

No. 7773. Improvements in Syringes.*(Perfectionnements aux seringues.)*

John S. Parsons and Joseph H. Yundt, Indianapolis, Ind., U. S., 15th August, 1877, for 5 years.

Claim.—1st. The outer tube A of a syringe formed with its rear end contracted and provided with a screw thread in which operates the screw threaded end C of the inner tube B; 2nd. The inner tapering tube B provided at the large or nozzle end with guides K K K to guide said inner tube B in the centre of tube A; 3rd. The inner tube B provided with a screw thread at small end C and adapted to be operated for adjustment in length by screw thread in the contracted end L of the outer tube A; 4th. The outer tube A provided with an induction tube G at or near its rear contracted end B; 5th. The outer tube A provided with a bulb F; 6th. The inner tube B formed tapering so as to leave a very narrow annular space at the nozzle between it and the outer tube A, and extending beyond the contracted end L of the outer case A with a screw thread or its equivalent, in such a manner as to allow the inner tube to be made adjustable endwise and to allow fluids to pass out of the syringe at the nozzle into the recess in which the syringe is inserted and to discharge said fluids through the interior of the inner tube B; 7th. A syringe composed of the outer tube A having a contracted or reduced end L, the inner tapering tube B provided with lugs K K K at or near its nozzle or large end, and further provided with a screw thread C at its small end, the lock nut D, washer E and induction tube G.

No. 7774. Rolls for Making Horse Shoe Blanks.*(Moquettes pour faire les ébauches des fers à cheval.)*

Harvey K. Flagler and Theodore S. Very, Boston, Mass., U. S., (Assignees of Hazen J. Batchelder), 15th August, 1877, for 5 years.

Claim.—1st. A pair of rolls A B having punches P P adapted to enter a bar from opposite sides and form coinciding cavities; 2nd. A pair of rolls A B having punches P P which are adapted to enter a bar of iron from opposite sides and form coinciding cavities which are inclined transversely of the bar; 3rd. The roll A having the shape of a conic frustum and provided with the die D or its equivalents and punches P, said die and punches being oblique to the surface of the roll A along its transverse section; 4th. The roll B having the die or enlargement E and punches P, combined with the roll A having punches P; 5th. The roll B having its periphery reduced on one side, in combination with the roll A; 6th. The roll B having the enlargement E, in combination with the roll A; 7th. The roll B having punches P, enlargement E and reduction R, combined with the roll A; 8th. A bar or blank provided with coinciding cavities on its opposite sides.

No. 7775. Improvements on Drills for Metal.*(Perfectionnements aux forêts à métaux.)*

James P. Thompson, Milwaukee, Wis., U. S., 18th August, 1877, for 5 years.

Claim.—1st. An improved drill bit having three longitudinal or spiral flanges whose sides are in cross section of the shape shown d e, the said flanges being connected by a central core and being parallel to each other; 2nd. A twist or spiral drill constructed with the annular grinding line D upon the shank A at right angles to the longitudinal centre of the drill.

No. 7776. Improvements on Butter Workers.*(Perfectionnements aux appareils à apprêter le beurre.)*

Eugène Danseman, Verchères, Que., 18th August, 1877, for 5 years.

Claim.—The combination of the table A, lever B, pin C and eyebolt D.

No. 7777. Improvements in Ploughs.*(Perfectionnements dans les charrues.)*

Napoléon F. Patenaude, Sorel, Que., 18th August, 1877, for 5 years.

Claim.—1st. The contour form given to the mould board A; 2nd. The construction of the skeleton B (otherwise called land side) in two metal plates, the outer plate being of steel; 3rd. The unattached sole in combination with slotted lugs and the method of raising or depressing the sole by means of screws.

No. 7778. Improvements in Dredging Machines.*(Perfectionnements aux machines à draguer.)*

Charles O. Davis, Portland, Me., U. S., 18th August, 1877, for 5 years.

Claim.—1st. The combination with the rigid swinging crane A of the horizontal friction wheel D and a device for clamping said wheel; 2nd. The combination in dredging machinery of the chain M and the vertical rods or shafts that operate the buckets for holding the buckets down; 3rd. The combination of the chain J, slotted piece h, frame H, bars j and buckets G G and chain L; 4th. The combination of the chain J, the slotted piece h, frame H, chain L, sheaves m r, rods F, bars j and buckets G G; 5th. The combination of the tubular shafts E, rods F and buckets of a dredging machine; 6th. The combination of the shafts E, rods F, slotted piece h, bars j, buckets G G, frame H, guides D, chains J L M and crane A.

No. 7779. Improvements on Fare Registers.*(Perfectionnements aux registres des billets de passage.)*

William H. Hornum, New York, U. S., 18th August, 1877, for 5 years.

Claim.—1st. The combination in a fare register of a pawl and ratchet for preventing the registering mechanism from being turned backward, a registering mechanism, an alarm mechanism, a prime-mover common to both and a locking latch for preventing the alarm from being sounded while the registering mechanism is free to be turned to zero; 2nd. The combination in a fare register of a single trip register, a general register, a prime mover common to both, a pawl and ratchet for preventing the single trip register from being turned back, and a locking latch for preventing the general register from being moved while the single trip register is free to be turned to zero; 3rd. The combination in a fare register of a single trip register, a general register, an alarm, a prime mover common to all three, a pawl and ratchet for preventing the single trip register from being turned back, and a locking latch for preventing the general register and the alarm from being moved while the single trip register is free to be turned to zero; 4th. The combination with the locking latch, the alarm mechanism and the registering mechanism of a pawl for locking the latch of a projection cam or toe on

any part of the registering mechanism for releasing the locking latch automatically when the registering mechanism has been turned to zero; 5th. The combination in a fare register with a registering mechanism and alarm, a prime mover common to both, a locking latch, a pawl for retaining said locking latch, and a tooth of projection for releasing the locking latch of a zero stop to arrest the registering mechanism at the moment the locking slide is released; 6th. The combination in a fare register of a solid protector with the alarm bell or gong and with the sound openings in the sides of the case, said protector being provided with an opening in its top; 7th. The combination in a fare register of a registering mechanism, an alarm, a prime mover common to both and a dial K, indicating the number of times the register has turned to zero.

No. 7780. Trimmer and Braid Guide Attachment for Sewing Machines.*(Lames de machines à coudre.)*

Eleanor C. Sproul and Samuel S. Rickman, Hamilton, Ont., 18th August, 1877, for 5 years.

Claim.—1st. In combination with a sewing machine of the plate E, constructed with folder f, braider l j, cloth holder k and slots g m; 2nd. In combination with the plate E of the plate D, constructed with folder n and slots g corresponding with slots g of the plate F; 3rd. In combination with a sewing machine, of the plates E and D constructed and operated for braiding, hemming, tucking and binding.

No. 7781. Improvement in Lamps.*(Perfectionnement des lampes.)*

Abner Burbank, Ethan A. Chase and Douglas Hovey, Rochester, N. Y., U. S., 18th August, 1877, for 5 years.

Claim.—1st. An air injecting lamp constructed with air pipes A₁ A₂ enclosing the oil receptacle B, branch pipes A₂ A₃ provided with the injectors a a, and oil pipes D D connected at one end with the receiver C and at the other with the burners E E; 2nd. The combination with the transparent receptacle B constructed with the narrow neck d, of the shallow receiver C contracted at its top so as to embrace only the neck, leaving the whole body of the receptacle exposed; 3rd. The combination with the receptacle B and air pipes A₁ A₂ of the holder I; 4th. The combination with the burner E₁ and injecting tube or opening g, of the deflector p and screens h h.

No. 7782. Improvements on Car-Couplings.*(Perfectionnements aux attelages de wagons.)*

Charles Dobbs and Samuel L. Robinson, Millwood, Texas, U. S., 18th August, 1877, for 5 years.

Claim.—The combination of the projection c on top of the front end of the head d, flanges g, hooks e and bolts t, the head being cut away between the projection c and flanges g, so that the links or hooks can slip off sideways.

No. 7783. Steam Boiler Injector.*(Injecteur de chaudière à vapeur.)*

William T. Messenger, Boston, Mass., U. S., 18th August, 1877, for 5 years.

Claim.—1st. The movable and stationary nozzles provided with means of guiding the movable one rectilinearly and with an adjusting screw or screws; 2nd. The pump barrel and its valve case formed or made in one entire piece; 3rd. The pump educt and the chambered rear nozzle receiver formed or made in one entire piece; 4th. The movable nozzle provided with a valve and open chamber and notched head, in combination with an operative screw provided with a head neck and shoulder, and applied to the nozzle and case cap.

No. 7784. Improvements in Tobacco Pipes.*(Perfectionnements dans les pipes de tabac.)*

Samuel R. Dummer, Jersey, N. J., U. S., 18th August, 1877, for 5 years.

Claim.—1st. The bowl of a smoking pipe made wholly of tobacco or of tobacco mixed with the ingredients named or their equivalents, to prevent the two ready combustion of the bowl; 2nd. The combination of a screw-threaded socket provided with wing or wings a to hold it in place, and the bowl of a smoking pipe, the socket being of different material from the bowl.

No. 7785. Improvements on Ice Creepers.*(Perfectionnements aux crampons à glace.)*

Thomas Gunnsalus, West Troy, N. Y., U. S., 18th August, 1877, for 5 years.

Claim.—The body A, screw B, concave arms a having sharp edges b and central spur c, the latter projecting beyond the edges b, constructed and arranged as described.

No. 7786. Punching and Shearing Machine.*(Machine à poinçonner et découper.)*

Moritz Gluck, New York, U. S., 18th August, 1877, for 5 years.

Claim.—1st. The compound levers B C D, combined together in the frame A, in which are fixed their fulcrums b c d, the whole series of the said levers being coupled together by the cog gearing b c c d; 2nd. The cutting knife E, in combination with the compound levers B C and D; 3rd. The guard plate F attached to the side of the bed plate A by the screw f; 4th. The gauge G G; 5th. The punch stock H, in combination with the compound levers B C D; 6th. The adjustable attachment for the guide I to the bed plate by means of the bolts i and slots a; 7th. The adjustable punch die k formed with adjusting slots k and adjustably attached to the bed plate A by means of the bolts L and the said adjusting slots k, and the bed plate slots a² so as to centre the said die plate to the punch.

No. 7787. Improvements on Rotary Churns.*(Perfectionnements aux barattes rotatoires.)*

James Burbank, (Assignee of Maxime Caissé), Danville, Que., 18th August, 1877, for 5 years.

Claim.—The combination of the pipe P P passing through the hollow gudgeon G and the arm or stay A.