

the main service-pipe and the check-valve for directing the back flow of the water to the draining-pipe, substantially as and for the purpose set forth.

### No. 27,366. Curtain Guide. (*Guide-rideau.*)

Alfred M. Haswell, Toronto, Ont., 8th August, 1887; 5 years.

*Claim.*—In a curtain guide, the guiding wire C, the adjustable attachment as composed of the parts D, E and  $\alpha$ , in combination each with the other and with the curtain B as attached thereto, substantially as for the purposes set forth.

### No. 27,367. Sole-Nailing Machine.

(*Machine à clouer les semelles*)

Freeborn F. Raymond, 2d, Newton, Mass., U.S., 8th August, 1887; 5 years.

*Claim.*—1st. In a sole-nailing machine, in combination with one or more last or work supports, a right-sole templet-plate, a left-sole templet-plate, and means for moving them into the same operative position. 2nd. In a sole-nailing machine, the combination of the right templet, the left templet adapted to be moved successively into the same operative position, with reciprocating nail-driving devices, adapted to be used with the right templet, and reciprocating nail-driving devices adapted to be used with the left templet, and mechanism for moving them successively into operative position. 3rd. The combination, in a sole-nailing machine, of the right templet, the left templet, adapted to be moved successively into the same operative position with the right nail-carrier, and the left nail-carrier, and devices for alternately moving them into operative position with their respective templets. 4th. The combination, in a nailing machine, of two nail-carriers with a nail-distributor, consisting of the block H, having two lines of holes  $h$  and  $h_1$ , the nail-holders G,  $G_1$  and the groups  $h_2$ ,  $h_3$ , of tubes or passages, one of which groups connects one line of holes with one nail-holder, and the other of which connects the other line of holes with the other nail-holder. 5th. The combination, in a nailing machine, of the distributor, comprising a block, having two lines of holes,  $h$ ,  $h_1$ , and two sets of distributing tubes  $h_2$ ,  $h_3$ , with nail-receiving and delivering block, adapted to deliver nails, first to the line of holes  $h$  and then to the line of holes  $h_1$ . 6th. In a nailing machine, a nail-distributor, comprising the block H, having the two lines of holes  $h$ ,  $h_1$ , and the groups  $h_2$ ,  $h_3$  of passages or tubes. 7th. The combination of the block H, having the two lines of holes  $h$ ,  $h_1$ , the nail-receiving and delivery block  $H_1$ , and devices for moving said block after it has received its load of nails, alternately in different or opposite directions, first to a position to bring its holes in register with the holes  $h$ , and next into register with the holes  $h_1$ . 8th. In a nailing machine, the combination of a last or work support, the right-sole templet-plate, the left-sole templet-plate, the right-sole beating-out form, the left-sole beating-out form, and devices for moving them into operative position. 9th. The combination of the nail-holder or holders G,  $G_1$ , a covering plate P, a cam and connecting devices, all substantially as described. 10th. The combination of the block H, having passages  $h$ ,  $h_1$ , the nail-receiving and delivery block  $H_1$ , the fingers or levers and cams, substantially as described. 11th. The combination of the plate H, having the holes  $h$ ,  $h_1$ , the nail-receiving and delivery block  $H_1$ , the cap guide plates, the fingers, the connecting straps, the cams and connecting devices, substantially as described. 12th. The combination of a plate H, having two lines  $h$ ,  $h_1$ , of nail-delivery holes arranged therein, with the nail-holding and delivery block  $H_1$ , and devices for moving the same longitudinally and transversely upon said plate H, to bring its holes in register successively with each line of holes of said plate, substantially as described. 13th. The combination in the templet-plate, having guides for the carrier-plate  $f$ , said carrier-plate  $f$ , the collar  $f_1$ , surrounding the nail-carrier plate, the yoke  $f_2$  arranged to lay hold of the collar, and devices for reciprocating the yoke at stated intervals, substantially as described. 14th. The combination of the templet-plate supporting the right and left sole-nailing templets, a post, a shaft, the pinion thereon, the sector, a cam and the sliding bar operated thereby and connected with the sector, all substantially as described. 15th. The combination of the templets, the nail-holders, the cam-shaft and cams thereon for operating the templets and nail-holders, the nail-distributors, the nail-receiving and delivery block, the cam shaft and cams thereon for moving the nail-receiving and delivery block, as specified, all substantially as described.

### No. 27,368. Chalk Suspender for Billiard Tables. (*Porte-craie de billard.*)

David W. Seely, Elmira, N.Y., U.S., 8th August, 1887; 5 years.

*Claim.*—1st. The chalk-holder, made from a single piece of sheet metal, and bent to form the top and depending end walls  $h$ , the said end walls having the side plates or flanges bent at right angles to their outer edges, and the top having the bent re-enforced plates on its under side, for the purpose set forth, substantially as described. 2nd. The chalk-holder, herein described, made from a single piece of metal bent to form the top and depending end walls, and the screw for drawing the end walls together, the said end walls having a slight elasticity, and adapted to expand when the screw is loosened. 3rd. In a billiard chalk suspender, the pulley-frame A and the pulleys E therein, arranged at a distance apart, in combination with the cord passing over the pulleys, the weight having openings  $f_1$ ,  $f_2$ , arranged at a less distance apart than the pulleys E, the cord having its pendent ends passing through the openings  $f_1$ ,  $f_2$ , one of the ends being secured to the ring, and the other end being free and provided with the chalk, as set forth. 4th. The frame A, having pulleys E, arranged at a distance apart, in combination with the cord passing over the pulleys, and the weighted ring G having the cord connected thereto at points less distant than the space between the pulleys E, as set forth. 5th. In a chalk-suspender, the pulleys, in combination with the cord, and the weighted ring on the cord, the cord being passed through the centre or the ring, leaving side portions of the ring on each side of the cord, as set forth.

### No. 27,369. Machine for Beveling and Moulding the Edges of Plates of Glass, and for Ornamenting the Surfaces of Plates of Glass. (*Appareil pour ébouser et mouler les arêtes des feuilles de verre et orner les surfaces des feuilles de verre.*)

Obed C. Hawkes, Birmingham, Eng., 8th August, 1887; 5 years.

*Claim.*—In machinery for beveling and moulding the edges and ornamenting the surfaces of plates of glass, the combination of a to and fro or reciprocating carriage, supporting an adjustable table, on which the plate of glass to be operated upon is clamped or fixed, with a vertical or horizontal rotating cutting mill or circular grinder, together with mechanism for giving a reciprocating motion to the travelling carriage and table, and for automatically reversing the direction of the motion of the said travelling carriage and table, the several parts of the machinery being constructed, arranged and operating substantially as hereinbefore described and illustrated in the accompanying drawings.

### No. 27,370. Velocipede. (*Vélocipède.*)

Friedrich Renz, Leipsic, Germany, 8th August, 1887; 5 years.

*Claim.*—1st. In a velocipede, the wheel A constructed of the hoops A, A, held apart by rods  $a$ ,  $a$ , and secured to the central rim B, with flexible tyre by spokes  $f$ ,  $f$ , substantially as and for the purpose set forth. 2nd. In a velocipede, the wheel A, constructed as described, revolving on axle C, substantially as and for the purpose set forth. 3rd. In a velocipede, the combination, with the wheel, as described, and the axle C with seat D, of the pedal crank-shaft E, with chain-wheels  $g$ ,  $g$ , the chains  $h$   $h$  and the chain wheels  $o$ ,  $o$ , fastened on to the wheel A, substantially as and for the purpose set forth. 4th. In a velocipede, the arms G with wheels  $i$ ,  $i$ , fulcrumed at  $k$ ,  $k$ , to arms H, and operated by levers  $o$ ,  $o$ , and rods M, M, in the manner described and for the purpose set forth. 5th. In a velocipede, the rear wheel F attached to the forked arm H, hinged to arms H, H, and regulated by the spring  $t$ , substantially as and for the purpose set forth. 6th. In a velocipede, the wheel A, constructed as described, for the purpose of permitting the rider to seat himself inside the same, for revolving and steering said wheel by means of pedal cranks chain wheels, chains and levers, all placed inside of said wheel and within easy reach of said operator, substantially as and for the purpose set forth.

### No. 27,371. Fire-Escape. (*Sauveteur d'incendie.*)

George Ogden, Trumansburg, N.Y., U.S., 8th August, 1887; 5 years.

*Claim.*—1st. In a friction fire-escape, the combination of the block A, having the openings B, C, the arms D depending from the said block, the drum journaled between the said arms, and the strap H wound on the drum and passed through the openings B, C, and means, substantially as described, to compress the arms against the ends of the drum, for the purpose set forth, substantially as described. 2nd. In a friction fire-escape, the combination of the block A having the openings B, C, the arms D secured on the said block, the bolt E and nut F to clamp the arms, the drum journaled between the arms and provided with the strap extending upward through the openings B, C, and the straps K and L attached to the lower ends of the arms, and adapted to form a loop and the cross-bar or yoke O adapted to slide in the said straps, substantially as described.

### No. 27,372. Cut-Out Switch for Railways.

(*Aiguille de chemin de fer.*)

Asa G. Dailey, Detroit, Mich., U.S., 8th August, 1887; 5 years.

*Claim.*—1st. In combination with the rails 1, the movable rail 17 and plate 5, having thereon the offset, and flange 22, substantially as shown and described. 2nd. The combination of the rail 1, the movable rail 17 and the chair 21, the flange of said rail 17 being cut away within the chair, substantially as shown and described. 3rd. In combination with the rails 1, 1, having the flanges thereon partly cut away, a plate 5, having at each end the narrow 21, substantially as shown and described.

### No. 27,373. Feed Cutting Machine.

(*Coupe-paille.*)

Lindley M. Batty, Canton, Ohio, U.S., 9th August, 1887; 5 years.

*Claim.*—1st. In a feed-cutter, the combination of the arm A secured to the shaft B, and provided with suitable recesses, with the bolt D having a bevelled head, and the narrow semicircular plate or cutter C, which is bevelled upon its back for the bevelled head of the bolt to bear against, substantially as shown. 2nd. In a feed-cutter, the combination of the arm A provided with a suitable recess F and bolt hole E, with a narrow semicircular plate or cutter C bevelled upon its back, and the bolt D having a bevelled head for fastening the plate in position, substantially as described. 3rd. The combination of the arm A, secured to the revolving shaft B, and provided with a recess to receive the cutter, the cutter having a bevelled back, a fulcrum or flange H for the cutter to bear against, and the clamping bolt D having a bevelled head, which catches over the cutter and holds it securely in position, substantially as set forth. 4th. The combination in a feed cutter, of the blade, the stripper C provided with pivots P, and pivoted to the main frame T at P<sub>1</sub>, with the cutter bar J and the spirally-ribbed feed-roll L, substantially as and for the purpose set forth.

### No. 27,374. Wheel and Axle. (*Roue et essieu.*)

Granville W. Pittman, Keokuk, Iowa, U.S., 9th August, 1887; 5 years.

*Claim.*—1st. A wheel and axle, consisting of a disk-journal having