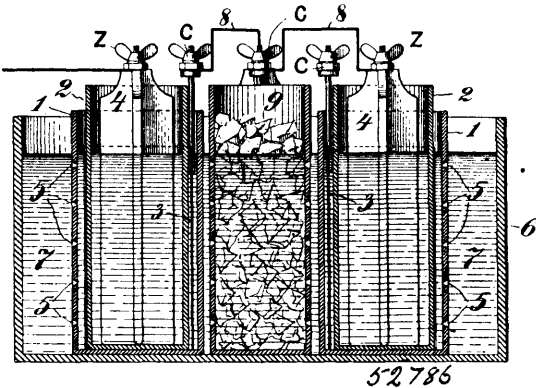


openings, or goggles and transparent green celluloid to extend over the openings as and for the purpose specified. 5th. In a cap, in combination the body portion, the peak provided with the transparent portion and supplemental covering layer for such transparent portion, as and for the purpose specified.

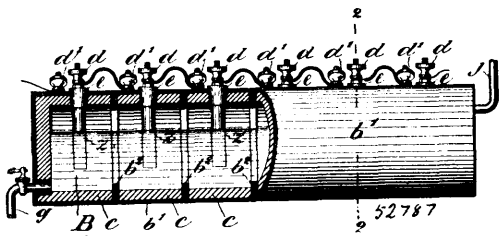
**No. 52,786. Galvanic Battery. (Batterie galvanique.)**



Edward Stanley Boynton, Brooklyn, New York, U.S.A., 2nd July, 1896; 6 years. (Filed 17th October, 1895.)

*Claim.*—1st. A cell for a galvanic battery, comprising an outer cup 1, provided at one side with a small aperture or apertures  $\bar{z}$ , for the admission of the battery-liquid, an electrode 3, within said cup, a porous cup 2, within the cup 1, and an electrode 4, within said porous cup, substantially as set forth. 2nd. A galvanic battery comprising a vessel 6, to contain a liquid electrolyte, and two or more voltaic cells in the said vessel, each of said cells comprising a cup 1, of suitable impervious material, having in one of its sides a contracted aperture for the electrolyte to pass through, a porous cup 2, in the cup 1, an electrode 3, in the outer cup 1, and an electrode 4 in the porous cup, said cells being connected electrically in series, as set forth.

**No. 52,787. Galvanic Battery. (Batterie galvanique.)**



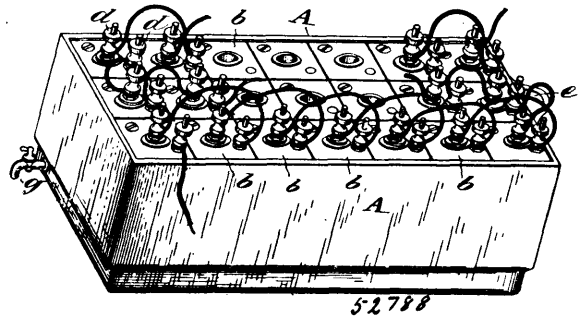
Edward Stanley Boynton, Brooklyn, New York, U.S.A., 2nd July, 1896; 6 years. (Filed 17th October, 1895.)

*Claim.*—1st. A galvanic battery having a common exterior casing for the elements, wholly closed at its sides and ends, and having a series of tubular, open-ended, carbon electrodes arranged end to end within said casing and insulated from each other at their abutting ends, whereby a continuous chamber for a liquid electrolyte is formed, said chamber extending through all of the carbons, substantially as set forth. 2nd. A galvanic battery comprising a series of hollow, tube-like, carbon electrodes, arranged end to end and separated at their adjacent ends by insulating material, whereby an electrolyte chamber, common to all the cells or elements, is formed, electrodes  $\bar{z}$  inserted in apertures in the walls of the respective carbon electrodes and extending into the said chamber, and a suitable casing enclosing the series of hollow electrodes, substantially as set forth. 3rd. A galvanic battery having the chamber to contain the liquid electrolyte for, and common to, all of the elements, formed of similar open-ended, hollow carbons arranged end to end and separated from each other by insulating material, the hollows in the several carbons communicating and being continuous whereby the electrolyte is free to flow from one end of the series of carbons to the other, substantially as set forth. 4th. The combination to form a galvanic battery, of a closed casing  $b^1$ , a series of hollow carbon electrodes  $c$  in said casing and arranged end to end therein, insulating rings  $b^2$  between the abutting ends of the carbons, and the electrodes  $\bar{z}$  removably set in apertures in the respective carbons, and insulated from the latter, a chamber to contain an electrolyte being thus formed within the hollows of the series of carbons, substantially as set forth.

**No. 52,788. Galvanic Battery. (Batterie galvanique.)**

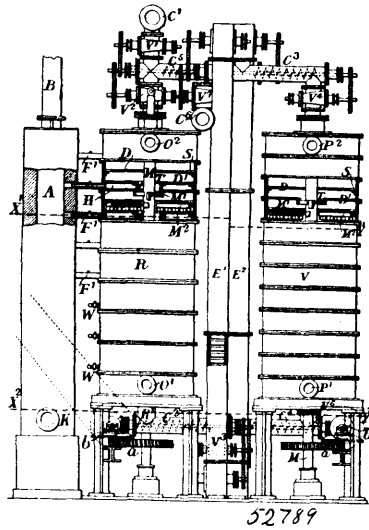
Edward Stanley Boynton, Brooklyn, New York, U.S.A., 2nd July, 1896; 6 years. (Filed 17th October, 1895.)

*Claim.*—1st. A galvanic battery having an electrolyte in common for all of the elements, and two or more elements immersed therein,



one electrode of each element being separated by insulating material from the corresponding electrode of the adjacent element, whereby full voltage is obtained, substantially as set forth. 2nd. A galvanic battery comprising a receptacle containing an electrolyte, and two or more elements immersed in said electrolyte, each element having an enclosing casing of some insulating material open at its lower part to permit free access to the electrodes of the liquid in the receptacle, substantially as set forth. 3rd. In a galvanic battery, the combination with a receptacle to contain the liquid electrolyte, of cells fitting into said receptacle, each of said cells comprising an open-bottomed casing of insulating material, and two electrodes pendant from the cover of said casing, whereby the liquid electrolyte has access to all of the electrodes of the cells, substantially as set forth. 4th. In a galvanic battery, the combination to form a cell, of an open-bottom casing  $b$  closed at the top, a tubular electrode  $c$  suspended from the top of said casing and extending only part way to the bottom of the same, and the electrode  $\bar{z}$  within the electrode  $c$ , and also suspended from the top of the casing, substantially as set forth.

**No. 52,789. Apparatus for treating Nickel Ores, etc. (Appareil pour le traitement des mineraux.)**



Ludwig Mond, Regent's Park, London, England, 2nd July, 1896; 6 years. (Filed 10th December, 1895.)

*Claim.*—1st. Apparatus for treating materials containing nickel with carbon non-oxide, consisting of the combination of a chamber adapted for reducing the material by reducing gases at an elevated temperature, a chamber adapted for treating the same with carbon non-oxide, means for causing the ores to descend over superposed trays in each compartment, means for conveying the material discharged from the bottom of the reducing chamber to the top of the volatilizing chamber, means for supplying the lower end of the reducing chamber with reducing gases, means for supplying the lower end of the evaporating chamber with carbon non-oxide, and means for discharging the said gases from the upper ends of the said chambers, substantially as described. 2nd. Apparatus for treating materials containing nickel with carbon non-oxide, consisting of the combination of a chamber adapted for reducing the material by reducing gases at an elevated temperature, a chamber adapted for treating the same with carbon non-oxide, means for causing the ores to descend over superposed trays in each compartment, means for conveying the material discharged from the bottom of the reducing chamber to the top of the volatilizing chamber, means for supplying the lower end of the reducing chamber with reducing gases, means