

No. 42,579. Heating Apparatus for Buildings.*(Appareil de chauffage pour édifices.)*

Quimby N. Evans, Brooklyn, New York, U.S.A., 12th April, 1893; 6 years.

Claim.—1st. A heating system for buildings, consisting of a liquid circuit, two successive heaters applied to said circuit, to heat the liquid therein, an exhaust pipe conducting exhaust steam to heat one of said heaters, and a live steam pipe conducting live steam to heat the other heater. 2nd. A heating system for buildings, consisting of a liquid circuit, an exhaust steam heater applied to said circuit and adapted to heat the same by exhaust steam, and a supplemental live steam heater in operative contact with said circuit, with a valve for controlling the admission of live steam thereto, whereby the exhaust steam heater may be used for heating said circuit in ordinarily cool weather, and steam may be turned on to said supplemental heater for augmenting the heat of said circuit in very cold weather. 3rd. A heating system for buildings, consisting of a liquid circuit, an exhaust steam heater in operative contact therewith, whereby the circuit may be heated in ordinarily cool weather by exhaust steam through the medium of said heater, means for cutting off the heat of said exhaust steam from said circuit, when the building is sufficiently heated, a supplemental heater applied to said circuit, and means for controlling the admission of live steam to heat said supplemental heater, whereby in very cold weather the heat of said circuit may be augmented by introducing live steam to said supplemental heater. 4th. A heating system for buildings, consisting of a liquid circuit, two successive heaters applied to said circuit to heat the liquid therein, an exhaust steam pipe conducting exhaust steam to heat one of said heaters, a live steam pipe conducting live steam to heat the other heater, a valve for controlling the supply of steam to the latter heater and a shunt of said liquid circuit around said exhaust steam heater, and valves for controlling the flow through said shunt or said latter heater, whereby the heating of the circuit by either heater can be controlled. 5th. A heating system for buildings, consisting of a liquid circuit, two successive heaters applied to said circuit to heat the liquid therein, a live steam pipe supplying one of said heaters, a thermostat arranged to be acted on by external temperature, and a valve in said steam pipe actuated from said thermostat and adapted to admit steam to said heater only when the external temperature falls below a predetermined degree, whereby said circuit is automatically heated by only one of said heaters during mild weather and by both of them in the coldest weather. 6th. A heating system for buildings, consisting of a liquid circuit, two successive heaters applied thereto, one heated by exhaust and the other by live steam, a shunt in said circuit around the exhaust steam heater, valves for directing the flow through the heater or through the shunt, a valve for controlling the admission of live steam to heat the live steam heater, electrically actuated means for operating said valves, and one or more thermostats within the building in circuit connection within said means, the whole so connected and operating that when the temperature affecting the rheostats becomes too low the liquid is directed through the exhaust steam heater and the said steam admission valve to the live steam heater is opened, and when said temperature becomes too high said valve is closed and the liquid is directed through the shunt around the exhaust steam heater. 7th. A heating system for buildings, consisting of a liquid circuit, two successive heaters applied thereto, one heated by exhaust and the other by live steam, a shunt in said circuit around the exhaust steam heater, valves for directing the flow through the heater or through the shunt, two valves for shutting off the admission of steam to the live steam heater, a thermostat arranged to be acted on by external temperature, another thermostat arranged to be acted on by internal temperature, and electric means for operating the respective live steam valves connected to and controlled by the respective thermostats, whereby live steam is admitted only when both the external and internal temperatures fall below the predetermined degrees.

No. 42,580. Device for Communicating Motion.*(Appareil pour communiquer le mouvement.)*

Louis Warfield, Detroit, Michigan, U.S.A., 12th April 1893; 6 years.

Claim.—1st. The combination, with a shaft of a casing surrounding the same, and having one or more bearings formed on or secured to it, means for uniting the casing and shaft, so that they will turn together while free to change their angular position, and a frame secured to the casing bearing or bearings. 2nd. The combination, with a shaft of a casing surrounding the same and having bearings, through one or both of which the shaft extends, means for uniting the casing and shaft so that they will turn together while free to change their angular position, a driving wheel secured to the casing, and a frame secured to the bearings. 3rd. The combination, with a shaft of a casing surrounding the same and having bearings, through one or both of which the shaft extends, means for uniting the casing and shaft so that they will turn together while free to change their angular positions, a driving wheel secured to the casing, a frame secured to the casing bearings, and power transmitting mechanism supported on said frame and operatively connected with the casing gear. 4th. The combination, with a shaft B of a casing having hollow journals through which said shaft extends, means for uniting

the casing and shaft between the bearings so that they will turn together though free to change their angular positions, a frame G secured to the bearings of the casing, an electric motor supported on the frame, and means for driving the casing from the motor also supported on the frame. 5th. The combination, with a carriage of two axes B B, casings having hollow bearings secured to each axle by a universal joint as described, a frame G secured to the bearings of the two casings, a motor supported upon the frame, and means for driving the casings from the said motor also supported on the frame. 6th. The combination, with a carriage of two axes B B, casings having hollow journals secured to each axle by a universal joint as described, a frame G secured to the bearings of the two casings, a motor supported upon the frame, a longitudinal driving shaft H journaled in the frame G, and means for operatively connecting said shaft with the casings. 7th. The combination, with a casing having hollow bearings of a shaft passing through said bearings, bearing pins D¹ D¹ secured to the shaft and projecting on opposite sides thereof, an annulus D² journaled on said pins and pivotally connected with the casing by pins D³ D³ arranged in a line transverse to the line of pins D¹ D¹, a gear wheel secured to the casing bearings, and driving mechanism supported on the frame and in operative connection with the casing gearing.

No. 42,581. Lunch Box. (Boite à collation.)

Jennie P. Duval, Richmond, Missouri, U.S.A., 12th April, 1893; 6 years.

Claim.—1st. A lunch box consisting of a body portion having on its bottom suitable feet and having in its corners suitable vessel compartments and having a set of upper and lower compartments separated by the horizontal diaphragm or partition, suitable netted perforations in the bottom of the body portion and suitable netted perforations in the horizontal diaphragm or partition, and a suitable cover adapted to fit over said body portion and secured thereto in any suitable manner, said cover also being provided in its top with suitable netted perforations, thereby permitting a circulation of air to pass from beneath the box out through the top. 2nd. A lunch box consisting of a body portion having attached to each of its outer four sides flaps 2, said flaps hinged at their lower edges to the body of the box and the perpendicular edges of said flaps connected by the strips of fabric 3, to the body of the box, thereby forming pockets between said flaps and box, and a suitable top adapted to fit over the body of the box and being secured thereto in any suitable manner.

No. 42,582. Pea Cutting Attachment for Harvesters.*(Attache pour moissonneuses à récolter les pois.)*

William Cosgrove, Hathaway, Quebec, Canada, 12th April, 1893; 6 years.

Claim.—1st. The combination of small wheel E to shaft with cranks to give withdrawing or proceeding motion to raisors A, substantially as and for the purpose hereinbefore set forth. 2nd. The improved raisor A having forked end to add to its strength, reduce vibration, act as a bed for grain passing over shaft and keep forked raisors in place, substantially as and for the purpose hereinbefore set forth. 3rd. The tension having lever so as to raise or lower cutter bar and to stop motion of wheel cranks and raisors, where motion is not desired, substantially as and for the purpose hereinbefore described and set forth.

No. 42,583. Composition for Melting Ice and Snow.*(Composition pour fondre la glace et la neige.)*

John W. Hallman, Toronto, Ontario, Canada, 12th April, 1893; 6 years.

Claim.—1st. The herein described composition of matter to be used for the removal of ice and snow by melting the same, consisting of water, chloride of sodium, acetic acid, and hydrochloric acid in the proportions specified and provided.

No. 42,584. Door Lock. (Serrure de portes.)

Josef Cathrein, Innsbruck, Austria, 12th April, 1893; 6 years.

Claim.—1st. A door lock to be opened from any given point of the room consisting of the lever B, with bolt C, and weight or spring D, cord E and weight F, substantially as described and shown.

No. 42,585. Jar. (Cruche.)

George H. Farrar, Iberville, Quebec, Canada, 12th April, 1893; 6 years.

Claim.—1st. In jars, the encircling band or wire W, inasmuch as it has the loops L, l, L, and inasmuch as it is used to fasten the spring S, all substantially and for the purpose hereinbefore set forth. 2nd. The spring S, single or double of either shape, substantially as described and for the purpose set forth. 3rd. The locking device D, substantially as and for the purpose hereinbefore set forth. 4th. In sealed jars, the rubber r, enveloping the edge or rim of the cover, substantially as shown and for the purpose hereinbefore set forth.