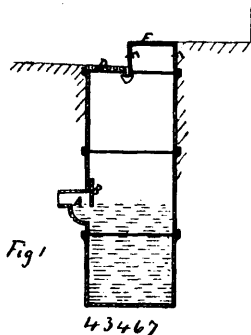


the upright rod or shaft D, carried through a perforation in the top of the frame, and through a perforation in the bottom of the frame at the enlarged portion F, a spiral spring G encircling said shaft D, a clamp H adjustably secured to said shaft for the purposes set forth, the bifurcated arms J J on the lower end of said shaft D and the wheel E, substantially as set forth. 3rd. The combination in a tongue support of the upright frame A secured to the tongue A' and having an opening C in the top thereof, the upright rod D carried through the said opening C and through the opening in the bottom of said frame A at the enlarged portion F and formed at its lower end with the bifurcated arms J J, the spring G encircling said shaft D, a clamp H, adjustably secured to said shaft D, for the purposes set forth, and the wheel E journaled between the arms J J, substantially as set forth and described.

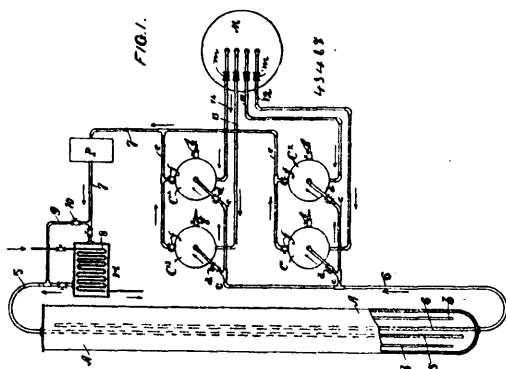
No. 43,467. Water Pump. (Pompe.)



Ignace Bilodeau, Quebec, Canada, 4th July, 1893; 6 years.

Resumé.—1er. La combinaison du siphon A et de la pelle B avec tuyau du puisard H, tel que décrit. 2ème. La combinaison de la grille D et de la trappe E avec tuyau G, tel que décrit. 3ème. La combinaison du tuyau G avec grille D et trappe E et du tuyau H avec siphon A et pelle B, tel que décrit.

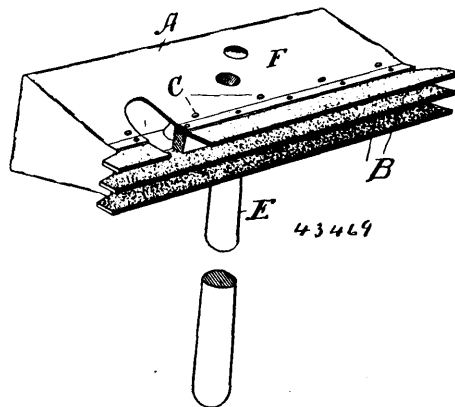
No. 43,468. Process and Apparatus for Vulcanizing Wood. (Procédé et appareil de vulcanisation du bois)



Samuel Edward Haskin, Avoca, New York, U.S.A., 4th July, 1893; 6 years.

Claim.—1st. In apparatus for vulcanizing wood, the combination with the chamber in which the wood is treated, of an air compressor an air heater, an induction conduit communicating with said chamber through numerous relatively small orifices at different points in said chamber, and a suitable eduction conduit whereby heated compressed air may circulate uniformly through said chamber, substantially as described. 2nd. In apparatus of the character described, the combination with the chamber in which the wood is treated, of an air compressor, an air heater, an induction conduit communicating with said chamber through numerous relatively small orifices, and an eduction conduit likewise communicating with said chamber through numerous small orifices, substantially as and for the purpose set forth. 3rd. In the art of wood vulcanization, the improvement consisting in circulating through the vulcanizing chamber heated compressed air, and then without interrupting the circulation or releasing the pressure, introducing into the circulating system successive volumes of cold air until the wood is cooled down below the boiling point of its liquid or liquifiable constituents, substantially as described. 4th. The process described of vulcanizing wood consisting in maintaining through the vulcanizing chamber a steady circulation of heated and compressed air, and then cutting out successive volumes of heated air, and introducing in place thereof cold compressed air constantly maintaining the circulation and pressure, substantially as set forth.

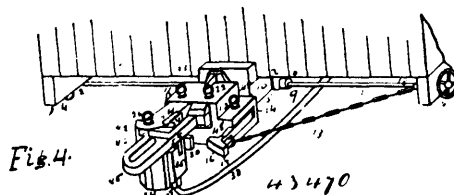
No. 43,469. Scrubbing Device. (Brosse à nettoyer.)



John William Roots, Toronto, Ontario, Canada, 4th July, 1893; 6 years.

Claim.—An improved scrubbing device consisting of a wedge shaped closed reservoir or receptacle having strips of rubber or similar pliable material located at the thin edge of the wedge shaped receptacle, a row of small perforation being made through the receptacle immediately above the strips of rubber or other material, and a row of larger perforations through the top of the receptacle near the edge farthest from the side from which the operating handle projects.

No. 43,470. Automatic Car Coupler and Air Brake. (Attelage et frein de chars.)



Phineas Pelton, Persia, Iowa, U.S.A., 4th July, 1893; 6 years.

Claim.—1st. In a car coupler, the combination, with a draw-head provided upon its front face, and at one side of its centre with a forwardly projecting coupling head whose outer side is provided with a vertical shoulder, of a hook pivoted at the opposite side of the draw-head, and extending in front of the same opposite the coupling head, a spring for normally pressing the hook inward at its outer end, and means for retracting the hook against its spring, substantially as specified. 2nd. In a car coupler, the combination of the draw-head provided upon its front face and at one side of its centre with a forwardly projecting coupling head, whose outer side is provided with a vertical shoulder, of a hook pivoted at the opposite side of the draw-head and extending in front of the same opposite the coupling head, a spring for normally pressing the hook inward at its outer end bearings, one of which is a standard having a recess, a reciprocating shaft mounted in the bearings, wheels for operating the shaft, connections between the hook and the shaft, and a boss mounted on the shaft, and provided with a lug for engaging the recess of the standard, substantially as specified. 3rd. In a car coupler, the combination, with a draw-head, having at its front side, and at one side of its centre a projecting coupling head provided upon its outer side with a vertical rib, and upon its inner face without a horizontal recess, a cut off located in the horizontal recess and provided with an upwardly extending lug, a spring for normally pressing the cut off in the recess, and air passage leading from the side of the coupling head to the recess and pivoted spring pressed at the opposite side of the draw-head, substantially as specified. 4th. In a car coupler, the combination, with a draw-head, provided upon its face with a removable coupling head extending forwardly therefrom, said coupling head having at one side a vertical rib, and its inner face vertically recessed, the bottom of which is provided with a horizontal recess, a smooth faced plate located in the vertical recess, a sliding cut off mounted in the horizontal recess, a spring for normally pressing the cut off into its recess, an air passage communicating with the horizontal recess and with the bottom or the coupling head, a pipe coupling connected with the air passage, a recess in the opposite side of the draw-head, a draw hook pivoted in the recess, and extending forward beyond the draw-head, a spring interposed between the rear end of the hook and the draw-head and means for retracting the hook against the tension and its spring, substantially as specified. 5th. In a car coupler, the