

connected respectively with the accumulator-operating-wheels, two sliding clutches mounted upon the axle and arranged to rotate therewith, and adapted to respectively engage with, and disengage from the accumulator-operating-wheels, means for operating such clutches, and means for controlling the rotation of the accumulator-operating-wheels. 2nd. The combination of the car frame, the car axle provided with fixed car wheels, two power-accumulator-operating-wheels loosely mounted upon such axle, the connecting wheel engaging with the accumulator-operating-wheels, two reversely arranged power accumulator devices, each fixed to the car frame and connected respectively with the accumulator-operating-wheels, two sliding clutches mounted upon the axle and provided respectively with means whereby the clutches are compelled to rotate with the axle, each in a direction reverse to the other and are allowed to slip respectively in the reverse directions.

No. 37,289. Pattern Chart.

(*Patron pour tracer les vêtements.*)

Samuel Gilbert Crow, Toronto, Ontario, Canada, 2nd September, 1891; 5 years.

Claim.—A plate, having a straight edge on one side marked with a double rule, commencing, one from each end, the opposite edge of the plate being curved and three curved openings made in the said plate to form the graded arms eye the shoulder and darts, the under arm seam and the side form, substantially as and for the purpose specified.

No. 37,290. Treadle Mechanism for Bicycles and Tricycles. (*Mécanisme pour pédales de bicyclette ou tricycle.*)

John Trebilcock, Ann Trebilcock and William Henry Kent, all of Toronto, Ontario, Canada, 2nd September, 1891; 5 years.

Claim.—A treadle journaled on the axle to which the bicycle-wheel is fixed, a heel formed on the said treadle, on which heel a beveled or mitred pinion is journaled, the said pinion meshing or engaging with a bevelled or mitred pinion fixed to the face of the fork and surrounding the axle, and with a pinion fixed to the said axle, substantially as and for the purpose specified.

No. 37,291. Method of Producing Artificial Cold. (*Méthode de produire du froid artificiel.*)

Flavius Paul Stiker, Buffalo, New York, U.S.A., 2nd September, 1891; 5 years.

Claim.—1st. The production of artificial cold for the manufacture of ice or for refrigerating purposes, by the use of the expansion of natural gas from its natural pressure or any portion thereof, to any lower pressure. 2nd. The use of natural gas, as a new agent for the production of artificial cold for the manufacture of ice or for refrigerating purposes. 3rd. The herein described mode of producing artificial cold, consisting in taking natural gas at its normal pressure and temperature as it issues from the earth into a suitable expanding apparatus, thereby expanding it from its normal pressure to a lower pressure, substantially as described.

No. 37,292. Pocket Book. (*Portefeuille.*)

Frederick Lieker, New York, State of New York, U.S.A., 2nd September, 1891; 5 years.

Claim.—A pocket book, composed of a flat bottom *a*, and four upwardly projecting sides *a*¹, *a*², *a*³, *a*⁴, connected at the corners to constitute a box, the sides *a*¹, *a*², being creased from the top diagonally downwards and the side *a*³, being provided with a flap, that overlaps the side *a*¹, when the pocket book is closed, substantially as specified.

No. 37,293. Turning Lathe. (*Tour à tourner.*)

Gustaf Adolf Brodin, Stockholm, Sweden, 2nd September, 1891; 5 years.

Claim.—1st. An oval-turning lathe, provided with two headstocks having chucks facing each other, the elliptical motion of each chuck being effected by a slotted ring in which works a block fixed to the chuck, the said ring being fixed to a slide arranged on the headstock, the said slide being provided with an adjusting screw for adjusting the ring on the slide, so that by properly adjusting the respective rings of the headstocks articles can be turned of different oval shapes at both ends or the longitudinal axes of the ovals determined by both the headstocks may lie in different planes. 2nd. An oval-turning lathe provided with only one headstock, arranged as described, in claim 1, for the purpose set forth.

No. 37,294. Safety Device for Use in Milking Cows. (*Appareil de sûreté à l'usage de traire les vaches.*)

Christopher Columbus Palmer, Bantam, Connecticut, U.S.A., 3rd September, 1891; 5 years.

Claim.—1st. In a safety device for milking cows, the combination of the movable frame consisting of the two stanchions and the top cross-piece, the removable fender-board held by the side pieces, the sliding and adjustable foot-rail, the locking levers *k*, pivoted to said side pieces and adapted to hold said foot-rail in adjustment, and the shelf or pail rest in front of and supported by said side pieces or arms therein, substantially as specified. 2nd. The device for the purpose herein described, comprising the frame supported on rollers and suspended from an overhead support, said frame having the fender-board removably held in slots in the side pieces thereof, the adjustable and sliding foot-rail, and the shelf or pail-rest supported by said side pieces or arms thereof, together with a back strap or cord, substantially as specified.

No. 37,295. Harrow. (*Herse.*)

Oscar Tower, Wilson, New York, U.S.A., 3rd September, 1891; 5 years.

Claim.—In a harrow, the hinged frames A, B, provided with detachable bars D, in combination with suitable teeth, and means for adjustably and removably connecting them to the bars, consisting of the clamping-plates H, having the slotted flanges *h*, and the clamps I, substantially as and for the purpose set forth.

No. 37,296. Hot Air Furnace. (*Calorifère à air.*)

George A. Wells, Oskaloosa, Iowa, U. S. A., 3rd September, 1891; 5 years.

Claim.—1st. In a hot air furnace, the combination of a fuel-chamber, a damper-box located above and communicating therewith, an exterior pipe connecting the lower part of said chamber with the damper-box, a partition having an opening, and being located in said box, and a damper so pivoted as to alternately close the pipe and opening in the partition, whereby an indirect or direct draft may be created in the manner and for the purpose, substantially as described. 2nd. In a hot air furnace, the combination, with a fire-chamber, of a hollow lining upon the sides thereof, forming an air-space between the lining and the walls of the fire-chamber, said lining being provided with openings in its side and bottom, and a damper commanding the openings in the bottom in the manner and for the purpose, substantially as described. 3rd. In a hot air furnace, the combination of a lining, an air-chamber behind the latter and having perforations through which the air is conducted behind said lining, and a water boiler around which the air passes from behind said lining, as and for the purpose set forth. 4th. In a hot air furnace, the combination of a fire-chamber having a damper-box above it, provided with a dampered inlet opening, a smoke-pipe leading out of said box, a partition having an opening and interposed between the top and bottom, an external pipe leading from the lower part of the furnace to the damper-box, and a pivoted damper located in said box and adapted to alternately close the openings in said partition, and said pipe all arranged and adapted to operate in the manner and for the purpose, substantially as described.

No. 37,297. Tool Box. (*Nécessaire à outils.*)

Charles O. Hescocx, Tacoma, Washington, U. S. A., 3rd September, 1891; 5 years.

Claim.—1st. The combination, with the tube holding box of the graduated tubes, and the false bottom formed by a thick block of wood adapted to have sockets of greater or less depth bored into it in continuation of the sockets formed by the tubes. 2nd. The combination, with the tube holding box of the graduated tubes, and the false bottom having its parts beneath the respective tubes shaped to form with said tubes pockets of different depth, as explained. 3rd. In a tool holding box, the combination of the box A, the graduated tubes E, and the pocket H, with the false bottom F, of irregular shape, adapted to support the tops of the tubes and pockets on the same level, as herein set forth. 4th. A tool holding box provided with a series of tubes graduated in diameter and length and arranged in order of their size, and a false bottom of irregular shape supporting said tubes, whereby a series of tool holding pockets X, are formed which are also graduated in diameter and length, substantially as herein set forth.

No. 37,298. Convertible Chair for Children. (*Fauteuil brisé pour enfants.*)

Adolph Ostlund, Centerville, Iowa, U. S. A., 3rd September, 1891; 5 years.

Claim.—1st. In a convertible chair, the frame having cleats on its inner face and extending the length of the same, an extension integral with said frame, and in the rear thereof, a rocking chair mounted thereon and provided with an opening in the seat thereof, springs and guides on the bottom of the chair for retaining the same in place on the frame, and a foot rest slidably supported on the cleats below the chair, having spring catches in one end to retain the same in a stationary position, substantially as described. 2nd. In a convertible chair, a base, a rocking chair mounted thereon, means for holding the rocker in alignment with the base, a tray pivotally connected by links with the chair rockers and adapted to be lowered to the plane of the chair seat, cleats on the inner face of the base extending the length thereof, and a foot rest having a sliding and locking engagement with said base and adapted to be turned to and retained in a vertical position to support said tray in its low position, substantially as described. 3rd. In a convertible chair, a supporting base, a foot rest sliding thereon and adapted to be turned to and retained in a vertical position, a rocking chair provided with a seat, having a semicircular opening in the forward outer edge, means for holding the said chair in alignment with and in fixed position on said base, a tray provided in its inner edge with a semicircular opening, and linked pivotal connection between said tray and rocker frame, whereby said tray may be lowered to the plane of the chair seat and be supported by the foot rest, substantially as described.

No. 37,299. Machine for Making Wire Ties for Bales, etc. (*Machine pour faire des liens en fer pour les ballots, etc.*)

Ovide Lamothe, St. Guillaume, Quebec, Canada, 3rd September, 1891; 5 years.

Claim.—1st. A machine for making wire bale ties, consisting of the twisting mechanism K, the said twisting mechanism consisting of plates 76, having a guide 77, a pin 78, suitably operated, a segmental slot in said plate, a pin 82, sliding in said slot, and means for operating the said pin, grippers M, cutting mechanism N, the