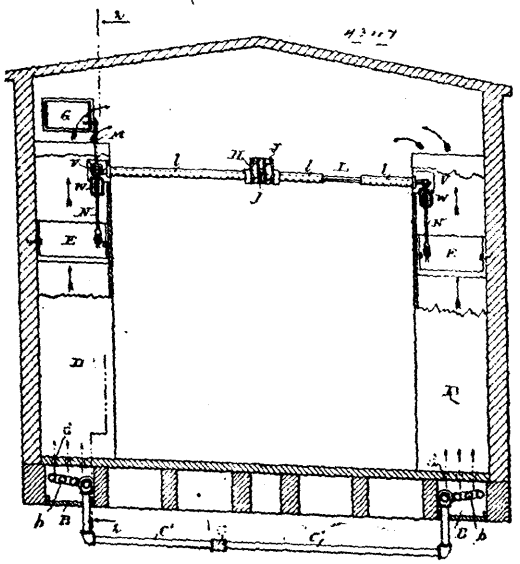
No. 43,117. Fruit Car Heating Apparatus.

(*Appareil de chauffage pour chars à fruits.*)

Fig. 2.



The Consolidated Car Heating Company, assignee of James Finney McElroy, all of Albany, New York, U.S.A., 3rd June, 1893; 6 years.

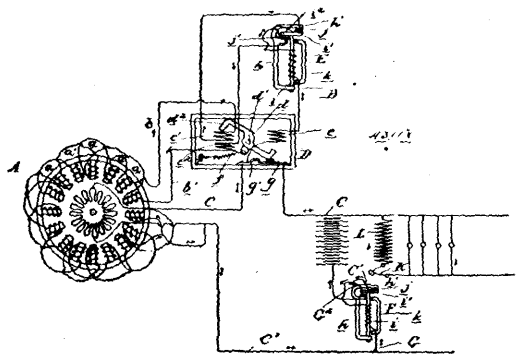
Claim.—1st. In an apparatus for heating fruit cars, a hot air chamber placed beneath the car, a series of piping placed within said hot air chamber, in communication between said hot air chamber and the interior of the car, a pipe connecting said piping in the hot air chamber with the train pipe, substantially as described and for the purpose set forth. 2nd. In an apparatus for heating fruit cars, a series of piping, a steam carrying train pipe connected therewith, said piping placed within a chamber outside of the car, a communication between the interior of the car and the chamber in which said piping is located, substantially as described and for the purpose set forth. 3rd. In an apparatus for heating fruit cars, a series of piping connected with the steam bearing train pipe placed exterior to the car, a communication between said piping and the interior of the car, substantially as described and for the purpose set forth. 4th In an apparatus for heating fruit cars, a series of piping suitably connected, a steam bearing train pipe connected therewith, a hot air chamber exterior to the car within which said piping is placed, a hot air box placed within the car, a communication between said hot air boxes and said pipe containing chamber, said hot air boxes communicating with the upper portion of the car, substantially as described and for the purpose set forth. 5th. In an apparatus for heating fruit cars, a series of piping suitably connected, steam bearing train pipe connected therewith, a hot air chamber exterior to the car within which said piping is placed, a hot air box placed within the car, a communication between said hot air boxes and said pipe containing chamber, said hot air boxes communicating with the upper portion of the car, substantially as described and for the purpose set forth. 6th. In an apparatus for heating fruit cars, a box placed at each end and on each side of a fruit car below the floor, a series of piping placed within each of said boxes, said piping connected with the steam bearing train pipe, within the car at each corner thereof a hot air duct communicating with said pipe containing boxes and opening into the car, a cold air duct extending from near the bottom of the car communicating with the lower portion of the boxes in which the piping is contained, a valve placed in hot air duct, a thermostat operating to open and close said valve, substantially as described and for the purpose set forth.

No. 43,118. Lighting Cars by Electricity.

(*Eclairage des chars par l'électricité.*)

The Consolidated Car Heating Company, of Wheeling, Virginia, assignee of James Finney McElroy, of Albany, New York, all in the U.S.A., 3rd June, 1893; 6 years.

Claim.—1st. In an electric system of lighting cars, the combination of a generator of alternating currents provided with two sets of field coils, two main leads extending through the cars, a shunt circuit divided into two branches connected to alternate field coils, and a current director operated by the passage of the current through said shunt circuit to divert the current waves of one direction to one branch of said shunt circuit and those of the opposite direction to the other branch of said circuit, substantially as described. 2nd. In an electric system of lighting cars, the combination of a generator of alternating currents provided with two sets of



field coils, two main leads extending through the cars, a shunt circuit divided into two branches, one for each set of field coils, a current director operated by the passage of the current through said shunt circuit to divert the current impulses of one direction to one branch and those of the opposite direction to the other branch of said shunt circuit, and current regulating devices comprising a choke coil in the shunt circuit whose iron core is immersed or withdrawn from the coil by the operation of a controlling magnet in the branches of the shunt circuit, substantially as described. 3rd. In an electric light equipment for cars, the combination of two main conductors, means for supplying the same with an alternating current, a storage battery and lamps respectively in circuit with one of the main conductors and with separate branches of a feeder from the other main conductor, and a current director in said feeder operated by the current passing through said feeder to divert the current impulses of like direction alternately to one and the other branch of said feeder, substantially as described. 4th. In an electric light equipment for a car, the combination of two main conductors forming part of the main leads of an alternating current generator, a storage battery and lamps respectively in circuit with one of the main conductors and with separate branches on a feeder from the other main conductor, a current director operated by the current passing through said feeder to divert the current impulses alternately over one or the other branch of the feeder, a resistance in a shunt circuit with the lamps, and a switch in the lamp circuit for cutting out the lamps and closing the circuit through the resistance, substantially as described. 5th. In an electric light equipment for a car, the combination of two main conductors, of an alternating current generator, a storage battery in circuit with one of said main conductors, and with one branch of a feeder from the other main conductor, lamps in multiple with the same main conductor and with another of said feeder, carbon discs or like bodies having their conductivity increased or decreased by an increase in pressure, included in each branch of said feeder, and a magnetic device operated by the current impulses passing in opposite directions through the feeder to alternately compress the carbon discs in the branches thereof, substantially as described. 6th. In an electric system of lighting cars, the combination with a supply circuit including translating devices in two separate branches thereof, of two piles of carbon discs one in each branch of said circuit, an electro-magnet in said circuit arranged to compress with its core, one or the other of said piles of carbon discs by a contraction or expansion on its length respectively, and a permanent magnet extending with its poles in proximity of the poles of the electro-magnet, whereby upon the passage of an alternating current through said circuit, the core of said electro-magnet is alternately lengthened and shortened, and thereby correspondingly compresses one or the other pile of carbon discs to divert the current impulses of one direction to one branch and those of the opposite direction to the other branch, substantially as described.

No. 43,119. Non-heat Conducting Cover for Steam Pipes. (*Couverture non-conductrice de la chaleur pour tuyaux à vapeur.*)

William Harvey Norris, Spokane, Washington, and Thomas Pin Hornsby, Portland, Oregon, all of U.S.A., 3rd June, 1893; 6 years.

Claim.—1st. In a non-heat conducting covering for steam pipes, substantially as described, the combination with a jacket, of the end collars M, formed by bending fluted sheets of metal into circles, the said collars having their ends loosely lapped, and also having the struck up wings E, adapted to engage the ends of the jacket, and the non-conducting fillings interposed between the end collars and the pipe on which the covering is mounted adapted to create a dead air space within the jacket between the end collars, substantially as and for the purpose set forth. 2nd. In a non-heat conducting covering for steam pipes and the like, the combination with a jacket comprising two longitudinal sections flexibly connected together, the