

No. 35,381. Pipe Coupling. (*Joint de tuyaux.*)

Felix Louis Decarie and Peter Lord, both of Montreal, Quebec, Canada, 7th November, 1890; 5 years.

Claim.—The combination, in a pipe coupling, of the sleeve *a*, having arm *g*, and set-screw *i*, also having head *b*, provided with circular flange *d*, with sleeve *a'*, having head *b'*, provided with groove *d'*, and packing *e*, adapted to receive the flange *d* and form a joint therewith by being pressed together by the set screw *i*, the whole substantially as described.

No. 35,382. Tap. (*Taraul.*)

James Dixon, Providence, Rhode Island, assignee of Horace Clark Bradford, Milwaukee, Wisconsin, both in U.S.A., 8th November, 1890; 5 years.

Claim.—In an adjustable tap, the combination of the collet *A*, provided with tap-retaining grooves *C*, cutting taps *B* located in their respective grooves *C*, inclosing band *F* surrounding said taps, tap-retaining gibs or clamping-pieces *G*, provided with outward projecting flanges *D* and adjusting screws *J*, operating in said inclosing band *F*, and engaging at their inner ends against said tap retaining clamps or gibs *G*, said gibs *G* being interposed between said inclosing band *F*, and the several cutting taps *B*, the threads of said clamps *G* being adapted to engage in the threads *I* of the cutting taps, while the outward projecting flanges *D*, *D* of said clamps engage upon the respective sides of said retaining band *F*, substantially as and for the purpose specified.

No. 35,383. Pipe Die. (*Filière pour tuyaux.*)

James Dixon, Providence, Rhode Island, assignee of Horace Clark Bradford, Milwaukee, Wisconsin, both in U.S.A., 8th November, 1890; 5 years.

Claim.—1st. In an adjustable pipe-die, the combination of a collet *A*, provided with a longitudinal central socket, and a series of longitudinal grooves *H*, formed in its interior walls, radial clamping bolts *I*, provided with retaining slots for the reception of the cutting-chasers *F*, cutting-chasers *F*, retaining clamps or gibs *K* located in the slots of said bolts *I*, and having screw-threaded bearing surfaces for the reception of the screw-threaded surfaces of the cutting chasers, and nuts *L*, turning on the bolts *I*, substantially as and for the purpose specified. 2nd. In an adjustable pipe die, the combination of a collet *A*, provided with a longitudinal central socket, a series of screw-threaded apertures *a*, for the reception of the reamers *E* and the reamer-adjusting screws *G*, and a series of longitudinal grooves *H*, for the reception of the cutting-chasers *F*, cutting-chasers *F*, reamers *E*, and reamer-adjusting screws *G*, radial clamping bolts *I*, provided with retaining slots for the reception of the cutting-chasers *F*, cutting-chasers *F* retaining clamps or gibs *K*, located in the slots of said bolts *I*, and having screw-threaded bearing surfaces for the reception of the screw-threaded surfaces of the cutting-chasers, and nuts *L*, turning on bolts *I*, all substantially as and for the purpose specified.

No. 35,384. Saw Set. (*Fer à contourner.*)

James Johnstone and William Johnstone, both of New York, State of New York, U.S.A., 8th November, 1890; 5 years.

Claim.—1st. A saw-set, comprising two main frames pivoted to two levers and operating in opposite directions, in combination with two oppositely-arranged anvils and two punches, one punch being carried by the upper frame and the other by one of the levers, substantially as shown and described. 2nd. In a saw-set, a main frame having a bridge piece on which is mounted an anvil, in combination with a sliding anvil block, an anvil mounted thereon, a set-screw for moving the anvil block, two opposite set-fingers, and means for reciprocating said fingers, substantially as described. 3rd. In a saw-set, the lever *A*, provided with the downwardly-projecting cheek piece *a*, and the lever *B*, formed with the upwardly-projecting arm *b*, in combination with the main frame *C*, pivoted to the said cheek pieces and provided with the anvils *D* and *G*, the auxiliary frame *H* pivoted to the lever *A*, the set-finger *E* pivoted to the arm *b*, and the set-finger *F*, held in the frame *H*, substantially as described. 4th. In a saw-set, the lever *A*, formed with the cheek pieces *a*, *a*, and the lever *B*, formed with the arm *b*, combined with the set-finger *E*, pivoted to the said arm *b*, and the main and auxiliary frames *C* and *H* pivoted to the said cheek pieces, substantially as described. 5th. In a saw-set, the combination of the main frame *C*, slotted at *d*, and having the bridge-piece *c*, provided with the anvil *G*, the movable anvil block *D* and the reversible anvils *D* and *G*, substantially as described. 6th. In a saw-set, the main frame *C*, formed with the slot *d*, bridge pieces *c*, *c*, and ways *d*, in combination with the anvil block *D*, held in the ways *d*, the anvil *G*, held on the bridge piece *c*, the anvils *D* and *G*, the set-finger *E*, attached to an arm of the lever *B*, the auxiliary frame *H* attached to the lever *A* and the set-finger *F*, adjustably attached to the auxiliary frame, substantially as described. 7th. In a saw-set, the auxiliary frame *H*, provided with the transverse worm *I* and rod *I*, in combination with the set-finger *F*, substantially as described. 8th. In a saw-set, the auxiliary frame *H*, provided with the transverse worm *I* and rod *I*, in combination with the set-finger *F*, the anvil *G* and the levers connected to reciprocate the auxiliary frame, substantially as described.

No. 35,385. Car Replacer.

(*Appareil à remettre les chars sur la voie.*)

James McGary and Frederick C. Thompson, both of East Tawas, Michigan, U.S.A., 8th November, 1890; 5 years.

Claim.—The combination, for application to the rails of a railroad track, of the detachable clips *D*, of hook shape at their one end or side to engage with the track rails, and having an elongated open

space *b* below, opposite their hooked ends, the clip locking cams or eccentrics *S*, and the inclined, replacing rails or bars *C*, pivoted at their upper ends to the clips for lateral and angular adjustment, substantially as shown and described.

No. 35,386. Heating Drum. (*Poêle sourd.*)

The Brock Heating Device Co., assignees of Arthur Wellington Brock, all of Shepherd, Michigan, U.S.A., 8th November, 1890; 5 years.

Claim.—1st. In a heating drum, the combination of the inlet pipe *A*, the pipe *B*, provided with the reversible damper *I*, the chamber *C*, provided with the inclined bottom, the removable cap, the flues *E* and *F* and chamber *D*, the parts being arranged to operate substantially as described. 2nd. In a heating drum, the combination of the inlet pipe *A*, the flue *B*, provided with the reversible spring controlled damper, the chamber *C*, provided with the inclined bottom and the removable cap, and with the partition *G*, of the flues *E* and *F* and chamber *D*, and of the circulating flue *K*, the parts being arranged to operate substantially as described. 3rd. In a heating drum, the combination, with the inlet pipe, of the vertical flue *B*, provided with the damper having the abutment *a* and the spring *b*, arranged to hold it in either one of its adjusted positions, substantially as and for the purpose described.

No. 35,387. Wire Stretcher.

(*Tendeur de fil de fer.*)

Charles M. Kiler and George W. Kiler, both of Indianapolis, Indiana, U.S.A., 8th November, 1890; 5 years.

Claim.—1st. A wire stretcher, comprising a casing, a sprocket-wheel having bearings in said casing, a pinion fixed to revolve with the sprocket-wheel, a sprocket-chain engaging the sprocket-wheel, and having a clamp to engage the wire to be tightened, a worm journaled in the casing and meshing with the pinion, and adapted to revolve the pinion and connected sprocket-wheel, and a hook device pivotally engaging the casing, and fence post to hold the stretcher while the wire is being drawn taut, substantially as shown and described. 2nd. In a fence wire stretcher, the two-part metallic casing *A*, having a hook pivotally secured to one end of the sprocket-wheel *D*, and pinion *C*, both secured to the same shaft and journaled in the casing, as shown, the worm *B* journaled in the casing with its axis at right angles to the axis of the pinion *C*, and having an angular-shaped end projected beyond the casing to be engaged by a crank or wrench, said worm meshing with the pinion and revolving it and the sprocket-wheel, and a sprocket-chain with a clamp at its end to engage the fence wire, all substantially as shown and described.

No. 35,388. Wire Fence.

(*Cloûture en fil de fer.*)

Charles M. Kiler and George W. Kiler, both of Indianapolis, Indiana, U.S.A., 8th November, 1890; 5 years.

Claim.—1st. A wire and metal rail fence, comprising metal corner or end posts, with wire fasteners secured thereto, metal intermediate posts, having transverse holes therethrough, a tubular rail loosely extended through the holes in said posts, and connected at their ends with the corner or end posts, and wires secured to the end or corner posts and extended loosely through holes in the intermediate posts in a line with the tubular rail, substantially as described. 2nd. In a fence, the combination of the tubular corner or end posts, the tubular intermediate posts, the tubular rail, and the wires all secured together in such manner that they will be vertically central with relation to each other, substantially as described. 3rd. In a fence, the combination of the tubular end posts *A*, the tubular intermediate posts *A*, having transverse holes therethrough, the tubular rail *C* extended through said holes and the wires *D* secured to the end posts and loosely extended through the intermediate posts with their centres vertically aligned with the rail *C* and posts, substantially as and for the purposes described. 4th. In a wire and tubular rail fence, the tubular posts, in combination with the caps *B*, having transverse holes *b* therethrough, and the tubular rail *C* extended through said hole, substantially as described. 5th. The combination, with the tubular posts *A* of a fence, of the caps *B* having the reduced ends to enter the posts, and having transverse holes therethrough, and the tubular rail *C* extended through said holes and secured to the corner posts at its ends, substantially as described. 6th. In a wire and tubular rail fence, the tubular posts *A*, the caps *B* secured thereto and having sockets formed therein, the tubular rail *C* entering said sockets, and the wires *D* secured to the posts in such manner as to be vertically aligned with relation to the rail *C* and post, as set forth. 7th. A wire and tubular rail fence, comprising the tubular end posts *A*, having sockets formed thereon or secured thereto, the intermediate posts *A*, having transverse holes therethrough, the tubular rail *C* extending through said holes and resting at its ends in the sockets of the end posts, and the wires secured to the end posts and loosely extended through holes in the intermediate posts, in a vertical line with relation to the rail, substantially as described and shown. 8th. A wire and tubular rail fence, comprising posts, having holes formed through them, tubular rails either extended entirely through said holes or joined or abutted at the axial centre of said posts, so that said junction is invisible, and wires connecting said posts, substantially as described. 9th. The combination with the post, having a small hole near its upper end, of the cap *B*, the lower end of which has a hole to register therewith, and a pin or rivet extended into said holes to secure the two together. 10th. In combination, the tubular post having a transverse hole near its upper end, and a cap, the lower end of which is extended into the tubular post, and has an elongated transverse holes to register at slightly varying positions with the hole in the post, and a pin or rivet extended through said holes to secure said posts together.