

through them beneath the surface of the water, sinking viaduct sections until they are opposite said apertures, and then moving said sections longitudinally through said apertures to the desired position.

### No. 36,951. Dog for Saw Mills.

(Clameau de scierie.)

Griffin C. Miller, (assignee of Alfred K. Miller), both of Millersport, Ohio, U.S.A., 10th July, 1891; 5 years.

**Claim.**—1st. In a saw-mill dog, the combination, with a slotted frame provided with a stationary rack, of a sliding bar provided with a stud projecting into the slot of the frame, a gear-wheel mounted on the stud and meshing with the rack, a lever for operating the gear-wheel, and a hook carried by the said sliding plate, substantially as described. 2nd. In a saw-mill dog, the combination, with a slotted frame provided with a stationary rack, of a sliding bar provided with a stud projecting into the slot of the frame, a gear-wheel mounted on the stud and meshing with the rack, a lever for operating the gear-wheel, and a hook adjustably secured to the said sliding bar, substantially as described. 3rd. In a saw-mill dog, the combination, with a frame provided with a rack and a longitudinal slot parallel with the said rack, of a gear-wheel in mesh with the said rack, a weighted lever formed on the said gear-wheel for turning the latter, a stud on which the said gear-wheel is mounted to turn, and which projects in the said slot of the frame, and a plate carrying the said stud and supporting the hook, substantially as shown and described. 4th. In a saw-mill dog, the combination, with a frame provided with a rack and a longitudinal slot parallel with the said rack, of a gear-wheel in mesh with the said rack, a weighted lever formed on the said gear-wheel for turning the latter, a stud on which the said gear-wheel is mounted to turn, and which projects in the said slot of the frame, a plate carrying the said stud, a clip held on the said plate, a hook passing with its shank through the said clip, and a screw screwing in the said clip against the said hook-shank, substantially as shown and described. 5th. In a saw-mill dog, the combination, with a frame provided with a rack and a longitudinal slot parallel with the said rack, of a gear-wheel in mesh with the said rack, a weighted lever formed on the said gear-wheel for turning the latter, a stud on which the said gear-wheel is mounted to turn, and which projects in the said slot of the frame, a plate carrying the said stud, a clip held on the said plate, a hook passing with its shank through the said clip, a screw screwing in the said clip against the said hook-shank, and a lever for turning the said screw, substantially as shown and described. 6th. In a saw-mill dog, the combination, with a supporting frame and a sliding rack thereon, of a hook pivoted to the rack and a spring secured to the rack and having its outer end engaging the hook, substantially as and for the purpose set forth. 7th. In a saw-mill dog, the combination, with a rack mounted to slide, of a hook pivoted on the said rack, a spring held on the said rack and supporting the said hook, a gear wheel meshing in the said rack and fulcrumed on the said plate, and a weighted lever formed on the said gear wheel and serving to turn the same, substantially as shown and described. 8th. In a saw-mill dog, the combination, with a frame, of a plate mounted to slide on the said frame, an adjustable clip held on the said plate, a hook held adjustably on the said clip, a pivoted hook supported by a spring and mounted to slide, and a plate secured on the said main frame and carrying the said hook, and means, substantially as described, for imparting a sliding motion to the said plate and the said hooks, substantially as set forth.

### No. 36,952. Motor. (Moteur.)

George John Altham, Swansea, Massachusetts, U.S.A., 11th July, 1891; 5 years.

**Claim.**—1st. A motor, comprising in its construction, a reaction wheel, a nozzle adapted to receive fluids under pressure, a tube connected with said nozzle and extending into said wheel, and stationary chutes connected with the end of the tube and arranged to discharge the fluids tangentially with respect to the inner circumference of the wheel, as set forth. 2nd. A motor comprising in its construction, a reaction wheel provided with a cover *r*, a nozzle adapted to receive fluids under pressure, a tube connected with said nozzle and extending into said wheel, the tube being inclined with respect to the axis of the wheel and cover, and stationary chutes connected with the end of the tube and arranged to discharge the fluids tangentially with respect to the inner circumference of the wheel, as set forth. 3rd. A motor, comprising in its construction, a receiving chamber, and a discharge chamber, a reaction wheel, a nozzle adapted to receive fluids under pressure, a tube connected with said nozzle and extending into said wheel, and stationary chutes connected with the end of the tube, the interior of the wheel as its center communicating with the atmosphere, and having communication at its periphery with the discharge chamber, as set forth. 4th. A motor, comprising in its construction, a receiving chamber, and a discharge chamber, a reaction wheel, a nozzle adapted to receive fluids under pressure, a tube connected with said nozzle and extending into said wheel, and stationary chutes connected with the end of the tube, a wheel surrounding the first mentioned wheel, the interior of the latter wheel as its centre communicating with the atmosphere and having communication at its periphery with the surrounding wheel which in turn communicates at its periphery with the discharge chamber, as set forth. 5th. A nozzle for mixing fluids under pressure, embracing in its construction chambers *e*, *k*, and *l*, *g*, pipes or tubes communicating with the exterior of the nozzle, as set forth.

### No. 36,953. Separator for Steam Boilers, etc. (Séparateur pour tuyaux de vapeur.)

Charles Dell Mosher, New York, State of New York, U.S.A., 11th July, 1891; 5 years.

**Claim.**—1st. The combination, with a steam drum or boiler, of a cylindrical steam conduit located within the steam space and provided with a continuous strip of metal bent into a spiral form extending its entire length, said spiral being of a width equal to the internal diameter of the conduit, whereby two spiral passages are formed in said conduit. 2nd. The combination, of a steam drum or boiler, a flue or conduit extending through the steam space of the boiler and provided with an internal spiral diaphragm or partition and with a water outlet, and a hood or casing containing said flue and perforated at its upper portion, said casing having in its lower portion a water outlet and a seal or check adapted to permit the escape of water from said outlet into the boiler and prevent the entrance of steam into said outlet, as set forth. 3rd. The combination of the boiler or drum, the casing having the perforated top or crown and the downwardly projecting flanges forming a water outlet, a trough receiving said flanges and sealing the water outlet against the admission of steam, and the steam flue within said casing and communicating at one end therewith, said flue having a spiral diaphragm or partition and an outlet slot or opening communicating with the outlet of the casing, as set forth. 4th. The steam flue made of spiral form in cross section, one edge overlapping the other, said edges being separated by a slot or outlet opening, combined with a spiral diaphragm or partition in said flue, as set forth.

### No. 36,954. Grain Grader. (Trieur de grain.)

George Horninger Rich, Geneva, Illinois, U.S.A., 11th July, 1891; 5 years.

**Claim.**—1st. The grading cylinder B, composed of the rings *b*<sup>2</sup>, bearing the eyes *b*<sup>3</sup>, and the tie rods *b*<sup>4</sup>, substantially as described. 2nd. The combination of the grading cylinder B, composed of the rings *b*<sup>2</sup>, and the hoppers D, D', E, substantially as described. 3rd. The combination of the grading cylinder B, composed of the rings *b*<sup>2</sup>, with a yielding cleaning device, as for example the board G, substantially as described. 4th. The combination of the grading cylinder B, composed of the rings *b*<sup>2</sup>, with the board G, substantially as described. 5th. The combination of the grading cylinder B, the board G, and the brush H, substantially as described.

### No. 36,955. Sash Lock. (Arrête-croisée.)

Wallace W. Doty, Pueblo, Colorado, U.S.A., 11th July, 1891; 5 years.

**Claim.**—1st. In a sash lock and anti-rattler, the combination of the socket plate having the slot 8, and provided with notches arranged on opposite sides of the slot, the casing, the sliding bolt arranged in the casing and provided at one end with a beveled head 7, having shoulders 22, adapted to engage said notches, said bolt having the threaded portion 26, and the nut arranged on the threaded portion of the bolt, substantially as described. 2nd. The combination, in a sash lock and anti-sash rattler, of the socket plate, the casing, the bolt sliding in the casing and provided at one end with the head 7, and having near the opposite end the threaded portion 26, and provided intermediate its ends with an annular flange and having a pin projecting from the flange, the guide and stop rods arranged within the casing and adapted to be engaged by said pin, the thumb-nut arranged on the threaded portion of the bolt, and the knob secured to the outer end of the bolt and having projections extending in the direction of said pin, substantially as described.

### No. 36,956. Siphon Valve for Cisterns.

(Soupape pour siphon de réservoir.)

John Robert Meadowcroft, Montreal, Quebec, Canada, 11th July, 1891; 5 years.

**Claim.**—1st. In a siphon valve, the combination, with the stand pipe section, of a jointless goose neck portion, as shown and described. 2nd. In a siphon valve, the combination, with the stand pipe section having its inlet opening and valve on one side thereof, of the goose neck portion with its main length in direct vertical line with such stand pipe section, for the purposes set forth. 3rd. In combination, with the lever E, disc D, and extension or facing C<sup>2</sup>, the arm E', projecting from such lever and having a conically shaped eye, and the conically shaped boss or projection *d* on the disc loosely fitting such eye and having its head enlarged, as described and for the purposes set forth.

### No. 36,957. Ice House. (Glacière.)

Octave Lambert and Alphonse Daigneault, assignees of Joseph Friere, all of St. Hyacinthe, Quebec, Canada, 11th July, 1891; 5 years.

**Résumé.**—1o. Dans une glacière la chambre à glace située à la partie supérieure ayant un double fond séparation avec la partie inférieure et dont le mur intérieur est une espèce de grillage et le mur extérieur percé des ouvertures J, K, à la partie inférieure et de l'ouverture G, à la partie supérieure permettant la circulation de l'air le tout tel que décrit pour les fins sus mentionnées. 2o. Dans une glacière la combinaison des pièces 2, 2', 3, 3', 4, 4', permettant le démontage par portions tel que décrit pour les fins sus mentionnées.

### No. 36,958. Whip Stand, or Checker, for Hotels. (Porte-fouet ou marqueterie pour hôtels.)

John Valentine Corrigan, Kinlough, Ontario, Canada, 14th July, 1891; 10 years.

**Claim.**—The combination and arrangement of the pockets or