

and bolting through the same to the end of the side framing piece *b*, as described and specified. 4th. In the construction of railway car trucks, the side bar pieces *b*, bolster pieces *d* and pieces *f*, and wheel guard-pieces *h*, all made of rolled channel steel and secured together in the manner specified, in combination with the brace pieces *a* secured to the framing pieces, as described and specified. 5th. A railway truck, constructed of the framing pieces *b*, *d*, *h* and *f*, all made of rolled channel steel and secured together, as described, in combination with the tie brace pieces *a*, swinging bolster *e* constructed as described, equalizers *m*, equalizing springs *n* and elliptic springs *o*, all arranged and described, as specified.

No. 25,236. Horse Collar. (*Collier de Cheval*.)

Patrick Sheehan, Monroe, Wis., U.S., 27th October, 1886; 5 years.

Claim.—A horse collar, comprising the two independent sections A, At, having loops *c* on their lower ends, and buckles *d*, *d*, on their upper ends, and the separate and independent neck-shield B, having the keeper straps *b*, *b*, to receive the upper ends of the collar sections, and the strap *e*, secured between its ends to the upper side of the shield and engaging the buckles *d*, *d*, substantially as set forth.

No. 25,237. Whiffletree. (*Palonnier*.)

Robert Davis and John W. Miller, Wyoming, Ont., 27th October 1886; 5 years.

Claim.—The combination of centre plate with draught-hook sheave and draught chain attachment, substantially as and for the purpose hereinbefore set forth.

No. 25,238. Carpenter's Rule. (*Pied de Roi*.)

William H. Jones, Montreal, Que., 27th October, 1886; 5 years.

Claim.—1st. A combined pocket rule or measure, and T-square, consisting of arms of equal length jointed together, one arm being provided with a hinge to adapt it to fold upon itself, and a second which is allowed to swing at freedom to any desired angle to former, substantially as described. 2nd. A pocket rule and T-square, consisting of a rule provided with two arms joined together, one arm having an intermediate hinge to permit it to fold upon itself, and provided on its outer edge with a pivoted plate or clip to guide and support the hinge portion, and on its inner edge with a slide and a hinge, as B, whereby the arms may be locked at any desired angle by forcing the slide into engagement with one of the inlets formed on the periphery of the hinge, substantially as described.

No. 25,239. Meat Cutter. (*Hache-Viande*.)

Charles F. Leopold, Philadelphia, Penn., U.S., 27th October, 1886; 5 years.

Claim.—1st. A meat-cutter, having a forcing screw, rotary cutter and stationary cutters, the rotary cutter being located between the stationary cutters, and formed of a blade having double cutting edges, said edges being on opposite sides of the blade, substantially as described. 2nd. A meat-cutter, having a casing provided with a forcing screw, and formed with an inner circumferential rib M, and spiral ribs N, substantially as described. 3rd. A meat-cutter, having a casing which is provided with a forcing screw, and formed on its interior at the end with a screw thread, and near the end with a shoulder, a stationary cutter resting against said shoulder, a perforated disc engaging with said thread, and a rotary cutter which is interposed between said stationary cutter and disc in contact therewith, and formed of a blade having cutting edges on opposite sides, substantially as stated. 4th. In a meat-cutter and casing A, having inner ribs, in combination with a forcing screw, a fixed cutter, a rotary cutter, the cutting edges of the knives of the cutters being in opposite directions, a detachable perforated disc, and a locking device for said disc, all substantially as described. 5th. A meat-cutter, having a detachable perforated disc, provided with a rim, having its periphery toothed and its casing provided with a pawl adapted to engage the said notched rim, substantially as described. 6th. The casing A, having circumferential rib M, spiral ribs N and shoulder E, in combination with forcing screw B, stationary cutter D, rotary cutter G, perforated disc C, with flange H, having its periphery toothed, pawl K and wiper L, all substantially as and for the purpose set forth. 7th. A casing, with a forcing screw therein, having internally threaded ends in combination with a stuffing spout or cap formed with a thread, whereby it may be screwed to said case, and a corrugated or serrated rim, whereby by means of a pawl on the casing, the cap or spout may be locked in position, substantially as described.

No. 25,240. Plate or Element of Voltaic Battery. (*Lame ou Couple de Pile Voltaïque*.)

The Primary Battery Company (Assignee of Desmond G. Fitzgerald), London, Eng., 27th October, 1886; 5 years.

Claim.—1st. The herein described process of producing dense and coherent plates, masses or layers mainly composed of oxide of lead, which process consists in the admixture with the oxide of lead of a soluble salt, which, when brought by solution into chemical contact with the oxide of lead will become decomposed, and form, with the oxide of lead, an insoluble salt of this metal, and thus cause the material to "set" and acquire the required dense and coherent condition. 2nd. In the process of producing dense and coherent plates, or concreted masses or layers of oxide of lead, the combination, with a portion of the lead entering into the composition of such plates, masses or layers, of the acid radical of an ammonia salt, the salt being such that its radical will form with lead an insoluble, or nearly insoluble salt of that metal, the object of such combination being to cause the material of which the plate, mass or layer is formed, to set so that it will not disintegrate when subsequently immersed in water. 3rd. The herein described process of peroxidizing plates or masses of oxide of lead, which has been caused to "set," as herein described, by submitting them to the oxidizing action of chlorine in the presence of water, substantially as specified. 4th. The herein described process of peroxidizing plates or masses of oxide of lead, by submitting them to the oxidizing action of a hot aqueous solution of sodio or magnesio hypo-chlorite, substantially as specified.

No. 25,241. Farm Fence. (*Clôture de Ferme*.)

William F. Shedd, Grand Rapids, Mich., U.S., 27th October, 1886; 5 years.

Claim.—1st. The combination of the crossed stakes A, A, B, B, rider D, supported in the upper crotch of said stakes, wire loops L, secured to said stakes below the crossing point thereof, S-shaped hooks crossing said loops, rails E, F, G, supported in said loops upon the hooks, wire loops C connecting the stakes above the crotch, braces J, K, notched at their upper ends, inserted in said loops, as described, and located respectively upon opposite sides of the fence panel, and clasp H uniting the lower crossed ends of said braces, and securing as a support for the lower rail G, substantially as described. 2nd. The combination with the crossed stakes and rails supported thereby, substantially as described, of the wire loops *c*, *c*, inclined braces having notched upper ends engaging said loops, the clasp H uniting the lower crossed ends of said braces and supporting the lower rail, and the vertical brace secured to each rail and having an inclined lower end resting upon the brace K within the clasp, substantially as described.

No. 25,242. Traction Engine Driving Gear. (*Appareil Moteur de Machine Locomotive*.)

John Abell (Assignee of Francis M. Walker), Toronto, Ont., 27th October, 1886; 5 years.

Claim.—1st. A traction engine, in which the traction gear is supported on an independent frame, pivoted at one end upon the axle of the main carrying wheels, and suitably connected at its other end to the boiler of the machine. 2nd. The frame N, pivoted on the axle C, and connected at its other end to the forward portion of the boiler A, in combination with the counter-shafts E, and F, journaled in bearing boxes M, adjustably connected to the frame N, substantially as and for the purpose specified. 3rd. The frame N, pivoted on the axle C and supporting the counter-shafts E and F, which carry the driving-gear, as specified, the crank-shaft P journaled in brackets S, attached to the boiler A and connected to the frame N by the links Q, in combination with the adjusting spindle S, arranged substantially as and for the purpose specified. 4th. A screwed spindle S, connected to and arranged to operate the crank-shaft P, in combination with the spring *r*, arranged substantially as and for the purpose specified.

No. 25,243. Band or Chain for the Transmission of Work. (*Courroie ou Chaîne de Transmission du Mouvement*.)

The Gasking Patent Driving Belt and Leather Company, London (Assignee of Alfred J. Gasking, Enfield, Eng., 27th October, 1886; 5 years.

Claim.—1st. The improvements in bands or chains for the transmission of work, which are composed of steel or other metallic links, with groups of discs or blocks, etc., threaded upon transverse pins for driving on to special pulleys or laces, having hollows or recesses for receiving the same, substantially as herein set forth. 2nd. A belt for transmitting power, consisting of a metallic frame having transverse rods, in combination with pieces of leather or other frictional material, etc., arranged upon the said rods between the sides of the said frame and presenting the operative surface or surfaces to the wheels, substantially as herein set forth. 3rd. In driving belts or bands, the combination of pieces of leather having one hollowed side and one straight side, secured together by transverse pins in combination with a metallic chain for taking the tension thereof, substantially as herein set forth. 4th. In combination with a metallic chain or links, a series of intermediate leather or other pieces, having serrated faces or edges, either longer or shorter, and threaded upon transverse rods to form a driving band, substantially as herein set forth.

No. 25,244. Dumping Waggon. (*Tombereau*.)

Joseph Cameron, Cynthiaua, John S. Judson and W. S. Judson, Springfield, Ohio, U.S., 27th October, 1886; 5 years.

Claim.—1st. A series of dumping slats, arranged in pairs and hinged at the bottom of the bed, in combination with a series of rods and bars connected therewith and to a hand-lever, whereby the said slats are raised and lowered by a movement of the hand-lever, thus opening or closing the bottom of the bed, substantially as set forth. 2nd. The combination in a waggon bed of a series of transverse slats hinged at the bottom of said bed and arranged in pairs, one set of pairs being arranged on each side of the respective axes and provided with a covering over the joints between the said pairs, whereby a hood is formed above the said axes, while discharging the load, substantially as set forth. 3rd. The combination with a waggon, of a dumping bed having a series of dumping slats arranged upon, of an opening L in the sides of the bed between the slats and a hood H above said opening and slats, substantially as and for the purpose set forth. 4th. In a dumping bed, a longitudinal bar connected by suitable means to a pivoted hand-lever and hinged to the side of the bed by a series of parallel bars, in combination with a series of dumping slats arranged in pairs and connecting bars from each slat of the respective pairs to the said parallel bars, substantially as set forth. 5th. A series of dumpings, disposed in pairs and hinged within the sides of the bed, connected by carcass or other suitable material, which is elevated above the joints by a transverse rod, substantially as set forth.

No. 25,245. Plate or Element for Voltaic Batteries. (*Lame ou Couple de Pile Voltaïque*.)

The Primary Battery Company (Assignee of Thomas J. Jones and William H. Tasker), London, Eng., 27th October, 1886; 5 years.

Claim.—1st. The herein described process of producing porous and coherent masses or plates, mainly composed of oxide of lead, which