

purposes herein set forth. 2nd. The herein described diagrams of colours harmonies, consisting of notes, chords or scales in ranges or keys corresponding respectively to the notes, chords, scales and keys of music or harmony, and composed by certain definite admixtures from the so-called primaries red, yellow and blue, with black and white in pigment or other colours or coloured materials, substantially as herein specified. 3rd. The manufacture or production of colours or coloured materials by the admixture of the primary colours, red, yellow, and blue, with black and white, by the system or method of harmonious colouring hereinbefore specified.

No. 36,559. Broom. (Balai.)

Byron Fullerton Richardson and John Kinleyside, both of Hamilton, Ontario, Canada, 9th May, 1891, 5 years.

Claim.—1st. In the device for pulling the parts of the broom together, the combination of the bottom bar P, and the compressing or top bar O, in connection with the leverage power on the bar O, with the posts M, the wedge keys E, and holes S, as described. 2nd. In a broom, the combination of the alternate corrugated strips C, B, A, B, C, for holding the ends of the broom material between them when compressed and bolted or riveted together, as described. 3rd. In a broom, the combination of the central strip A, wedge shaped in connection with the strips B, and C, to flare out the broom material at each side and give a wide sweeping surface, as described. 4th. In a broom, the combination of the reversible ferule F, split pin A, and handle G, as described, all operating substantially as and for the purposes herein set forth.

No. 36,560. Soap. (Savon.)

Albert Wilhelm Rehnström, Malhammar, Rekarne, Sweden, 9th May, 1891, 5 years.

Claim.—1st. The method, substantially as described, of preparing hard or soft soap by saponifying milk, either natural more or less concentrated or mixed with soap substance, which milk has or has not previously been deprived of more or less of its natural fat or caseine, and in the latter event mixed with a cheaper fat, and then treating the mass in the usual manner for preparing soap. 2nd. A hard or soft soap prepared by saponifying milk either natural or more or less concentrated, or mixed with soap substance, which milk has or has not previously more or less been deprived of its natural fat or caseine, and in the latter event mixed with a cheaper fat, whereafter the mass has been treated as usual, substantially as specified.

No. 36,561. Ink Stand. (Encrier.)

Arthur Joseph Ingraham, Philadelphia, Pennsylvania, U.S.A., 9th May, 1891, 5 years.

Claim.—1st. In an ink stand provided with a cap or cover, a spring actuating device and a flexible disc, and both interposed between the cap or cover and top of the stand, of a funnel-shaped tube extending into said stand and provided with an integral collar having a valve therein, and aperture in the lower part of said tube, substantially as and for the purposes described. 2nd. In an ink stand provided with a cap or cover and an interposed flexible disc, of a tube extending into said stand having a valve formed integral therewith, and said tube provided with lugs for maintaining a washer in position adjacent to said disc, substantially as and for the purposes described. 3rd. An ink stand provided with a cap or cover, a gasket, a flexible disc, and a delivery tube supported by a spring and extending through the cap or cover and disc into the chamber of the inkstand, and said tube having a valve formed integral therewith for regulating the quantity of fluid presented at the delivery end thereof, substantially as and for the purposes described.

No. 36,562. Boot. (Chaussure.)

Milo Francis Jarden, Selkirk, Ontario, Canada, 9th May, 1891; 5 years.

Claim.—A boot in which the vamp and quarters are made in two pieces joined together by the seams D, and E, and braced by the toe piece F, having projecting wings f, formed on it, substantially as and for the purpose specified.

No. 36,563. Device for Closing Doors.

(Appareil à fermer les portes.)

John Noah Strong, Woodbridge, Ontario, Canada, 9th May, 1891; 5 years.

Claim.—1st. Two bars joined together, the end of one bar fitting into a socket fixed to a door or gate, and the end of the other bar fitted into a socket pivoted on the end of a bracket fixed to the door jamb, in combination with a weight applied to the said bar or bars, substantially as and for the purpose specified. 2nd. Two bars joined together, the end of one bar fitting into a socket fixed to a door or gate, and the end of the other bar fitted into a socket pivoted on the end of a bracket fixed to the door jamb, the bottom of the said socket being bevelled and designed to rest upon a correspondingly bevelled surface formed around its pivot in the said bracket, in combination with a weight applied to the said bar or bars, substantially as and for the purpose specified.

No. 36,564. Revolving Fire Box.

(Boîte à feu tournante.)

Joseph C. Henderson, Troy, New York, U. S. A., 9th May, 1891; 15 years.

Claim.—1st. A revolving fire box provided with opposite openings for admission of coal, and communication with the grate, in combination with a contiguous casing surrounding the fire box except at

said openings, and a grate at the bottom contiguous to the casing, as and for the purpose set forth. 2nd. A fire box open at top and bottom, in combination with a surrounding casing, the said casing and box separated so as to form an air space on both sides of the box for the passage of air and gases from the bottom of the box to the top thereof, substantially as described. 3rd. The combination, with a cylindrical fire box having opposite openings for the insertion of fuel, and communication with grate, of a cylindrical casing separated from said box but surrounding the box to the said openings, and a circular grate at the bottom of said box practically forming a continuation of said casing, substantially as described. 4th. The revolving fire box provided with trunnions for turning the same, and with a lug on each head of the box, in combination with an outside casing through which said trunnions pass, and provided with lugs corresponding to the lugs on the fire box and arranged to come in contact therewith, whereby the box is given a half turn and held in that position, substantially as described.

No. 36,565. Power Transmitter.

(Appareil de transmission de mouvement.)

Andrew Tolton and David Tolton, both of Guelph, Ontario, Canada, 9th May, 1891; 5 years.

Claim.—1st. A pulley journaled on an arm pivoted upon a bracket made vertically adjustable upon a suitably braced vertical post, substantially as and for the purpose specified. 2nd. A pulley journaled on one end of an arm, on the other end of which an annular projection is formed, in combination with a bracket having an annular recess formed in it to receive the annular projection, the two being secured together by a bolt passing through a hole in them made larger than the diameter of the bolt, substantially as and for the purpose specified. 3rd. A pulley journaled on an arm pivoted upon a bracket made vertically adjustable upon a suitably braced vertical post, in combination with a bar adjustably connected to the said arm, substantially as and for the purpose specified. 4th. A pulley journaled on an arm pivoted upon a bracket made vertically adjustable upon a suitably braced vertical post, in combination with an idler pulley supported in proximity to the periphery of the main pulley.

No. 36,566. Foundation for Piers, etc.

(Foundation pour piles, etc.)

Robert Lewis Harris, New York, State of New York, U. S. A., 9th May, 1891; 5 years.

Claim.—1st. The method herein specified of constructing consolidating or strengthening foundations or structures, the same consisting in forcing into the interstices of such foundation or adjacent thereto, successive charges of mixed cement commencing at the lowest level or more distant points, and adding thereto progressively until the mass is solidified, substantially as specified. 2nd. The method herein specified of progressively making artificial stone foundations or structures in loose materials remaining in position, the same consisting in making holes between such loose materials and introducing thinly mixed cement through a pipe or pipes under pressure to the distant portions of such holes to cause the cement to spread in between the loose materials, allowing the cement to accrete or set, and then repeating the operation at nearer points in such holes until a solid cement structure is built up in the loose materials, substantially as set forth. 3rd. The method herein specified of cementing together loose materials, such as rubble riprap gravel, and imperfect masonry, consisting in directing streams of water through such materials to remove mud or sediment, and introducing cement in successive charges through holes commencing at the desired level, and filling in upwardly and allowing the successive charges of cement to set or to accrete between one charge and the next in order to fill the interstices progressively, substantially as set forth. 4th. The method herein specified of building a caisson or a coffer dam, or supporting structure in sand earth or loose materials, consisting in making holes from above in such materials and forcing cement into the same under pressure at the lowest desired places, and building by successive operations from the lowest desired level upwardly, the holes being sufficiently close together for the cement spread laterally by the pressure at one hole to extend to and bond with the cement from the adjoining holes, substantially as set forth. 5th. The method herein specified of introducing a floor or supporting layer into rubble sand or other loose material without removing the same, consisting in introducing into such material at numerous places or holes, cement in a semi-liquid condition forced through pipes passing down to the same or nearly the same level, and the places of supply being sufficiently close together for the cement introduced at one hole to spread to and unite with the cement introduced at adjacent holes, substantially as specified. 6th. The method herein specified of making a caisson under water with bottom and walls of cement, consisting in forcing such cement through pipes and into the loose materials existing under the water and in their normal condition, such cement being first introduced at the lowest desired places and sufficiently close for the cement to spread and unite and form the floor, and then building up the walls progressively from the floor to the higher places, substantially as specified.

No. 36,567. Dumping Car. (Char à bascule.)

John Smith, Howell, Michigan, U.S.A., 9th May, 1891; 5 years.

Claim.—1st. The combination, with a supporting frame, of a dumping car consisting of two separate dumping boxes, said boxes having an oscillatory engagement upon the edges of said frame respectively, substantially as described. 2nd. The combination, of the supporting frame, uprights located thereupon at the edges of the frame, and a dumping car consisting of two separate dumping boxes having an oscillatory engagement upon said uprights, substantially