

flexible or pliable clasp G, attached to said supports by its ends only, substantially as and for the purposes hereinbefore set forth. 2nd. combination of the wiper carriage, the flexible or pliable clasp G, the oscillatory clasp supports, and the slides to which said supports are pivoted, said oscillatory clasp supports and slides being disconnected from, and movable independently of the said wipers, substantially as and for the purposes hereinbefore set forth. 3rd. The combination of the wiper carriage, the flexible or pliable clasp G, the oscillatory clasp supports, the slides to which said supports are pivoted, and the slide operating adjusting mechanism, said oscillatory clasp supports, slides and slide operating and adjusting mechanism being disconnected from, and movable independently of said wipers, substantially as and for the purposes hereinbefore set forth. 4th. The pivoted clasp supporting arms I and the flexible or pliable clasp G, in combination with back stops for preventing undue spreading apart of said arms, substantially as hereinbefore set forth.

### No. 29,266. Machine for Lasting Boots and Shoes. (*Machine à enformer les chaussures.*)

The Shoe Lasting Machine Company, New York, N.Y., (assignee of Frank Chase, Boston, Mass.), U.S., 1st June, 1888; 5 years.

*Claim.*—1st. The combination of the toe wipers, the retarder capable of oscillatory movement to adapt itself to inequalities in the upper, and the hold-down vertically movable independently of said retarder, substantially as and for the purposes hereinbefore set forth. 2nd. The combination of the retarder, its movable supporting frame, the hold-down vertically movable in said frame independently of the retarder, and means, substantially as described, for forcing down the hold-down, substantially as and for the purposes hereinbefore set forth. 3rd. The combination, with the toe wipers, of the adjustable side toe clamps arranged and adapted to bear from opposite sides against the toe end of the last, substantially as and for the purposes hereinbefore set forth. 4th. The combination, substantially as hereinbefore set forth, of the toe wiper, the hold-down and retarder mechanism, and the adjustable side toe clamps. 5th. The longitudinally movable and laterally tilting lasting carriage E, in combination with means, substantially as described, for adjusting said carriage both longitudinally and laterally, as hereinbefore set forth. 6th. The combination of the bar G, the wiper carriage adapted to slide and turn thereon, the carriage advancing and retracting mechanism, and means, substantially as described, whereby the carriage may be laterally tilted and held in such tilted position upon the bar, as and for the purposes hereinbefore set forth. 7th. The bar or rail G pivoted at its rear end, and the wiper carriage mounted and adapted both to slide and to turn on said rail, in combination with means, substantially as described, for lifting or lowering the front end of said rail. 8th. The combination of the bar or rail G, the wiper carriage mounted and adapted both to slide and to turn thereon, and mechanism, substantially as described, whereby each end of the bar or rail may be raised or lowered independently of the other, substantially as and for the purposes hereinbefore set forth. 9th. The combination, with the wiper carriage and the two independent slide bars O, R, of the wipers carrier by the slide R, the arms M and links N, connecting slide O with the wipers, for the purpose of opening and closing the latter, and the links connecting the pivoted arms M of slide O with slide R, for the purpose of advancing and retracting the latter, substantially as and for the purposes hereinbefore set forth. 10th. The pliable clasp G, composed of one or more chains joined at the ends to their supporting carriage, faced with leather or other smooth pliable material, and provided with a central guide, or supporting stem, substantially as and for the purposes hereinbefore set forth. 11th. The adjustable side toe clamps provided with pivoted or swivelled pressure pads, as and for the purposes hereinbefore set forth.

### No. 29,267. Hydrocarbon Oil Burner. (*Foyer à hydrocarbures.*)

James Sangster, (assignee of Charles E. Burbank), Buffalo, N.Y., U.S., 1st June, 1888; 5 years.

*Claim.*—In a vapour or gas generator for burning oil, a retort provided with a refuse receptacle at its inlet end, and means, substantially as described, for getting at the interior of the receptacle to clean it, in combination with a rear refuse receptacle, a perforated burner tube connected with said receptacle, and with a vertical tube within the receptacle provided with a conical deflecting cap, for the purposes described.

### No. 29,268. Coal Hod. (*Seau à charbon.*)

Edward Barrath, Cincinnati, Ohio, U. S. 1st June, 1888; 5 years.

*Claim.*—1st. The combination of the body A having a lap, the foot C having a lap, and the bottom B having a lap embracing the laps of the body and foot, substantially as described. 2nd. The combination of the body A having lap formed with an in-turned part a, upturned part a', and outturned part a'', the foot C having lap formed with an in-turned part c, upturned part c', and outturned part c'', and the bottom B having a lap formed with a downward part b, an in-turned part b', embracing the out-turned parts of the body and foot, substantially as described.

### No. 29,269. Manufacture of Canoes. (*Fabrication de canots.*)

William English, Peterborough, Ont., 1st June, 1888; 5 years.

*Claim.*—The combination, with the strips A forming the body of the canoe, of pieces of compressed wood B inserted into grooves formed in the edge of each strip, substantially as and for the purpose specified.

### No. 29,270. Copying Machine. (*Machine à copier.*)

William Harkins, Chicago, Ill., U.S., 1st June, 1888; 15 years.

*Claim.*—1st. The combination of the frame A, hinged to the base

board K by the hinges k, k, and hinge plates e, e, and being made of the holder D, binder R and stretcher F, with the stoncil B and ink pad L, substantially as described and for the purpose set forth. 2nd. The combination of the frame A with the stoncil material B, oiled paper C, and stoncilling material C, substantially as described and for the purpose set forth. 3rd. The combination of the frame A with a stylus, the stoncil material B, the stoncilling material C and the oiled material C, substantially as described and for the purpose set forth. 4th. The combination of the stoncil B, stoncilling fabric C, oiled paper C, with the keys and platen of a typewriter, substantially as described and for the purpose set forth. 5th. As a new article of manufacture, a stoncil made of a centre of porous paper and a border of paper impermeable to ink, the two held together by a coating of paraffin or like material, substantially as described and for the purpose set forth. 6th. The detached rubber tubing f, in combination with the tongues e, e, and grooves d, d, of the frame A and the materials B and C, substantially as and for the purpose set forth. 7th. A stoncilling material C made of flexible material, so as to conform to curved surfaces as the platen of a typewriter, substantially as described and for the purpose set forth. 8th. As a new article of manufacture, a typewriter ribbon made of silk bolting cloth, substantially as described and for the purpose set forth.

### No. 29,271. Freight Car. (*Char à marchandises.*)

Perry Brown and Daniel E. Doherty, Louisville, Ky., U. S., 1st June, 1888; 5 years.

*Claim.*—1st. In a freight car, the combination of the side wall having the lower half permanently closed and the upper half permanently slatted, of a door having a vertically moving hinged connection at the top, and a rabbeted lock at the bottom, for tightly closing said slatted portion, substantially as and for the purpose specified. 2nd. In a freight car, the combination, with the car body having an opening in its side wall, of a frame E, hinged to said side wall, the slats on said frame and the door E, and a double hinge connecting said frame and also hinging the frame E to the wall, substantially as and for the purpose specified. 3rd. In a freight car, a door having a rabbeted lock at the bottom, locking means near its vertical centre, and holding means upon opposite sides of the central lock, substantially as shown and described. 4th. In a freight car, a door provided with a supplemental door, and means for simultaneously locking said supplemental door to the main door, and the main door to the frame, substantially as described. 5th. In a freight car, a door provided with a supplemental door combined with transverse bolts on the main door, a bolt constructed to lock said supplemental door to the main door, and means for operating all of said bolts simultaneously, as set forth. 6th. The combination, with a car having an opening in its top, and a casting around said opening, of a hinged portion of the run board and a depending flange carried by said hinged portion and constructed to embrace said casting, substantially as shown and described.

### No. 29,272. Oil Feeder. (*Graisneur.*)

John E. Blakemore and Samuel A. Randall, Boston, (assignees of Nicholas Siebert, Malden), Mass., U. S., 1st June, 1888; 5 years.

*Claim.*—1st. The combination, with the oil reservoir having an oil and water passage respectively, and a condenser communicating with the water passage, of an upwardly moving check-valve within the water passage, and a horizontally moving valve within the oil passage for checking the feed of oil when the steam is shut-off, substantially as herein described. 2nd. The oil reservoir I, the steam pipe B, passing through said reservoir, and the water passage d, in combination with a condenser communicating with both the steam pipe, and water passage, the oil passage e and a steam pipe adjacent to the discharge of said oil passage, substantially as herein described. 3rd. An improved oil reservoir comprising a steam pipe, a water passage d and an oil passage e formed therein, a condenser communicating with the steam pipe and a water passage, check-valves within said water and oil passages, a steam chamber g beneath the oil passage, a steam pipe and the controlling valve adjacent thereto, and a discharge pipe and controlling valve leading from said oil chamber to the valves and pistons, substantially as herein described.

### No. 29,273. Invalid and Dental Chair. (*Chaise d'invalides et de dentiste.*)

Joseph Peltier and Etienne Peltier, Montreal, Que., 1st June, 1888; 5 years.

*Claim.*—1st. In a dental or invalid chair, the combination, with a frame having grooves, of a sliding chair adapted to be raised or lowered in the said grooves, and provided with an adjustable back and hinged extension, as herein described. 2nd. The combination, with the frame A, A', A'', groove a, of the diagonal pieces B, the spring supports D, brackets B, disc and lever E, E', foot-lever F, hand lever H, bent socketed lever G, link I, legs t, and sliding chair G, substantially as shown and described. 3rd. The combination of the bent rods or hinges c', chair back H, notched segments P, slots h, catches or levers J, springs f, cords y, sliding bar K and seat C, substantially as shown and described. 4th. The combination of the seat C, hinged extension L, strap e, notched segment e', slot e'', catch M, spring m, wire or cord m', and ring or handle m'', as shown and described. 5th. In a chair as shown, the combination of the seat C and sliding staples N, extension L and back H, substantially as specified.

### No. 29,274. Car-Coupling. (*Attelage de chars.*)

Daniel M. Cowher and David H. Foster, Mapleton Depot, Penn., U.S., 1st June, 1888; 5 years.

*Claim.*—1st. The combination, with the draw-head having a rear transverse shoulder B, of the trigger supporting block having a rear extension E adapted to impinge upon the shoulder B, and the trigger working within the body of said block, substantially as specified. 2nd. The combination of the draw-head, the block C secured within the