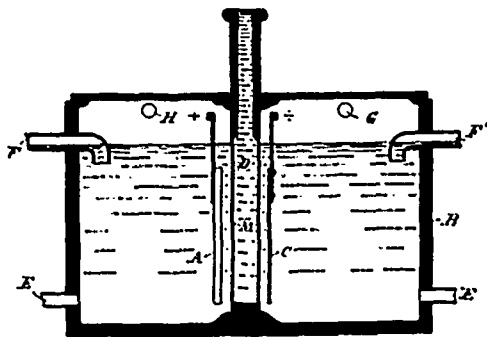


secured on a rocking shaft, and mounted in bearings at the rear of the fixed step or support, and adapted to swing in parallel planes with the front pair of arms, an extension step hinged to the swinging end of the front pair of arms, and provided with rigid arms extending to and hinged with the rear pair of arms, and operating mechanism connected with the rocking shaft, substantially as set forth.

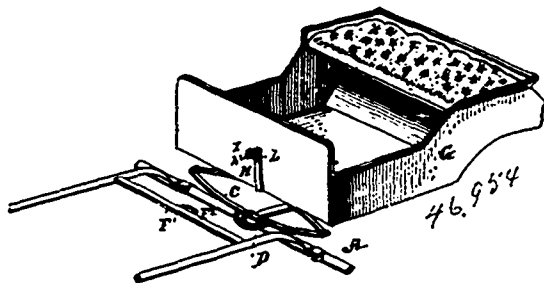
No. 46,953. Treating Salts in Solution by Electrolysis. (*Traitement du sel en solution par l'électrolyse.*)



Henrik Christian Fredrick Stormer, Christiana, Norway, 4th September, 1894; 6 years.

Claim.—1st. In the electrolysis of salts in solution or in molten state, the method for preventing the wandering of the ions from the electro-negative field to the electro-positive field and vice versa, and the reunion of such ions in the diaphragm separating the two fields of action from each other, consisting in placing a liquid under pressure in a space between the said electric fields, said space being in communication with said fields, substantially as described. 2nd. In combination, a vessel B, and the hollow diaphragm within the same, said diaphragm being porous or perforated and adapted to receive a separating fluid, substantially as described. 3rd. In combination, a hollow diaphragm or partition wall D, provided with porous or perforated membranes M, and with a connection to a source of supply, substantially as described.

No. 46,954. Thill Support. (*Arçon de limonière.*)



Ruben Cox, assignee of Samuel Dillard Webb, and George Theobald Jacobs, all of Washington, Columbia, U.S.A., 5th September, 1894; 6 years.

Claim.—1st. In a shaft supporting device, a bracket adapted to be connected with the vehicle body, a hook pivoted and adapted to oscillate relative thereto, a loop or bar adapted to be connected with the shafts, substantially as described, whereby the loop or bar is adapted to be engaged by the hook or bracket to hold the shafts elevated, and to act upon the hook to oscillate the same, to release the shafts from engagement with the hook, as set forth. 2nd. In a shaft support, an oscillating head provided with a hook arm, and with a throw-off arm, in combination with a loop or bar connected with the shafts, adapted to be engaged by the hook as the shafts are raised to hook the same, and to engage the throw-off arm in depressing the shafts to release the same from the hook, substantially as and for the purpose set forth. 3rd. In a shaft support, the combination with a loop or bar adapted to be connected with the cross-bar of the shafts, of an oscillating hook mounted on an arm or bracket adapted to be connected with the vehicle body, a stop on the hook to engage the arm or support, and a throw-off arm rigidly connected with the hook, arranged and operating, substantially in the manner and for the purpose set forth. 4th. In a shaft support, an oscillating hook mounted on a bracket extending from the vehicle body, a throw-off arm formed integral with the hook, a stop on the hook to engage the bracket, a spring adapted to engage stop faces on the oscillating hook, and an arm, a hook connected with the cross-bar of

the shafts, all combined and operating, substantially as and for the purpose set forth. 5th. In a shaft support, the arm or bracket having the oscillating hook mounted thereon, in combination with a stop on the hook provided with a cushioned face to engage the arm or bracket, substantially as and for the purpose set forth.

No. 46,955. Manufacture of Nickel and Cobalt.

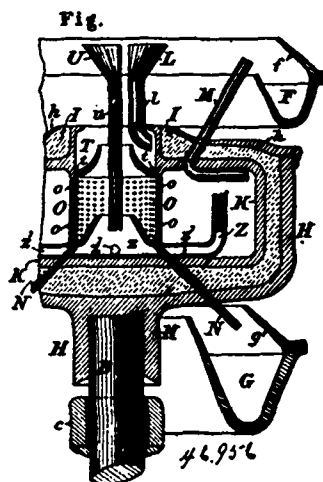
(*Fabrication de nickel et cobalt.*)

Pierre Mauhes and Societé Anonyme de Metallurgie du Cuivre (Procédés Pre Mauhes) all of Lyon, France, 5th September, 1894; 6 years.

Claim.—1st. The art or process of refining nickel and cobalt after elimination of iron and partial desulphurization, to obtain said metals commercially pure, which consists in first crushing or granulating said impure nickel or cobalt and mixing the same with basic or alkaline re-agents or fluxes mixed with chlorides of the same nature (said re-agents being lime, baryta, magnesia, soda, potash or the like, and the chlorides, chloride of lime, barium, magnesium, sodium, potassium) then covering the soie of a metallurgical furnace with a layer of lime and chloride of lime mixed, then placing the granulated nickel or metal and mixed re-agents aforesaid in said furnace, and heating the same to separate the metal and scoria, the latter during transformation removing all the remaining sulphur, and when flowed out of the furnace the pure metal is withdrawn. 2nd. The art of desulphurizing nickel or cobalt after elimination of iron and partial desulphurization, which consists in fusing said metals with a flux consisting of basic or alkaline re-agents and chlorides of the same nature, as set forth.

No. 46,956. Centrifugal Apparatus.

(*Appareil centrifuge.*)



Jonathan Aldous Mays, Belsize Terrace, Aamstead, County London, England, 5th September, 1894; 6 years.

Claim.—1st. The centrifugal apparatus for separating other metals from molten argentiferous lead consisting essentially of a revoluble receiver or vessel for containing the molten zinc or other menstruum, means for rotating the same, a feeding device for supplying the argentiferous lead in minute particles to the menstruum, and an eduction passage or passages through which the purified lead passes out. 2nd. The centrifugal apparatus for separating other metals from molten argentiferous lead consisting essentially of a revoluble receiver or vessel for containing the molten zinc or other menstruum, means for rotating the same, a feeding device for supplying the argentiferous lead in minute particles to the menstruum, an eduction passage or passages through which the purified lead passes out, a supplying device for the molten zinc or other menstruum, and an eduction passage or passages for the same. 3rd. The centrifugal apparatus for separating other metals from molten argentiferous lead consisting essentially of a revoluble receiver or vessel for containing the molten zinc or other menstruum, means for rotating the same, a feeding device for supplying the argentiferous lead in minute particles to the menstruum, an eduction passage or passages through which the purified lead passes out, and a stationary collector for receiving and holding the purified lead. 4th. The centrifugal apparatus for separating other metals from molten argentiferous lead consisting essentially of a revoluble receiver or vessel for containing the molten zinc or other menstruum, means for rotating the same, a feeding device for supplying the argentiferous lead in minute particles to the menstruum, an eduction passage or passages through which the purified lead passes out, a supplying device for the molten zinc or other menstruum, an eduction passage or passages for the same, and stationary collectors for receiving and holding the purified