or other feed 80 in a stock-car, &c.

In most instances I prefer to provide doors c of suitable character in the walls extending above the running-board at the sides thereof, so that access may be gained to the 85 compartments or spaces e. These doors c also afford convenient means for loading the car with grain, ice, &c. The doors c may be formed of slats similar to a common windowblind, or be otherwise constructed, in order to 90 constitute ventilators for the interior of the car. The floor F may also be constructed of slats or be otherwise formed, so as that air communication may be had between the interior of the main or body portion of the car 95 and the compartments e. In some instances as, for example, in cars making up a circustrain—I may provide the compartments e with beds or bunks, so as to afford a place for men not obliged to be constantly on the watch at 100 night or day to sleep.

I may provide existing cars with my im-

provement by building on the top of the roof at the sides of the running-board, as above the dotted line D, Fig. 1, though for the most part it is contemplated to adapt the improvement to new cars.

It is obvious that changes may be made in the form, proportions, and arrangement of parts comprising my improvements without departing from the nature or spirit thereof.

• Having thus described my invention, I de-

clare that what I claim is—

1. A railway-car provided with a depressed passage-way in its top, vertical walls adjacent to the sides of the said passage-way, and doors c in the said vertical walls, as set forth.

2. A railway-car provided with a depressed passage-way in its top, doors or openings in the walls of said passage-way, and compartments in the sides of said passage-way independent of the interior of the body of the car, 20 as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 19th day of July,

A. D. 1890.

LOUIE J. HARRIS.

Witnesses:

ARTHUR W. CROSSLEY, A. D. HARRISON.