

combination, in an electrical chandelier, of a standard, or support, A carrying a set of conductors, those of one or the main circuit, a base provided with a series of contact plates, or springs, one set for each arm connected in multiple arc to the main circuit and an arm, or arms, for carrying the lamps, each provided with conductors and with an insulated end carrying contact plates, arranged to complete circuit with the proper set of contacts in the base. 5th. A chandelier base, provided with an insulated plate and having secured thereon contact plates, or springs, each set forming terminals of a derived circuit. 6th. An electrical knock down chandelier in which each part intended to be separable is provided with an insulated portion carrying or supporting contact plates, or springs, forming the terminals of its wire conductors and arranged to complete circuit with its neighbouring portion, when the two are secured together. 7th. The combination, in an electrical chandelier, of a wooden body and arms, and conducting wires secured within perforations therein.

No. 15,643. Improvements on Mail Bag Fastenings. (*Perfectionnements aux cachets de sûreté des valises à lettre.*)

John H. Bartlett and Peter D. McIntyre, Ottawa, Ont., 17th October, 1882; for 5 years.

Claim.—1st. In a mail bag fastening, the opposing cams K K pivotally hung in slots in the shell of the lock yielding to the insertion of the rivet and resisting its withdrawal by compression. 2nd. The lock shell constructed of the sections H H' and plates N N' adjusted and rivetted together.

No. 15,644. Improvements in Devices for Converting Motion. (*Perfectionnements aux appareils à convertir le mouvement.*)

Frank Elbing, Algersdorf, Austria, 19th October, 1882; for 5 years.

Claim.—1st. The crank mechanism, having slotted crank arm A, crank pin B hung by arm b on the crank arm, and the grooved plate C having a guide slot engaged by the crank pin. 2nd. The combination, with a crank, of a secondary crank engaging the main arm and held in position by an eccentric guide.

No. 15,645. Improvements on Apparatus for Dispensing Effervescent Liquids. (*Perfectionnements aux appareils de distribution des liquides effervescent.*)

Louis Bergen, New York, N. Y., U. S., 19th October, 1882; for 5 years.

Claim.—1st. The combination of two compartments, a pipe leading to, one compartment from the receptacle containing a liquid, a pipe, or passage, connecting this compartment and the other compartment directly together and provided with a valve, whereby the gas may be allowed to escape from the former compartment to the latter compartment, and an escape from the compartment last named to the atmosphere. 2nd. The combination of two compartments arranged one above the other, a pipe leading to the lower from the receptacle containing the liquid, a pipe, or passage, connecting the two compartments directly together, and provided with a valve, whereby gas may be allowed to escape from the lower compartment into the upper compartment, and an escape cock arranged in the upper compartment. 3rd. The combination of two compartments, a partition between the same, capable of movement by inflowing liquid, a pipe leading to one compartment, from the receptacle containing the liquid, a valve controlling communication between this compartment and the other compartment, and an escape from the compartment last named.

No. 15,646. Improvements on Fittings and Fixtures for Electric Lamps. (*Perfectionnements dans la pose et aux garnitures des lampes électriques.*)

Thomas A. Edison, Menlo Park, N. J., U. S., 19th October, 1882; for 15 years.

Claim.—1st. The combination of a base piece, a lamp or chandelier standard, a safety catch and a cap covering the base-piece. 2nd. The combination of a base piece, secured to the wall, or ceiling, a bracket, or chandelier, the stem of which is attached to said base-piece, an incandescing electric lamp or lamps supported by said bracket, or chandelier, and a safety-catch and circuit connections upon said base piece. 3rd. The combination of a pendant incandescing electric lamp and a socket to which said lamp is removably attached, with an open flaring reflector supported by means attached to or above said socket, whereby the downward reflection of the light is uninterrupted and the lamp can be removed from and placed in said socket, without disturbing the position of said shade, or reflector. 4th. The combination, with the downwardly hanging arm of a bracket, or chandelier, of a lamp socket secured to said arm, a pendant incandescing electric lamp removably secured to said socket, and a shade, or reflector, supported by means surrounding the bracket, or chandelier, arm above said socket and resting upon said socket. 5th. The combination, with the downwardly hanging arm, of a bracket, or chandelier of a lamp socket, secured to said arm, a pendant incandescing electric lamp, removably secured to said socket, and a shade or reflector supported by means clamped between said socket and a shoulder, or ring on said bracket, or chandelier arm, above said socket.

No. 15,647. Improvements on Skates. (*Perfectionnements aux patins.*)

William A. Sutton, New York, N. Y., U. S., 10th October, 1882; for 5 years.

Claim.—1st. In a skate, the combination, with a fixed heel plate, of an oscillating clamp plate, having fixed rear clamps and a movable

front clamp, said front clamp being actuated by a connecting rod, pivoted to the movable clamp and secured adjustably to a pivot-lug of the heel plate, sideways of the runners, so as to throw the movable clamp against the heel by swinging the runner in line with the foot. 2nd. The combination of the runner having a fixed heel plate, with an oscillating clamp plate having fixed rear clamps and a movable front clamp, and with means whereby the movable front clamp is connected to a side pivot of the fixed heel plate, so as to be carried toward or away from the heel, by swinging the runner into, or out of line with the foot. 3rd. The combination, of a fixed heel plate and oscillating clamp plate, having fixed rear clamps and a movable front clamp, with a connecting rod, pivoted to the movable clamp and secured adjustably to a pivot-lug of the heel plate by a screw-nut at each side of the pivot-lug. 4th. The combination of a sole-plate, having an adjustable sole-clamp at one side, and a movable sole-clamp arranged at the other side of the sole-plate with an eccentrically pivoted cam-lever, connected by a pivoted bracket to the movable clamp.

No. 15,648. Offal Dryer and Cooler. (*Séchoir et rafraîchisseur des rebuts.*)

Max Tamm, Saint-Louis, Mo., U. S., 19th October, 1882; for 5 years.

Claim.—1st. The cooler L, consisting of a tank, left open at the top, the rotating shaft M, revolving stirrer K, having radial arms k₁ k₂ with incline face k₃, the dryer consisting of two, or more tanks C D, closed at top, its two bottoms d d' forming a steam space e, the steam pipe F, the water pipe G and the rotating shaft I, carrying stirrer K of like construction to that in the cooler, all said parts combined and constructed by means whereof the dried offal can be immediately cooled and packed for use. 2nd. The combination of one or more dryers consisting of a tank, or compartment having closed top, the bottoms d d' forming a steam space e, the steam pipe F with its branches, the water pipe G with its branches, the shaft J, its stirrers K, having curved arms k₁ k₂ with incline face k₃, the feed and discharge pipes H and O, the cooler consisting of a tank L open at top, its shaft M carrying stirrer K, the fan and its communication to the dryers and the top shaft and gearing, meshing with said vertical shafts.

No. 15,649. Improvements on Sleeping Cars. (*Perfectionnements aux wagons dortoirs.*)

Peter M. Melick, Newark, N. J., U. S., 19th October, 1882; for 5 years.

Claim.—1st. In a car seat convertible into a sleeping couch, the combination, with cushions A A', backs B, braces b and pivot i, of bars I, carrying said pivots and provided with racks c at their lower extremities and fitting into sockets in the platform, or leg, the pinions x and shaft z arranged below platform D and operating to raise the lifting bars I, and stops l arranged and operating to sustain rods I when elevated. 2nd. In combination with the platform D, back B and leg G, the rods I carrying the back B by the pivots i and arranged in sockets in the platform, or leg, and provided with mechanism for lifting, and the arm C hinged to end piece d by a horizontal joint and arranged so that the entire arm, above the seat cushions, may be turned downward and outward. 3rd. In combination with the wall of the car and the backs B turned up, the partition E constructed and secured to the side, or wall, of the car and provided with a strip E' at the bottom, to fill the space between the edges of the adjacent backs. 4th. The combination, with the wall of the car and the backs B turned up, of the strip E' secured to the wall of the car and serving to fill the space between the adjoining backs. 5th. In combination with the partition E or strip E' secured removably to the wall of the car, the means for connecting the same to the edges of the upturned backs B as at e or p and thereby supporting, or bracing, the backs in a horizontal position.

No. 15,650. Improvements on Telephones. (*Perfectionnements aux téléphones.*)

Allen W. Rose, Farrington Road, Eng., 20th October, 1882; for 5 years.

Claim.—1st. The improved combined telephonic instrument.

No. 15,651. Improvements on Steam Engines. (*Perfectionnements dans les machines à vapeur.*)

Alexander Morton, Glasgow, Scotland, 20th October, 1882; for 5 years.

Claim.—1st. The combination of the short lever, or spanner A, centered at one end B, on a projection on the connecting rod X and having a radiating, or movable end C attached to an overhanging crank D by a link E, and to the valve rod P by a simple lever, or levers G, connecting links H M with a slide block and slot, or curved bar O, whereby an equal distribution of steam, or other gas, to both ends of the cylinder, or cylinders, is effected whether in full, or intermediate gear. 2nd. The combination of the short lever, or spanner A centered at one end B on a projection on the connecting rod X and having a radiating, or movable end C attached first by a link E to levers F and U, the said lever F moving through an arc which crosses, or is subtended by a line drawn through the centres of the engine, and second to the valve rod P by a lever G, links H M, slide block N and slot, or curved bar O, whereby an equal distribution of steam, or other gas, to both ends of the cylinder, or cylinders, is effected, whether in full, or intermediate gear. 3rd. The combination of the short lever, or spanner A, centered at one end on a projection on the connecting rod X and having a radiating, or movable end C attached, first by a link E to levers F and U, the said lever F moving through an arc which crosses, or is subtended, by a line drawn through the centres of the engine and second to the valve rod P by a simple lever G, links H M and Y, the latter link being substituted for the curved slot, or bar O, whereby an equal distribution of steam, or other gas to both ends of the cylinder or cylinders, is effected, whether in full, or intermediate gear. 4th. The combination of the short lever, or span-