cylinder, journalled on standards fixed centrally lengthwise on the top of the car, air outlets for the hollow trolley pole and oscillating cylinder, an extension spring and a guide for the same, which is adapted to enter the hollow portion of the trolley pole when the spring is compressed and the trolley wheel lowered, substantially as described and specificat. 4th. A trolley wheel lowered, substantially as described and specificat att. A trolley wheel journalled on a standard swivelled on the end of a vertical trolley pole and provided with a piston head, in combination with an oscillating frame or cylinder journalled on standards fixed centrally lengthwise on top of the car, an extension spring and a guide for the same which is adapted to enter the hollow portion of the trolley when the spring is compressed and the trolley pole lowered, substantially as described and specified. 5th. A trolley wheel journalled on a standard swivelled on the end of a vertical hollow trolley pole and provided with a piston head, in combination with a cylinder and a piston head formed on the end of said cylinder, a coil extension spring within this cylinder bearing against the piston head of the trolley pole, and the piston head of the cylinder, and a guide for the same, which is adapted to enter the hollow portion of the trolley pole when the spring is compressed, air outlets for the cylinder and hollow trolley pole, an oscillating frame or cylinder journalled on standards fixed centrally lengthwise on the top of the car, air outlets for the oscillating cylinder, a plurality of coil springs, and guides for the same which pass through the piston head, substantially as described and specified. 6th, A trolley, comprising the following elements, B, trolley wheel C, trolley wake E, journals D, oil cups F, fixed standard G, hollow shank H, spindle on trolley pole h, shoulders on trolley pole K, air outlet mollow trolley pole L, piston head on trolley pole K, air outlet mollow trolley pole L, piston head on trolley pole K, air outlet

No. 49,826. Process of Manufacturing Metal Letters, by Electro-deposition. (Procede defubrication de lettres métalliques, au moyen d'ouvrage galvanoplastique.)



John James Callow, Cleveland, Ohio, U.S.A., 3rd September, 1895; 6 years.

Claim.—The herein described process of producing letters, &c., consisting, first, in etching on plates or sheets of glass the required letters, second, coating the etched surface with graphite to render it conductive, and third, submerging the glass plates in the solution of a battery for the deposition of metal thereon, substantially as described.

No. 49,827. Manufacture of Magnesium.

(Fabrication d'hydrate de magnésium.)

Michel Nicholas D. Andria, Stratford, England, 3rd September, 1895; 6 years.

Claim.—1st. The hereinbefore described process for and method of manufacture or production of magnesium hydrate and which consists in treating slaked calcined dolonite with the natural flow of a large quantity of water, substantially as and by the means set forth. 2nd. The method and process for obtaining the magnesium from sea water by means of calcined dolonite, substantially as hereinbefore described.

No. 49,828. Digestive Compound. (Composé digestif.) John Carnuck, New York, State of New York, U.S.A., 3rd September, 1895; 6 years.

Claim.—1st. The process of preparing digestive ferments or en-zymes and zymogen which consists in removing the tissue or portions symes and symogen which consists in removing the tissue or portions of the glands containing the digestive secreting cells, and the active enzymes, from the muscular tissue and fat, drying said cell tissue, at a temperature below that which would coagulate the albuminous matter, then reducing it to a powder and separating the cells containing enzyme and zymogen from the epidermal scales and muscular fibres as by sieving or equivalent means. 2nd. The process of preparing digestive ferments or enzymes and zymogen which consists in removing the portion of the glands containing the digestive secreting cells and the active enzyme, from the muscular tissue and fat, and drying said cell tissue at a comparatively low temperature secreting cells and the active enzyme, from the muscular thane and fat, and drying said cell tissue at a comparatively low temperature of about 100° F, to 110° F, then reducing it to a powder and separating the contained enzyme and zymogen from the epidermal and muscular scales or fibres by sieving or equivalent means, then treating the digestive powder with a solution of gum benzoin for protecting and preving it 3rd. The process of preparing digestive ferments or enzymes and zymogen which consists in dissecting from the fresh digestive organs or glands the tissuesor portions which contain the digestive selecting cells so as to remove them from the muscular tissue and fat which are rejected, drying the cellular substance at a temperature na exceeding 100° F, to 110° F, and then reducing it to a rowder, treating said powder with a solvent to remove the fat, then powder, tresting said powder with a solvent to remove the fat, then powder, tre ting said powder with a solvent to remove the fat, then again drying start a low temperture and reducing to a fine powder, seving it to remove scales or films of inuscular tissue and then treating the resulting powder with a solution of gum benzom for protecting and preserving the enzyme and zymogen. 4th. The process of preparing digestive enzymes from spleen or liver which consists in finely comminuting the organ and then drying at a low temperture and reducing to powder, then making an alcoholic solution and evaporating the alcohol to form a stiff extract. 5th. The process of preparing digestive enzymes from spleen or liver which consists in finely comminuting the organ and then drying at a low temperature and reducing to a powder, then making an alcoholic solution and evaporating the alcohol to form a stiff extract, then rubbing up such extract with a suitable proportion of milk sugar to form a granular evaporating the alcohol to form a still extract, then rubbing up such extract with a suitable proportion of milk sugar to form a granular powder, then moistening such powder with a solution of gum benzoin and allowing it to dry. 6th. An artificial digestive preparation containing the enzymes capable of digesting and preparing for assimilation three different kinds of food substance, such as proteids or nitrogenous food, fatty food and starchy food. 7th. An artificial uitrogenous food, fatty food and starchy food. 7th. An artificial digestive preparation containing mother-ferment or zymogen, possessing its natural function and property of developing and forming an active digestive enzyme under the influence of the productive and vital forces in the digestive track of the living subject. 8th. An artificial digestive preparation containing the active digestive enzyme and the mother-ferment or zymogen, the latter being in the various stages of development and possessing the natural properties and functions which it had when taken from the animal, of developing and forming, by internal change, active digestive enzyme, under the influence of the productive and vital forces inthe digestive track of the living subject. 9th. A digestive preparation or composition containing a digestive extract of sphen and of liver capable of digesting and emulsifying fats. 10th. An artificial digestive preparation containing an enzyme extract of sphen adapted for emulsifying and digesting fats. 11th. A digestive compound or composition containing in a form capable of preservation, extracts or enzymes of the salivary form capable of preservation, extracts or enzymes of the salivary peptic, pancreatic, hepatic and Brunner's glands, Lieberkuhn's folicles and the spleen mixed in suitable proportions. 12th. A digestive compound or composition containing the active ferment or enzyme and the mother-ferment or zymogen, of the salivary, peptic, pancreatic hepatic and Bruinner's glands, Lieberkuhn's folicles and the spleen mixed in suitable proportions. 13th. A digestive compound or composition containg the active enzyme and the mother-ferment or zymogen of the methe and engerstic glands combining with one or composition containg the active enzyme and the mother-ferment or zymogen of the peptic and pancreatic glands combined with one or more of the enzymes of the salivary, Brunner's and hepatic glands Lieberkuhn's follicles and spleen. 14th. A digestive preparation or composition containing enzyme and zymogen separated from one or more of the digestive organs and in the dry powdered form, the grains or particles thereof having a protective coating of gum benzon or equivalent material. 15th. A digestive preparation or composition in the dry form and containing directive management. position in the dry form and containing digestive enzymes, the grains or particles of which are coated with gum benzoin for preserving the enzymes and a suitable proportion of milk-sugar.

No. 49,829. System of Electrical Distribution.

(Système de distribution électrique.)

William Stanley, Pittsfield, Massachusetts, U.S.A., 3rd September, 1895; 6 years.

Claim.—1st. In a system of electrical distribution the combination of several alternators having synchronizing coils upon their armatures separate and distinct from the coils supplying energy to the line wires, said synchronizing coils being connected in parallel, substantially as described. 2nd. In a system of electrical distribution the combination of several alternators having means for maintaining the same in phase, with separate transformers for each alternator, the