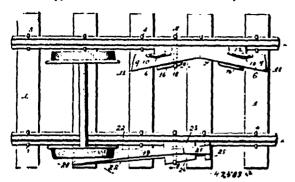
No. 47,383. Car Replacer.

(Appareil à remettre les chars sur lu voie.)



James M. Morris, Salt Lake, assignee of Summer J. Harkness, Scofield, both in Utah, U.S.A., 3rd December, 1894; 6 years.

Claim.-1st. A car replacer, comprising an inner section secured at the inner side of one of the track-rails and having its upper surface inclined downwardly toward said rail, and terminating at its surface inclined downwardly diverging or bevelled surfaces, substantially as set forth. 2nd. A car replacer, comprising a section arranged at the inner side of one of the track-rails, having its upper surface inclined downwardly and inwardly toward said rail, and having at the opposite ends of said surface downwardly divergent surfaces, and a flange projecting upwardly from the inner margin of said section, in combination with a second section arranged outward of and at an angle to the companion track-rail, and having its upper surface horizontal, and terminating at its opposite ends in downsurface norizoital, and terminating at its opposite ends in downwardly diverging bevelled surfaces, substantially as set forth.

3rd. A car replacer, comprising a section arranged at the inner side of one of the track-rails, having its upper surface inclined downwardly and inwardly toward said rail, and having at the opposite ends of said surfaces downwardly divergent surfaces, and a flange projecting upwardly from the inner margin of said section, in combination with a second section arranged surface of said section, and a flange projecting upwardly from the inner margin of said section, in combination with a second section arranged outward of and at an angle to the companion track-rail, and having its upper surface horizontal, and terminating at its opposite ends in its upper surface horizontal, and terminating at its opposite ends in downwardly diverging bevelled surfaces, and having downwardly divergent sides, substantially as set forth. 4th. In a car replacer, the combination with a section fitting against the inner side of one of the track-rails, and having its inner margin diverging inwardly from a point about midway its length, and having its upper surface from said margin inclined downwardly to the track-rail, a flange projecting vertically upward from the inclined margin, and elongated lugs or ribs projecting upwardly from the upper side of said section, of a companion section arranged at the outer side of the other track-rail and having a horizontal unare surface terminating at its conseils. rail, and having a horizontal upper surface terminating at its opposite ends in downwardly divergent surfaces, substantially as set forth. 5th. A car replacer, comprising a section fitting against one of the track-rails, and having its free margin converging from a point about midway its length so as to extend at an angle to the track-rail, and elongated lugs or shoulders projecting from said divergent margin. and a retainer-bar or clamp hook fitting against the underside of the track-rail and the said section and engaging the outer base flange of the rail and one of said clongated logs or shoulders, and prongs or points depending from said section, substantially as and for the purpose set forth. 6th. A carreplacer, comprising an inner section having a straight margin and a margin extending divergently outward from a point about midway its length, and formed in the shape of a hollow casting, and having its upper surface inclined downwardly toward the straight margin, downwardly divergent bevelled surfaces 12, 12, at the opposite ends of said upper surface, downwardly divergent surfaces 9, 9, also at the opposite ends of said upper surfaces and projecting beyond the ends of the surfaces 12, 12, so as to form vertical shoulders 8, and guide-ribs projecting vertically upward from vertical shoulderss, and guide-tos projecting vertically upward from the surfaces 4 and 9 and extending approximately parallel with the shoulders 8, substantially as set forth. 7th. A car replacer, com-prising a section in the form of a hollow casting, and a pin or lug depending from the bottom of said casting, and provided with an aperture near its lower end, in combination with a retainer-bar or clamp, having an aperture engaging said pin or lug, and a removable pin engaging the aperture in said pin or lug and supporting said retainer-bar or clamp in position, substantially as set forth.

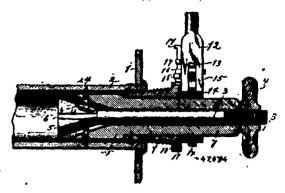
No. 47,584. Machine for Cutting Boiler Tubes.

(Machine à couper les tubes de chaudières.)

Carl Otto Thierne and Augusta Peliuski, both of St. Louis, Missouri, U.S.A., 3rd December, 1894; 6 years.

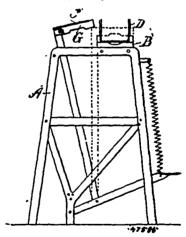
Claim.—1st. In a tube cutter, the combination with the stock and laterally movable cutters, of a tapered integral sleeve threaded upon its outer surface, means whereby said sleeve may be rotated to securely clamp said stock and said cutters in position within the tube to be cut, means for rotating the cutters to

cut the tube and means for simultaneously feeding them laterally, substantially as herein specified. 2nd. In a device for cutting boiler tubes, the combination of a cylindrical casting 7, an enlarged portion 8, formed on one end of said casting, a shaft 3, mounted in said



cylindrical casting 7, an enlarged or conical portion, cutters 24, mounted in the enlarged portion 3, of the casting 7, projections 26, on said cutters in engagement with the guideways 6, formed in the enlarged or conical end 5, of the shaft 3, a casting acrew threaded on its outer periphery, an annular flange 10, on one end of said casting, notches 11, formed in said flange, a handle mounted on said casting 7, a slot 13, formed in said handle, a ratchet-wheel 14, placed in said slot, and a pawl 15, connected to said handle and constructed to engage said ratchet-wheel. 3rd. In a device for cutting boiler tubes, a handle 12, straps 17 and 18, connected to said handle, a bolt mounted in said straps, a pawl 20, mounted in said bolt, and a spring 22, adapted to retain the pawl in its outward position. 4th. In a device for cutting boiler tubes, the combination of a shaft mounted for rotation, a head, conical in form, mounted on the shaft, and provided with a plurality of dove-tailed grooves, hinge members or lugs mounted in said grooves and in sliding connection therewith, and cutters mounted in proximity to said head and hinged to said lugs.

No. 47,585. Broom. (Balai.)



William Sanfield McDonel, Windsor, Ontario, Canada, assignee of Daniel Alexander McDonel, Detroit, Michigan, U.S.A., 4th December, 1894; 6 years.

Claim.—1st. The herein described method of manufacturing brooms, consisting in compressing the body corn in a clamping frame surrounding the broom and handle, securing that frame to the handle, and then in securing the covering over the body, substantially as described. 2nd. The method of forming brooms consisting in securing the covering to a handle at a point above the lower end thereof and with the butts presented downward and evened, securing the body to the handle below the butts and finally securing the covering over the body, substantially as described. 3rd. In a broom, the combination of the handle and body corn, a U-shaped frame in which the body corn is adapted to be compressed by binding down the ends of the frame upon the corn and handle, and means for securing the frame to the handle, substantially as described.

No. 47,586. Furnace. (Fournaise.)

Hugo Jacob Donan, Tacoma, Washington, assignee of Samuel M. Trappe, Maywood, Illinois, both in the U.S.A., 4th December, 1894; 6 years.

Claum.-1st. In a regenerating furnace, the combination with a