

S. J. Seely,
Petroleum Car.

N^o 38,765.

Fig: 1

Patented June 2, 1863.

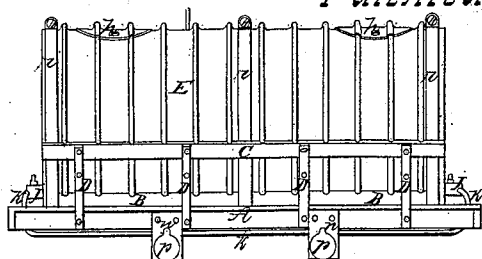


Fig: 2

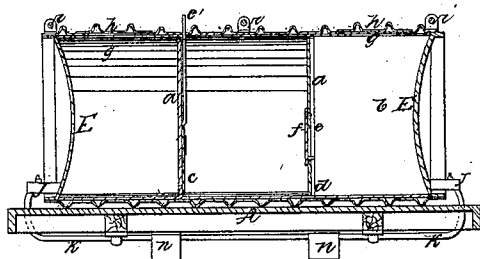


Fig: 3

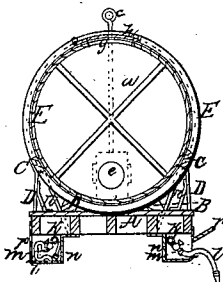
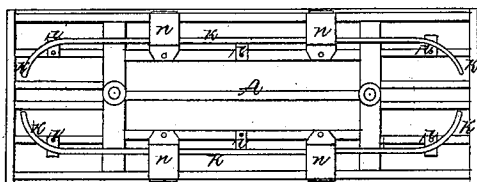


Fig: 4



Witnesses:

M. J. Partridge
Samuel Robinson

Inventor:

Sam J. Seely

UNITED STATES PATENT OFFICE.

SAMUEL J. SEELY, OF BROOKLYN, NEW YORK.

IMPROVED CAR FOR CARRYING PETROLEUM, &c.

Specification forming part of Letters Patent No. 38,765, dated June 2, 1863.

To all whom it may concern:

Be it known that I, SAMUEL J. SEELY, of the city of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Railway-Cars for Carrying Petroleum or other Substances; and I do hereby declare that the following is a full, clear, and exact description of the same, reference, being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side view of a car constructed according to my invention, the wheels and tracks being omitted as unnecessary to explain the improvements. Fig. 2 is a central longitudinal section of the same. Fig. 3 is a transverse vertical section of the same. Fig. 4 is an inverted plan of the same.

Similar letters of reference indicate corresponding parts in the several figures.

This invention consists in the construction of the body of a railway-car of corrugated or other sheet-iron in the form of a cylinder, whereby it is made of the greatest strength with the least practicable weight of material and at less expense than a wooden car of the same strength, and is rendered especially applicable to the transportation of petroleum and other liquid substances.

It also consists in the division of the cylindrical iron car-body into compartments by means of transverse or longitudinal, or both transverse and longitudinal, bulk-heads, which serve to strengthen it very materially.

It also consists in the combination, with such car-body, of a system of pipes running under the whole or any portion of the length of the bottom of the car, near the sides thereof, and furnished with a series of cocks and flexible branch pipes for drawing off the liquid contents of the car into several barrels or other vessels at once; and it further consists in the protection of the said cocks by means of boxes so constructed and arranged as to allow the flexible branches to be stowed away within them and furnished with suitable doors, through which the cocks may be reached to open and close them, and through which the flexible branch pipes may be drawn out for filling the barrels or other vessels.

To enable others skilled in the art to make

and use my invention, I will proceed to describe its construction and operation.

A is a platform, constructed like the platform or floor of an ordinary car, and intended to be supported upon trucks in the usual manner. B C D is a cradle constructed upon the said platform or floor, and extending the whole length thereof, for the reception of the cylindrical sheet-iron body E, the said cradle being composed of horizontal side pieces, B and C, of wood, and standards D, of wrought-iron, the side pieces B being arranged upon and secured to the platform in such a manner as to serve as chocks to prevent the rolling of the body, and the pieces C being supported by the standards in such a manner as to occupy positions against the sides of the body a little below the center thereof.

The cylindrical body E should be constructed of a shell of corrugated or ridged or plain sheet-iron with heads of concave form, and with a lining of plain galvanized iron.

The plates of iron employed in the construction of the shell and beds may be of any suitable size and united by riveting. The galvanized plates of which the lining is composed may be soldered together. The transverse bulk-heads *a* and the longitudinal ones *b* are also made of galvanized iron, and riveted and soldered into their place, and may be made perfectly tight to form tight compartments.

The object of making the lining and partitions of galvanized iron is to facilitate repair by soldering, and to prevent discoloration of the oil or other liquid. Communication may be had between the compartments by sliding gates *c*, as shown in Fig. 2, operated by rods *c'*, passing through the top of the body; or they may be made with openings at the bottom, as shown at *d* in the same figure, to allow free communication for the liquid between the several compartments, as may be most convenient, and in the latter case they should be provided with man-holes *e*, fitted with man-heads *f*, to allow the ingress and egress of persons from one compartment to the other for cleaning or for any other purpose. One or more man-holes, *g*, and man-heads *h* are also provided in the top of the body for filling it and to permit the entrance of person to the interior.

The body, besides being seated in a cradle, is

secured to the platform A by a suitable number of wrought-iron straps, *i i*, passing over it and fastened to the platform.

j j are cocks secured in each head of the cylindrical car-body, close to the bottom thereof, and *k k* are two pipes secured under the whole length of the bottom of the car, near the sides thereof, and each connected with both of the said cocks.

U are the flexible branch-pipes, of vulcanized india-rubber or other suitable material, of which there are any suitable number connected with each of the pipes *k k* by means of cocks *m m*. These branch pipes are furnished with metal nozzles to facilitate their insertion into the bung-holes of barrels and to protect their ends from wear.

n n are boxes for the protection of the cocks *m m* and for stowing away the branch pipes when not required for use. These boxes are secured under the floor of the car, and are provided with doors *p p* in their outer sides, the said doors being hinged or otherwise attached, as may be most convenient.

To fill the car with oil or other liquid, the said liquid may be either pumped in at the upper man-holes, *g g*, or allowed to run thereinto from an elevated stationary reservoir in which it may have been previously collected. When the liquid has been transported in the car to its destination, one or both of the cocks

j j are opened to allow it to flow into the pipes *k k*, and the drawing off can be effected from as many of the branch pipes *l l* as may be desirable by opening the doors of their respective boxes, drawing out the said pipes, and inserting them into the barrels or other vessels, and opening the cocks *m m*. These branch pipes enable the filling of several casks or vessels to be effected at the same time independently of each other as each is opened and shut off by its own cock *m*.

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

1. A railway-car having its body composed of a corrugated or other sheet-iron cylinder, substantially as and for the purpose herein specified.

2. The combination, with the car-body, of one or more pipes, *k k*, arranged below the car, as described, and furnished with a series of flexible branches, *l l*, connected by cocks *k k*, substantially as and for the purpose herein set forth.

3. The boxes *n n*, arranged as described, for the protection of the cocks *k k* and for the stowage of the flexible branch pipes *l l*.

SAML. J. SEELY.

Witnesses:

M. S. PARTRIDGE,
DANIEL ROBERTSON.