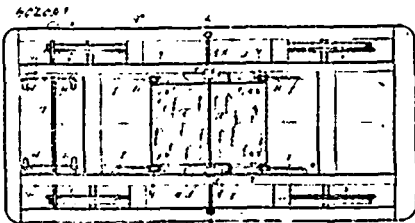


low self induction, also inductively related to said disc, a spring attached to said shaft tending to oppose its rotation, and a damping magnet applied to reduce the oscillations. 7th. In an alternating current meter, the combination of a movable element and suitable indicating devices, with two actuating circuits and their respective actuating coils, one of said circuits receiving currents proportional to the electromotive force impressed upon it independently of the periodicity, the other of said circuits receiving currents directly proportional to the impressed electromotive force and inversely proportional to the periodicity. 8th. In an alternating current meter, the combination of a movable element operated inductively, actuating circuits connected in parallel, a non-inductive resistance included in one of said circuits, and an inductance coil included in the other circuit, said inductance coil comprising a winding of relatively low resistance having a nearly closed subdivided iron core with an interruption or air gap, which air gap constitutes the principal element of reluctance in the magnetic circuit of said inductance coil. 9th. In an alternating current meter, operated by the inductive effects of two currents differing in phase, the method of compensating for changes of periodicity which consists in maintaining one of said currents proportional to the difference of potential independently of the periodicity, and causing the other to vary by its self-inductive action, inversely as the periodicity, and to vary also in direct proportion to the difference of potential. 10th. The combination of an armature comprising a closed conducting circuit, an actuating circuit including an actuating coil and a coil of relatively high self induction in series therewith, a second actuating circuit including an actuating coil and a relatively high non-inductive resistance in series therewith, the temperature coefficient of the non-inductive resistance being approximately the same as that of the closed conducting circuit of the armature, said actuating circuits being connected in parallel. 11th. The combination of an armature comprising a closed conducting circuit, an actuating circuit including an actuating coil and a coil of relatively high self induction in series therewith, a second actuating circuit including an actuating coil and a relatively high non-inductive resistance in series therewith, the temperature coefficient of the non-inductive resistance being so related to that of the armature as to vary the actuating current inversely as the current induced in the closed conducting circuit of the armature is varied by changes of temperature. 12th. In a meter for alternating current circuits, the combination of a closed conductor capable of rotation, actuating circuits therefor connected in parallel, one of said circuits including an inductive resistance, and the other including a non-inductive resistance having a temperature coefficient approximately equal to that of the said closed conductor.

No. 50,704. Coal Dumping Cars.

(*Char à bascule pour le charbon.*)



William George Lane, Pictou, Nova Scotia, Canada, 3rd December, 1895; 6 years.

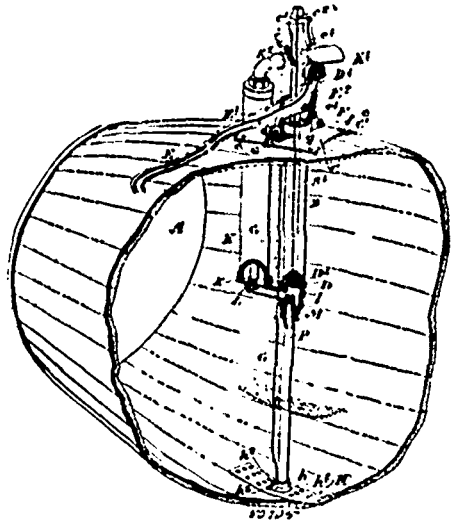
Claim.—1st. A dumping car having a hopper open at its lower end, and a pair of doors pivoted to jointed side pieces or wings, gravitating locking latches adapted to secure said doors in closed positions, and rollers on said doors adapted to roll on guides or ways secured to the car frame, substantially as and for the purpose set forth. 2nd. A dumping car having a hopper at its lower end, and a pair of doors pivoted to jointed side pieces or wings, and gravitating latches adapted to secure said doors in closed positions, and rollers on said doors adapted to roll on guides or ways secured to the car frame combined with a rock-shaft having a releasing lever and arms connected to the respective side wings and means for releasing the latches during the opening of the doors, substantially as and for the purpose set forth.

No. 50,705. Pump. (*Pompe.*)

William Henry Heard, London, Ontario, Canada, 3rd December, 1895; 6 years.

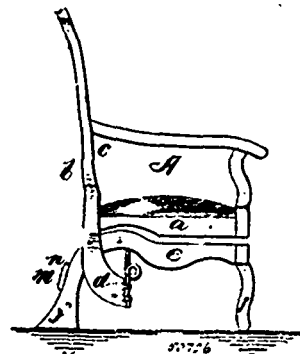
Claim.—1st. In a pump for barrels, the combination with the main cylinder and plunger, and air cylinder and tube of the ball valves located beneath the plunger and tube, and held in a cage comprising the guide-ways and teeth extending laterally over each ball, as and for the purpose specified. 2nd. In a pump, the combination with the base casting having a recess internally threaded at one end of the passage-way formed in the casing, of the valve I, having the ring portion externally threaded and provided with circular holes 1^2 in the upper face of the ring, as and for the purpose specified. 3rd. In a pump, the combina-

tion with the base casting a recess internally threaded at the lower side of the passage way above the suction tube, of the



valve M, formed as specified, and having the ring portion externally threaded and recesses m^2 , formed in the lower face of the ring, as and for the purpose specified. 4th. The combination with a cylinder, of a plunger provided with a rod d^1 , and having a central annular groove for the reception of packing of the plunger and open annular grooves to each side of such central groove, all arranged as and for purpose specified. 5th. The combination with the main cylinder and air cylinder and tube extending downwardly from the lower end of the main cylinder, of the plunger and plunger rod, lever for operating the same, perforated dasher through with the suction tube extends and a rod connecting the dasher with the lever, as and for the purpose specified. 6th. The combination with the main cylinder and air cylinder and tube and passage-ways connecting both cylinders and a suction tube extending downwardly from the lower end of the main cylinder, of the plunger and plunger rod, lever for operating the same, perforated dasher through which the suction tube extends, and a rod pivotally connected at the top end to the lever and having the lower end extending into a lug, forming part of the collar b , in which it is held by a set screw, as and for the purpose specified. 7th. The combination with the pump and pump cylinder supported from a central boss on the arched plate on the outside of the barrel and extending into the barrel as specified, the standards extending upwardly from the boss and connected together at the top by a suitable head piece, the plunger and plunger rod and the lever pivotally connected to the plunger and to a swing link pivotally connected to the lugs on the boss, as and for the purpose specified.

No. 50,706. Rocking Chair. (*Fauteuil à bascule.*)



Thomas Walter Wigg, Jamestown, New York, U.S.A., 3rd December, 1895; 6 years.

Claim.—1st. A rocking chair consisting of a base, a seat, a back connected to the seat and having its sides projecting below the top of the base, a transverse bar connecting the lower ends of the sides, of the back, and a coiled spring attached at one end to said bar and having its other end connected with the chair base, substantially as described. 2nd. A rocking chair, consisting of a base, a cross bar connecting opposite sides of the base, a seat, a back connected with the seat and having its sides projecting below the top of the base, a cross bar connecting the lower ends of said sides, springs connecting