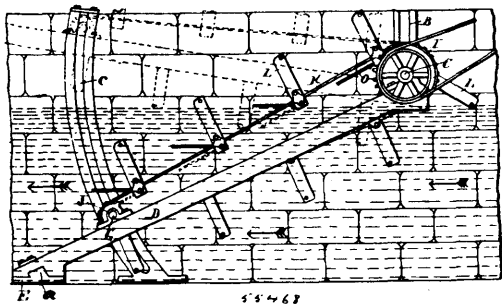


movable side-bars and means for operating the side-bars, substantially as set forth. 4th. In a gang press a movable follower, a fixed head, laterally movable side-bars, movably attached to the fixed head, and means for moving the side-bars laterally, substantially as set forth. 5th. In a gang press a movable follower and cross-head, laterally movable side-bars therefor, and means for moving the side-bars, substantially as set forth. 6th. The combination in a gang press of a frame, a trough hoop support, a movable follower, a fixed head, laterally movable side-bars and mechanism for moving the side-bars, substantially as set forth. 7th. The combination in a gang press of the trough hoop support, laterally movable side-bars, mechanism for moving the side-bars laterally, and a movable follower and support slidably mounted on the trough, substantially as set forth. 8th. In a gang press a hoop support, a pair of relatively adjustable hoop clamping bars and mechanism for moving them relatively in effecting the clamping of the hoops, substantially as set forth.

**No. 55,468. Current Water Motor. (Moteur hydraulique.)**



Joseph G. McCaffrey, Detroit, Michigan, U.S.A., 29th March, 1897; 6 years. (Filed 10th March, 1897.)

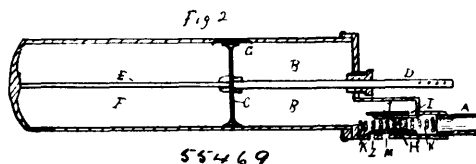
*Claim.*—1st. In a water motor, the combination with a waterway, the inclined frame therein, the shafts journaled at the opposite ends of said frame, the sprocket wheels on said shaft, the endless chain passing around said sprocket wheels, the series of buckets mounted on said chain distant from each other and standing in independent horizontal planes. 2nd. In a water motor, the combination with a waterway, the inclined frame therein, the shafts journaled at the opposite ends of said frame, the opposed sets of sprocket wheels on said shafts, the opposed sprocket chains passing around said wheels, the series of buckets mounted between said chains and attached at their opposite ends thereto, said buckets arranged distant apart and standing in separate horizontal planes, substantially as set forth. 3rd. In a water motor, the combination with a waterway, the inclined frame therein, the shafts journaled at opposite ends in said frame, the opposed sets of sprocket wheels carried by said shafts, the opposed sprocket chains passing around said wheels, the series of buckets mounted between said chains and secured at their opposite ends thereto, said buckets having each a movable blade or paddle hinged thereto, substantially as set forth. 4th. In a water motor, the combination with a race way, two opposed shafts crossing said race way and journaled in suitable supports on opposite sides thereof, said shafts being distant apart horizontally and located one above the other, the series of sprocket wheels mounted on said shafts, the opposed chains passing around said sprocket wheels, the series of buckets mounted between said chains and secured at their opposite ends thereto, said buckets having a movable blade or paddle hinged thereto, substantially as set forth. 5th. In a water motor, the combination with the waterway, of the supporting frame mounted therein, the opposed shafts, the sprocket wheels thereon, the chains passing around said sprocket wheels, the buckets mounted on said chains, said buckets consisting of a trilateral frame, a tie rod connecting the opposite ends of said frame, and a movable blade or paddle hinged to the rear side of the bucket and adapted to swing outward against said tie rod. 6th. In a water motor, the combination with the waterway, the inclined frame therein pivotally mounted at its upper end, the shafts journaled in said frame, the sprocket wheels thereon, the sprocket chains passing around said wheels, the series of buckets carried by said chains, the curved ways in the walls of the raceway adjacent to the lower end of said frame, the ends of the lower shaft projecting into said ways, which stand concentric with the pivotal point of said frame.

**No. 55,469. Air Brake. (Frein atmosphérique.)**

Jonathan J. Teetzel, St. Thomas, Ontario, Canada, 29th March, 1897; 6 years. (Filed 1st March, 1897.)

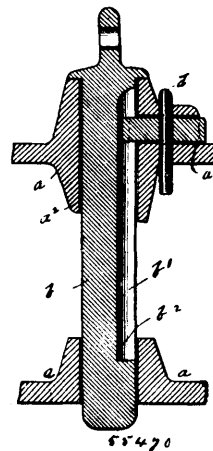
*Claim.*—In an air brake for railway cars, etc., the combination with the train pipe and brake cylinder, of a device for effecting the evacuation of air from the brake cylinder to the atmosphere at each car, said device comprising a casing having a valve chamber at one end opening into the train pipe A and at the other into the brake cylinder B, said valve chamber containing valve H, thus closing up direct communication through said chamber, comprising also a cylindrical opening leading from the brake cylinder two-thirds the length

of valve chamber and parallel with it and connected with valve chamber by a port through which the air is forced to release brakes,



also two springs K one at either end of valve H holding it in a certain regular position covering all ports when not in use, also having two ports opening to the atmosphere, the port L is brought into use every time the brake is set and the port M only when an emergency action is made.

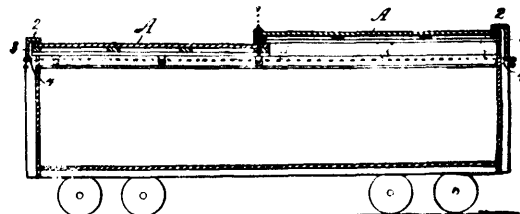
**No. 55,470. Car Coupler. (Attelage de chars.)**



Gardner Meeker, Newark, New Jersey, U.S.A., 29th March, 1897; 6 years. (Filed 12th March, 1897.)

*Claim.*—1st. In a car coupler, the combination with the coupling hook or knuckle, of a vertically movable locking-pin for engaging with said knuckle provided with a projection thereon, and a stop device for limiting the vertical movement of said pin consisting of a bar having like ends and removably supported in a seat or pocket in the draw-head so as to be capable of being reversed in position and having one end thereof extended into a position to engage with said projection on the locking-pin, substantially as described and for the purpose set forth. 2nd. In a car coupler, the combination with the coupling hook or knuckle, of a vertically moving locking-pin for engaging with said knuckle provided with a projection thereon, and a stop device for limiting the vertical movement of said pin consisting of a bar having like ends removably supported within an enclosed seat or pocket in the draw-head by means of a retaining pin passing through a centrally located opening therein, the said bar having one end thereof extending into a position to engage with said projection on the locking-pin, substantially as described and for the purpose set forth.

**No. 55,471. Railway Car. (Char de chemin de fer.)**



William G. Richards, Hillsboro, Ohio, U.S.A., 29th March, 1897; 6 years. (Filed 12th March, 1897.)

*Claim.*—1st. The combination with a railway car, of a roof consisting of two movable sections the outer ends of which are adapted to project beyond the end walls of the car, the overlapping strips covering the projecting ends of the sections, and the depending cleats or aprons attached to the outer and under edge of said overlapping strips, substantially as and for the purposes herein specified. 2nd. The combination with a railway car, of a roof consisting of two sections, the cross-bar overlying the junction of said sections, the bolt connecting the cross-bar and the lapped inner ends of the sections, the hasp covering the head of said bolt and the seal-lock adapted to secure the hasp, substantially as and for the purpose specified.