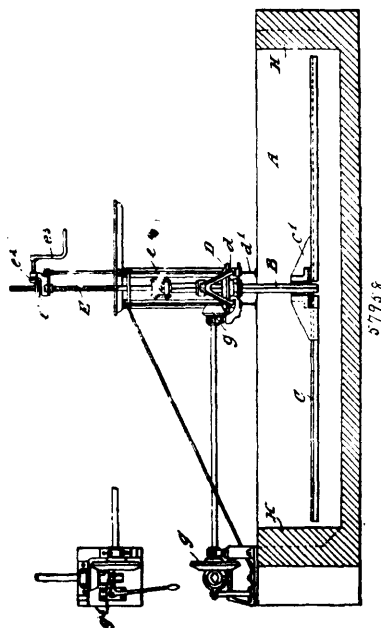


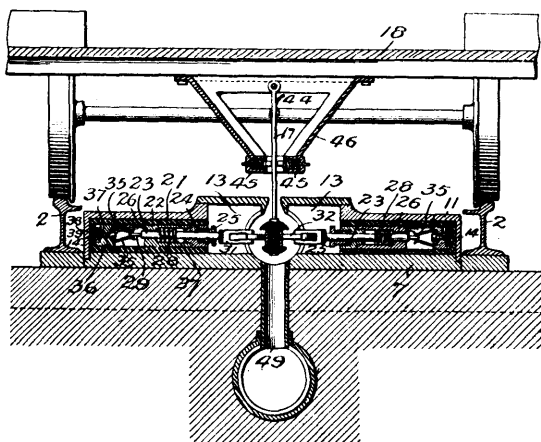
vertical shaft B, having stirrers or agitators C at its lower end, and means for rotating the said shaft, of the shackle e connecting the



said shaft B to a screw-threaded rod E, the screw-threaded rod E, a threaded pinion e^1 on the said rod E, a pinion e^2 in gear with the said pinion e^1 , and operated by a cranked handle, substantially as set forth. 3rd. In a machine for use in the extraction of gold from auriferous material by the aid of chemical solvents, a vat having projections H around the inner side of its walls, substantially as and for the purposes specified. 4th. In a machine for use in the extraction of gold from auriferous material by the aid of chemical solvents, a valve I, together with means whereby it may be adjusted vertically in the side of the vat, substantially as and for the purpose specified.

No. 57,959. Electric Street Railway Conduit.

(Conduit pour chemins de fer électriques.)



57959

John Henry Munson, Chicago, Illinois, U.S.A., 2nd November, 1897; 6 years. (Filed 27th March, 1895.)

Claim.—1st. In a conduit of the class described, the combination of the slotted pipe-sections, the opposite pairs of lateral parts or extensions whereto the ends of said pipes or sections are secured, said parts or extensions comprising upper and lower portions and surface plates, lateral recesses in said extensions, slidably arranged contact arms provided therein and suitably insulated, a circuit-closing device in connection with each arm, a binding block or post in connection therewith and a heel plate removable to permit access to said binding block, substantially as described. 2nd. The combination with a lateral extension of a conduit provided with a suitable recess, a suitable barrel and a binding block arranged therein and insulated therefrom, contact-springs connected with said block, a contact arm slidably arranged in said barrel, a spring provided in said barrel to act upon said arm, an insulated part of

said arm having an outer end to engage said contact spring or switch, and a contact wheel horizontally arranged upon the inner end of said insulated part to be engaged by a contact shoe, substantially as described. 3rd. The combination, with a lateral extension, of a conduit provided with a suitable recess, a suitable barrel and binding block arranged therein and insulated therefrom, contact springs connected with said block, a contact arm slidably arranged in said barrel, a spring provided in said barrel to act upon said arm, and an insulated part of said arm having an outer end to engage said contact spring or switch, a contact wheel horizontally arranged upon the inner end of said insulated part to be engaged by said contact shoe, a water-tight outer end for said recess, and a packing gland provided about the inner end of the slidable contact arm and in the head of said barrel, substantially as described. 4th. The combination with the track, of the conduit, a contact shoe or collector movable in said conduit, contact devices provided in said conduit at intervals along the same, said devices arranged in pairs to be operated by the entrance of said shoe between the same, said shoe having an overhanging top or water shed and being of considerably greater width or depth than the faces of said contact devices to permit vertical movement of the shoe, as and for the purpose specified. 5th. The combination with a conduit provided with a surface slot, of a contact shoe or collector movable within the conduit and to be carried by a car, pairs of contact devices arranged within said conduit at intervals along the same and to be engaged by said shoe, electric feeders or supply wires, electric switches or circuit closers connected therewith and arranged in water-tight chambers, said switches or circuit closers being adapted to be operated by the shoe through the medium of said contact devices, and said circuit closers being normally out of engagement with said contact devices, and said shoe being of a length to engage two of the pairs of contact devices simultaneously, substantially as described. 6th. The combination with the track, of a conduit arranged between the same and having a surface slot, the lateral extensions or containing-boxes projecting upon opposite sides of said conduit, laterally operative contact devices provided in said extensions or boxes and having suitable bearings therein in which they are adapted to slide, the outer part of said boxes provided with water-tight chambers, a switch provided in each to be engaged by an insulated part of the contact device when the same is projected outwardly, supply and return connections upon opposite sides of the conduit, the same connected with respective switches within said boxes, said connections being made water-tight, means to normally project the contact devices inwardly, and a movable contact-shoe provided within the conduit to engage said contact devices and whereby circuit is closed, substantially as described. 7th. The combination with the track, of the conduit proper, lateral parts or containing boxes extending from opposite sides of the conduit and having recesses opening into the same, laterally operative contact and circuit closing switches provided in said lateral parts or boxes and adapted to be operated by the shoe moving within the conduit, all of said parts being between the rails and above the ties of the track, substantially as described. 8th. The lateral extension or containing box of a slotted conduit having a recess or chamber, an insulating-lining therefor, a metallic lining or barrel, and contact and switch devices provided in connection with said plunger, substantially as described. 9th. The lateral extension or containing box of a slotted conduit having a recess or chamber, an insulating-lining therefor, a metallic lining within the same, a plunger slidable within said metallic lining or barrel, and contact and switch devices provided in connection with said plunger, the ends of said recess being closed by water-tight means, substantially as described. 10th. The slotted conduit sections, in combination with opposite laterally-extending parts whereto the conduit sections are joined, a collector shoe to operate within the conduit, and circuit closing devices provided in said laterally-extending parts and adapted to be operated by said shoe, substantially as described. 11th. The combination with the metal pipes forming the conduit sections and having surface slots, of the pairs of metallic lateral extensions or castings arranged upon opposite sides of the conduit and whereto said sections are joined, the conduit being continued through the same, said lateral extensions or castings provided with cavities or recesses, circuit closers provided therein, and a shoe to travel in the conduit and to actuate the circuit closers substantially as described. 12th. The combination with the conduit sections having surface slots, of the horizontal lateral extensions upon opposite sides of the conduit, said extensions being metallic and provided with recesses which at their inner ends open into the conduit and are closed at their outer ends, supply and return conductors having insulated terminals within the outer ends of opposite extensions, laterally operative contact devices provided within said extensions, the same having their inner ends projecting into the conduit, surface plates upon the inner and outer ends of said lateral extension and upon the removal of which access may be had to said contact devices and to said terminals, and a shoe movable in the conduit and adapted to project said contact devices, which when so projected make electrical connections with said terminals, substantially as described. 13th. The combination with the conduit having a surface slot, of metallic lateral extensions through which the conduit and slot are continued, a shoe or collector to operate within the conduit and circuit closers provided in said lateral extensions, each said circuit closer comprising a plunger laterally operative in metallic bearings in the lateral extension, a conductor insulated within the plunger, a contact-wheel