

No. 31,269. Tea and Coffee Pot.*(Théière et cafetière.)*

Arthur H. Bowman, London, Eng., 4th May, 1889; 5 years.

Claim.—1st. An improved detachable strainer of extended surface projecting into and suitable for a tea or coffee pot or similar vessel, and provided with a spring pin or fingers adapted to seize upon the base of the spout of the said vessel, so as to retain the strainer in place until it is desired to remove it. 2nd. The combination of a close meshed strainer of extended surface, with a spring-pressed pin D provided with a pivoted finger or claw E to pass through a small aperture, and thereby automatically lock the strainer in place.

No. 31,270. Apparatus for Automatic Control of Combustion in Hot Water and Hot Air Heating Apparatus. *(Appareil de contrôle automatique de la combustion dans les calorifères à eau et à air.)*

J. Charles F. Atsatt, Mattapoisett, Mass., U.S., 4th May, 1889; 5 years.

Claim.—An automatic damper regulator, consisting of chamber b, bowl i, diaphragm h, lever l, weight m and wire d, all formed and arranged substantially as and for the purpose described.

No. 31,271. Rotary Harrow. *(Herse rotatoire.)*

Ira E. Stump, Richville, Ohio, U.S., 4th May, 1889; 5 years.

Claim.—1st. The combination of the frame A, provided with the castings D, the spindles E having located upon their lower ends the rotating harrows J, the screws F provided with the handles G, the lifting lugs H and the driving lugs M, substantially as and for the purpose specified. 2nd. The combination of the frame A, the wheel B, the castings D, the screws F, the spindles E having located upon their lower ends the rotating harrows J, and the draft rod P connecting the lifting lugs H and the draft strap O, substantially as and for the purpose specified. 3rd. The combination of the frame A, the wheels B provided with secondary rims, and the driving lugs M adapted to move in radial slots, and to engage with the teeth of the harrow J, substantially as and for the purpose specified. 4th. The combination of the pole W, provided with the slot I, the double-tree S provided with the slot R, the draft strap O and the draft rods P, substantially as and for the purpose described.

No. 31,272. Clothes Drier. *(Séchoir à linge.)*

John L. Lincoln, Chicago, Ill., U.S., 4th May, 1889; 5 years.

Claim.—An improvement in compartment clothes driers, consisting of the wall supports C, D, and guide-rods K attached thereto, in combination with the line-bars H, I, provided with eye-bolts L operating on the rods, the double pulleys F, E, single pulleys G and lines J, the cords M attached to the bars I running over pulleys G and F, and attached to bar O, separate cords N attached to the bar H passing over pulleys E and attached to bar O, and the bar R suspended from the bar O by cords Q, and the stop-pins V for elevating, lowering and holding the lines, as specified.

No. 31,273. Machine for Uprooting Trees.*(Machine à déraciner les arbres.)*

John F. Foulke, Philadelphia, Penn., U.S., 4th May, 1889; 5 years.

Claim.—1st. As a device for overturning trees, a triangular truss or frame having one of its sides adapted to be secured to a tree trunk, in combination with a lifting device connected and applied to the free end of the said triangular truss. 2nd. In a device for overturning trees, substantially as described, the combination of the triangular truss and lifting jack, constructed and adapted for use as shown and specified, with a carriage A having bearings t whereon to balance and turn the jack frame, and bent lever P, whereby to elevate and balance the strut or the triangular frame, all as and for the purpose specified.

No. 31,274. Gasometer. *(Gazomètre.)*

Wilberforce B. Hammond, Boston, Mass., U.S., 4th May, 1889; 5 years.

Claim.—1st. In a gasometer, the combination, with a cistern, of an inverted holder adapted to rise and fall therein, guides spaced at governing points about said holder and attached thereto, and connected shafting mounted upon the cistern, each member of said shafting being operated by, or geared to, one of said guides, whereby a motion of parallel translation of the holder is assured at all periods of its rise and fall, substantially as described. 2nd. In a gasometer, the combination, with a cistern, of an inverted holder adapted to rise and fall therein, rack bars spaced at governing points about said holder, and attached thereto, and connected shafting mounted upon the cistern, each member of said shafting being provided with a sprocket wheel intermeshing with one of the rack bars, substantially as described.

No. 31,275. Railway Car Coupling.*(Atelage de chars de chemin de fer.)*

Donald Ross, Humphry, Ont., 4th May, 1889; 5 years.

Claim.—In a car coupling bumper W, spring A, and pin E, all formed and combined as and for the purpose hereinbefore set forth.

No. 31,276. Clothes Stick. *(Mouvette à linge.)*

William H. Scott and Hester V. Hardy, Toronto, Ont., 7th May, 1889; 5 years.

Claim.—A clothes-stick composed of a pair of scissor-jointed stick held apart by the action of a spring, in such a manner that it is open in its normal position, and may be closed by a single grasp of the hand, substantially as and for the purpose specified.

No. 31,277. Indexing. *(Mode d'index.)*

George Dugan, (assignee of Robert M. Rigby), Kansas, Mo., U.S., 7th May, 1889; 5 years.

Claim.—In a combined book and index, the combination, with a book provided with a leaf C free of the book cover to its rear edge, of an index provided with a leaf or cover F, the free edge of the latter being flexibly united to the free edge of the leaf C, whereby the index is independent of the book cover, and may be inserted and confined between the book cover and the leaf C with the front edges of the leaves outermost, substantially as described.

No. 31,278. Tension Regulator for Spinning Machines. *(Régulateur de tension pour machines à filer.)*

Patrick L. Kenney and Louis C. Werner, Pittsfield, Mass., U.S., 7th May, 1889; 5 years.

Claim.—1st. The combination, with the cylinder or drum B, the whirls D, and the band L, of the bracket E, and the swinging arm G provided with idler pulleys I, substantially as and for the purpose specified. 2nd. The combination, with the cylinder or drum B, the whirls D, and the band L, of the brackets E, provided with downwardly inclined arms e, et, the removable collar H, the swinging arm G, and the idler pulleys I, substantially as specified. 3rd. The combination with the cylinder B, the whirls D, and the band L, of the castings provided with sockets f, the brackets E provided with vertical arms e and having downwardly inclined arms e, et, the swinging arm G provided with a collar H, and the adjustable idler whirls I provided with collars M, substantially as specified. 4th. The combination, with the cylinder B, the whirls D, and the band L, of the brackets E having arms e, et, the collar H, the swinging arm G provided at the other end with an eye K, the adjusting bolt a, the conical washer k, and the idler pulleys I, substantially as specified. 5th. The combination, with the cylinder B, the whirls D, and the band L passing around the same, of the bracket, the swinging arm G provided with idler-pulleys I around which the said band passes, and the weight O provided with a set-screw n, substantially as specified. 6th. The combination, with the cylinder B, the whirls D, and the band L, of the bracket E provided with an inclined supporting arm e, the swinging arm G, the adjustable collars M, M provided with the vertical bolts m, and the idler pulleys I, substantially as specified.

No. 31,279. Stove and Range Grate.*(Grille de poêle et de lan tier.)*

Charles D. Chown and Henry Cunningham, (assignees of William King), Kingston, Ont., 7th May, 1889; 5 years.

Claim.—1st. The combination of the fixed frame section A, the shaking grate section B having a central opening B₁, and the dumping section C having gudgeons C₁, C₂ journaled through the ends of section A, whereby the dumping section C when rocked lifts section B in a horizontal plane to effect shaking, and section C when released from section B falls edgewise clear of the opening B₂ to effect dumping, as set forth. 2nd. A cooking stove or range grate, comprising a frame section A having drop ends A₁, provided with vertical guide grooves A₂, a grate section B having a central opening B₂, and lugs B₁ coinciding with the grooves A₂, and provided with projections B₃, B₄, and a dumping section C having gudgeons C₁, C₂ journaled through the ends A₁, and provided with cams C₂ for lifting section B horizontally to shake the grate by a rising and falling movement and to allow section C to drop away clear of the opening B₂ in dumping, as set forth.

No. 31,280. Pneumatic Railway Signal.*(Signal pneumatique de chemin de fer.)*

John K. Leedy, Toms Brook, Noah W. Solenberger and German Smith, Winchester, Va., U.S., 7th May, 1889; 5 years.

Claim.—1st. The combination, with pneumatic signals mounted on posts and communicating with signals in remote stations, of signal arrows fixed to said posts and pointing in opposite directions, substantially in the manner and for the purpose described. 2nd. A pneumatic signal composed of an opaque cylinder, a superimposed transparent cylinder, a guiding cylinder or band, and a colored vertically movable signal provided with a valve stem, and a valve adapted to close against a seat when the colored signal is raised and exposed to view, substantially as described. 3rd. The combination of an opaque cylinder, a transparent cylinder, an enlarged vertically movable visible signal, a pneumatic tube, and a valve, substantially in the manner and for the purposes described.

No. 31,281. Everer for Vehicles.*(Volée d'arrière de voiture.)*

Alfred G. Brown, Egan, Dak., and Ervin G. Boynton, LaCrosse, Wis., U.S., 7th May, 1889; 5 years.

Claim.—In a draft-equalizer, a vehicle pole having a draft-plate secured to its inner end, provided with a series of perforations and projecting outward at one side of said pole, an everer centrally pivoted thereto, one end of which is secured by rings, links, and a rod to a long everer that is horizontally pivoted to a short everer which is connected by rings, links, and a rod to the short everer on said plate, the outer ends on each everer being provided with draft-clevises, a flat connecting-rod connected to the pivot-bolt of the long and short levers, and longitudinally adjustable by central perforations and bolts, and its opposite end connected in a diagonal line by clip-strap to a vehicle, substantially as shown and described.

No. 31,282. Motor for Launches and other Boats or Vessels. *(Moteur pour les chaloupes et autres bâtiments ou vaisseaux.)*

Charles Desmarais, St. Jean, Qué., 7th May, 1889; 5 years.

Réclame.—1o. Dans un appareil moteur pour les chaloupes, la combinaison avec les bras ou tiges A, A', avec les plaques ou pelles B, B',