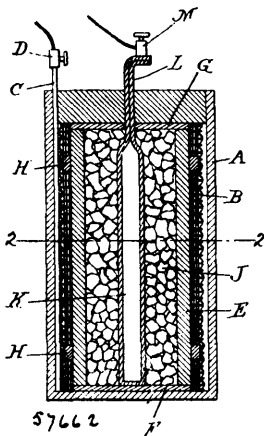


ing pulleys d^2 , trace deflecting pulleys h , and breech strap deflecting pulleys k , applied to shafts pivoted at e , to the fore part of the fore-carriage; and traces f , connected to the levers g , and to the animal at the collar and deflected by the pulleys h , and breech connections i , connected to the traces and deflected by the pulleys k , and belly and back bands n , by which the resultant lifting or down-bearing force operating through the ordinary shafts d , is applied to the animal, as set forth. 2nd. The combination of adjustable springs a , and levers g , carried by brackets b , applied to the fore-carriage; spring bearing pulleys d^2 , and trace deflecting pulleys h , applied to shafts pivoted at e , to the fore part of the fore-carriage; and traces f , connected to the levers g , and to the animal at the collar and deflected by the pulleys h ; and belly and back bands n , by which the resultant lifting or down-bearing force operating through the ordinary shafts d , is applied to the animal, as set forth.

No. 57,662. Storage Battery. (Accumulateur d'électricité.)



Lee & Company, assignee of Varian M. Harris, all of Chicago, Illinois, U.S.A., 4th October, 1897; 6 years. (Filed 10th April, 1897.)

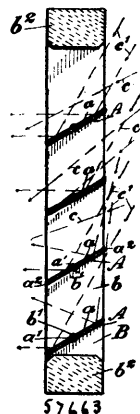
Claim.—1st. A storage battery comprising an outer retaining case or cup, an outer cylindrically shaped gauze-like body constituting the negative element, an inner cylindrical porous cup, a central cylindrical positive element having a smooth unbroken surface, a mass of active material annular in cross section interposed between the walls of the porous cup and the surface of the opposite element, the two elements and the active material arranged symmetrically about a common axis and a suitable fluid in the retaining cup. 2nd. A storage battery comprising an outer retaining case or cup, an outer cylindrically shaped mercury-covered copper gauze-like body constituting the negative element, an inner cylindrical porous cup, a central cylindrical positive element having a smooth unbroken surface, a mass of active material annular in cross-section interposed between the walls of the porous cup and the surface of the opposite element, the two elements and the active material arranged symmetrically about a common axis, and a suitable fluid in the retaining cup. 3rd. A storage battery comprising a central positive element, a porous cup surrounding the same, a mass of active material within the cup and about the element, an outer copper gauze mercury covered negative element, a case or cup to contain the whole and a suitable fluid within the case. 4th. A storage battery comprising a central metallic positive element, a porous cup surrounding the same, an outer case, a fluid in the same, and a cylindrical copper gauze mercury covered negative element within the retaining case and surrounding the porous cup and positive element, and an insulation seal at each end of the porous cup, substantially as shown and described.

No. 57,663. Light Deflector. (Déflecteur de lumière.)

William J. Withrow, Montreal, Quebec, Canada, 4th October, 1897; 6 years. (Filed 1st June, 1897.)

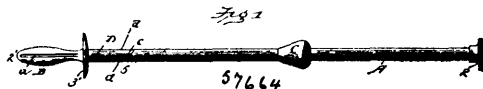
Claim.—1st. The method of deflecting light from its normal, to any desired direction, by placing across its path a plurality of brightly reflecting slats, arranged in series, spaced apart and so adjusted that light, falling upon the reflecting faces of the slats from one side of the series, will be reflected therefrom, to the other side of the series, in the desired direction, the light so deflected having passed between the slats, as and for the purpose specified. 2nd. A light deflector, comprising a plurality of brightly reflecting slats, arranged in series, spaced apart and so adjusted that light, falling upon the reflecting faces of the slats from one side of the series, will be reflected therefrom, to the other side of the series, the light so deflected having passed between the slats, as and for the purpose specified. 3rd. A light deflector, comprising a plurality of slats A and sheets of mirror glass or other suitable brightly reflecting

material a , placed on one side thereof and arranged as and for the purpose specified. 4th. In a light deflector, the combination, with



the slats A, having the brightly reflecting surface a , of the side-bars b by which the slats A are supported, as and for the purpose specified.

No. 57,664. Uterine Dilator. (Dilatateur utérin.)

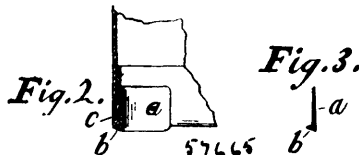
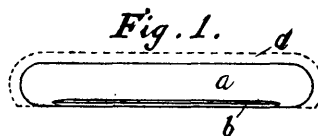


Timothy Allen Lewis, Frank A. Bigelow and David H. Palmer, all of La Crosse, Wisconsin, U.S.A., 4th October, 1897; 6 years. (Filed 18th August, 1897.)

Claim.—As an improved article of manufacture, a dilator comprising the cylindrical handle, provided with the fixed milled knob 2, and having its opposite end formed with the integral rectangular tongue c , the cylindrical rod D, formed with the integral parallel jaws d , between the parallel walls of which the said rectangular tongue c is pivoted by the transverse rivet e , the conical pear-shaped sleeve C, snugly encompassing the joint between the handle and the rod, to fix it rigid, the screw-stud 3 formed integral with said rod, and the detachable solid stem B, provided with the threaded orifice 4, and having the integral concave flange 3', encompassing its base, and the longitudinal parallel grooves a , formed in the opposite sides of said stem, substantially as shown and described.

No. 57,665. Trousers Protector.

(Protecteur de pantalon.)



Louise M. Howes, Montreal, Quebec, Canada, 4th October, 1897; 6 years. (Filed 13th August, 1897.)

Claim.—1st. A trousers protector consisting of a strip of soft rubber or other analogous material moulded with a longitudinal projection or rib so as to wholly cover and protect the lower edge of the trousers leg from wearing and soiling the boot or shoe. 2nd. A trousers protector consisting of a strip of soft rubber or other analogous material moulded with a longitudinal projection or rib so as to wholly cover and protect the lower edge and to have its thickest portion rest upon the boot or shoe and increase its wearing capacity and reduce its weight and clumsiness. 3rd. A trousers protector consisting of a strip of soft rubber moulded with a longitudinal pro-