

No. 15,801. Improvements on Bee Hives.*(Perfectionnements aux ruches.)*

Herskiah Bailey, (assignee of Martin Van Ensley,) Willamina, Oregon, U. S., 21st November, 1882; for 5 years.

Claim.—1st. The passages *f g* leading from the upper surplus honey chamber *H* to the lower part of the rear side of the hive, and provided with gates *h* at their lower ends, whereby the bees can escape from the said chamber, when the inlet passages are closed. 2nd. The passages *W X* leading from the front surplus honey chamber *B*, along the floor *I* covered with wire gauze, and provided at their outer ends with closing buttons *Y*, whereby the bees can escape from the said chamber when the inlet passages are closed, and air can be admitted to ventilate the hive. 3rd. The comb frame crates *T* made with an unobstructed aperture in their inner end for the passage of bees, and a gauze covered aperture in their outer ends for the passage of air. 4th. The combination, with the separable parts *A₁ A₂* of the front of the hive, of the stationary cleat *D* and the wed key *C*, whereby the said parts are locked together and in place.

No. 15,802. Improvements on Telephones.*(Perfectionnements aux téléphones.)*

Cyrus V. Stafford and Robert R. Rae, Acton, Ont., 21st November, 1882; for 5 years.

Claim.—1st. In an acoustic telephone, a metallic diaphragm in combination with a lead, or soft metal ring placed between the diaphragm and the diaphragm-holder, in which it is secured. 2nd. A metallic diaphragm, in combination with a metallic vibrator having a lead, or soft metal ring placed between it and the diaphragm. 3rd. A metallic diaphragm having a lead, or soft metal ring placed between it and the diaphragm-holder, in combination with a metallic vibrator having a lead, or soft metal ring placed between it and the diaphragm. 4th. A diaphragm-holder hinged to a plate having a slotted passage way for the bolt employed to receive it in position, in combination with an adjustable nut placed between the diaphragm-holder and wall, or partition it is fastened to.

No. 15,803. Improvements on Brushes.*(Perfectionnements dans les pinceaux.)*

James F. Bartlett, Cleveland, Ohio, U. S., 21st November, 1882; for 5 years.

Claim.—The combination and arrangement of the socket *A* having opening *C*, the wedge or shell *D* in which a nut *F* is soldered or otherwise secured, spaces *a* being left between the sides of the nut and said shell, and the handle *G* having screw *H*.

No. 15,804. Improvements in the Manufacture of Coke. *(Perfectionnements dans la fabrication du coke.)*

John Jameson, Newcastle-on-Tyne, Eng., 21st November, 1882; for 5 years.

Claim.—1st. The manufacture of coke by the extraction, at an early stage of the process, of part of the gaseous products of coal. 2nd. The manufacture of coke by the supply of hydro-carbon gas, or vapour or fluid, at a later stage of the manufacture.

No. 15,805. Improvement on Car Brakes.*(Perfectionnement des frein des chars.)*

James K. Sremain, Milwaukee, Wis., U. S., 21st November, 1882; for 15 years.

Claim.—1st. The combination of a spring, or springs, interposed between the brake-rod or lever and the brake-shoes, with a stop, or stops. 2nd. The stop, or stops *H* projecting from the centre of the truck, towards the end, or ends, of the same. 3rd. The adjustable stop for regulating the pressure of the brake-shoes on the wheels.

No. 15,806. Improvements on Ink Pad Holders. *(Perfectionnements aux boîtes-encriers.)*

Emmor M. Bayne, Philadelphia, Penn., U. S., 21st November, 1882; for 5 years.

Claim.—The combination of the box *A* containing the printed material, and the porous fabric *D*, said fabric held in position over the printing material by an inner retaining sleeve *C*.

No. 15,807. Improvements in Grappels.*(Perfectionnements aux grappins.)*

Samuel Trott and Herbert Kingsford, Halifax, N. S., 21st November, 1882; for 5 years.

Claim.—1st. A grappel provided with a movable plug extending outward through the fluke or arm of the grappel, and with an electric contact plate in connection with a signal, whereby the engagement of the fluke or arm with a body is caused to press the plug inward and complete the circuit, thereby operating the signal. 2nd. The grappel consisting of a body having arms or flukes, one or more of said arms containing an insulated contact plate in electric connection with a signal and a yielding or spring sustained plug, held normally out of contact with said plate, but extending outside of the arm, and adapted to be pressed inward by contact with bodies against which the grappel is drawn, and thereby to complete the circuit and cause the operation of the signal. 3rd. The grappel consisting of body *a*, insulated conductor *a¹*, contact plate *h*, plug *e* having point or needle *f*, and spring *g*. 4th. In a grappel, the combination of insulated conductor *a¹*, contact plate *h*, elastic packing *g*, plug *e* having pointer needle *f*, washer *d* and tubular threaded plug *c*. 5th. In combination with contact surface *h* and spring *g*, plug *e* having threaded stem or pin *f* adapted to be screwed in or out, to lengthen or shorten the distance between its point and the contact surface *h*.

No. 15,808. Improvements in Hame Tugs.*(Perfectionnements aux mancelles.)*

Thomas A. Simmons, Wooster, Ohio, U. S., 21st November, 1882; for 5 years.

Claim.—The body having suitable recess for the reception of the extended arms of the detachable draft iron, the detachable buckle and its connecting strap provided with a recess, to receive the end of the draft iron arm and the detachable loop, all secured in proper position by the rivet.

No. 15,809. Improvements in Means for Attaching Corkscrews to Bottles.*(Perfectionnements dans les moyens d'attacher les tire-bouchons aux bouteilles.)*

Henry W. Simms, Bay, Mich., U. S., 21st November, 1882; for 5 years.

Claim.—1st. In combination with a bottle and a corkscrew, a metal piece having an opening at one end in which the point of the screw is inserted, and a lip at the other end bent around the handle of the corkscrew. 2nd. The flap to turn over and protect the point of the screw.

No. 15,810. Improvements on Self-Winding Clocks. *(Perfectionnements aux horloges à remontoir automatique.)*

Auguste Dardenne, Mariembourg, Belgium, 21st November, 1882; for 5 years.

Claim.—1st. The combination of wheel *A A₁*, pinion *B*, escapement wheel *C C* and anchor *D D₁*, the anchor *D D₁* and wheel *C C₁* being adapted to operate together by aid of their respective position, and the shape and direction of their pawls and teeth so as to form a reversed dead-beat escapement. 2nd. The combination, with a flat wheel *S* fixed on the axle of the helix, of a brake made of rod *T T₁*, lever *R* and block *Q*, the said brake being adapted to act upon the rim of the wheel *P* when the rod *T T₁* is moved upward by the pulley of the weight *X*.

No. 15,811. Electric Motive Engine.*(Machine électrique motrice.)*

Désiré T. Piot, London, Eng., 21st November, 1882; for 5 years.

Claim.—The combination of crank-shaped soft iron cores wound circularly with insulated conducting wire, or forming the coils or bobins of the armature with similarly shaped electro-magnets.

No. 15,812. Improvements on Door Balances. *(Perfectionnements aux valets des portes.)*

William F. Sexton, sr., and William F. Sexton, jr., Toronto, Ont., 21st November, 1882; for 5 years.

Claim.—1st. In connection with a hinged door, the combination of a weighted lever so connected to the door that the power of the lever shall be directed in holding the door closed. 2nd. In connection with a hinged door, a pivoted lever provided with an adjustable weight and connected by a chain to a lever pivoted to the door jamb, in combination with a lever also pivoted to the door jamb, its other end being connected to the back edge of the door by a link. 3rd. In connection with a hinged door, a pivoted lever provided with an adjustable weight and connected to the door by a chain and lever, in combination with a sheave pulley pivoted upon an arm extending from a casting secured to the door jamb, and arranged for the purpose of directing the chain from a vertical to a horizontal direction.

No. 15,813. Improvements on Feeding Devices for Carding Engines. *(Perfectionnements aux appareils nourrisseurs des machines à carder.)*

John F. Gebhart, New Albany, Ind., U. S., 21st November, 1882; for 5 years.

Claim.—1st. The combination of the traveller *F*, mechanism for reciprocating the same, its toothed drums, a rack bar, a feed table, the shifting plate connected by the pivoted arms to said traveller, and smooth rollers receiving rotation. 2nd. The combination, with the traveller arranged to reciprocate over a feed table and means for moving said traveller, of the toothed drums, the shifting plate bearing feed rollers and an eye piece or guide for the moving, and a spring acting on the curved edge of said plate. 3rd. The combination of the shifting hooks and releasing devices therefor, with a traveller bearing toothed drums, and a shifting plate having feed rollers applied to it. 4th. The combination, with the traveller *F*, of the annularly grooved tooth drums *H H*, the rack which engages with the upper teeth of said drums, the smooth edge guide rail or bar applied beneath the rack and receiving the grooved parts of the drums, the smooth feed rollers, a spring for holding said rollers against the drums and shifting devices for the plate *K*. 5th. The combination, with the bar *D* and pins *l* arranged at the ends of said bar, of the traveller and means for reciprocating the same, said traveller being adapted to feed and distribute the roving upon the endless feed apron.

No. 15,814. Improvements on Spring Vehicles. *(Perfectionnements aux voitures à ressorts.)*

George Delker, Henderson, Ky., U. S., 21st November, 1882; for 5 years.

Claim.—In combination with side bars rigidly connected with a front head block and rear axle, and suitable front and rear springs, a phaeton-shaped body having, at its rear or raised portion, downwardly projecting rigid brackets *H*, extending to the rear springs and secured