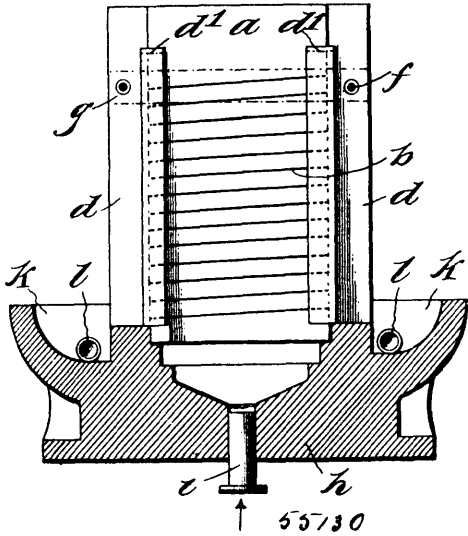


the purpose described. 3rd. Electrodes for using high tension currents, consisting of a plate of insulating material wound or covered

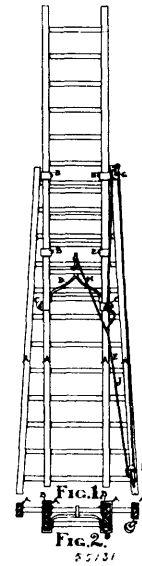


with a net of platinum wire of such a mesh that the lines of force radiating from each of the wires forming a mesh toward the next adjacent electrode just touch the lines of force from the adjacent wire, for the purpose set forth. 4th. Electrodes for using high tension currents, consisting of platinum wire nets which penetrate a non-conducting plate having their free ends projecting on either side of said plate and so spaced that their lines of force radiating from the ends of the wires of each piece do not come within the field of those radiating from the ends of the wires of the other pieces, for the purpose described. 5th. Electrodes for using high tension currents, composed of strips of platinum foil which are laid between the strips or sections of insulating material so spaced that their edges on either side of the insulating material radiate lines of force toward the next adjacent electrode so as not to fall within the field of each other, for the purpose described. 6th. Electrodes for using high tension currents, consisting of a platinum net on either side of an insulating material, said nets being held in conductive relation with each other by means of one or more platinum plated copper bolts or rivets, and the net of such a mesh that the lines of force radiating from the wires of each mesh do not cross one another, for the purpose set forth. 7th. Electrodes for using high tension currents, consisting of a platinum wire carried back and forth through an insulating plate in such manner as to appear on the faces of the plate like rows of stitches, presenting numbers of short exposed wires whose distances apart are such that the lines of force radiating from each exposed wire do not fall within the field of those radiating from the others, for the purpose set forth. 8th. A method of making electrodes for high tension currents, which consists in disposing a metal not affected by the electrolyte so that the lines of force emanating from each exposed part of the metal do not come within the field of action of the other exposed parts, for the purpose set forth. 9th. In an electrolytic apparatus, the combination of electrodes made in the described manner, with grooved side pieces or sheets of non-conducting material holding the electrodes and preventing the electrolyte held between the electrodes from forming a short circuit, for the purpose set forth. 10th. In an electrolytic apparatus, the combination of a series of electrodes of the described construction and side pieces of insulating material for holding and spacing the electrodes, with a vessel furnished with a central feed pipe for the electrolyte, suitable overflow, so that the liquid is compelled to rise in separate layers between the electrodes which are formed into a solid block-like structure, and after being electrolysed runs over a notch and down the sides in isolated streams. 11th. An electrode composed of an insulating material and a metal, the metal presenting points to the electrolyte and so situated with respect to each other that the lines of force emanating from each do not fall within the field of action of the others, for the purpose set forth. 12th. An electrode composed of an insulating material and a metal, the metal presenting a series of successions of points or edges to the electrolyte and so situated with respect to each other that the lines of force radiating from each series of points or edges do not cross or enter the field of action of the other series of points or edges. 13th. An electrode for using high tension currents consisting of an insulating plate in combination with a series of wire windings so situated that the lines of force radiating from each wire do not cross or fall within the field of action of those radiating from the others, for the purpose described.

No. 55,131. Extension Ladder. (*Echelle à rallonge.*)

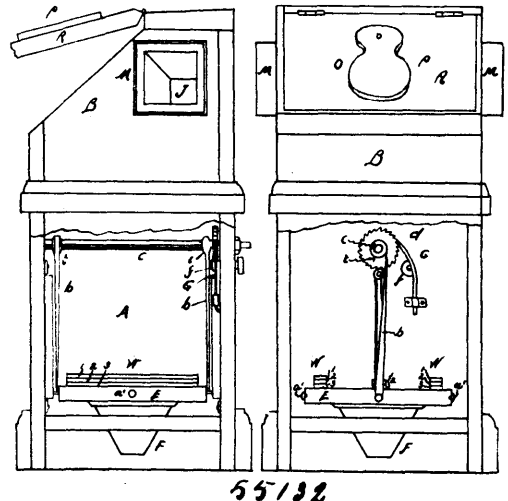
Lyman Andrew Weatherston and John Emmerson Rankin, both of Ogdensburg, New York, U.S.A., 1st March, 1897; 6 years. (Filed 6th October, 1896.)

Claim.—The combination with the ground section, having splayed side bars A, A, and intervening parallel bars A', A', said



bars connected by rounds A², of the extension section having side bars A², sliding upon the bars A¹, and connected thereto slidingly by guide bands B B, and having a hook D engaging said rounds A², and the endless rope E passing through pulleys F, G, near the top and bottom of the ground section and attached to the foot of the extension section, said rope having a branch H connected to said hook to effect disengagement with the rounds, as set forth.

No. 55,132. Machine for Holding, Lighting and Keeping in Position Mariners' Compasses. (*Machine pour éclairer et tenir en position les boussoles.*)



Ell B. Rockwell, Alburg, Vermont, U.S.A., 1st March, 1897; 6 years. (Filed 24th October, 1896.)

Claim.—1st. The combination of the elevator E and block W, holding the magnets piled three on each side and two in the middle, with the strips b, b, pulleys t, t, ratchet wheel d to raise and lower the magnets to the exact distance necessary to adjust the compass, as herein described. 2nd. The combination of the elevator E, block W and weight I, with the strips b, b, pulleys t, t, ratchet wheel d and catch C to raise and lower the magnets to the exact distance necessary to adjust the compass, as herein described. 3rd. The combination of the elevator E and block W, forming a double-balanced platform upon which the magnets are piled, the strongest on each side and the weaker in the middle, with the strips b, b, winding upon the pulleys t, t, operated by the ratchet wheel d and catch G to raise and lower the magnets, as herein described and for the purpose specified.

No. 55,133. Rowlock. (*Porte-rame.*)

Frederick Russell Edwards, Thurso, Quebec, Canada, 1st March, 1897; 6 years. (Filed 5th December, 1896.)