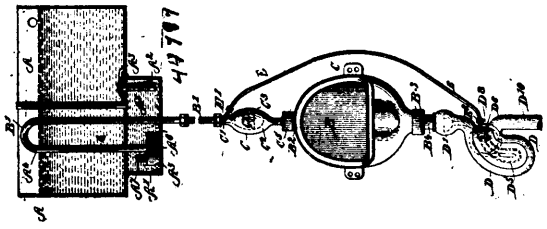
No. 44,797. Automatic Flushing Apparatus.

(*Appareil automatique pour laver les latrines.*



William Clark, Alexander Cameron, both of Sydney, and Charles Kirk, of North Sydney, all of New South Wales, Australia, 28th November, 1893 ; 6 years.

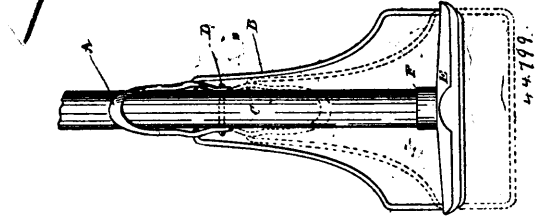
Claim.—1st. In automatic flushing urinals and other contrivances of the class set forth, the combination and arrangement with a flushing tank and a main syphon therefrom, of an open receiving vessel or basin connected to the long leg of said syphon an air-trap or water lute in said long leg of said syphon between said receiving vessel or basin, and said flushing tank, a closed chamber connected by an inverted syphon or bent pipe with the main discharge pipe from said receiving vessel or basin (or say the continuation of the long leg of the main syphon), and adapted to receive the first of any liquid supplied to said receiving vessel or basin, a by-pass pipe connecting said closed chamber with the said long leg of the main syphon, at a point above the said air-trap or water lute, and an auxiliary syphon from said closed chamber to the said main discharge pipe, adapted to set up a vacuum or partial vacuum in said closed chamber and in the said long leg of the main syphon sufficient to create syphonage in said main syphon, substantially as herein described and explained. 2nd. In automatic flushing apparatus for urinals and other contrivances of the class set forth, the combination and arrangement with a main syphon having an air-trap or water lute therein, and a break or opening or open receiving vessel or pan such as an urinal pan, also therein below said air-trap or water lute of a closed chamber connected by an inverted syphon with the discharge pipe from said break or opening and having an auxiliary syphon connecting it with the said discharge pipe, and a by-pass pipe connecting it with the said main syphon above the said air-trap or water lute, substantially as herein described and explained. 3rd. In automatic flushing apparatus for urinals and other contrivances of the class set forth, the combination and arrangement with a flushing tank having a reservoir such as A, and a measuring chamber such as A^1, a main syphon therefrom such as A^4, B^1, and a receiving vessel or pan such as B, having a discharge pipe, and bend such as D and D^{10}, of an air-trap or water lute such as C, an inverted syphon such as D^3, a closed chamber such as D^4, an auxiliary syphon such as D^7, D^8, D^9, and a by-pass pipe such as E, substantially as herein described and explained. 4th. In automatic flushing apparatus for urinals and other contrivances of the class set forth, the combination and arrangement with the other main parts of an inverted syphon such as D^3, having a perforated or grating or sieve top such as D^2, a closed chamber such as D^4, within the bend D, of a plumber's trap and an auxiliary syphon formed of pipe D^7, coil D^8, and the pipe D^9, substantially as herein described and explained. 5th. In automatic flushing apparatus for urinals and other contrivances of the class set forth, the combination and arrangement with the other main parts of a peculiarly constructed air-trap or water lute consisting of neck such as C^1, inner bottomless bottle-shaped chamber C^2, outer bottle-shaped chamber C^3, connecting port or passage C^4, and discharge socket end C^5, substantially as herein described and explained. 6th. In automatic flushing apparatus for urinals and other contrivances of the class set forth, the combination and arrangement with other main parts of a syphon starter, consisting of box or casing such as F, having therein catch trap formed of plates such as F^4 and F^5, with plug thereto such as F^6, and divided into back and front compartments by partition as F^7, the latter compartment forming closed chamber such as D^4, an inverted syphon having grating such as G^2, long leg such as G, bend such as G^3, and short leg such as G^4, an auxiliary syphon having short leg such as H^1, coil such as H, and long leg such as H^2, and a by-pass pipe E, substantially as described and explained. 7th. In a syphon starter consisting of parts as set out in the preceding (6th) claim, the combination and arrangement with said parts of a weeping tank such as J, having weeping orifice such as J^1, substantially as herein described and explained.

No. 44,798. Process of Obtaining Pure Sulphide of Nickel. (*Procédé pour obtenir du sulfure de nickel pur.*)

The Oxford Copper Company, New York City, New York, assignee of John L. Thomson, City of Bayonne, New Jersey, all in U.S.A., 28th November, 1893 ; 6 years.

Claim.—1st. The hereinbefore described method of producing and separating sulphide of nickel, consisting in smelting ores or mattes containing nickel with a sulphide of any of the alkaline bases, or a mixture of any two or more of such sulphides, substantially as described, whereby sulphide of nickel is formed, which is of greater specific gravity than the remainder of the mass, and is precipitated to the bottom of the mass, while the copper, iron and salts of the alkaline base rise to the top and may be separated in any convenient manner. 2nd. The hereinbefore described method of producing sulphide of nickel consisting in smelting the ores, mattes or other substances containing nickel with a sulphide of any of the alkaline bases or a mixture of any two or more of such sulphides, substantially as described, in separating out the sulphide of nickel resultant from the operation, from the smelted mass, and in resmelting the bottoms rich in sulphide of nickel with the sulphide of the alkaline base, and separating the resultant sulphide of nickel from the sulphides of the other metals present, and in repeating the operation until a commercially pure residue of sulphide of nickel is obtained. 3rd. The hereinbefore described method of producing and separating sulphide of nickel, consisting in smelting the ores, mattes or other bodies containing nickel, with a sulphide of any of the alkaline bases or a mixture of any two or more of the same, substantially as described, in separating out the bottom rich in sulphide of nickel resultant from the smelting, by means of specific gravity, and in subjecting the separate sulphide of nickel to repeated smelting with the sulphide of any of the alkaline bases, and subsequent separation by specific gravity until a commercially pure residue of sulphide of nickel is obtained.

No. 44,799. Floor Mop. (*Balai à laver les planchers.*)



Washington T. Triphagen, Bellevue, Michigan, U.S.A., and George W. Baker, Winnipeg, Manitoba, Canada, 28th November, 1893 ; 6 years.

Claim.—The lever A, working on the fulcrum D, in an ordinary mop handle C, in combination with the clamp B, and the head E, with socket F, substantially as and for the purposes hereinbefore set forth.