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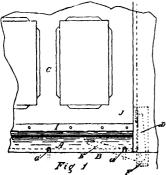
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INVENTIONS PATENTED.

NOTE .- Patents are granted for 18 years. The term of years for which the fee has been paid, is given after the date of the patent.

No. 42,785. Weather Strips. (Bourrelet de porte.)



Ira Bates, Toronto, Ontario, Canada, assignee of William Elmer Mahaffey, Ceredo, West Virginia, U.S.A., assignee of Elihu P. Koontz, of Ceredo aforesaid, 1st May, 1893; 6 years.

Claim.—1st. The saddle A hinged at its front or outer edge to the door frame sill, in connection with a bell crank or lever arranged to lift the inner or lose edge of the saddle so as to meet and lie against the inner or lose edge of the saddle so as to meet and lie against the face of the door when shut, substantially as shown and described.

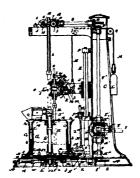
2nd. A bell crank pivoted in the door frame one of its area. of its arm projecting under the hinged saddle A, while its outer arm is so placed as to be operated upon by the edge of the door when closing, substantially as described and shown. 3rd. The L-shaped water shed piece secured to the face of the door, and overlying a saddle piece A hinged to the door from sill and leaning against the door. substantially as described and shown. door, substantially as described and shown.

No. 42,786. Machine for Moulding Cement Pipes.

(Appareil de moulage des tuyaux en ciment.)

Jeff W. Bedford, assignee of Emanuel Oehrle, Omaha, Nebraska, U.S.A., 1st May, 1893; 6 years.

Claim.—1st. In a cement sewer pipe moulding machine, the combination, with the horizontally rotating pipe mould of the vertically sliding arm or rammer stock, the guide bar upon which it is arranged at the combination of t it is arranged to slide, the steam or air cylinder carried by said arm, the piston having a rammer secured to its rod, and a counter balancing device or weight, substantially as specified. 2nd. The combination with the retating sewer pipe and the a counter balancing device or weight, substantially as specified. 2nd. The combination, with the rotating sewer pipe and the vertical raising core mould mechanism shown, of the steam I, and the weight L, and guide arbors K and arms O, with friction rollers g, and the guide arbors K and arms O, with for the purpose herein mentioned. 3rd. The combination, with the rotating pipe mould consisting of the outer shell b the expanding core mould c, and bell mould d, the rotating mechanism shown, and the mould raising mechanism shown, of the steam rammer or rammers H, with their cylinders I¹, piston I, valve n, the arbour K, the arms J, and the weight L, substantially as and for the purpose herein set forth. The combination with the horizon.



The combination, with the horizon tally rotating pipe mould consisting of the outer shell b and core mould c and bell mould d, and the mould rotating mechanism shown, of the steam rammer or rammers H, with their pistons I and cylinders I¹, and the arms J and arbours K and weight L, and the core mould raising mechanism consisting of the friction rollers 3 and 4 and the bar 2 and gears 6 and 7, the shaft 8 and V^1 , and the bevel gears, 9, 10, 11 and 12, substantially as and for the purpose herein set forth. 5th. In a sewer pipe moulding machine, the combination, with a

rotating table B, and guide hub 59 and the outer mould b and bell mould d, of the inner mould c with the shaft S and its pivot 58, the sleeve 22, the wings 23, the shoulders 21, the rollers 24, the studs 27, the slots 26, and stops 60. 6th. In a sewer pipe machine, the combination of a rotary mould comprising an expansible vertically movable core, mechanism for raising said core, a drive shaft, gearing movable core, mechanism of raining said core, a transfer said gearing into or out of gear with the drive shaft, gearing from the drive shaft to operate the core raising mechanism, and a clutch to throw said gearing into or out of gear with the drive shaft, substantially as described. 7th. In a pipe machine, the combination, with a rotary mould, of a vertically adjustable supportarranged above the mould, provided with a cylinder having suitable ports and valve, and a reciprocating piston in said cylinder, the piston rod thereof being provided with a rammer to operate on the substance in the mould said valve being connected with and operated by said piston rod, substantially as described. Sth. In a sewer pipe machine, the combination, with the mould, of a vertically adjustable and laterally bination, with the mould, of a vertically adjustable and laterally movable support above the mould, an automatic reciprocating engine carried by said support above the mould, and a rammer carried by the piston rod of said engine to pack the substance in the mould, substantially as described. 9th. In a sewer pipe machine, the combination of a rotary mould, a vertically and laterally movable support, means, substantially as described, for counterbalancing the same, a vertically disposed automatic reciprocating steam or air engine carried by such support, a rammer carried by the piston rod of such engine to pack the material in said mould, and means, subof such engine to pack the material in said mould, and means, substantially as described, controlling the lateral swing of said support and engine. 10th. In a sewer pipe machine, the combination, of the rotary mould and means for rotating the same, the vertical or the rotary mould and means for rotating the same, the vertical shaft, a vertically movable support on the shaft, an automatic reciprocating engine carried by and moving laterally and vertically with said support, a rammer carried by the piston rod of said engine to pack the material in said mould, a counterbalancing device for said support and engine, and means, substantially as described, connected with said shaft to automatically turn the same to swing said support and engine laterally, substantially as described. 11th. The combination, with a mould, of a vertically disposed vertically movable automatic with a mould, of a vertically disposed vertically movable automatic reciprocating steam or air engine, a rammer carried by the piston reciprocating steam or air engine, a rainmer carried by the piston rod of said engine to pack the material in the mould, and operating mechanism whereby there is a relative movement between the mould and engine, so that the material is packed around the mould, substantially as described. 12th. In combination, the vertically movable support having a cylinder formed therein, a steam chest movacie support naving a cylinder formed therein, a sceam chest communication with opposite ends of the cylinder, a rocking valve controlling the ports and exhaust, a reciprocating piston in the cylinder, connections between the piston rod and said valve to automatically operate the same, the rammer carried by said piston rod, and a mould in which said rammer operates, substantially as