

No. 18,404. Force Pump. (Pompe foulante.)

John Bedford, Rossville, Tenn., U. S., 13th January 1884; 5 years.

Claim.—1st. In a pump for artesian or bored wells, the combination of the vertically sliding bail or stirrup F having an offset at its top, and a horizontal bottom portion, and the hollow plunger A having a transverse opening for the passage of the horizontal portion of the bail, with the pump cylinder C, provided with vertical bottom slots c, for the reception of the sliding bail, the check valve D, the rod G, the tube E, the stock H and the lever I, all constructed and relatively arranged as herein set forth, for the purpose specified.

No. 18,405. Fire-Place and Fire-Back.

(Foyer et fond de foyer.)

James H. Burnham, Fayetteville, Tenn., U. S., 13th January 1884; 5 years.

Claim.—1st. The combination, with a fire-place having an opening extending centrally through it, of a reversible concave metallic fire-back having an inclined plane at its upper end, forming a rigid extension thereof, said fire-back being thus adapted to project into the adjoining room and close the draft opening in the fire-place of said room, substantially as described. 2nd. The combination, with the fire-place α provided with the central opening c, extending centrally through it and having the flanges h, of the reversible concave metallic fire-back l having flanges m and inclined plane q, substantially as described and for the purpose set forth. 3rd. The combination, with the cast iron fire-place or frame a having flanges b, recesses c, smoke passages t and opening e extending centrally through it and provided with the flanges h, of the reversible concave metallic fire-back l having flanges m and inclined upper and q, and removable grate n, substantially as described and for the purpose set forth.

No. 18,406. Abrading Machine.

(Machine de friction.)

George H. P. Flagg, trustee for the Globe Buffer Company, (assignee of Frederick W. Coy.), Boston, Mass., U. S., 14th January 1884; 5 years.

Claim.—1st. The sleeve A, in combination with shaft B and its abrading wheels, substantially as and for the purpose specified. 2nd. The described combination of the hood D and fan case J, with the opening from the hood close to the opening into the fan case, as and for the purposes specified. 3rd. The bell-shaped pulley J, in combination with shaft J1 and pulley F1, and shaft f, one shaft being at right angles with the other, and the two pulleys connected by a belt, all substantially as described.

No. 18,407. Rotary Plough and Pulverizer.

(Charrue rotatoire et brise-motte.)

Columbus Johnston, Clarksville, and Sylvester T. Johnston, St. Louis, Mo., 14th January 1884; 5 years.

Claim.—1st. The combination of adjustable frame G, oblique shaft S and cutter wheel U, V, substantially as and for the purpose set forth. 2nd. The combination of ground wheels A, B, tongue frame or hounds E, axle C, adjustable frame G, drive wheels Q, R, oblique shaft S and wheel U having cutters V, substantially as and for the purpose set forth. 3rd. A rotary plow and pulverizer having an obliquely arranged plow shaft S carrying wheel U with cutter blades V, having cutting edges from the points to, or nearly to the wheel U, substantially as and for the purpose set forth. 4th. The combination of wheels A, B, shaft or axle C, frame E and G, oblique plow or cutter S, U, V and adjusting device I, K, L, substantially as set forth. 5th. The combination of wheel A, cog-wheels Q, R, oblique shaft S, clutch W and plow or cutter wheel U carrying cutters V, constructed and arranged substantially as set forth.

No. 18,408. Pocket Inkstand. (Encrier portatif.)

Olof Jansson, West Sweden, Wis., U. S., 14th January 1884; 5 years.

Claim.—1st. The case A, having hemispherical seat c and cover B, in combination with the hemispherical shape glass ink-receptacle C, confining-disk D and hinged plate E, carrying packing g, substantially as and for the purpose set forth. 2nd. The case A, having cover B and slotted plate or disk D, and the spring-catch F, in combination with the ink-receptacle C and hinged plate E, having downwardly-curved extensions h, i and packing g, substantially as and for the purpose specified.

No. 18,409. Car-Coupling. (Accouplage de wagons.)

Crowell M. Clancy, Wallaceburg, Ont., 14th January 1884; 5 years.

Claim.—1st. In combination with a draw-head, a shuttle enclosed in a chamber therein and provided with a recess in the front-face, and having the two movements under the operation of the pin and link, therein described and for the purposes set forth. 2nd. A draw-head provided with the bell-mouth B and chamber C, in combination with a shuttle E, provided with a recess e co-incident, when the pin and link are in place, with the pin-hole α , the parts constructed and operated, substantially as specified.

No. 18,410. Boot. (Botte.)

William Brown, Toronto, Ont., 14th January 1884; 5 years.

Claim.—1st. In a boot, the combination of the vamp A and back B, with the strap C passing under the ankle, and buckle D, as shown and for the purpose specified.

No. 18,411. Car-Coupling. (Accouplage de wagons.)

John D. Kiely, Toronto, Ont., 14th January 1884; 5 years.

Claim.—1st. In combination with a draw-head, the counter-balanced hook-coupling hung upon a transverse rock-shaft, the turning of which regulates the movements of such coupling hook, substantially as set forth. 2nd. In a car-coupling, the coupling hook E provided with the arms h, i, and a counter-balance k hung upon a transverse rock-shaft, with which it has a partial rotary movement, substantially as and for the purposes described. 3rd. In combination with a draw-bar A provided with a stop-block D, the coupling hook E provided with the arms h, i, and counter-balance k, and hung upon a transverse rock-shaft F, substantially as described. 4th. In a car-coupling, the combination of the draw-head A, recessed portion C and stop-block D, the coupling hook E, rock-shaft F and rods H, when constructed, arranged and operating substantially in the manner and for the purpose specified.

Claim.—1st. In a gas engine, the combination, with the cylinder, of the block R having an aperture Q provided with a cavity W, a slot S on the block, a channel U extending from the aperture to the explosion chamber, of the plug N adapted to rock in the aperture Q, and provided with a slot O and channels P extending sideways from each side of the slot, and of a cam for operating the valve plug, substantially as herein shown and described and for the purpose set forth. 2nd. In a gas engine, the combination, with the cylinder, of the block R having an aperture Q, a cavity W and the channel U, of the plug N having a slot O and side channels and the burners T and S, substantially as herein shown and described and for the purposes set forth. 3rd. In a gas engine, the combination, with the cylinder, of a rocking valve plug and a wheel provided with a cam groove suddenly extended at one point toward the rim of the wheel, and of devices for transmitting the motion from the cam wheel to the rocking valve plug, substantially as herein shown and described and for the purpose set forth.

No. 18,412. Gas Engine. (Machine à gaz.)

Harmer Denney, Brooklyn, N. Y., U. S., 14th January 1884; 5 years.

Claim.—1st. In a gas engine, the combination, with the cylinder, of the block R having an aperture Q provided with a cavity W, a slot S on the block, a channel U extending from the aperture to the explosion chamber, of the plug N adapted to rock in the aperture Q, and provided with a slot O and channels P extending sideways from each side of the slot, and of a cam for operating the valve plug, substantially as herein shown and described and for the purpose set forth. 2nd. In a gas engine, the combination, with the cylinder, of the block R having an aperture Q, a cavity W and the channel U, of the plug N having a slot O and side channels and the burners T and S, substantially as herein shown and described and for the purposes set forth. 3rd. In a gas engine, the combination, with the cylinder, of a rocking valve plug and a wheel provided with a cam groove suddenly extended at one point toward the rim of the wheel, and of devices for transmitting the motion from the cam wheel to the rocking valve plug, substantially as herein shown and described and for the purpose set forth.

No. 18,413. Combined Condenser and Separator, for Condensing and Separating the Vapour eliminated from Petroleum Oils. (Condensateur et séparateur combinés pour condenser et séparer la vapeur éliminée des huiles de pétrole.)

John Brake and George Brake, Petrolia, Ont., 14th January, 1884; 5 years.

Claim.—1st. A combined condenser and separator C provided with tubes D, D, for condensing and separating the vapour eliminated from petroleum oils, constructed and arranged substantially as hereinbefore set forth. 2nd. The combination of a combined condenser and separator C provided with tubes D, D and heads C1, C2, with packing E and plate F, to allow said tubes to contract and expand without injury to themselves or said condenser, substantially as shown and described. 3rd. The combination of a combined condenser and separator C provided with tubes D, D, with vapour pipes B, B, packing E, plate F, reservoirs G, G1, stack H and outlet pipes J, J, substantially as shown and described and for the purpose specified.

No. 18,414. Stave Jointer.

(Jointeur des douves.)

Julius F. Vogt and William C. Vogt, St. Louis, Mo., U. S., 14th January, 1884; 5 years.

Claim.—The combination, with a stave-holder, of a disk having a circular channel in its face, concentric with the centre of the disk, made concave to suit the bilge of a stave and having two sets of jointing-cutters, both inclined backwardly from the bilge-line l, one inwardly and the other outwardly, whereby each stave will be jointed from the bilge-line toward both ends, as described.

No. 18,415. Cut-off for Conductors of Liquids. (Branchement pour les conduits des liquides.)

William F. B. Fisher, Springfield, Ohio, U. S., 14th January, 1884; 5 years.

Claim.—1st. In a cut-off of the character described, the combination, with the cut-off C, provided with arms or extensions e2 adapted to bear yieldingly against the body A, of a tilting or pivoted deflector B, substantially as specified. 2nd. In a cut-off, the combination of the body A, collar A1 secured as described, and tilting deflector B arranged between the body and the collar, substantially as shown and described. 3rd. The combination of the body A cut away on the line a, a, the cut-off C having an arm or arms e2, the deflector B and the collar A1 secured throughout half its circumference to the body, substantially as described. 4th. In a cut-off, the combination of a tilting deflector and a cut-off having a curved arm or arms, adapted to bear against the inner surface of the body of the cut-off, whereby the cut-off proper is held in an open position against the tendency of the wake falling thereon back of its pivots to close the same, substantially as shown and described.

No. 18,416. Boring Bit. (Trépan.)

Hiram E. Fuller and Edmund C. Bramhall, New York, N. Y., U. S., 14th January, 1884; 5 years.

Claim.—1st. In a bit, the combination, with a screw or gimlet point, of downwardly curved cutters, depending spurs or cutters arranged at the outer edges of said cutters, and upwardly projecting lips arranged opposite to said spurs, substantially as set forth. 2nd. In a bit, the combination, with a screw or gimlet point, of outwardly curved cutters, depending spurs or cutters arranged at the outer edges of said cutters, and upwardly projecting lips, substantially as set forth.