

sume its normal position automatically, as set forth. 3rd. In combination, with a standard or other support, a bar pivoted thereto, and provided at one end with a cover, and having the other end weighted, whereby a gravitating movement is imparted, causing the lid to assume its normal position in closing an ink-well or other receptacle, substantially as described. 4th. In combination, an adjustable clamp adapted to grasp the ink well, a standard, adjustably attached to said clamp, and a pivoted beam or gravitating bar, having a lid or cover attached to one end thereof, substantially as described. 5th. The herein described device for automatically closing an ink-well or other receptacle, consisting of an adjustable clamp composed of two angular bars adapted to be secured to an ink-well or other receptacle, and a standard, horizontally adjustable upon one of these angular bars and a beam or bar pivoted to this standard, and provided with a cover, all substantially as and for the purposes set forth.

### No. 35,552. Rubber Overshoe.

(*Soulier de caoutchouc.*)

John Francis O'Brien, Montreal, Quebec, Canada, 3rd December, 1890; 5 years.

*Claim.*—1st. A rubber overshoe, having a heel counter portion of desired height, and a rim adapted to clasp the sole of the boot. 2nd. In a rubber overshoe, the combination of a heel counter portion, a rim adapted to clasp the sole of the boot, and a band connecting the sides of overshoe under the boot, as and for the purpose set forth.

### No. 35,553. Device for Propelling Vessels.

(*Appareil de propulsion pour vaisseaux.*)

Jacob Cochrane, Hill City, South Dakota, U. S. A., 5th December, 1890; 5 years.

*Claim.*—1st. In a propelling device for boats, the U-shaped, reversible swinging bucket 22, having pivots at its inner open end and stops 23, at opposite sides of its closed end, substantially as set forth. 2nd. In a device for propelling boats, the U-shaped, reversible swinging bucket 22, having stops 23, at the sides of its closed end, lugs 20 on its free open end for connection of the sides of the bucket with an endless carrier, and having apertures to receive the pivot-bar 19, said bar being adapted for connection with an endless carrier, substantially as set forth. 3rd. In a device for propelling boats, the combination, with chain wheels, and endless chains carried by said wheels, of stirrup-like buckets pivoted at their inner ends to the endless chains, the outer ends of the buckets being free to swing in either direction to permit them to automatically reverse, substantially as shown and described, and for the purpose specified. 4th. In a device for propelling boats, the combination, with chain wheels, and endless chain belts carried by said wheels, of stirrup-like buckets pivoted at their inner ends between the endless chains, and provided with stop-pins at their sides near their outer swinging ends to limit the movement of the outer free ends of the buckets, substantially as shown and described. 5th. In a device for propelling boats, the combination, with chain wheels having spurs formed thereon, a peripheral recess between each spur, and chain belts carried by the said wheels, comprising a series of pivoted links, each alternate link being provided with an aperture to receive the spurs of the wheels, the other links being solid and adapted to enter the recesses between the spurs, of cross-bars connecting the solid links of the chain belts, and stirrup-like buckets detachably attached to the said bars and provided with stop-lugs at their sides, substantially as shown and described, and for the purpose specified. 6th. In a device for propelling boats, the combination, with endless belts and means for revolving said belts, of stirrup-like buckets pivoted between the links of the belts, whereby the said buckets are free to turn in direction of either the front or the rear of the vessel and act upon the water to propel the said vessel forward or to back the same, substantially as shown and described.

### No. 35,554. Cable or Electrical Elevated Railway.

(*Chemin de fer élevé à câble ou à électricité.*)

Adolphus Davis, London, England, 5th December, 1890; 5 years.

*Claim.*—1st. In an elevated railway, the combination, with a series of single posts, of a girder resting upon them, and carrying on its bottom chord cross ties, supporting the longitudinals and rails, all as herein set forth. 2nd. In an elevated railway, the combination of a single girder, rails carried by cross pieces resting on the lower chord of such girder, a propelling cable resting on the top chord of such girder, and means secured to bottom of the car and actuated therefrom for gripping and releasing the cable, all as herein set forth. 3rd. The combination, with the bottom of the car, and with the top chord B, of the girder, of guards D, D', as and for the purposes set forth. 4th. The combination, with the posts J, of the girder resting on top of same, cross pieces H, carried on top of chord C, cross plates G, connected with girder by diagonal stays F, longitudinals L, and rails M, as and for the purposes described. 5th. The combination, with the cable A, of gripping wheels O, O', mounted on the ends of pivoted levers U, a train of gearing operating such gripping wheels, and an electric motor, governed from the car, operating such train, all substantially as herein set forth.

### No. 35,555. Apparatus for Treating Sewage.

(*Appareil pour le traitement des vidanges d'égouts.*)

Oluf E. Meyer and Charles E. Weck, both of Milwaukee, Wisconsin, U.S.A., 5th December, 1890; 5 years.

*Claim.*—1st. The combination, in sewage apparatus, of a settling-chamber into which the sewage is discharged, and a conduit having open ends and closed sides leading laterally out of the side of said

settling-chamber, above the bottom thereof, and divided by transverse screens into compartments which are filled with suitable filtering material, said conduit having movable sections, whereby the filtering material in each compartment may be renewed without disturbing that in the other compartments, in sewage apparatus, of the purpose set forth. 2nd. The combination, in sewage apparatus, of two settling chambers connected by branches with the sewer main, a gate arranged to direct the sewage into either branch and exclude it from the other, or direct it into both branches at the same time and conduits leading laterally out from the sides of each settling-chamber, above the bottom thereof, and divided by upright screens into compartments which are filled with suitable filtering material, substantially as and for the purpose set forth. 3rd. The combination, in sewage apparatus, of two settling chambers connected by branches with the sewer main, a valve or gate at the junction of said branches with the main, arranged to divert the sewage into either branch and cut it off from the other, a separate elevator-well somewhat deeper than said settling-chambers, provided with hoisting apparatus, a conduit leading from the bottom of each settling chamber into said well, downwardly inclined filtering-conduits leading laterally out from the sides of said settling-chambers, above the bottom thereof, and divided transversely by upright screens into compartments which are supplied with filtering material, and a well into which said filtering conduits discharge, substantially as and for the purpose set forth. 4th. The combination in sewage apparatus, of a settling chamber into which the sewage is discharged, a downwardly-inclined filtering-conduit leading laterally out from the side of said chamber, above the bottom thereof, and provided with upright screens between which is interposed filtering material, a well provided with a cage having closed sides and horizontal screens between which is interposed filtering and deodorizing material and upon which said conduit discharges means for removing the water from from said settling-chamber and means for removing the sediment. The said well, substantially as and for the purpose set forth. 5th. The said well, substantially as and for the purpose set forth, and connected by branches with the sewer main, a gate or valve arranged to close either branch and open the other, an elevator-well somewhat deeper than said settling-chambers and provided with hoisting apparatus and communicating through openings with the lowest parts of the settling chambers, the bottoms of which are inclined downwardly toward said openings, cut-offs arranged to open and close the openings from the settling chambers into the elevator-well, filtering-conduits leading laterally out of the sides of said chambers and divided by upright screens into compartments which are filled with filtering material movable sections in said conduits, whereby access is had to said screens and filtering material, and a well into which said conduits open and their discharging ends, substantially as and for the purposes set forth.

### No. 35,556. Spike for Railways.

(*Chevilletes de chemin de fer.*)

Elias Dietrich, Rochester, New York, U.S.A., 5th December, 1890; 5 years.

*Claim.*—1st. The herein described spike, comprising a primary and secondary spike, arranged face to face, the secondary spike being wedge shaped, and the two spikes provided near their upper ends with registering grooves formed in their inner walls, and a removable locking pin inserted in the opening formed by the grooves when the primary and secondary spikes are placed face to face, substantially as specified. 2nd. The herein described spike, the same consisting of the main spike, having the outer plain wall, and the head, the rear end of which is flush with said wall, and the front end of which is formed to overlap the base of a rail, the supplemental wedge shaped spike terminating at its upper end in a head oppositely disposed to the head of the main spike, and having its inner end flush with the wall of the secondary spike, and its opposite end formed to rest upon a tie, the adjacent edges of the heads being bevelled or cut away, as at 15, and the adjacent faces of the spikes being transversely grooved below the heads, and a split locking pin of spring metal inserted in the opening formed by the said grooves when the primary and secondary spikes are placed face to face, substantially as specified.

### No. 35,557. Tile Post.

(*Poteau artificiel.*)

Joseph Fillmore Marshall, Hanoverton, Ohio, U.S.A., 5th December, 1890; 5 years.

*Claim.*—The herein described composition or tile post, consisting of a post moulded of clay, fire clay or cements, and provided with a base or foot, as a new article of manufacture, substantially as and for the purposes set forth.

### No. 35,558. Fastener for Watch Bows.

(*Agrafe pour pendants de montre.*)

Ezra Charles Fitch, Newton, Massachusetts, U.S.A., 5th December, 1890; 5 years.

*Claim.*—A watch case pendant, having orifices in its sides, combined with the smooth-surfaced or unthreaded bow-securing pins inserted in said orifices, and having heads within the pendant larger than the orifices, the collar  $g^1$  inserted within the pendant and provided with recesses or seats  $g^2$  formed to support the heads of the pins and prevent inward movement thereof, and the bow having socketed ends formed to receive the projecting portions of the pins, as set forth.

### No. 35,559. Stud for Shoe Lacings.

(*Ailette pour lacets de chaussures.*)

William Henry Smidt, City of New York, New York, U.S.A., 5th December, 1890; 5 years.

*Claim.*—1st. A shoe lacing stud, having a tubular settling eyelet, a circumferential flange at the top of said eyelet, a diminished neck,