

tion between them, substantially as and for the purpose specified. 7th. In road vehicles in which the pole is connected to the front axle by curved elastic steel draw-bars, the combination of a semi-circular brace rigidly connected at either end to the draw-bars and centrally fastened to the end of the pole. 8th. A metal draw-jack E, having a tapered hole through it to receive the draw-pin, and extended ends to provide means for securing it in position on the axle.

No. 18,612. Block Presser for Wood Paper Pulp Machines. (*Presseur de buche pour machines à Pâte à Papier de Bois.*)

Norman H. Brokaw, Marinette, Wis., U. S., 4th February, 1884; 5 years.

Claim.—1st. A block-presser for paper pulp mills, consisting of a hydraulic press having the upper and lower ends of the cylinder connected with a pipe or pipes, which are provided with cocks for admitting the liquid into the upper or lower ends of the cylinder, substantially as described. 2nd. A block-presser for paper-pulp mills consisting of a hydraulic press, the cylinder of which has its upper and lower ends connected with a pipe or pipes; which are provided with cocks, for admitting the liquid into either end of the cylinder, said cocks being provided with devices for automatically adjusting them when the piston arrives at the end of its downward stroke, substantially as described. 3rd. A block-presser for pulp mills consisting of a hydraulic press provided with means for conducting the liquid into the upper end of the cylinder, to press the piston downward, and with means for admitting the liquid into the lower end of the cylinder, for the purpose of forcing the piston upward after it has completed its downward stroke, substantially as described. 4th. In a block-presser for pulp mills, the combination, with the cylinder A, of the tubes E, E', connecting the ends of the cylinder, the three-way cocks F, F', the piston B and the rod C, substantially as described. 5th. In a block-presser for pulp mills, the combination, with the cylinder A, of the tubes E, E', the three-way cocks F, F', the arms H, H', the rods I, I', the levers J, J', the weights K, K', the latch L, the piston B, the rod C, the head-block D and a device for connecting the piston rod or head-block with the latch, substantially as described.

No. 18,613. Mouse Trap. (*Souricière.*)

Edgar J. Jarvis, Toronto, Ont., 4th February, 1884; 5 years.

Claim.—1st. In a mouse trap, a perforated bait-box arranged to contain and protect the bait, in combination with a catching device located in front of the bait-box, substantially as and for the purpose specified. 2nd. In a mouse trap, in which the mouse is caught by a spring loop, the combination of a pivoted wire having one end bent to retain the spring, as specified, while the other end extends between the spring loop and bait, substantially as and for the purpose specified. 3rd. In a mouse trap, in which the mouse is caught by a loop actuated by a spring, the pivoted wire bar F, in combination with the pivoted wire C, having a bent end *a* to hook over the wire F, while its other end extends between the catching loop and bait. 4th. A perforated bait-box A located at the end of the passage way C, a loop D actuated upwardly by the coiled wire spring E, and held down within the passageway C by the pivoted wire F, in combination with the wire G having the bent end *a* to retain the wire F, and its other end arranged to extend within the passageway C, between the loop D and perforated bait box A.

No. 18,614. Riddle for Extracting Cockle and Wild Peas from Grain. (*Crible pour Séparer la Nuelle et les Pois sauvages du grain.*)

William Atwell, Robert Floeter and Manson Campbell, Chatham, Ont., 4th February, 1884; 5 years.

Claim.—The combination of the frame D, screens A, B, C, close bottom E, shoot F, cross-bars G, G' and slide H, substantially as shown and described and for the purpose specified.

No. 18,615. Rowlock. (*Toilette.*)

Joseph Beaudreau and Thomas F. Criley, Ludington, Mich., U. S., 4th February, 1884; 5 years.

Claim.—1st. The combination of the clamp D having spring-catch *d*, and rock shafts C provided with circular nuts *c*, with the U-shaped frame B having slots H and circular recesses I at its ends, substantially as shown and set forth. 2nd. The ear-sleeve F having inwardly projecting pins *f*, securing screws *f*' and external annular flanges *f*2, combined with the clamp *d* and U-frame, as set forth. 3rd. The combination of the bracket A, U-shaped frame B having slots H and recesses I, clamp D having rock-shaft C provided with nuts *c*, and ear sleeve F, as shown and set forth.

No. 18,616. Self-Closing Spigot. (*Fausset Automatique.*)

Ferdinand Mayer and William F. Cox, Union Hill, N. J., U. S., 4th February, 1884; 5 years.

Claim.—1st. The self-closing spigot herein shown and described, consisting of the body A, plug B, arm D, weight *f* and bent rod E, substantially as and for the purposes described. 2nd. The combination, with the body A and plug B of the spigot, of the arm E having face or portion *e* inclined to the plane of motion of the weighted arm D, for automatically forcing plug B tightly to its seat, on the fall of the arm D, substantially as shown and described.

No. 18,617. Fastening for Gloves and Mitts. (*Agrafe pour Gants et Mitaines.*)

Jean B. A. Lanctot and Francois X. Lanctot, Montreal, Que., 4th February, 1884; 5 years.

Claim.—A spring fastening for gloves made of a wire or strip of metal having suitable fastenings at or near the lower ends, and

twisted into a ring at the top, so that the side pieces B, B will always come together, all as and for the purposes set forth.

No. 18,618. Illuminating Gas Apparatus. (*Appareil à Gaz d'Éclairage.*)

John E. Bioknell, Cleveland, Ohio, U. S., 7th February, 1884; 5 years.

Claim.—1st. The combination, with the retort A having the bottom aperture *c*, of the rotary shaft *a* carrying radial rakes *b*, adapted to spread the saw-dust and transfer the charcoal to the discharge *c*, as described. 2nd. The apparatus for making illuminating-gas consisting of wood-retort A, superheaters C, D, oil retort E and connections *l, m, n*, substantially as shown and described.

No. 18,619. Sash-Holder. (*Arrête-Croisée.*)

Martin Burke, Youngstown, Ohio, U. S., 7th February, 1884; 5 years.

Claim.—1st. In a sash-holder, a bottomless diagonally slotted housing, in combination with a longitudinal bolt formed in sections and detachably connected together, one of said bolt sections being provided with an operating lever, substantially as and for the purpose set forth. 2nd. In a sash-holder, the combination, with a bottomless diagonally slotted housing, of a longitudinal bolt formed in sections and detachably connected together by a slot and pin, one of said sections having an operating lever, substantially as and for the purpose specified. 3rd. The combination, in a sash-holder, of a bottomless diagonally slotted casing and a bolt consisting of two sections, one of said sections being provided with a lever and a shaft carrying a pin, and the other section being formed hollow and having a T-shaped slot, by which means the two sections are detachably connected together, substantially as and for the purpose described. 4th. A sash-holder consisting of a bottomless diagonally slotted housing containing a horizontal bolt formed in sections, having a handle and a shaft with pin upon one of said sections, and the other section having a T-shaped slot formed with an inclined shoulder to assist the pin in riding over, and preventing it from falling into the straight or horizontal portion of the slot, when the section is turned, substantially as and for the purpose specified. 5th. In a sash-holder, the combination, with a longitudinal bolt formed in sections, one of which has an operating lever, of a bottomless diagonally slotted housing provided with a longitudinal slot joining the diagonal slot to facilitate the insertion of the lever, substantially as and for the purpose described. 6th. In a sash-holder, the combination, with a bottomless diagonally slotted housing, of a longitudinal bolt formed in sections, one of said bolt sections having an operating lever, and the other section, at its outer end, having a flange or bearing plate to broaden the surface of the end of the bolt, substantially as and for the purpose set forth. 7th. In a sash-holder, a bottomless diagonally slotted housing, in combination with a longitudinal bolt formed in sections, one of said sections having an operating lever and cast hollow portion of its length, and the other bolt section having a reduced end to enter the hollow section and detachably connected thereto, substantially as and for the purpose specified. 8th. In a sash-holder, the combination, with a longitudinal bolt formed in sections, of a bottomless diagonally slotted housing cast with retaining shoulders upon its interior sides, to prevent the bolt from lateral movement, substantially as and for the purpose described. 9th. In a sash-holder and lock, a bottomless diagonally slotted housing containing a longitudinal bolt formed in sections, in combination with a flanged or socket plate adapted for attachment to the side of the window or casing, to receive the outer end of the bolt, substantially as and for the purpose set forth. 10th. In a sash-holder, a bottomless diagonally slotted housing cast with a spur and retaining shoulders upon its interior sides, in combination with a longitudinal bolt formed in sections, detachably connected together a slot and pin, substantially as and for the purpose specified.

No. 18,620. Drop Tubes for Boilers. (*Tubes Inclines pour Chaudières.*)

William H. Baldwin, Ottawa, Ont., 7th February, 1884; 5 years.

Claim.—1st. A drop tube for boilers consisting of an external tube B secured to the lower boiler plate, and a smaller internal tube *B*1, passing through the tube A and through the upper boiler plate *B*2, and secured to the same by jam nuts or other convenient means, and having the free ends of the two tubes connected and jointed by a reducing coupling *c* screwed to ends thereof. 2nd. The reducing coupling *c* having each end internally screw-threaded to fit over, and screw upon the larger tube A and the smaller tube B simultaneously, in combination with the tubes A and B forming an annular space. 3rd. A tube B inserted in a larger tube A of such a diameter as to leave an annular space between the walls of the tubes, and connected and jointed by a reducing coupling C fitting upon the ends of both tubes. 4th. A tubular flue A2 B2, in combination with the water legs D of a horizontal boiler E, all substantially as described and for the purpose set forth.

No. 18,621. Machine for Stretching Pants. (*Machine pour Étirer les Pantalons.*)

Kenneth Allison, Toronto, Ont., 7th February, 1884; 5 years.

Claim.—1st. The spring D fitted to each of the cross-pieces B and C, and capable of being tightened by the screw *e*, as shown and for the purpose specified. 2nd. The combination of the hinged spring D with the cross-pieces B and C, working on the rod or staff A, as shown and for the purpose specified.

No. 18,622. Tool-Holder for Iron Planing Machines. (*Porte-Outil pour Machines à Raboter le Fer.*)

Robert Nield, Stratford, Ont., 7th February, 1884; 5 years.

Claim.—1st. The tool-holders D held within the tool-box C, in combination with mechanism arranged to simultaneously adjust both tool-holders, substantially as and for the purpose specified. 2nd. The