

**No. 7697. Improvements in Mill Stone Dress.***(Perfectionnements dans le rhabillage des meules.)*

Robert S. Williams, Milwaukee, Wis., U.S., 27th July, 1877, for 5 years.

*Claim.*—The tangential furrows A upon the bosom of the stone and connecting with the radial furrows upon the skirt.**No. 7698. Apparatus for Cleansing the Hulls of Vessels Afloat.***(Appareil pour nettoyer les coques de vaisseaux à flot.)*

Henry J. Cole, London, England, 1st August, 1877, for 5 years.

*Claim.*—1st. The combination of appliances shown in figures 1 2 3 4; 2nd. The combination of appliances shown in Figures 6 7 8; 3rd. The apparatus shown in Figures 13, 14; 4th. Fitting two vancanson or ladder chains B B, upon or against a vessel, to rotate a drum brush, when said brush is drawn up or down, or to and fro; 5th. Constructing cylindrical brushes with intervening metal strips, or blades in spiral order; 6th. Fitting or attaching springs in cylindrical brushes made in sections or without metal blades.**No. 7699. Raising and Transplanting Plants.***(Culture et déplacement des arbres.)*

Conrad Loskamp, Newburgh, N.Y., U.S., 1st August, 1877, for 5 years.

*Claim.*—1st. The method of raising and transplanting plants which consists in planting roots, seeds, &c., in earth contained in a series of paper bags, moistening the earth in the bags simultaneously by water supplied centrally thereto, hastening germination, forcing the growth of the plants and preventing injury to the bags by the circulation of warm air about the outside of the bags, and finally transplanting the plants with the bags and earth about the roots; 2nd. The combination of a rack for holding and separating the bags, an open bottomed frame in which the rack is supported, and water holders or receptacles for supplying water centrally to the earth in the bags; 3rd. The frame constructed with an open end, an open bottom and a closed top provided with the series of water holders.**No. 7700. Improvements on Churns.***(Perfectionnements aux barattes.)*

William H. Conyer, Agnews' Mills, Elizabeth Fite, Alleghany, and Jacob J. Speck, Pittsburgh, Pa., U.S., 1st August, 1877, for 5 years.

*Claim.*—1st. The combination of discs with a partition board, of a reversible compartment churn for collecting the butter globules and spreading the air; 2nd. The combination of swinging balls or frames with a reversible churn barrel and a supporting frame; 3rd. The combination of spring holders with a reversible or journalled churn barrel and supporting frame; 4th. The combination of the frame A having journal boxes B, swinging balls E and spring holders F, to operate in connection with a reversible or journalled churn barrel D.**No. 7701. Improvement in Dredging and Derrick Machines.***(Perfectionnements dans les dragues et les chèvres.)*

Ralph R. Osgood, Troy, N.Y., U.S., 1st August, 1877, for 5 years.

*Claim.*—1st. A turn-table with one or more vertical guide sheaves and two or more horizontal guide sheaves, in combination with a hinged or pivoted boom and its hoisting chain, or its equivalent; 2nd. One or more hoisting chains, in combination with the dipper or load boom, turn-table guide, sheaves and moving power; 3rd. The step with an annular groove on its upper surface, in combination with a turn-table, annular flange corresponding with groove in step, ring or segments firmly secured to step and over annular flange of the turn-table; 4th. The turn-table, boom and hoisting chain, in combination with the boom chain and stop chain; 5th. The combination of boom F, turn-table D, sheaves P Q R, step B, hoisting chain M, boom chain I, stop chain J.**No. 7702. Improvements in Car Couplings.***(Perfectionnements dans les attelages de wagons.)*

William Craig, Nunda, N.Y., U.S., (Assignee of Benning Rowell), 1st August, 1877, for 5 years.

*Claim.*—The combination of the lever and pivoted V shaped pawl, the T rock shaft, the ratchet or toothed link fixed on the end thereof, and the coupling pin and draw head.**No. 7703. Improvements in Keys for Locks.***(Perfectionnements aux clés de serrures.)*

Richard A. Abbott and Myron W. Parrish, Jackson, Mich., U.S., 1st August, 1877, for 5 years.

*Claim.*—The combination of a thumb screw or nut with a door or other key.**No. 7704. Improvements on Water Purifiers.***(Perfectionnements aux filtres à eau.)*

James Foley, Montreal Que., 1st August, 1877, for 5 years.

*Claim.*—1st. A water purifier to connect with water service pipes having a group of tubes *a a* 2 3, connectedly arranged within bands N or a casing L; 2nd. A water purifier constructed of a group of tubes *a a* 1 2 3 having trap screws or ports *d*, perforated diaphragms *c c* 1 and connected near top and bottom alternately by pipe connections or eyelets *b b* 1 2 and inlet and outlet pipes *f* 3, valved for circulating the flow alternately upward and downward, or vice versa; 3rd. A water purifier constructed of a group of tubes *a a* 1 2 3 coupled together near top and bottom alternately by pipes or eyelets *b b* 1 2 to give an upward and downward flow through the filtering medium in said tubes; 4th. A water purifier consisting of a group of filtering tubes *a a* 1 2 3 connected alternately at top and bottom, having inlet and outlet pipes *f* 3 connected by pipe G for reversing the circulation; 5th. A water purifier composed of a group, or purifying tubes *a a* 2 3 alternately connected, and a cooling chamber above the same having within a coil pipe I for storage of ice for cooling the flow of purified water.**No. 7705. Improvement in Combined Covers and Blotters.***(Perfectionnement dans les couvercles-buvards.)*

Jesse W. Payson, Hyde Park, Mass., and William M. Scribner, Chicago, Ill., U.S., 1st August, 1877, for 5 years.

*Claim.*—1st. A combined blotter and cover formed of one continuous strip of bibulous paper and folded in form; 2nd. A combining blotter and cover folded in form and having protection strips or bands at the folds; 3rd. The combination of the back pieces A A and flaps B B, either or both of bibulous paper, with strips C C C; 4th. In any combined blotter and cover having folded pieces or flaps, the lines D D drawn on the meeting faces of such flaps.**No. 7706. A Barrel. (Un baril.)**

James Tomlinson, Goderich, Ont., 2nd August, 1877, (Extension of Patent No. 4023), for 5 years.

**No. 7707. A Barrel. (Un baril.)**

James Tomlinson, Goderich, Ont., 2nd August, 1877, (Extension of Patent No. 4023), for 5 years.

**No. 7708. Composition for Sheep and Cattle Wash.***Composé pour le lavage des moutons et bêtes à cornes.)*

William Clark, South Dumfries, Ont., 3rd August, 1877, (Extension of Patent No. 1573), for 5 years.

*Claim.*—The combination of spirits of tar, the best whale-oil, hellebore, tobacco juice, powdered soda, and soft soap in the proportions and in the manner specified.**No. 7709. Improvement on Curtain Fixtures.***(Perfectionnement des ajustages de rideaux.)*

Nathan Campbell, Rochester, N.Y., U.S., 9th August, 1877, for 5 years.

*Claim.*—1st. The lever B constructed with the pawl *f* and extending outside of and around the ratchet C, in combination with a bracket having a bearing *d*; 2nd. The ratchet C constructed with four plane sides *a a a a* and hooked teeth *b b b b*; 3rd. The bit G and socket *j*, the socket constructed shorter than the bit and having the depression X in the back to contain the bit; 4th. The bracket A constructed with the open slot Z in its foot, near the top, leaving a wide bearing at its bottom.**No. 7710. Improvements on Concrete Pavement.***(Perfectionnements du pavage en béton.)*

Cyrus M. Warren, Brookline, Mass., U.S., 9th August, 1877, for 5 years.

*Claim.*—A foundation of concrete prepared with or containing coal tar or coal tar pitch and a surface layer of concrete made with a compound of native bitumen or rosin, and the heavy oil or residuum of petroleum or equivalent non-volatile and non-drying material, or an equivalent surface layer made of other bituminous material.**No. 7711. Improvement in Photographic Printing Frames.***(Perfectionnement des châsses à impressions photographiques.)*

Louise Ray, Peoria, Ill., U.S., (Assignee of Thomas L. Ray), 9th August, 1877, for 5 years.

*Claim.*—1st. In the process of printing an indefinite number of sun pictures from negatives of different intensity at one time and at the same exposure to light; 2nd. The method of securing the equal printing of pictures in printing, that is: by retarding the light on all of the least intense negatives or increasing the light on all of the most intense, or by retarding the light on the least intense and increasing the light on the most intense by means of equalizing media and condensing lenses; 3rd. The method of printing one picture from each negative in the printing frame on a continuous piece of sensitive paper, and having an indefinite number of pieces of sensitive paper between the negatives just the size of the picture already printed; 4th. The method of pressing the sensitive paper in contact with negative in the printing frame by means of the flexible strip P with block L and spring S<sub>3</sub> and the cover K; 5th. The printing of an indefinite number of pictures, at one time and in the same frame, of different persons, or from negatives of the same intensity taken on separate glasses, when said pictures are finished on separate cards.**No. 7712. Manufacture of Brooms and Brushes.***(Fabrication des balais et des pinceaux.)*

Thomas Jesson, Galway, and Thomas Duggan, Glasnevin, Ireland, 9th August, 1877, for 5 years.

*Claim.*—1st. The process of making brushes by laying across a box D the bristles *a*, or their equivalent, wrapping the same with wires or rods *f* and forcing the bristles or their equivalent, so bound, into a hollow brush, stock or head; 2nd. The novel combination in a machine for making brushes, of a table or bench J having an opening or space, a portable box or casing D and a pusher P; 3rd. The portable box composed of transversely connected sections D in conjunction with parallel rollers 1 2 and end pins 3 4 5 6, with or without a hinged drop bottom; 4th. The employment of iron wires or rods *f* and pins *t*, in combination with the material *a* arranged and fastened; 5th. The employment in combination with the brush stock F, fig. 12, of the wires *i* and eyes or hooks *l*, for fastening the bristles or their equivalent *a* in the said stock.