

No. 41,141. Pump. (Pompe.)

Hugh J. Dykes, Peralta, California, U. S. A., 9th December, 1892; 6 years.

Claim.—1st. In a pump, the combination of a series of independent cylinders, having a common receiving chamber and a common discharge chamber with suitable controlling valves, valved pistons operating within the several cylinders and having valve rods, the means for operating the pistons, consisting of the power shaft having the series of differently located cams, the tappets on the piston rods, against which the cams successively operate to raise the rods, the springs for forcing the rods down again when relieved of the cams, and the top springs on the piston rods serving as cushions for limiting the downward stroke of the pistons, substantially as herein described. 2nd. In a pump, the combination of the main casting A, having the partitions dividing its interior space into separate cylinders, the bottom casting B, bolted to the main casting, and forming a receiving chamber common to all the cylinders of the main casting, the valve seat plate and valve strip secured between the bottom casting and the main casting and controlling their communication, the top casting bolted to the upper end of the main casting and forming the common discharge chamber communicating with each of the cylinders of the main casting, the reciprocating pistons with valves operating within the independent cylinders of the main casting, the piston rods of said piston, the power shaft, the cams located at different points about the circumference of said shaft, the tappets on the piston rods, against which the cams successively operate to lift the rods, the springs above the tappets for forcing the rods down again, and the top springs on the piston rods for limiting the downward stroke of the pistons and preventing them from coming in contact with the lower valves, substantially as herein described.

No. 41,142. Lubricating Box for Car Axles.

(Boîte à graisse de chars.)

Charles Fergie, Westville, Nova Scotia, Canada, 9th December, 1892; 6 years.

Claim.—1st. An axle box having in the upper section a grease chamber E, at the front, and an internal conduit C, leading downwardly to the axle bearing, substantially as set forth, for the purpose described. 2nd. The combination, with the axle of a car, an axle box having a grease chamber E, in the upper section, and a conduit C, leading to the axle, and a stuffing box H, bolted to the underside of said upper section, and covering the bearings of the axle, as set forth.

No. 41,143. Depolarizing Liquid for Galvanic Batteries. (Dépolarisation des liquides pour piles galvaniques.)

Oscar Schlesinger, London, Middlesex, England, 9th December, 1892; 6 years.

Claim.—A depolarizing liquid for galvanic battery elements consisting of diluted sulphuric acid, trioxide of chromium, and nitrous acid solution, in or about the proportions stated.

No. 41,144. Grain Meter. (Compteur à fluide.)

John Henry, Ardoch, North Dakota, U.S.A., 9th December, 1892; 6 years.

Claim.—1st. The combination, with a frame, of a vibratory hopper, valves for opening and closing the hopper, and flexible connections extending from the valves to the frame, and adapted to limit the drop of the valves when the hopper vibrates, substantially as set forth. 2nd. The combination, with a frame and scale beam fulcrumed thereon, of a hopper pivotally supported on the beam to one side of its fulcrum, and valve for automatically opening and closing the hopper as it vibrates, substantially as set forth. 3rd. The combination, with a frame, of a hopper mounted therein to vibrate, valves connected to said hopper, flexible connections between the valves and frame, flanges on said hopper, and flanges on the valves to engage said flanges on the hopper, substantially as set forth. 4th. The combination, with a chute and a frame, of a hopper in the said frame and adapted to vibrate, said hopper being divided into two compartments, a valve pivoted to the hopper for each compartment, flexible connections between said valves and the frame, and a stop on the chute and adapted to retain one of said compartments of the hopper at a time in communication with the spout of the chute, substantially as set forth. 5th. The combination, with a frame of a hopper mounted therein to vibrate, valves connected to said hopper, flexible connections between said valves and frame, said valves being provided with flanges to engage flanges on the hopper, and made somewhat longer than the hopper is wide, substantially as set forth. 6th. The combination, with a chute, of a frame secured thereto, a yoke pivotally supported in said frame, and having a weighted arm, a hopper mounted in the free ends of said yoke and within the frame, a partition dividing said hopper into two compartments, a valve for each compartment, a cord or chain connecting each valve with the frame, and a stop secured to the chute, and adapted to maintain one of said compartments at a time in communication with the outlet of the chute, substantially as set forth.

No. 41,145. Saw-mill Dog. (Clameau de scierie.)

Michael Hanna, Clinton, Missouri, U.S.A., 9th December, 1892; 6 years.

Claim.—1st. In a saw-mill dog, the combination with an upright mounted upon the carriage, and having the vertical face groove or channel, of a sliding rack bar moving in said channel and carrying a dog head at its lower end, a dog moving in said lower head, an upper dog head sliding upon said upright and over said rack bar, a dog moving in said upper head, means for moving said upper and lower head toward each other, and means for simultaneously adjusting said dogs, substantially as set forth. 2nd. In a saw-mill dog, the combination with the upright having a longitudinal face groove or channel, of a spring actuated rack bar moving vertically in said channel and carrying a dog head at its lower end, an upper dog head sliding over said upright above the lower dog head, laterally movable dog mounted in both of said heads, and means for simultaneously adjusting the dogs in said heads by a single movement, substantially as set forth. 3rd. In a saw-mill dog, the combination with the upright having a face channel or groove, of a spring actuated rack bar moving in said channel, and provided at its lower end with a head embracing the sides of the upright, a lower dog adjustably mounted in said lower head, an upper head sliding upon said upright over the rack bar, an upper dog mounted in said upper head, a toothed operating lever mounted at one end in said upper head and meshing with the rack bar, and means for simultaneously adjusting the dogs in said heads, substantially as set forth. 4th. In a saw-mill dog, the upright having a face groove or channel, a spring actuated rack bar moving in said channel and carrying a dog head at its lower end, an upper dog head sliding over said upright above the dog, simultaneously adjustable dogs mounted in said heads, and an operating lever pivotally mounted at one end in said upper head, and provided with a partly toothed circular lever head meshing with said rack bar, and circular guide flanges on each side and extending back of the teeth in the head and adapted to straddle the teeth of the rack, substantially as set forth. 5th. In a saw-mill dog, the combination, with the upright having a face channel, of a sliding rack bar moving in said channel and carrying a dog head at its lower end, an adjustable dog sliding within said head and provided with a toothed face, an upper dog head sliding upon said upright, and having a similar toothed face, an upper dog sliding in said upper head, a dog setting shaft passing through said upper and lower heads, and operating pinions loosely mounted upon said shaft to revolve therewith, and meshing with the toothed faces of said dogs to simultaneously adjust the same, substantially as set forth. 6th. In a saw-mill dog, the upright having a longitudinal face groove, a rack bar moving in said groove and carrying a dog head at its lower end, said dog head being provided with a laterally extending bearing lug, a bearing sleeve working in said bearing lug, a lower dog sliding in said lower head and provided with a rear toothed face, an upper dog head sliding upon said upright and having a laterally extending bearing lug, a bearing sleeve working in said bearing lug, an upper dog sliding in said upper head and having a rear toothed face, a bearing plate secured to the rear upper end of said upright, a squared setting shaft journaled at its upper end to said bearing plate and passing through said bearing sleeves, and operating pinions carried by and sliding upon said shaft and meshing with the toothed faces of said dogs to simultaneously adjust the same, substantially as set forth. 7th. In a saw-mill dog, the upright, a sliding rack bar moving in said upright and carrying a dog head at its lower end, a lower toothed dog sliding in said dog head, an upper dog head mounted to slide upon the upright over the lower dog head, an upper toothed dog sliding in said upper head, a notched bearing plate secured to the upper end of said upright, a vertical dog setting shaft journaled at the upper end in said bearing plate and working through said dog heads, operating pinions carried by said setting shaft and meshing with said toothed dogs, and an operating handle pivotally connected to the upper end of said shaft and provided with a locking lug adapted to engage said notched bearing plate, substantially as set forth. 8th. In a saw-mill dog, the upright having a face groove or channel, a spring actuated rack bar moving in said face, groove or channel and carrying a lower dog head, an upper dog head sliding over said upright, laterally adjustable dogs sliding in said dog heads, means for simultaneously adjusting said dogs, and a lock lever pivoted at one end to the top of the upright and adapted to be swung over the top of the spring actuated rack bar to hold the same inoperative, substantially as set forth. 9th. In a saw-mill dog, the upright having the face groove or channel, a lower dog head carried upon the lower end of said rack bar, an upper dog head sliding upon said upright over the lower dog head, an operating lever mounted in said upper dog head and provided with a partially toothed head meshing with and adapted to be ungeared from said rack bar, adjustable dogs moving in said dog heads, means for simultaneously adjusting said dogs, a rod secured in rear of the upright, and a spring actuated collar sliding upon said rod and connected to said rack bar, substantially as set forth. 10th. In a saw-mill dog, the upright having a face channel, rearwardly extending lugs, and a slot between said lugs, a rack bar in said channel and carrying a lower dog head, an upper dog head sliding upon the upright, an increased rod mounted between said rearwardly extending lugs, a sliding collar mounted upon said rod and provided with a securing arm projecting through said slot and connected with said rack bar, a spring mounted upon said rod