

bination for the purposes set forth: 2nd. The grooves H, H', and stop pin J of the cradle, as described, which cradle is made separable or fixed acting in combination with the parts of the chair set forth in the first claim, the chair and cradle working together, as described, or in any other manner substantially the same.

No. 4413. JOHN GRIST, jr., Ottawa, Ont., (Assignee of A. Huber) 22nd February, 1875, for 5 years: "Improvements on Mirrors." (Perfectionnements aux miroirs.)

*Claim.*—1st. Coating the silvering of a mirror plate with a water proof material or liquid B, and a covering of cement or calcined gypsum C, applied in a plastic state to harden therein when dry for the purpose set forth: 2nd. Securing a mirror plate A, or picture in a frame D, by a backing of cement or calcined gypsum C, applied in a plastic state to adhere to the plate and frame when dry, as set forth.

No. 4414. JOHN M. BRUCE, West-Townsend, MASSENA M. HEATH and GEORGE E. UNDERWOOD, Ayer, Mass., U. S., 22nd February, 1875, for 5 years: "Improvements on Street Lanterns." (Perfectionnements aux lanternes de rues.)

*Claim.*—The combination of the posts B and B', the lantern L, chains D, D', and counter weights, all operating together as described.

No. 4415. JOHN M. BROSIUS, and SAMUEL K. CAMPBELL, Richmond, Va., U. S., 22nd February, 1875, for 5 years: "Car Axle Box." (Boîte d'essieu de wagon.)

*Claim.*—1st. The combination with axle box, of a journal gate E, having excisions e, e', and the guide groove E', having inclined strips e', e', placed in the lower end, as set forth: 2nd. The plate F, projecting inwardly from the rear of the axle box, as specified: 3rd. The combination, with an axle box having the annular recess or groove a, of the elastic ring I, as set forth: 4th. The combination with axle box of a device to hold the lubricating fabric to the journal consisting of the plate spring K, placed longitudinally on the bottom of the box, fastened at the outer end, and the cross bar K', as described: 5th. The combination, with lubricating fabric J, of the slotted holder J', and guide plate J'', as described: 6th. The combination with spring band K, of a pivoted fabric-holder M, as specified.

No. 4416. THOMAS SULLIVAN, Belleville, Ont., 22nd February, 1875, (Extension of Patent No. 256), for 5 years: "Tire Upsetting Machine." (Machine à refouler les bandages de roues.)

*Claim.*—The arrangement and combination of the various parts of the machine, viz. the moveable bed plate C, being drawn towards the fixed bed plate B, by the application of the lever N, to the curved rack I, the eccentrics D, D', to hold the tire to be shortened firmly to the bed plates B and C.

No. 4417. DAVID S. CORNELL, WARWICK, and ELI B. WHITE, Bosanquet, Ont., 23rd February, 1875, for 5 years: "Straw-Cutter." (Hache-paille.)

*Claim.*—1st. The post C, secured to the box and legs of the machine by horizontal bars D, in combination with a diagonal knife holder connected thereto by end pivots I, bars G, and having a suitable handle F, for operating the knife P, as set forth: 2nd. Providing the bars G, with an adjustable block J, operated by set screws K, for gauging the feed-cut, as set forth: 3rd. The combination of the frame M, rod a, spring N, and treadle Q, operating as set forth, for depressing the feed roller or block L, in the cutting box A, as described.

No. 4418. ALEXANDER RODGERS, Muskegon, Mich., U. S., 23rd February, 1875, for 5 years: "Circular Saw Carriage." (Table mobile de scie ronde.)

*Claim.*—1st. The supplementary rack D, in combination with the head block B: 2nd. The stops E, upon the rack D, in combination with the stops Q, upon the head block B: 3rd. The disengaging rack L, in combination with the setting jack C, and adjusting lever F: 4th. The reciprocating rack G, in combination with the setting shaft O, provided with the tooth H: 5th. The cam I, operated by the hand lever, in combination with the toothed arc J, and setting rack G: 6th. The flat form S, in combination with the device for retracting the setting jacks: 7th. The dogs V, provided with the rubber cushions g, in combination with the oscillating

posts V, and setting jack C: 8th. The setting shafts N, and O provided with the adjustable couplings, as described, for the purpose of regulating the relative positions of their pinions or other operating devices, as set forth.

No. 4419. THOMAS PENTON, Sarnia, Ont., 23rd February, 1875, for 5 years: "Combination of a Steam Engine with a Cooking Stove." (Ajutage d'une machine à vapeur à un poêle de cuisine.)

*Claim.*—The combination of the steam boiler B, engine D, and connecting pipe K, with the parts of cooking stove A, C, E, and F, as set forth.

No. 4420. LEWIS M. BECKER, Peckham, Eng., 23rd February, 1875, for 5 years: "Improvements on Sewing Machines." (Perfectionnements aux machines à coudre.)

*Claim.*—1st. The adaptation to and use in sewing machine spools and shuttles of cotton thread or other sewing material a, ready wound or spooled in appropriate forms, as described, upon perforated card or other material b or upon bobbins c, such perforated card or other material c, bobbins as the case may be, being arranged to enter and be retained within the pool d, e, e', or shuttles f, of such machine, as set forth: 2nd. The construction of sewing machine spools in which the two discs or plates d, f, can be readily separated and the sewing material a, previously wound into an appropriate form placed upon the shank or body e, of the spool between the two discs as described: 3rd. The methods of securing bobbins c, of ready wound sewing material a, in the shuttles f, of sewing machines, as described: 4th. The application and use in combination with the reel n, and fixed spindle or pillar o, in a sewing machine of a guide m, for equalizing the tension or strain upon the cotton or sewing material a, as described.

No. 4421. BENJAMIN WAGGONER, Reach, Ont., 23rd February, 1875, for 5 years: "Improvements on Gang Ploughs." (Perfectionnements aux charrues à socs multiples.)

*Claim.*—The use of the swivel axle D, for the front wheel of gang ploughs so constructed as in turning to bear against the crank E, as set forth: 2nd. The use of an adjustable coupling K, connecting the handle G, with the crank H, of the back wheel as set forth: 3rd. The use of the swivel box N, and the jointed arm L, L', in connection with each other, as set forth.

No. 4422. BENJAMIN WAGGONER, Reach, Ont., 23rd February, 1875, for 5 years: "Iron Neck Yoke." (Jongen fer.)

*Claim.*—1st. The mode of constructing neck yokes out of bar iron in the shape shown in the drawings: 2nd. The use of the ferule E, as applied to iron neck yokes as set forth.

No. 4423. JAMES F. WILLIAMS, Niagara, Ont., 23rd February, 1875, (Extension of Patent No. 257,) for 5 years: "Boot and Shoe Latchet Loop." (Bride de lacet de chaussures.)

*Claim.*—The use of loops A, arranged to intervene each other on each side of the opening to be closed to receive a string C; also the application to the loops A, of an external metallic band to be rivetted or otherwise fastened to the sides of the opening to be laced for strengthening the loop and ornamenting the boot or shoe: also the application to boots and shoes for the purpose of fastening of independent loops, to be attached to the sides of the opening to be closed to receive the lacing string C, in the manner substantially as described and set forth.

No. 4424. JOSEPH H. OSGOOD, Boston, Mass., U. S., 24th February, 1875, for 5 years: "Composition for Printers Inking Rollers." (Composition pour les rouleaux de distribution de l'encre d'imprimerie.)

*Claim.*—1st. The process described for making a granular composition on to be cast into printers inking rollers or melted for an adhesive cement, the same consisting in combining glue, water and saccharine matter without the application of heat, in the manner set forth: 2nd. The granular composition described, consisting of glue, water and saccharine matter for the purpose specified.

No. 4425. FINIS L. BATES, Carrollton, Mis., U. S., 24th February, 1875, for 5 years: "Nut-lock." (Noix de sûreté.)

*Claim.*—A nut having its threaded portion extending partly through the aperture, in combination with an ordinary screw-bolt, so that when the nut is applied the wrenut portion of the aperture of the nut will strip one or more threads from the bolt, as specified.