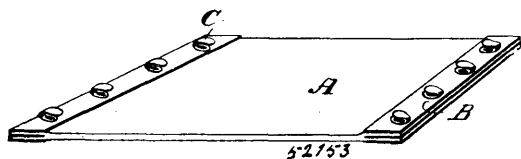


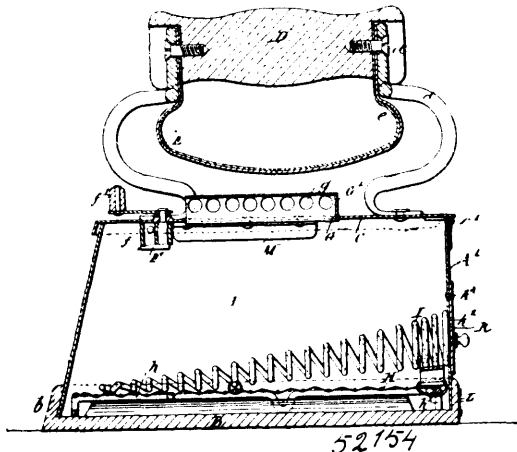
No. 52,153. Pneumatic Tire Puncture Band.
(*Bande pour réparer les bandages pneumatiques.*)



David W. Noyes, Boston, Massachusetts, U.S.A., 4th May, 1896; 6 years. (Filed 28th March, 1896.)

Claim.—The band of rubber, or other elastic substance, rectangular in shape and varying in length and width with the variations in the sizes of tires of bicycles and other vehicles, reinforced across each end by a transverse strip of non-elastic, flexible material, in combination with two series of lacing hooks, one set in each of said reinforced ends, with open sides facing outward, and a lacing cord for connecting said two series of hooks and binding said band around the punctured tire to cover and close the puncture, all constructed, arranged and operating substantially as described.

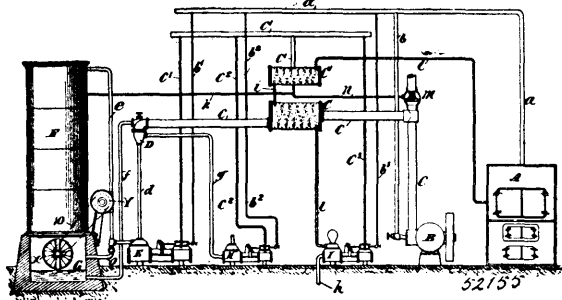
No. 52,154. Box-Iron. (*Boîte de fer à repasser.*)



Frances Eliza Hunter, North Fitzroy, Victoria, Australia, 4th May, 1896; 6 years. (Filed 31st March, 1896.)

Claim.—1st. A box-iron having its body made of sheet metal and its bottom of cast iron, the latter having upwardly projecting flanges around its edge to which said body is attached, substantially as herein described. 2nd. In a box-iron, a tapering spiral wire flue (such as I) constructed and arranged substantially as herein described. 3rd. In a box-iron, a vent formed by a slot in or about the centre of the lid or cover and provided with a perforated cap or cover substantially as herein described.

No. 52,155. Self-Cooling Condenser. (*Condenseur.*)



Henry R. Worthington, Elizabeth, New Jersey, assignee of Louis Ross Alberge, New York, State of New York, both in the U.S.A., 4th May, 1896; 6 years. (Filed 4th April, 1896.)

Claim.—1st. An apparatus of the class described having a series of layers, each layer consisting of tubular bodies placed side by side with their walls extending transversely to the layer and forming distributing surfaces and spaces between them extending through the layer, whereby the subdivision of fluid passing through the spaces is secured, substantially as described. 2nd. An apparatus of the class described having a series of layers, each layer consisting of tubular bodies placed side by side with their walls extending transversely to the layer and

forming distributing surfaces and spaces between them extending through the layer and with surface contact between the bodies of each layer, the spaces through each layer being opposite the walls of the next layer whereby the subdivision of fluid passing through the spaces is secured, substantially as described. 3rd. An apparatus of the class described having a series of layers, each layer consisting of tubular bodies having longitudinal cross-walls or projections dividing their interior space, said bodies being placed side by side with their walls extending transversely to the layer, the spaces through each layer being opposite the walls of the next layer whereby the subdivision of fluid passing through the spaces is secured, substantially as described. 4th. An apparatus of the class described having a filling consisting of a series of layers, each layer consisting of tubular bodies placed side by side with their walls vertical and forming distributing surfaces and spaces between them, extending through the layer, the layers being piled one upon the other and each layer being arranged to subdivide the sheets of liquid received from the next layer above, substantially as described. 5th. The combination with a structure having a series of layers, each layer consisting of tubular bodies placed side by side with their walls extending transversely to the layers and forming distributing surfaces and spaces between them extending through the layer, the spaces through each layer being opposite the walls of the next layer whereby the subdivision of fluid passing through the spaces is secured, of means for supplying liquid at the top of the structure and a current of air transversely to the layers, substantially as described. 6th. The combination with a structure having a filling consisting of a series of layers, each layer consisting of tubular bodies placed side by side with their walls vertical and forming distributing surfaces and spaces between them extending through the layer, the layers being piled one upon the other and each layer being arranged to subdivide the sheets of liquid received from the next layer above, of means for supplying liquid at the top of the structure and a current of air transversely to the layers, substantially as described. 7th. The combination with apparatus constructed to secure contact of water with a current of air, a motor for delivering the water to the tower, and a fan for producing the air current, of a fan-actuating water-motor controlled by the water delivering motor, substantially as described. 8th. The combination with the cooling tower, fan and motor for circulating the water to be cooled, of a fan-actuating motor operated by a column of water moved by said water circulating motor, substantially as described. 9th. In a self-cooling condenser, the combination with the cooling tower, fan and condensing chamber, of a fan actuating water-motor for operating said fan placed on the water circulating connections, substantially as described. 10th. In a self-cooling condenser, the combination with the cooling tower and fan, of an aspirating condensing chamber, a fan actuating water-motor, and connections for the condensing water from the reservoir through the water motor to the condensing chamber, substantially as described. 11th. In a self-cooling condenser, the combination with a cooling tower and a pump for raising the water, of an aspirating condenser, and an air-pump connected with said condenser, substantially as described. 12th. The combination with an aspirating condenser and water supply, of a pump for raising the discharge water from said condenser, said condenser being elevated above the water supply and pump to utilize the condenser vacuum in raising the water from the supply, whereby the discharge water passes from the condenser to the pump under a head and the pump under a head and the pump is assisted, substantially as described. 13th. The combination with an aspirating condenser and water supply, of a pump for raising the discharge water from said condenser, said condenser being elevated above the water supply and pump to utilize the condenser vacuum in raising the water from the supply, whereby the discharge water passes from the condenser to the pump under a head and the pump is thus assisted, substantially as described. 14th. In a self-cooling condenser, the combination with a cooling tower and a pump for raising the water, of an aspirating condenser connected with the pump and elevated above the water supply and pump to utilize the condenser vacuum in raising the water, whereby the water passes from the condenser to the pump under a head and the pump is thus assisted, substantially as described. 15th. In a self-cooling condenser, the combination with a cooling tower, and a pump for raising the water to be cooled, of an aspirating condenser connected with the pump and elevated above the water supply and pump to utilize the condenser vacuum in raising the water, whereby the water passes from the condenser to the pump under a head and the pump is thus assisted, and an air-pump connected with said condenser, substantially as described. 16th. In a vacuum steam system employing one or more auxiliary engines, the combination with the boiler and a self-cooling condenser, of means for heating the feed water by the exhaust steam from the main steam apparatus and the auxiliary engine or engines and for adding water condensed from the exhaust steam to a water supply within the system, substantially as described. 17th. In a vacuum steam system employing one or more auxiliary engines, the combination with the boiler and a self-cooling condenser, of a main heater for heating the feed water by the exhaust steam from the main steam apparatus on its way to the condenser, a supplementary heater for heating the feed water by the exhaust steam from the auxiliary engine or engines, and connections for adding the water condensed from the exhaust steam of the auxiliary engine or engines to the water for condensation, substantially as described.