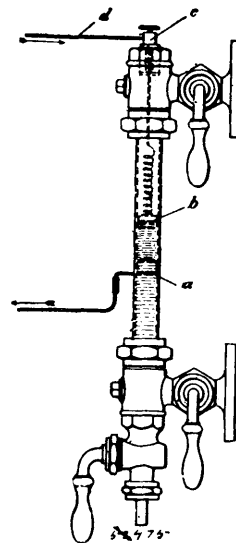


pneumatic tube carried by said carriage, a valve chamber mounted in said tube, a valve mounted in said valve chamber and adapted to open and close said tube, mechanism adapted to automatically open and close said valve as said carriage reciprocates, a vertically-movable picker mounted upon said tube, guides bearing upon said vertically-movable picker and adapted to alternately raise the same and permit the same to be lowered as said carriage reciprocates, a valve mounted upon said vertically-movable picker, and mechanism connected with said valve and adapted to automatically open and close the same as said carriage reciprocates, substantially as described. 4th. The combination with a carriage, guides supporting said carriage, mechanism for reciprocating said carriage in said guides, a pneumatic tube mounted on said carriage, a valve chamber mounted in said pneumatic tube, and a valve located in said valve chamber, of a valve rod secured to said valve and projecting beyond said valve chamber at both sides, a stop adapted to close said valve as said carriage reciprocates, a lever hinged to said valve chamber and provided with a latch adapted to engage with said valve rod and adapted to be raised out of engagement with said valve rod as said carriage moves backward, and springs connected with said pneumatic tube and said valve rod and adapted to open said valve when said valve rod is disengaged from said latch, substantially as described. 5th. The combination with pneumatic mechanism adapted to lift a sheet of paper at its front edge and move it forward, of a rotating reciprocating pneumatic tube provided with a series of openings upon its side, mechanism adapted to reciprocate and rotate said tube, a valve controlling the air inlet into said tube, mechanism adapted to automatically open and close said valve as said tube reciprocates, and mechanism adapted to raise the rear end of the sheet of paper against said pneumatic tube as the same reciprocates, substantially as described. 6th. The combination with a rotating reciprocating pneumatic tube provided with a series of openings upon its side, and mechanism adapted to rotate and reciprocate said tube, a vacuum tube connected with and opening into said rotating and reciprocating pneumatic tube, a valve chamber mounted in said vacuum tube, a valve mounted in said chamber and controlling said vacuum tube, of a valve rod connected with said valve, a support for said valve rod, a spring mounted upon said valve rod and bearing upon said valve rod and said support and adapted to close said valve as said pneumatic tube is moved forward, a lever hinged to said valve chamber and provided with a latch adapted to engage with said valve rod when said valve is closed and adapted to be lifted from said engagement when said pneumatic tube is moved backward, and a spring mounted upon said valve rod and bearing upon it and said support and adapted to open said valve as said latch is freed from engagement with said valve rod, substantially as described. 7th. The combination with a rotating reciprocating pneumatic tube provided with a series of openings upon one side, adapted to pneumatically engage with and lift the rear end of the top sheet of a pile of paper, and mechanism for rotating and reciprocating said tube, of a shaft, mechanism for rocking said shaft, and a series of lifting rods adjustably mounted upon said shaft and adapted to automatically lift the rear portion of a pile of sheets against said rotating and reciprocating pneumatic tube as said tube is moved to its backward position, substantially as described. 8th. The combination with a rotating reciprocating pneumatic tube provided with a series of openings upon one side, and adapted to pneumatically engage with and lift the rear end of the top sheet of a pile of paper, and mechanism for rotating and reciprocating said tube, of a shaft, mechanism for rocking said shaft, a series of lifting rods adjustably mounted upon said shaft and adapted to automatically lift the rear portion of a pile of sheets against the rotating and reciprocating pneumatic tube as said tube is moved to its backward position, and holders mounted upon said shaft and adapted to hold down the rear end of a pile of sheets after the top sheet has been engaged with said pneumatic tube, substantially as described. 9th. The combination with a rotating reciprocating pneumatic tube provided with a series of openings upon one side, and adapted to pneumatically engage with and lift the rear end of the top sheet of a pile of paper, and mechanism for rotating and reciprocating said tube, of a shaft, mechanism for rocking said shaft, a series of lifting rods adjustably mounted upon said shaft and adapted to automatically lift the rear portion of a pile of sheets against said rotating and reciprocating pneumatic tube as said tube is moved to its backward position, hollow holders having a series of openings in their front edges and adapted to hold down the rear end of a pile of sheets after the top sheet has been engaged with said pneumatic tube, as described, and air tubes connected with said holders through which a stream of air may be forced through said holders under said lifted sheet, substantially as described. 10th. In a pneumatic sheet-delivering device, the combination with a suction roller, a shaft, and mechanism for rocking said shaft, of a ring adjustably secured to said shaft and provided with a circumferential groove, a ring mounted in said circumferential groove, and flexible lifters secured to said last-named ring, substantially as described. 11th. In a pneumatic sheet-delivering machine, the combination of a shaft, an inner ring adjustably mounted upon said shaft and provided with a circumferential groove and having a slot in said groove extending through a portion of the ring periphery, an outer ring mounted in said circumferential groove of the inner ring and provided with a slot throughout a portion of its circumference, screws mounted in the slot of the inner ring and adapted to engage the ends of the slots in the outer

ring to impart movement to said outer ring on forward and backward rotation of the shaft and inner ring, a flexible lifting rod mounted upon said outer ring, and a suction roller, substantially as described. 12th. The combination with mechanism adapted to engage one end of a sheet of paper and move it toward a printing press, of a coacting, rotating, reciprocating pneumatic-tube provided with one or more openings, mechanism adapted to reciprocate and rotate said tube, valve mechanism controlling the air inlet into said tube, and adapted to automatically open and close said air inlet as said tube reciprocates, and mechanism adapted to raise the other end of said sheet of paper against said pneumatic tube as the same reciprocates, substantially as described.

No. 52,475. Electric Water Gauge.

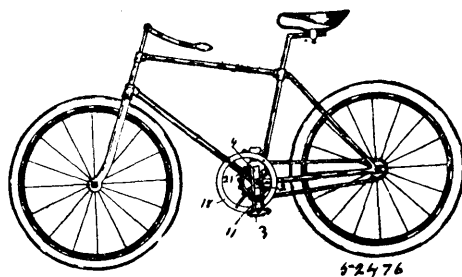
(Indicateur d'eau électrique.)



Hermann Biermann, Breslau, Prussia, Germany, 1st June, 1896; 6 years. (Filed 4th May, 1896.)

Claim.—Electrical water-gauge for preventing boiler explosions in consequence of insufficient water, characterized by a float (b) within the glass which in case of the water reaching the lowest level permissible, sets itself upon a wire (a) within the glass in such a way that the electric current is enclosed in a circuit to which the alarm and safety apparatus attached.

No. 52,476. Crank Motion. (Mouvement de bielle.)



William J. Devers, Frank H. Lewis and Charles E. Hamlin, all of Scranton, Pennsylvania, U.S.A., 1st June, 1896; 6 years. (Filed 29th April, 1896.)

Claim.—1st. The combination with a driven-shaft, of a crank-arm having one member fixed to the shaft, and a slidable member provided with a slot in which the fixed member fits, the contacting surfaces of said member being provided with intermeshing ribs and grooves, a track or guide eccentric with the driven-shaft, and anti-friction rolls carried by the slidable member of the crank-arm and respectively engaging the inner and outer peripheries of the track or guide, said rollers and the track or guide being provided with interlocking peripheries, substantially as specified. 2nd. The combination with a driven-shaft, of a crank-arm having one member fixed to the shaft, and a movable member slidably mounted upon the first-named member, a track or guide eccentric with the driven-shaft and provided with sectionally V-shaped inner and outer grooves, and inner and outer anti-friction guide rollers, mounted upon the movable member of the crank-arm and operating, respectively, in the said grooves of the track or guide, said rollers having reduced or V-shaped peripheries to form an interlocking connection with the track or guide, substantially as specified. 3rd. The com-