closed within a casing, and a series of gas jets to each section, the pipes to same passing through the jacket and being furnished with taps and Bunsen burners between the supply pipe and casing. 4th. A heating apparatus composed of two or more integral sections, with separate flow and return pipes and heating devices, all contained within a casing or jacket with a movable side, and means outside such jacket for connecting said pipes with a system of distributing pipes, and disconnecting same therefrom, all as and for the purposes set forth 5th. A heating apparatus composed of two or more integral sections with separate flow and return pipes, contained in a casing with movable door, and a series of heating devices to each section secured alternately in the casing and door of the same, all as and for the purpose set forth.

No. 39,320. Manufacture of Insulated Wire for Electrical Purposes. (*Fabrication de fils isolés pour objets électriques.*)

Herman Henry Brown, Montreal, Quebec, Canada, 13th July, 1892; 6 years.

Claim.—1st. In the insulation of wire for electrical purposes, the combination, of an inner waterproofing coat of plastic substance, two superimposed braid coverings, each saturated when in place with a solution of silicate of soda, and an outer coating of paint, all as herein set forth. 2nd. A waterproof coating for electrical wires, composed of asphalt, ozokerite, Canoba wax, gomme de mer and rubber, substantially in the proportions and for the purposes set forth.

No. 39,321. Wash Board. (*Planche à savonner.*)

Charles Edwin Williams, Utica, New York, U.S.A., 13th July, 1892; 6 years.

Claim.—1st. The combination, with a wash board and its movable rubber, of connecting mechanism, consisting of the swinging arms C, the bent rod D, and links E, E^1 and F, substantially as described. 2nd. The combination, in mechanism for connecting a wash board and its rubber, of the bent rod D, the swinging arm C, composed of a single piece, and also bent downwardly in its centre, links E, E^1 and F, and a supplemental rod F^1, substantially as and for the purpose set forth. 3rd. The combination, in a wash board, of the sides A, containing grooves, the soap box G, mounted in said grooves, and a projection or stay attached to said soap box, whereby the wash board may be held in position in the tub, substantially as set forth. 4th. The combination, in a wash board, of the side pieces A, provided with grooves in their lower portions, and with a suitable connecting cross bar at their upper portions, the rubbing portion and the rod D having bent ends imbedded in grooves, whereby said rod serves as a cross piece to yieldingly secure the side pieces together at the lower end of the rubbing portion. 5th. The combination, in a wash board, of side pieces supporting a rubbing surface, a rubber having a corrugated face adapted to move in a substantially parallel plane over said rubbing surface, said rubber being connected to said board by means of swinging arms which extend below said board, and are there connected to said frame by means of swinging links, and supporting and governing rods for said links, substantially as shown and described.

No. 39,322. Method of and Machine for Manufacturing Garment Stays. (*Méthode et machine poar la fabrication des renforts de vêtements.*)

Frederick Crompton, Toronto, Ontario, Canada, 13th July, 1892; 6 years.

Claim.—1st. In combination, the lower chest B, the yielding pad F thereon, upon which the sheets to be finished are placed, and the upper adjustable steam chest with means for applying pressure thereto, substantially as described. 2nd. In combination, with the upper and lower steam chests of a press, the removable pad F, having a yielding upper surface and a plurality of holes to allow for the escape of moisture, and the plate I, carried by the upper chest, substantially as and for the purpose specified.

No. 39,323. Corset. (*Corset.*)

Nancy E. Miles, Indianapolis, Indiana, U.S.A., 13th July, 1892; 6 years.

Claim.—The corset comprising the back and sides section, having its edges extending to the front of the body in a vertical line with the bust portions, and two front sections detachably connected with each other and meeting said back and sides section in said vertical line with the bust portions, non-elastic lacings connecting the meeting edges of said front and back and sides section from a point immediately below the bust to the lower edge of the corset, and elastic lacings connecting the bust portions from said point to the upper edge of the corset, substantially as specified.

No. 39,324. Method of Electrical Refrigeration.

(*Méthode de réfrigération électrique.*)

Mark Wesley Dewey, Syracuse, New York, U.S.A., 13th July, 1892; 6 years.

Claim.—1st. The method of electric cooling or freezing, consisting in establishing an electric circuit having one or more parts adapted to be cooled and one or more parts adapted to be heated by the current therein, locating the cooled part or parts within or in contact with a receptable to cool the interior thereof, and diffusing or conducting the heat from the heated part or parts of the circuit. 2nd. The method of electric cooling or freezing, consisting in establishing an electric circuit having one or more parts adapted to be cooled and one or more parts adapted to be heated by the current therein, locating the cooled part or parts within or in contact with a receptacle to cool the interior, insulating said receptacle from the influence of heat on the exterior, and diffusing or conducting the heat from the heated part or parts of the circuit. 3rd. The method of electric cooling or freezing, consisting in establishing an electric circuit having one or more parts adapted to be cooled by the current therein, locating said part or parts within or in contact with a receptacle containing an uncongeable medium, insulating said receptacle from the influence of heat on the exterior thereof, and exposing the substance to be cooled to the cooling influence of said medium. 4th. The method of electric cooling or freezing, consisting in establishing an electric circuit having one or more parts adapted to be cooled by the current therein, locating said part or parts within or in contact with a refrigerator or ice chamber, and exposing the substance to be cooled within the said refrigerator. 5th. The method of cooling or freezing a substance contained in a receptacle, consisting in removing the heat from the interior of said receptacle by or through the convection of heat produced by an electric current or currents. 6th. The method of electric cooling or freezing, consisting in establishing an electric circuit having one or more parts adapted to be cooled by the current therein, locating said part or parts within or in contact with a receptacle containing an uncongealable medium, electrically insulating the receptacle and medium from the circuit, insulating said receptacle from the influence of heat on the exterior thereof, and exposing the substance to be cooled to the cooling influence of said medium. 7th. The method of electric cooling or freezing, consisting in establishing an electric circuit having one or more parts adapted to be cooled by the current therein, locating said part or parts within or in contact with a receptacle, electrically insulating the receptacle from the circuit, insulating the said receptacle from the influence of heat on the exterior thereof, and exposing the substance to be be cooled within said receptacle. 8th. The method of electric cooling or freezing, consisting in establishing an electric circuit having one or more parts adapted to be cooled and one or more parts adapted to be heated by the current therein, locating the cooled part or parts within or in contact with a receptacle, electrically insulating the same from the circuit, insulating the receptacle from the influence of heat on the exterior thereof, diffusing or conducting the heat from the heated part or parts of the circuit, and exposing the substance to be cooled within said receptacle. 9th. The method of electric cooling or freezing, consisting in establishing an electric circuit having one or more parts adapted to be cooled and one or more parts adapted to be heated by the current therein, locating the cooled part or parts within or in contact with a receptacle, insulating the receptacle from the influence of heat on the exterior thereof, locating the heated part or parts of the circuit within or in contact with a conduit, passing a current of water or air through the conduit to dissipate the heat of said part or parts of the circuit, and exposing the substance to be cooled to the cooling effect of the said receptacle. 10th. The method of electric cooling or freezing, consisting in establishing an electric circuit having one or more parts adapted to be cooled and one or more parts adapted to be heated by the current therein, locating the cooled part or parts within or in contact with a receptacle, insulating the receptacle from the influence of heat on the exterior thereof, diffusing or conducting the heat from the heated part or parts of the circuit, and exposing water to be frozen in a vessel within said receptacle containing an uncongealable medium. 11th. The method of electric cooling or freezing, consisting in establishing an electric circuit, including a thermo-pile, locating the alternate junctions adapted to be cooled by the current within or in contact with a receptacle to be cooled, and dissipating or conducting the heat from the heated junctions. 12th. The method of electric cooling or freezing, consisting in establishing an electric circuit, including a thermo-pile, locating the alternate junctions adapted to be cooled by the current within or in contact with a receptacle to be cooled, insulating said receptacle from the influence of heat on the exterior thereof, and dissipating or conducting the heat from the heated junctions. 13th. In a system of electric cooling or freezing, consisting in connecting two or more thermo-piles or conductors having parts adapted to be cooled by a current flowing therein in multiple are relations with leads from a suitable source of electricity, and regulating the current flowing through the thermo-piles or conductors independently of each other. 14th. In a system of electric cooling or freezing, consisting in connecting two or more thermo-piles or conductors having parts adapted to be cooled by a current flowing therein in multiple arc relation with leads from a suitable source of electricity, locating the cooled parts of each of said thermo-piles or conductors within or in contact with a suitable receptacle to be cooled, and regulating the current flowing through the said thermo-piles or conductors by any suitable and well known method.

No. 39,325. Electric Railway.

(*Chemin de fer électrique.*)

Mark Wesley Dewey, Syracuse, New York, U.S.A., 13th July, 1892; 6 years.

Claim.—1st. In an electric railway, a permanently continuous line working conductor, a vehicle, an electro-motor to propel said