connected directly to the shell of the nose piece, having the integral a port 4, discharging laterally into the drum, a wall 8, having the adjustable rearwardly extending shank G, projection from said ends secured to the inlet pipe or tube 2, at opposite sides of the port adjustance rearwardly executing shall be protein a state end of said shalk constructed on its front face to be connected directly to a shell and constituting an auxiliary nose piece adapted to engage the nose of the user rearwardly of the plane of the lenses, whereby only one piece of metal is required for the usual and auxiliary nose pieces of each lens of the glasses, substantially as and for the purpose set forth. 2nd. In eye glasses or analogous devices, the lenses or lens frames, their studs D, and the intermediate bridge connected thereto, in combination, of a nose piece for each lens, conneeded thereto, in combination, or a mose piece for each lens, consisting of a substantially flat metallic piece as H, having an elongated forward portion a, extending in the plane of the lens, constructed at the upper end of its back face to be connected directly to the stud of the glasses and on its front face to be directly connected to a facing e, and constituting the usual front nose piece E, for engaging the front of the nose, a lateral shank, as G, integral with and projecting from the rear side of said portion a, in substantially the same plane therewith, and a rearward portion b, integral with and projecting from said shank, extending substantially parallel with said portion a, constructed on its front face to carry a facing f, and constituting an auxiliary nose piece F, said portions a, G and b, all constructed of one integral piece, substantially as and for the purpose set forth.

#### No. 42,525. Sole Sewing Machine.

(Machine à coudre les semelles.)

George Richard Peare, Lynn, Massachusetts, U.S.A., 8th April 1893; 6 years.

Claim.-1st. In a sole sewing machine, the following instrumentalities, viz: a horn spindle, as A', having a gear A', a toothed segment, a compound connection composed of rods and a spring and blocks, and means to actuate one of the said rods positively, substantially as described, the other rod transmitting its power to the stantially as described, the other rod transmitting its power to the segment in a yielding manner, for the purposes set forth, substantially as described. 2nd. In a sole sewing machine, a horn, a vertical horn spindle  $A^s$ , and the shaft c, in the horn, the gear  $c^2$  thereon, and the whirl actuating pinion connected to said shaft, combined with a clutch composed of separable members or parts constituting a yielding element of the looper train and adapted to yield one part with relation to the other upon undue obstruction of the rotation of the shaft c, by stoppage of the whirl actuating pinion, substantially as described. 3rd. The shaft  $A^s$ , its attached plate  $d^1$ , having dogs or projections 3, 4, arranged out of line with the diameter of the shaft  $A^s$ , and a plate d, and a spring to force it toward the plate  $d^1$ , said plate having conical recesses to receive the said the plate  $d^1$ , said plate having conical recesses to receive the said dogs or projections, combined with a horn and a shaft c therein, prorided with a gear  $c^2$ , to operate substantially as described. 4th. The combination, with a horn of a sole sewing machine, of a whirl actuating pinion therein having its shaft slotted at its lower end and threaded and a sleeve screwed thereon, as described, a rotating shaft ct, having a tongue to enter the slot of the said whirl actuating pinion, and the said sleeve, to operate substantially as described. 5th. A sole sewing machine horn and shafts e, e<sup>1</sup>, therein, and but. A sole sewing machine norm and sharts  $e, e^*$ , therein, and bevelled gears  $e, e^*$ , connecting them, combined with a bearing  $e^*$ , having an ear, and a bearing  $e^*$ , pivoted at  $e^*$ , to the said ear, and with a tipping bearing  $e^*$  for the lower end of the shaft e, substantially as described. 6th. A sewing machine horn having shafts  $e, e^*$ , gearing connecting the said shafts, and a thread support e, and tension devices the said horn being alread at its argument e. sion device, the said horn being closed at its concave side and being open at its convex side from at or near a point opposite the said open at its convex side from at or near a point opposite the said gears to a point below the tension device, as and for the purpose set forth, substantially as described. 7th. A sewing machine horn having its concaved side from its tip to the base closed, a solid portion of the horn nearer its concaved face being provided with a thread hole, as and for the purpose set forth, substantially as described.

## No. 42,526. Stock Cutter. (Tranche rotatoire.)

Isaiah Hardee, Burke, Texas, U.S.A., 10th April, 1893; 6 years.

Claim.—1st. A rotary stock cutter comprising a hub adapted to be secured to a spindle, a disc formed on the said hub and provided with a flange, a set of cutters seated in the said disc and abutting against the said flange, a middle disc placed on the said first named disc and containing a set of cutters arranged alternately with the cutters of the said first named disc, and a third disc fitting into the cutters of the said first named disc, and a tiffic disc fitting into the middle or second disc and also provided with a flange and sets of cutters, substantially as shown and described. 2nd. A rotary stock cutter comprising a hub adapted to be secured to a spindle, a disk formed on the said hub and provided with a flange, a set of cutters seated in the said disc and abutting against the said flange, a middle disc placed on the said first named disc and containing a set of cutters arranged alternately with the cutters of the said first named disc and stind all discussions. disc, and a third disc fitting into the middle or second disc and also provided with a flange and sets of cutters and bolts for fastening the several discs together, as set forth.

#### No. 42,527. Drum for Hot Air Furnaces.

(Dôme pour fournaises à air chaud.)

John Alfred Crossman and John Alfred Laws, both of Amherst, Nova Scotia, Canada, 10th April, 1893; 6 years.

Claim.—1st. A drum heater comprising the external wall 5 an inlet pipe or tube 2, closed at the top by a cap 3, and provided with

ends secured to the inlet pipe or tube 2, at opposite sides of the port 4, and following the external wall parallel and heads 12, at both ends covering the smoke space or divided flue 7, whereby the wall of the inlet pipe or tube and the wall 8, of the smoke passages 7 form a circulating air space 6, and said space divides the volume of smoke in passing through the drum, as set forth. 2nd. An oval smore in passing through the drum, as set forth. 2nd An overshaped drum having in cross section a horse shoe shape circulating air space 6, extending from end to end of the drum and a central inlet pipe or tube 2, closed at the upper end and provided with a cap 3, and having a port 4, oppositely to said space, and an outlet 9, located at the greater distance from said port, as set forth. 3rd. The combination with a stove A, of a hot air furnace, of a drum attached to the smoke pipe or connecting with the smoke outlets, said drum having a tubular inlet 2 passing through a upper space. said drum having a tubular inlet 2, passing through an open space 6, and closed at the upper end, and provided with a port 4, discharging laterally into the drum and 11 ing laterally into the drum and having a divided flue 7 around said air space as set footh. air space, as set forth.

# No. 42,528. Spring Tyres and Apparatus for their Manufacture. (Bandage à ressort et appareil de fabrication.)

John Boyd Dunlop, sr., and John Boyd Dunlop, jr., Blackrock Dublin, Ireland, 10th April, 1893; 6 years.

Claim.—1st. The combination with a wheel having a rigid rim, of a spring tyre made up of rows of elastic blocks secured at intervals on the rim, and bands of canvas wrapped round each said row of blocks, substantially as and for the purpose specified. 2nd. The combination with a wheel having a flexible rim, of a spring tyre made up of rows of elastic blocks secured at intervals on the rim, and bands of canvas wrapped round each said row of blocks, substantially as described for the purpose specified. 3rd. The combination with a whool of booking the bands of the bands of booking the bands of blocks, substantially as described for the purpose specified. tion with a wheel, of bands of canvas broader than and secured to the rim thereof, a row of blocks of indiarubber secured at intervals to said row of blocks, substantially as and for the purposes specified.

4th. The combination with a wheel, of bands of canvas secured at intervals on the rim thereof, blocks of indiarubler secured to the said canvas bands, other bands and blocks secured outside the inner row, and an outer band of canvas and indiarubber furnished with projecting contral ridge or ridges, substantially as described for the purpose specified. 5th. The combination with a wheel of bands of canyas secured on the size Markovich and the secured of the se canvas secured on the rim, blocks of rubber secured at intervals to the said bands, an outer canyas band covered with indiarubber to form the thread surfaces of the wheel, and side strips of rubber or other suitable material to cover the spaces between the blocks, substantially as described for the spaces between the blocks, substantially as described for the spaces between the blocks, substantially as described for the spaces between the blocks, substantially as described for the spaces between the blocks. stantially as described for the purpose specified. 6th. The combination with a wheel having a rigid corrugated or castellated rim, of hands of canyon with a wheel having a rigid corrugated or castellated rim, or hands of canyon when the control of canyon with the cany bands of canvas secured thereon, and a row of blocks of indiarubber secured at intervals in said bands, and other bands of canvas placed outside said row of blocks, substantially as described and for the purpose specified. 7th. In the manufacture of a spring rim of tyre having blocks of rubber or the like spaced at intervals on the rim of a wheel, the employment of a flat disc of larger diameter than the rim of the wheel and having projections on the sides there of of the shape, size and position of the desired spaces between the blocks to be placed on the rim of the wheel, substantially as described for the arrange particle. cribed for the purpose specified.

# No. 42,529. Handle. (Manche.)

Nelson Hindley Prouty, Charlton, Massachusetts, U.S.A., 10th April, 1893; 6 years.

Claim.—As an improved article of manufacture, a handle, con sisting of a disc, or circular plate, provided with holes or openings in the edge thereof, and a coiled wire extending around the edge of said disc, and received the said disc, and received the said disc. said disc, and passing through the holes therein, substantially as shown and described.

## No. 42,530. Aerator and Cooler for Milk and Cress.

(Garde-lait et crème aérateur.)

Patrick Star Ryan, Rutland, Vermont, U.S.A., 10th April, 1893; 6 years.

Claim.—1st. A cream and milk cooling apparatus, consisting of a shallow vessel having a closed water chamber formed under it. and formed above the level of the top of the sides of the said water to the said overflow being formed above the level of the top of the sides of the said shallow vessel, an air occasion to the said shallow vessel. vessel, an air escape tube permitting the water to enter the chamber and means for agitating the water in the said chamber, substantially as set forth. 2nd. In a granu and mile the said chamber, substantially as set forth. as set forth. 2nd. In a cream and milk cooling apparatus, the combination with a milk-order of the contraction of the contraction with a milk-order of the contraction of bination with a milk vat C, of the water chamber A, D, air escape tube E, and overflow T, substantially as set forth. 3rd. In a cream or milk cooling apparatus, the cooling apparatus apparatus apparatus, the cooling apparatus appar milk cooling apparatus, the combination with the vat C, and water chamber A, of the cylindrical chamber H, having a cover I, having a perforated raised ring I, an ice pounder consisting of a perforated cone n, and rod N the said water and the control of the cylindrical cone in the cone n, and rod N, the said rod passing through a perforation in the said cover, substantially as set forth. 4th. In a cream and milk cooling apparatus, the combination with a milk vat, having a water chamber formed under and around the sides of the blades on the chamber formed under and around the sides of the blades p, on the vertical red () admits a few points and provided the sides of the blades p, on the vertical red () admits a few points and provided the sides of the blades p, on the vertical red () admits a few points and provided the sides of the blades p, on the vertical red () admits a few points and provided the sides of the blades p, on the vertical red () admits a few points and provided the sides of the blades p, on the vertical red () admits a few points and points a few points are the vertical red () admits a few points and points a few points are the vertical red () admit vertical rod Q, adapted to rotate in the said water chamber, the air escape tubes E, connected to the said water chamber and the overflow tube T, substantially as set forth.