

formed between the gear wheel F and counter-shaft and operated by a cam, substantially as and for the purpose specified. 8th. In a hoisting machine, a friction clutch formed by a conically recessed disc having a paper lining pressed into it, in combination with a metal disc having a conical flange formed on it to fit into the paper-lined disc, as specified. 9th. In a hoisting machine, in which the rope drum is so connected to its shaft that it may revolve freely on it, the combination of speeded gearing arranged to connect the rope drum to its shaft, so that the speed of the drum shall be greater than its shaft, the said gearing being provided with clutches so that the connection between the drum and shaft may be disconnected at pleasure.

No. 18,861. Vapour Burner. (Fournneau à Hydrocarbures.)

David E. Bangs, Medford, Mass., U. S., 13th March, 1884; 5 years.

Claim.—1st. The combination of the steam-generator tube, the superheater tube connecting therewith, the vaporizing tubes with one of which the steam generator communicates, means for introducing hydro-carbons into said vaporizing tubes, and the burner tube communicating with the vaporizing tubes and located below the steam and vaporizing tubes, and provided with jet opening for directing the flame-jet directly against the steam vaporizing tubes, substantially as described. 2nd. The combination of the steam generator tube, the vaporizing tubes, means for supplying hydro-carbons to said tubes, the superheater tube communicating with the steam generator tubes and with the vaporizing tubes, at a point where as it enters the vaporizing tube, and the burner tube communicating with the vaporizing tubes and located at a point to direct the flame against both the steam and vaporizing tubes, substantially as described.

No. 18,862. Rotary Ventilating Fan. (Eeventail Rotatoire.)

Wright D. Smith, Detroit, Mich., U. S., 13th March, 1884; 5 years.

Claim.—1st. In combination with the base A and case B of a rotary fan, the hanger C for supporting the fan case and fan shaft, substantially as described. 2nd. In a rotary fan, the combination of the base A, case B, hanger C, shaft D, hub or disk E and spiral blades F, when constructed, arranged and operating, substantially in the manner and for the purposes set forth.

No. 18,863. Car Truck. (Train de Char.)

Alexander E. McConnell, New Orleans, La., U. S., 13th March, 1884; 5 years.

Claim.—1st. In axle bearings for railroad cars and other vehicles, in which the axle has its bearing upon or against superimposed wheels arranged to run upon opposite sides of the axle, the combination, in the one truck or frame, of the vehicle with a series of axles C, and running or supporting wheels B thereon, of a series of superimposed wheels D, D¹ arranged to form rolling bearings for the axles C and so that each intermediate one D¹ thereof will bear upon or run against the journals of two adjacent axles C, substantially as described. 2nd. The combination, in a railroad car truck or frame A, of the axles C and running wheel B thereon, the superimposed wheels D, D¹ arranged so that each intermediate wheel D¹ bears against the journals of two adjacent axles C, and the axles E arranged to connect the superimposed wheels D, D¹ upon opposite sides of the truck or frame, G, in combination with the frame A, the shafts or axles E extending across the truck or frame, the rolling bearing wheels D, D¹ on said axle E, and the axles C with their attached running wheels B, essentially as shown and described. 4th. A six wheel railway truck, having the journals of the axles of its running wheels supported by four pairs of connected superimposed wheels, substantially as shown and described.

No. 18,864. Production of Ammonia or Compounds of Ammonia. (Production de l'Ammoniaque ou Composés d'Ammoniaque.)

Robert Teeret, Clippens, Scotland, 13th March, 1884; 5 years.

Claim.—The obtaining of ammonia from carbonaceous whilst undergoing distillation, or from their cokes or residues by acting upon them with hydrogen, substantially as hereinbefore described.

No. 18,865. Cigar-Holder. (Porte-Cigare.)

George W. Keith, (Co-inventor with George C. Sutherland,) Toronto, Ont., 13th March, 1884; 5 years.

Claim.—1st. As an improved cigar-holder, a hollow wire or tube, having a mouth-piece at one end, and pointed at its other end for introduction into a cigar, the said point being pierced so as to form a draught passage between the body of the cigar and the interior of the hollow wire or tube, substantially as and for the purpose specified. 2nd. A wire or tube B, attached to the mouth-piece A, and having a passage-way a cut through it, to correspond and communicate with the passage-way through the mouth-piece, in combination with an upwardly turned and pointed end having a hole b pierced through it, or tube B attached to the mouth-piece A, and having an upwardly turned and pointed end with a hole b pierced through it, to communicate with the passage-way a passing through the tube and substantially as and for the purpose specified. 4th. The pointed supporting piece D attached to the mouth-piece A, and having a hole being pierced near its point so as to form a draught passage between the body of the cigar and its interior, in combination with a device for holding the cigar against the supporting piece D, substantially as and for the purpose specified.

No. 18,866. Car-Coupling. (Accouplage de Wagons.)

James Murray and Allan Ritchie, New Castle, N.B., 13th March 1884; 5 years.

Claim.—1st. In a railway car-coupler, the pawl B pivoted to the draw-head A, so as to operate in the chamber formed therein, and having the hook a and the projecting block c, substantially as described. 2nd. In a railway car-coupler, the rocking trip C supported on its journals d, d in the lugs e, e, and provided with the lifting arm f, the lifting lever D, rod, rope or chain g and projecting toes h, h, substantially as described. 3rd. In a railway car-coupler, the combination of the draw-head A having the lugs e, e and the stops i, i fixed or formed thereon, with the rocking trip C, substantially as shown and described, and for the purpose set forth.

No. 18,367. Stove for Burning Bituminous Coal. (Poêle Brûlant le Charbon Bitumineux.)

The Rawson Stove Company, Albany, (Assignees of Charles A. Hamlin, Greenbush,) N.Y., U. S., 14th March, 1884; 5 years.

Claim.—The combination, with a retorting chamber B, a combustion chamber C lying directly underneath said retorting chamber, and a flame chamber D separated from said retorting chamber by means of the bridge wall B¹, whereby the egress draft-opening d is formed, as herein described, of the inclined rear grate C fixed under the retorting chamber B and the imperforate fire-bed c, arranged to form a close joint with the combustion chamber C, at the ends and one side of said chamber, as and for the purpose herein specified.

No. 18,868. Door Spring. (Ressort de Porte.)

William H. Sherer, James D. Stratton and Lyman Clock, Binghamton, N.Y., U. S., 14th March, 1884; 5 years.

Claim.—In combination with the bracket A; drum B provided with a spring and adapted to be mounted on a door, a plate D having ears e, f, and spring rod acting in connection with pin h on the bracket, and a connecting strap, substantially as described.

No. 18,469. Document and File Case. (Boîte pour Dossiers et Documents.)

Anthony W. Voltz, Buffalo, N.Y., U. S., 14th March, 1884; 5 years.

Claim.—1st. A file case having vertical boards parallel to its back B, vertical partitions E at right angles thereto, and horizontal bottom-pieces, these parts forming sets of terraced series of rigid file-holding compartments each upper row of the latter being located farther back than the one below it, substantially as set forth. 2nd. A portable case for files, consisting of two hinged sections A, A¹ provided with handles and fastenings, each section being constructed with vertical boards F parallel to the back thereof, vertical partitions E at right angles thereto and horizontal bottom pieces, these parts forming two sets of terraced series of rigid file-holding compartments, each upper row of the latter being located farther back than the one below it, substantially as set forth. 3rd. As an improved article of manufacture, a file case A having the compartments for the reception of the said documents, a hinged lid C provided with a pendent locking device H and one or more of the compartments provided with the adjustable bottom, substantially as described for the object stated. 4th. In paper cabinets, an adjustable bottom for the compartments of a frame F composed of the slotted top rail F¹, rail F² and suitable side pieces, as described, said frame being constructed to fit tightly into said compartments and arranged to operate in conjunction with a detachable extractor, as and for the purpose stated.

No. 18,870. Waterproof Coat. (Habit Imperméable.)

Tanerède Robitaille, St. Hyacinthe, Que., 14th March, 1884; 5 years.

Claim.—1st. The process of making waterproof coats, which consists in, first cutting out the two thicknesses of material which are to compose it, and a piece of soft rubber of corresponding size and shape, then fitting such parts together, then pressing them together with hot irons to cause the rubber to adhere, and then sewing the different parts of the coat together, substantially as described. 2nd. In a coat having a layer of rubber interposed between the cloth and lining, a pocket having a linen stay piece and secured in place by pressure between the said layer of rubber, and another layer of rubber interposed between the pocket and the cloth, substantially as described. 3rd. In a coat, a collar having a lub formed with it and adapted either to be folded back under such collar or to be extended across the front opening, substantially as described. 4th. The combination, with a reversible coat, of a double-headed button, substantially as described. 5th. In combination with a reversible coat, linen stay pieces, eyelet holes and double-headed buttons secured thereon, substantially as described. 6th. A button having two heads upon a single shank, for the purpose described.

No. 18,871. Washing Machine. (Machine à Laver.)

Leander K. Dutton, Oskaloosa, Iowa, U. S., 14th March, 1884; 5 years.

Claim.—In a washing machine, the suds box D provided with a lining of corrugated sheet rubber, and having the internal circumferential support E to which is connected the bracket k, in combination with the hinged cover F, stirrers H and means for operating them, and the rod K connected to the driving wheel I and provided with removable weight L, substantially as and for the purpose set forth.

No. 18,872. Fire-Escape and Fire-Extinguisher. (Sauveteur et Extincteur d'Incendie.)

James Kennedy, Strabane, Ireland, 14th March, 1884; 5 years.