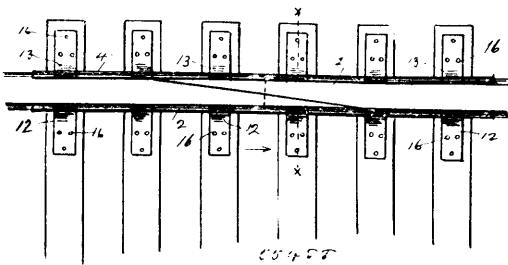
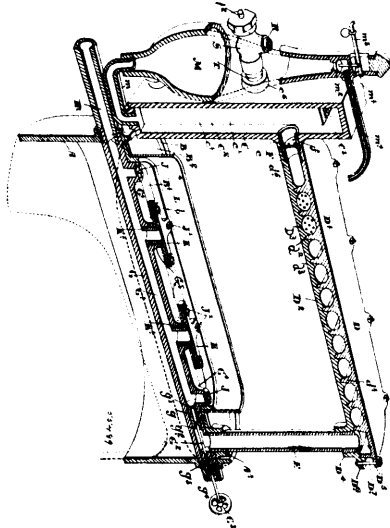


No. 55,488. Rail Joint. (Joint de rail.)

Winfield S. Smith, Kingman, Maine, U.S.A., 2nd April, 1897; 6 years. (Filed 6th November, 1896.)

Claim. In a railroad rail joint, the combination of two rails having their opposing ends overlapping and bevelled on their meeting faces, each rail having a side plate extending beyond its bevelled extremity and formed on its inner side with a longitudinal recess to receive an interlocking projection on the web portion of the adjacent rail, and means for securing the two rails together, substantially as set forth.

No. 55,489. Water and Oil Burner and Gas Generator. (Brûleur à eau et huile et générateur à gaz.)

Ezra Glasco, Brantford, Ontario, Canada, 2nd April, 1897; 6 years. (Filed 2nd February, 1897.)

Claim.—1st. In a water and oil burner, in combination a base provided with a suitable central opening, a bridge spanning the opening, formed with a hollow passage-way, burners supported on the bridge and communicating with the passage-way, a retort suitably supported in proximity to the burners and provided with three vertical compartments, a compartment to receive the oil, a compartment to receive the water and an intermediate compartment all communicating with each other at the top, carbonate of lime in pebbly form situated in the oil and water compartments, suitable water and oil supply pipes leading to the side compartments, valves for the pipes, a deflecting crown provided with a serpentine passage-way and suitably supported above the burners, a nipple connecting one end of the passage-way of the crown to the central compartment of the retort and a pipe connecting the opposite end of the passage-way of the crown to the passage-way in the bridge as and for the purpose specified. 2nd. In a water and oil burner, in combination a base provided with a suitable central opening, a bridge spanning the opening formed with a hollow passage-way, burners supported on the bridge and communicating with the passage-way, a retort suitably supported in proximity to the burners and provided with three vertical compartments, a compartment to receive the oil, a compartment to receive the water and an intermediate compartment all communicating with each other at the top, carbonate of lime in pebbly form situated in the oil and water compartments, suitable water and oil supply pipes leading to the side compartments, valves for the pipes, a deflecting crown provided with a serpentine passage-way and suitably supported above the burners, a nipple connecting one end of the passage-way of the crown to the central compartment of the retort, a pipe connecting the opposite end of the passage-way of the crown to the passage-way in the bridge and a plug or sleeve to the inside of the pipe leading to the bottom passage-way having a small orifice and tapered recess leading to such orifice and a needle valve rod with tapered inner end extending through a space below the pipe and provided with a screwed portion extending through a

corresponding hole in the plug to the outside of the passage-way and a hand wheel on the end of the valve rod as and for the purpose specified. 3rd. In a water and oil burner, in combination a base provided with a suitable central opening, a bridge spanning the opening formed with a hollow passage-way, burners supported on the bridge and communicating with the passage-way, a retort suitably supported in proximity to the burners and provided with three vertical compartments, a compartment to receive the oil, a compartment to receive the water and an intermediate compartment all communicating with each other at the top, carbonate of lime in pebbly form situated in the oil and water compartments, suitable water and oil supply pipes leading to the side compartments, valves for the pipes, a deflecting crown provided with a serpentine passage-way and suitably supported above the burners, a nipple connecting one end of the passage-way of the crown to the central compartment of the retort, a pipe connecting the opposite end of the passage-way of the crown to the passage-way in the bridge and an asbestos wicking surrounding the opening and supported upon the base and means for saturating such asbestos wicking with oil as and for the purpose specified. 4th. In a water and oil burner, in combination a base provided with a suitable opening, a bridge spanning the opening formed with a hollow passage-way, burners supported on the bridge and communicating with the passage-way, a retort suitably supported in proximity to the burners and provided with three vertical compartments, a compartment to receive the oil, a compartment to receive the water and an intermediate compartment all communicating with each other at the top, carbonate of lime in pebbly form situated in the oil and water compartments, suitable water and oil supply pipes leading to the side compartments, valves for the pipes, a deflecting crown provided with a serpentine passage-way and suitably supported above the burners, a nipple connecting one end of the passage-way of the crown to the central compartment of the retort, a pipe connecting the opposite end of the passage-way of the crown to the passage-way in the bridge, an asbestos wicking surrounding the openings and supported upon the base, and a plug provided with a small passage-way leading from the oil compartment of the retort over the wicking and a needle valve rod having a tapered inner end designed to close such passage-way extending through the retort and means for adjusting such valve longitudinally, as and for the purpose described. 5th. In a machine of the class described in combination, the base, the burners constructed as specified, the bridge for supporting the same provided with hollow passage-way leading to the burners, the openings at each side of the bridge and the upwardly extending flange surrounding the opening, as and for the purpose specified. 6th. In a machine of the class described, in combination the base, the burners constructed as specified, the bridge for supporting the same provided with hollow passage-way leading to the burners, the openings at each side of the bridge, the upwardly extending flange surrounding the openings, and an upwardly contracted extension surrounding the flange, as and for the purpose specified. 7th. The combination of the burners supported on the bridge and communicating with the bottom passage-way, and the retort formed as specified, of the deflecting crown comprising the bottom plate having cross corrugations and recesses, the top plate having depending ribs arranged alternately to extend to one side and then to the other, so as to form a continuous serpentine passage-way, the inclosing flanges of the plates and means for holding them together, the passage-way leading to the retort from the serpentine passage-way, and the pipe connecting the opposite end of the passage-way to the bottom passage-way in the bridge, as and for the purpose specified. 8th. In a device of the class described, a retort, side compartments to receive the oil and water, a needle valve for each compartment attached directly to the retort and comprising a plug with a small passage-way leading into the compartment, a valve rod with tapered end designed to close the end of this passage-way, a pipe joint or coupling forming a space outside the valve, a pipe leading from such space to the reservoir, and means for longitudinal adjusting the valve rod to and from its seat, as and for the purpose specified. 9th. In a device of the class described, the retort, side passage-way, the central passage-way communicating with the side passage-ways, a compression chamber connected by a pipe to the central compartment, a weighted lever at the top of the compression chamber, and a pipe leading out from the top of such compression chamber above the valve seat, as and for the purpose specified.

No. 55,490. Machine for Exterminating Vegetation. (Sarclleur.)

Andrew Thomson Fotheringham and Robert McDonell, both of Grenfell, North West Territories, Canada, 2nd April, 1897; 6 years. (Filed 14th November, 1896.)

Claim.—1st. In a vegetation exterminator, the combination, with an arch shaped chamber, of a fan communicating with the said chamber, substantially as set forth. 2nd. In a vegetation exterminator, the combination, with a supporting frame, of a series of telescopic arch shaped sections carried by the said frame, substantially as set forth. 3rd. In a vegetation exterminator, the combination, with a supporting frame, of a series of telescopic arch shaped sections carried by the said frame, and lifting devices for raising and lowering the said sections, substantially as set forth. 4th. In a vegetation exterminator, the combination, with a frame mounted on wheels of an arch shaped chamber carried by the said frame, a fan connected to the said chamber, and driving devices operatively connecting