

No. 11,563. Improvements on Buttons. (*Perfectionnements aux boutons.*)

Theodore L. Snyder, Montclair, N. J., U. S., 28th July, 1880; for 5 years.

Claim.—A button composed of a body of solid inflexible material having a dovetailed recess in its under side, and provided with a flexible shank secured within said recess.

No. 11,564 Method of, and Apparatus for removing and Treating Fæces. (*Méthode pour enlever et traiter les excréments, et appareil pour cet objet.*)

Friedrich Breyer, Vienna, Austria, 28th July, 1880; for 5 years.

Claim.—The method of removing fæces and waste materials from buildings, by means of compressed air or steam directly acting upon said fæces and waste materials collected in self-closing vessels. 2nd. The process of drying and disinfecting fæces and waste materials, by causing heated gas or steam to act directly upon the fæcal mass, previously fed into a filtering apparatus. 3rd. The general construction and arrangement of an apparatus for collecting fæces and waste materials and converting same into a dry and almost inodorous article of commerce, free from infectious matter, consisting of the collecting vessel, valve apparatus, filtering apparatus, and pipe connections. 4th. The combination of the collecting vessel arranged beneath a privy pipe or sink hole, with its hollow valve C, with pipe 4, with its central pin d, with the valve apparatus and pipe 5. 5th. The combination with the collecting vessel of pipe 1 and filtering apparatus. 6th. The combination with the filtering apparatus of the valve 1, pressure pipe 2, filtering plate K, pipe 3 and valve apparatus. 7th. In the filtering apparatus, the combination of the boiler with the movable filtering plate K, cylinder m, hollow piston o, tube u, and a wire rope or chain fastened at the filtering plate and the plate p of the piston o and guided by pulleys. 8th. In the filtering apparatus, the arrangement for raising and lowering the filtering plate and consisting of right and left-handed screws X X, wedge-shaped nuts X' X', bearing against corresponding wedge-shaped projections on the under side of the frame of the filtering plate, of the hand wheel z, and gearing y y.

No. 11,565. Improvements in Lock Gates. (*Perfectionnements aux portes des écluses.*)

Thomas Milette, Trois Rivières, Que., 28th July, 1880; for 5 years.

Claim.—1st. The combination of pulleys f g e e' d for operating the lock gates. 2nd. The water wheel mechanism for operating the gates. 3rd. The double bottom of the lock composed of rectangular frames F placed side by side with interstices K between their upper sides, for the passage of the water, said double bottom thus forming a sluice G under the lock chamber.

No. 11,566. Improvements on Pumps. (*Perfectionnements aux pompes.*)

Adolph Toellner, Milwaukee, Wis., U. S., 28th July, 1880; for 5 years.

Claim.—1st. The combination of sectional rod flexible connection, bell crank lever and the adjustable lever. 2nd. The combination, in a pump-plunger, of the chamber and valve seat, the latter cast with a stirrup and a tube which passes up through the top of the chamber, to connect by a coupling M, with the rod section B. 3rd. The valve plate clamped between the seat and chamber, in combination with the tube and coupling.

No. 11,567. Washing and Cleansing Powder. (*Poudre à laver et nettoyer.*)

Harvey H. Vansickle, Oaondago, Ont., 28th July, 1880; for 5 years.

Claim.—A washing and cleansing powder composed of soda ash, sal soda, muriate of ammonia, borax and alum.

No. 11,568. Improvements on Traction Mechanism for Propelling Machinery. (*Perfectionnements aux mécanismes de traction pour les appareils de propulsion.*)

George E. Burt, Harvard, Mass., U. S., 28th July, 1880; for 5 years.

Claim.—1st. The method of transmitting motive power by a ring and its contracting arcs, and a series of traction rolls resting in contact with each other and the arcs of the ring below the centre provided with recesses and flanges, arranged and covered within the periphery of the ring. 2nd. The regulating screws j j and the oblong box-seats E', in combination with traction rolls B B' B'' and the ring A. 3rd. The projecting casing K K' K'' in combination with the traction rolls B B' B'', the ring A and frame C.

No. 11,569. Improvement in Mail Bags. (*Perfectionnements dans les valises à lettres.*)

John H. Bartlett and Peter D. Macintyre, Ottawa, Ont., 28th July, 1880; for 5 years.

Claim.—1st. A metal or other clasp of three links N E F, linked together and pivoted to the lock O at one end, and to the clutch L at the other end, forming an oblong or square. 2nd. A metal clutch L having recesses K K' and shoulders D D, with seal slide. 3rd. A square or other shaped key P, having a conical or pyramidal-shaped point R. 4th. In combination with the lock O, clutch L and links E F N, the square seal of paper, lead, wood or other material with the required inscription.

No. 11,570. Process of Treating Vegetable Fibrous Substances. (*Procédé de traitement des substances végétales fibreuses.*)

William Courtney, New York, U. S., 30th July, 1880; for 5 years.

Claim.—1st. The utilization of scrap vulcanized fibre, waste paper, cotton rags and other vegetable fibrous substance, by an admixture of the same, either separately or together, with either of the chlorides named or the mother waters thereof, and subjecting the same to heat, kneading and pressure.

2nd. The treatment of these vegetable fibrous substances to a bath of dilute sulphuric acids, before the admixture of the same, in a comminuted form, with the metallic chlorides, to render them more susceptible to the treatment proposed and produce a greater or less degree of gelatinization. 3rd. The admixture of graphite, resin, gums, and other foreign substances, with the comminuted fibrous matter before the treatment with metallic chlorides, said admixture not being possible with paper in the sheet, as now usually treated. 4th. The method of controlling the contraction of the goods moulded, by admixture therewith of suitable foreign substances. 5th. The method of refinishing these moulded goods in hot dies or rolls, to give them a gloss, and by partial fusion of the resinous gums, to render them impervious to moisture. 6th. As a new article of manufacture, the goods prepared under these various methods of ground or comminuted vulcanized fibre and other vegetable substances. 7th. The method of coloring the substances, by the admixture of any coloring matter, which will not affect the chemical action of the chlorides.

No. 11,571. Improvements on Refrigerating Apparatus. (*Perfectionnements aux appareils frigorifiques.*)

Andrew J. Chase, Boston, Mass., U. S., 30th July, 1880; for 5 years.

Claim.—1st. In a refrigerator, the combination with the receptacle containing the refrigerating material of one or more pipes or air conduits passing diagonally, through the same, and communicating with their upper and lower ends with the air outside of said chamber, so as to cause a circulation of air downward through said pipes. 2nd. In combination with the vessel or receptacle for containing the refrigerating material, of a vessel below communicating with said receptacle, in which the liquid resulting from melting of the ice is collected and held and utilized to assist in the refrigerating process before being discharged. 3rd. In combination with receptacle for containing the refrigerating material, and the vessel for collecting the liquid resulting from the melting of the ice, one or more pipes or air conduits passing through said liquid and communicating with the air outside of the same, whereby a current of air may be passed through the body of the refrigerating material. 4th. The combination with the vessel for containing refrigerating material and the pipe or pipes extending through the same, of the dividing partition F having openings at the top and bottom.

No. 11,572. Improvements on Postal Paper. (*Perfectionnements au papier-enveloppe.*)

William E. Cornell, Toronto, Ont., 30th July, 1880; for 5 years.

Claim.—A new article of manufacture, a postal sheet adapted to be folded, and provided with gummed flaps for fastening and having a revenue stamp printed on the back of one of the folded sections.

No. 11,573. Improvements on Calk Plates for Boots and Shoes. (*Perfectionnements aux plaques à crampons pour les chaussures.*)

John B. Weir, Otsego Lake, Mich., U. S., 30th July, 1880; for 5 years.

Claim.—1st. The heel M constructed with a screw orifice K in combination with the recessed sole G, the plate A having lugs F and a fastening screw Q. 2nd. The plate A constructed with a heel bend a, whereby, when the plate is applied to the sole and the lugs are pushed forward into their recesses, the rear part of the plate A may be locked by the heel bend a against the heel M.

No. 11,574. Improvements on Washing Machines. (*Perfectionnements aux machines à laver.*)

Honoré Mounsey, Iberville, Que., 30th July, 1880; for 5 years.

Resumé.—Les combinaisons de la roue H, de son couvercle h, des planchettes br, des plaques x y x' z y z' et des cavités z y x y', y x' et des broches h' h' h' h'.

No. 11,575. Improvements on Telephones. (*Perfectionnements aux téléphones.*)

Thomas A. Watson, Everett, Mass., U. S., 30th July, 1880; for 15 years.

Claim.—1st. In a telephonic circuit, the spring hook D adapted to support the weight of the hand telephone, in combination with the contact springs s' s' s' connected with the transmitter, hand telephone and a signalling circuit. 2nd. The spring hook D adapted to support the weight of the hand telephone, in combination with contact spring s' s' and their connections, to automatically establish the primary local circuit through the transmitter and, at the same time, bring into the main line the circuit through the hand telephone and secondary circuit through the transmitter, by taking the telephone from the hook. 3rd. The lever D' connected with the main line of a telephonic circuit and having a positive movement in either direction, in combination with the contact springs s' s' s', the transmitter, the hand telephone, a signalling circuit and suitable connecting wires.

No. 11,576. Improvements in Telephones. (*Perfectionnements dans les téléphones.*)

Robert M. Lookwood, Samuel H. Bartlett and Charles F. Livermore, New York, U. S., 30th July, 1880; for 5 years.

Claim.—1st. The diaphragm or sounding board formed upon or secured to a reduced or spring extension of the pole of the magnet. 2nd. The curved or V-shaped arm made in one piece with, and forming a reduced extension of one pole of the magnet and having the diaphragm formed upon or secured to it. 3rd. The diaphragm connected with one pole of the magnet by means of the reduced arm or spring extension of, and arranged relatively to said pole. 4th. The combination with the diaphragm or sound board of a telephone receiver, of a magnet having its helix provided with the metallic enclosing sleeve. 5th. The combination of a magnet having the diaphragm secured to, or formed upon a reduced extension of one of its poles, a helix and a metallic sleeve surrounding said helix.