

brating armature, and push and pull pawls combined with the ratchet wheel G provided with the pin *v*, and the escapement arms *w* projecting from said armature. 16th. In a telephone local call, a travelling switch and dial rim in the line circuit combined with a unison shunt twice as long as the local station shunts, or thereabouts, whereby the travelling switch may be moved forward out of its normal position of rest without going off the unison shunt. 17th. In a telephone local call, a travelling switch in the line circuit with a local station, or bell shunt, combined with a telephone receiver in the bell shunt circuit, and an automatic switch whereby the current will be shunted to the bell magnets and line, when said receiver is hanging on its hook, or through said receiver to the line when said receiver has been taken off the hook. 18th. In a telephone local call, a travelling switch in the line circuit, a local station or bell shunt and a switch spring *z* in connection with said local shunt, combined with a pivoted hook lever whereon the telephone may hang when not in use, and contact springs *ct m*, one or the other whereof is in contact with said spring *z* as said lever is up or down, and the current correspondingly shunted to the bell or to the telephone. 19th. In a telephone local call, a travelling switch in the line circuit, a unison shunt and a station bell shunt separated therefrom, suitable spring *z* and hook lever respectively in electrical connection with the bell shunt and detent shunt combined with the switch springs *ct n*, whereby the current may be automatically sent to the telephone from either the unison shunt or station bell shunt by the act of removing said telephone from its hook. 20th. In a telephone local call, a dial rim and a travelling switch in the line circuit combined with a local bell shunt on said dial, the length whereof is such that the index in passing must make at least two pauses upon said shunt. 21st. In a telephone local call central office instrument, comprising motor magnets, a dial travelling switch and a series of radial station keys combined with a protecting cover A' provided with perforations to permit the protrusion of the finger buttons B' and a transparent center over the dial.

**No. 16,092. Pomade or Unguent for the Restoration of Hair and Cure of Scalp Disorders.** (*Pomade on onguent pour activer la croissance des cheveux et guérir les maladies du cuir chevelu.*)

Rémi Prud'homme, Ottawa, Ont., 10th January, 1883; for 5 years.

*Claim.*—1st. The composition of matter to be used for the restoration of hair to bald scalps and for the cure of scalp disorders composed of Sebi Bovis, vaseline, Olei Ricini, Acidi Galici, Balsami Peruviani, Olei Caryophylli and Canella.

**No. 16,093. Improvements on Yarn Winding Machines.** (*Perfectionnements aux bobineuses.*)

Edmund Ashworth, Bolton-le-Moors, Eng., 10th January, 1883; for 5 years.

*Claim.*—1st. A vibrating lever *h* on which are mounted carriages *k*, which give motion to the yarn guide bars *d* and are connected with screw-shafts *l*, which move the carriage *k* nearer to the fulcrum or axis *l* of the lever, as the winding proceeds in order to produce coned ends on the cylindrical masses *d* of wound yarn. 2nd. The double armed lever *h* carrying studs or parts which cause the yarn guides bars *d* to traverse, and the rotating screw-shafts *l* for shifting the said studs or parts nearer to the axis of the vibrating lever *h*, whereby the traverse of the yarn guide bars *d* is lessened. 3rd. The lever *h*, the carriages *k* acting upon the yarn guide bars, the screw shafts *l* receiving movements by means of the ratchet wheel *o* and pawl *p*.

**No. 16,094. Improvements on Spark Arresters.** (*Perfectionnements aux éteignoirs.*)

Alexander Mitchell, Wilkes Barre, Penn., U. S., 10th January, 1883; for 5 years.

*Claim.*—1st. The combination of the smoke box and its stack, the exhaust nozzle, the spark arresting screen in the smoke box, a spark receptacle located above the bottom of the smoke box, and a lift pipe communicating with the upper end of the receptacle and with the bottom of the smoke box. 2nd. The combination of the smoke box and its stack, the exhaust nozzle, the spark arresting screen in the smoke box, a spark receptacle located above the bottom of the smoke box, and a lift pipe surrounding the exhaust nozzle and having a branch communicating with the upper portion of each spark receptacle. 3rd. The combination of the smoke box and its stack, the exhaust nozzle, a spark receptacle, a lift pipe having a branch communicating with said spark receptacle, a screen extending from the lift pipe to the shell of the smoke box, and a screen extending to the exhaust nozzle from the inside of the lift pipe above the branch of the same. 4th. The combination of the smoke box and its stack, a spark arresting screen, a spark receptacle above the bottom of the smoke box, a lift pipe communicating with the bottom of the smoke box and the upper portion of the spark receptacle, a draft pipe *a* and a screen *b* interposed between the pipe *a* and the lift pipe and occupying such relation to the latter that the sparks impinge upon the screen as they emerge from the lift pipe. 5th. The combination of the smoke box, its spark arresting screen and stack, the lift pipe and a spark receptacle having a draft pipe *a*, a screen *b*, a nozzle *d* and an overflow *e*. 6th. The combination, with the exhaust nozzle and the shaft pipe *a*, of connecting pipes extending from the exhaust nozzle up to and entering the pipe *a*, so that the exhaust steam may be utilized to create a greater draft through the latter.

**No. 16,095. Improvements on Sockets for Electric Lamps.** (*Perfectionnements aux douilles des lampes électriques.*)

Edward H. Johnson, New York, N.Y., U.S., 10th January, 1883; for 5 years.

*Claim.*—1st. A socket for electric lamps formed of two detached parts, each of which is provided with contact plates for completing

circuit, when the plates are placed together. 2nd. The combination, with the detached parts described, one of which is grooved on its inner face, of a safety catch held in such groove and contact plates electrically connected by such safety catch. 3rd. In a circuit controller for electric lamps, a spring seated rod provided with a key or handle enlarged and forked at one end and containing a spring for holding the forked portions apart and contact plates. 4th. In a circuit controller, the combination of a rod having a stop or projection upon its body, a sleeve through which the rod passes provided with a spiral slot, in which the stop or projection takes and a spring within the sleeve forcing the rod normally beyond the sleeve and holding the circuit broken and contact plates. 5th. The combination, with interior insulating portions provided with circuit connections, of exterior metal portions forming a covering therefor.

**No. 16,096. Improvement in Artificial Cream.** (*Perfectionnements dans la crème artificielle.*)

David H. Burrell, Little Falls, N. Y., (Co-inventor with William Cooley, Waterbury, Vt., and Walter W. Whitman, Little Falls, N. Y., U. S., 10th January, 1883; for 15 years.

*Claim.*—1st. An artificial cream composed of an oleaginous substance mechanically blended, or otherwise incorporated with milk, buttermilk or cream. 2nd. The method of preparing an artificial cream or emulsion formed from oil or oleaginous substances and milk by mechanically mingling the same together.

**No. 16,097. Improvement in Hand Rakes.**

(*Perfectionnement des râteliers à main.*)

The Baker Manufacturing Company, (assignee of Charles D. Miller and George L. Eason,) Des Moines, Iowa, U. S., 10th January, 1883; for 5 years.

*Claim.*—1st. The combined cleaning bar and frame composed of the bent wire or rod *a* adapted to be intertwined between rake teeth, and the frame *b* adapted to extend above the rake head. 2nd. The attachment for cleaning rakes composed of the combined cleaning bar and frame *abc* and the spring *g* adapted to be fastened to a rake handle. 3rd. A combined cleaning bar and frame adapted to surround and extend between or intertwine the teeth of a rake, a spring extending from said frame and adapted to be fastened to a rake handle arranged and combined relatively to each other and a rake.

**No. 16,098. Improvements on Grain Drills.**

(*Perfectionnements aux semoirs en ligne.*)

Peter H. Smith, Soldier Tshp, and William H. Poor, Topeka, U. S., 10th January, 1883; for 5 years.

*Claim.*—1st. The combination, with the frame for carrying the rollers of an axle provided at its opposite ends with spindles, and pivoted at its middle to the framing, and the two rollers placed on the spindles of the oscillating axle and arranged in rear of, and so that they will travel in the furrows formed by the shovels on the seeder frame. 2nd. In a roller attachment for grain drills, the combination with the frame of a series of rollers arranged in pairs, each pair being coupled to an adjacent pair and having an independent vertical movement or adjustment. 3rd. The combination of the pair of rollers *E*, the standard *g*, cross beam *g* having slots *g*, the pair of rollers *E*, support *h*, equalizer *h*, support *h* and seat bar *K*.

**No. 16,099. Improvements on Sash Fasteners and Holders.** (*Perfectionnements aux arrête-croisés.*)

John R. Montague, (Co-inventor with James T. Booker and Enoch C. Dinning,) Franklin, Ky., U. S., 10th January, 1883; for 5 years.

*Claim.*—The case A, dog B provided with arms *b*, serrated block or eccentric D pivoted in said arms, and spindle C.

**No. 16,100. Improvements on Door Knobs and Spindles.** (*Perfectionnements aux boutons et aux axes des boutons de portes.*)

William N. Mills and Alvin C. Van Meter, Truro, N.S., 10th January, 1883; for 5 years.

*Claim.*—A door knob and spindle attachment in which either knot is provided with a pawl arranged to engage with a toothed portion of a spindle to provide for the longitudinal adjustment of the knot on the spindle and for its retention thereon. 2nd. The combination of the spindle B having ratchet or other suitably shaped teeth on or near its opposite ends, the knobs A constructed to turn with said spindle but admitting of their longitudinal adjustment thereon, and the springs or pawls C fitted to the knobs and arranged to engage with the teeth on the spindle. 3rd. In a door knob and spindle attachment, the locking spring or pawl C constructed with shank D and lip J for connection with its respective door knob on the spindle. 4th. The combination, with the spindle B having teeth on or near either or both of its ends, of either door knob A constructed with a chamber F in its shank, also with a side aperture E communicating with said chamber, and the locking springs or pawl C arranged for action within said chamber, in suitable relation to the side aperture, for release of the pawl from the spindle by a key inserted through said aperture.

**No. 16,101. Improvements on Portable Bathing Apparatus.** (*Perfectionnements aux baignoires portatives.*)

William Kendall and Theodore G. Conkling, Logansport, Ind., U. S., 10th January, 1883; for 5 years.

*Claim.*—1st. In combination with tub V having the handles U, the posts D having guide slots *d* for the wings P of adjustable reservoir E, and having slot *d* and pin *d* for hooked extremity *m* of Intel M. 2nd. In combination with the slotted guide posts D and vertically adjust-