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INVENTIONS PATENTED.

NOTE—Patents are granted for 15 years. The term of years for which the fees have been paid, is given after the date of the patent.

No. 26,795. Dining Car. (*Char réfectoire.*)

James H. Elliott, Montreal, Que., 1st June, 1887; 5 years.

Claim.—1st. In a coach of the class described, a double dining-room arranged at the end thereof, and divided into two separate distinct compartments by a transverse partition, one division of the dining-room communicating directly with the passenger-compartment, and the other directly with the platform, and a kitchen communicating by wickets with each of said separate compartments, substantially as specified. 2nd. In a coach of the class described, separate dining-rooms arranged at the end thereof, and a kitchen arranged at one corner of the coach, and provided with communicating wickets for each of the dining-rooms, substantially as specified. 3rd. In a coach of the class described, a kitchen arranged at one corner and along the side, a transverse partition extending from the wall of the kitchen to the opposite wall of the coach, and provided with a door and curved counters arranged between said door and the wall of the kitchen, whereby an unobstructed passage is provided from the platform to the main portion of the coach, substantially as specified. 4th. In a coach of the class described, a kitchen located at the corner of the coach and along a portion of its side, and separated by a curved partition provided with wickets, a transverse partition extending from the opposite wall of the coach to the kitchen-wall, and to a point between the wicket, substantially as specified.

No. 26,796. Running Gear for Road Wagons. (*Train de wagons routier.*)

Cyrus W. Saladee, Cleveland, Ohio, U.S., 1st June, 1887; 5 years.

Claim.—1st. In a road wagon, the combination, with a spring perch, consisting of two similar flexion members arranged side by side extended to connect the axles, and the axle-stays P, P constructed and arranged to operate substantially as set forth. 2nd. In a road wagon, the combination, with a spring perch, the axle-stays P, P having their front ends rigidly attached to the centre portion of the perch, and their rear ends pivotally connected to the hind axle at or near the opposite shoulders thereof, substantially as set forth. 3rd. In a road wagon, the combination, with a spring perch, the axle-stays P, P having their front ends secured to the central portion of the spring perch, and their rear ends V pivotally connected to the hind axle at a point below the line of the pivotal bearing D supporting the rear end of the perch, substantially as and for the purpose set forth. 4th. In a road wagon, a fifth wheel coupling consisting of the upper circle A, provided with the rearwardly extended arm D, trunnion bolt M, and the bottom circle B, substantially as set forth. 5th. In combination, with the fifth wheel, circles A and B, the under-brace E, its rear end supporting the rearwardly extended arm D of the upper circle A, its front end supporting the circle plates A and B in front of the axles, and the clip king-bolt G, all combined and arranged to operate substantially as set forth. 6th. In combination with the fifth wheel circle-plates A and B, the under-brace E having its front ends secured in front of the axle to the circle-plates by bolts 1 and 2, the latter having their thread cut in the end of the brace E and locked therein by set-nuts 1 and 2, substantially as specified.

No. 26,797. Telephony. (*Téléphonie.*)

James W. Bonta, Philadelphia, Penn., U. S., 1st June, 1887; 5 years.

Claim.—1st. The art or method of transmitting vocal or other

sounds telephonically, by causing intermittent or pulsatory currents of a uniform volume or intensity, and of duration corresponding to the phases of the oscillations of the diaphragm. 2nd. The method of transmitting vocal or other sounds telephonically, by causing electrical impulses of constant volume, and of durations corresponding to the elements of the sound, force or waves, substantially as set forth. 3rd. The method of transmitting vocal or other sounds telephonically, by causing electrical impulses which differ in duration with the overtones, and fundamentals of the vocal or other sounds, substantially as set forth.

No. 26,798. Fence. (*Clôture.*)

Cyrus Crabbs, Markham, Ont., 1st June, 1887; 5 years.

Claim.—The boards or rails A connected together by the vertical pieces B, in combination with the slanting stakes D, driven into the ground on either side of the fence and tied together in pairs by the tie-pieces F, substantially as and for the purpose specified.

No. 26,799. Steam Boiler. (*Chaudière à vapeur.*)

Allen Calhoun, Middlebury, Vt., U.S., 1st June, 1887; 5 years.

Claim.—1st. A steam-boiler having the following elements, viz: an outer shell or casing, two water-chambers of a width equal to the distance between the side walls of said casing, and a length considerably less than the distance between the front and rear walls of said casing, said chambers being arranged horizontally one above the other and equidistant from said front and rear walls, a series of vertical water-tubes connecting said chambers, a series of fire-tubes extending longitudinally through each of said chambers from front to rear, and partitions extending from one end of each of said chambers to the wall of said casing below the fire-tubes, and from the other end of each of said chambers to the casing above the fire-tubes, substantially as described. 2nd. In a steam-boiler, the combination of two water-chambers located within an outer shell, and connected together by a series of water-tubes, a series of fire-tubes extending from end to end of each of said chambers, and a series of partitions between the ends of said chambers and the front and rear walls of said casing, whereby the products of combustion are caused to pass in succession along the lower surface of a chamber, and through the fire-tubes of said chamber along the upper surface of one chamber and the lower surface of the other chamber, through the fire-tubes of the upper chamber and along the upper surface of said upper chamber, substantially as described.

No. 26,800. Clod Crusher and Pulverizer.

(*Rouleau brise-motte.*)

David Lubin, Sacramento, Cal., U.S., 1st June, 1887; 5 years.

Claim.—1st. The combination, with a series of spiked wheels, of a series of adjacent crushing-bars between said wheels, said bars being formed of spring metal, and having curved or rounded front surfaces, whereby they yield to permit the passage of an obstruction, substantially as and for the purpose specified. 2nd. In a clod-crusher, the combination, with a main frame, a main shaft and a supplemental frame A projecting from said shaft, of a series of spiked wheels or disks, and a series of adjacent crushing-bars secured to said shaft and supplemental frame, said bars having curved or rounded front ends and a curved or Q-shaped rear end, substantially as described. 3rd. The combination, with a series of rotating spiked wheels or disks, of a series of adjacent crushing devices having a centrally projecting preliminary crushing edge, substantially as herein described. 4th. The combination, with a series of rotating spiked wheels, of an adjacent series of crushing devices having crushing shoes, with a projecting rib or preliminary crushing edge, substantially as described. 5th. The combination, with a series of rotating wheels having flat teeth projecting therefrom, of a series of rearwardly curved crushing-bars pressing upon the ground and crushing the clods between their lower surfaces and the adjacent teeth, substantially as specified. 6th. A main frame, the wheels supporting said frame, and a main shaft having a series of spiked wheels thereon, in combination with a supplemental frame extending rearwardly from said shaft, a series of springs rearwardly curved crushing-bars carried by said frame and means for elevating the said supplemental frame and crushing-bars, substantially as herein de-