

sides and flanges, for the purpose of supporting the wheel in each side of the central portion, substantially as and for the purpose described. 4th. The combination of the track D, shaped and adapted to operate, substantially as described, with a bracket or angle iron for supporting the same, adapted to be fastened to a beam or other support above the door, all substantially as and for the purposes described. 5th. The combination of the track D having a raised portion, the sides of which are inclined with the projections *d* extended to vary nearly the flange of the rail and inclined upon their inner surface to correspond in substance with the inclination of the central portion of the rail, where they serve to clear the rail from any substance that may lodge thereon, all substantially as and for the purposes described. 6th. The combination of the rail D having a raised portion, with inclined sides and flanges for the support of the wheel C, with said wheel C having two webs or extensions which straddle the raised portion of the rail and bear upon the flanges thereof, all constructed and arranged so that the wheel shall be caused to take a straight path with as little friction upon the rail as possible, and the liability of its riding the rail prevented, all substantially as and for the purpose described.

### No. 18,015. Reverberatory Gas Furnace.

(*Fourneau à gaz à réverbère.*)

William L. McNair, Golden, Colorado, U. S., 2nd November, 1883; 5 years.

*Claim.*—1st. In a furnace, the combination of a series of muffles A, with the plane B and a grate C, whereby coke can be banked up in front of the inner ends of the muffles for the purpose of causing the volatile matter in the fuel to pass through the heated coke, substantially as shown. 2nd. In a furnace, the combination of a series of muffles, the plane B, grate C and the air ports or flues A, through which air or steam may be passed through the coke as it lays upon the grate, substantially as described. 3rd. In a furnace, the combination of a series of muffles, the plane B and the grate C, with the hopper L having openings N through them, through which steam or air can be passed into the muffles, substantially as set forth. 4th. In a furnace, a muffle or series of muffles formed of brick and then covered over with a glazing compound, substantially as specified. 5th. The combination, in a furnace, of the walls J placed in the flue E, for the purpose of causing eddies in the escaping products of combustion, substantially as shown. 6th. In a furnace, a series of pits Q arranged in the flues in a line with the escaping products of combustion, substantially as described. 7th. In a furnace, the combination of the walls J with the pits Q, arranged at different points in the line of the moving products of combustion, substantially as set forth. 8th. The hearth D having a water chamber placed under or formed in it, substantially as specified. 9th. In a furnace, the combination of the flues C D; E; H and valve M, the valve M and the flue G being adapted to be closed so as to prevent air from mingling with the products of combustion, as they pass over the bridge wall, for the purpose of producing a low temperature in the hearth, substantially as described.

### No. 18,016. Adjustable Table and Desk.

(*Table et pupitre mobiles.*)

John White, Goderich, Ont., 2nd November, 1883; 5 years.

*Claim.*—1st. The combination of the top C and the sliding pillar or post F, with the lower hollow pillar H, for the purpose set forth. 2nd. The combination of the supports K K, with the top C and the sliding pillar F, with the lower hollow pillar H, for the purpose set forth.

### No. 18,017. Artificial Stone Grave Vault.

(*Caveau de cimetière en pierre artificielle.*)

James Logan, Waterloo, N. Y., U. S., 2nd November, 1883; 5 years.

*Claim.*—1st. A grave vault or receptacle for coffins made of artificial stone, in the manner described, and provided with grooves or channels in the sides, for the reception of coffin supports, substantially as set forth. 2nd. A grave vault made of artificial stone and provided with one more interior coffin supports, whereby the coffin is raised above the bottom of said vault, as set forth. 3rd. A grave vault, as described, in combination with the coffin supports and detachable cover resting upon said supports and adapted to receive and support the artificial stone cover and the superincumbent earth, substantially as set forth. 4th. The combination, with a grave vault, of a detachable cover provided with hooks or catches, whereby the cap can be lowered on the vaults, and the lowering means removed, substantially as set forth. 5th. The coffin supports C having recesses in their top for the reception of cross-bars *d*, and adapted to enter grooves in the sides of the vault and support the coffin above the bottom of the vaults, as and for the purpose set forth. 6th. The combination, with a grave-vault of artificial stone, of the coffin supports, a detachable cover or cap provided with a covering of artificial stone which, when set, becomes integral with the vault and thus renders it air and water-tight, substantially as and for the purpose set forth.

### No. 18,018. Grinding Attachment for Valves. (*Appareil de remoulage des soupapes.*)

Alfred W. Case, South Manchester, Conn., U. S., 2nd November, 1883; 5 years.

*Claim.*—The combination, with the valve stock A and the valve head D, having square recess H in its face, of the sliding rod I having square inner end, the stuffing box J and the screw plug K, substantially as shown and described, whereby the said valve-head can be ground to its seat without being removed from its valve stock, as set forth.

### No. 18,019. Devices for Shifting Thills.

(*Moyens de déplacer les limonières.*)

George H. Doane (assignee of George H. Lusk), Pittsford, N. Y., U. S., 3rd November, 1883; 5 years.

*Claim.*—In a sleigh or cutter, the combination, with the thills C C, of the tube D, the wood filling *a a* at the ends of the tube, the interior rod E extending through the tube, and the fillings projecting at the ends and forming the bearings for the eyes of the thills, the thread *e* and nut *e* on the ends of the rod clamping the eyes against the ends of the tube, as shown and described.

### No. 18,020. Dynamo-Electric Machine.

(*Machine électro-dynamique.*)

Charles E. Ball, Philadelphia, Penn., U. S., 3rd November, 1883; 5 years.

*Claim.*—1st. In combination with the pole pieces C C<sub>1</sub> on opposite sides of the machine, the brace or stay D forming a central bearing for the armature shaft, substantially as shown and described. 2nd. The combination, in a dynamo-electric machine, of two armatures on one shaft, each connected with its own commutator and located and arranged to be rotated within the inductive influence of only one pole of an electro-magnet, the two poles being on opposite sides, substantially as shown and described. 3rd. The combination, in a dynamo-electric machine, of an electro-magnet having unlike poles on opposite sides, i. e., one pole on each side with two armatures on a single shaft, each of said armatures having a commutator and being arranged and adapted to be rotated in the inductive field of only one of said poles, substantially as shown and described.

### No. 18,021. Carpet Stretcher.

(*Appareil à poser les tapis.*)

Randolph O. Robinson, Glidden, Iowa, U. S., 3rd November, 1883; 5 years.

*Claim.*—1st. The combination, in a carpet-stretcher, of the box A B, head D constructed with a series of fingers F having hooks G and provided with the shank C having notches J, extensible arm or bar H shouldered at I, jointed lever L K hinged at one end upon box A B and adapted to be stepped with its free end into any one of the series of notches J, and rack-bar O hinged at one end upon the top of box A B and adapted to be engaged with its free end, a stud P upon the sliding head, substantially as and for the purpose shown and set forth. 2nd. The combination, in a carpet-stretcher, of the box A B, head D constructed with a series of fingers F having hooks G and provided with the shank C forming a rack-bar, extensible arm or bar H shouldered at I, toothed wheel Q provided with the removable lever R and rack-bar O hinged at one end upon the top of box A B and adapted to engage, with its free end, a stud P upon the sliding head, substantially as and for the purpose shown and set forth.

### No. 18,022. Tag Fastener. (*Attache-étiquette.*)

Moses Alshuler, Maltoon, Ill., U. S., 3rd November, 1883; 5 years.

*Claim.*—1st. In combination with the apertured tag, the metal fastener constructed with a central loop in which the tag is freely suspended, and two arms, one of which is laterally bent in a plane at right angles with that of said loop, and the other of which is bent in the same plane with said loop, substantially as described and for the purposes set forth. 2nd. The tag fastener described consisting of the wire F bent to form the central eye F<sub>1</sub> for the tag, and two branching arms, one terminating in a ring *f* occupying a plane at right angles with that of the central eye F, and the other arm terminating in a projecting point *f* adapted, when inserted through a central fold of fabric, to pass through the ring *f* and to be bent over on a plane with such arms, all substantially as shown and described.

### No. 18,023. Machine for Attaching Buttons.

(*Machine pour assujétir les boutons.*)

Albert W. Ham, Troy, N. Y., U. S., 3rd November, 1883; 5 years.

*Claim.*—1st. In a button-attaching machine, a fulcrumed upper jaw constructed to hold a button and staple, in combination with a lower jaw provided with a yielding wedge shaped die, and a regulating spring to act upon the die to spread the forks of the staple, substantially as described. 2nd. In a button attaching machine, the combination of two fulcrumed jaws, one of which is provided with a fork or slot for holding a button and staple and the other with a yielding slotted die adapted to spread the forks of the staple and guide them in their course, the latter jaw acting, independently of the die, to set the staple firmly upon the fabric, substantially as described. 3rd. In a button-attaching machine, a slotted jaw adapted to receive the eye of a button, in combination with a slotted wedge adapted to swing on said jaw, to and from the slotted end of the jaw, and grasp the button eye, substantially as and for the purposes mentioned.

### No. 18,024. Improvements in Paper Boxes.

(*Perfectionnements dans les boîtes en papier.*)

Richard R. Colburn, Ansonia, Conn., U. S., 3rd November, 1883; 5 years.

*Claim.*—1st. The described folding box consisting of the two parts, each composed of four sides with extensions at one edge of the blank from said sides, whereby, when the sides at the opposite end of the blanks are united, said extensions may be turned inward and interlocked to close that end, leaving the other end of the part open, the internal dimensions of one part corresponding, substantially, to the external dimensions of the other part, whereby the one part may be set over the other part and inclose that other part, the closed end of one part closing the open end of the other part, substantially as described. 2nd. The described telescopic box consisting of the two parts, each constructed from a blank having the sides A B C D in a continuous piece, the two sides A C constructed respectively with extensions *a c* at one end and the said extensions having a V-shaped notch *e* out in the corresponding edge, the dimensions of one part with relation to the other part being such that, when the said parts are set up, the internal dimensions of one part will correspond to the external dimensions of the other part, and whereby the one part may be telescopically passed on over the open end of the other part and serve to inclose the other part, substantially as described.