gether with twine, or thread, or wire, the stitches passing through the bodies of the strips, as specified. 2nd. A lathing fabric, composed of lathing strips of any suitable material, stitched together, substantially as specified.

No. 35,068. Axle Check for Vehicles.

(*Arrêt pour essieux de voiture.*)

Daniel C. Funcheon, Denver, Colarado, U.S.A., 23rd September, 1890 ; 5 years.

Claim.—The combination, with the forward axle and the reach of a vehicle, of the chains 8, 8, secured at their forward extremities to the axle, a ring or link 9, uniting their opposite extremities, a chain 12, connected with said ring at its opposite extremity to the reach, at a point in the rear of ring 9, substantially as described.

No. 35,069. Brake Apparatus for Vehicles, such as Railway Waggons. (*Appareil aux freins des wagons de chemin de fer.*)

William Panter, Lambeth, County of Surrey, England, John Charles Taite, and Thomas William Carleton, London, England, 23rd September, 1890 ; 5 years.

Claim.—1st. In brake apparatus for vehicles such, as railway waggons, the combination of a brake block or blocks, a hand lever adapted to actuate the same, and a holding device, said hand lever being arranged to extend transversely, or approximately so, of the vehicle, and capable of being actuated, and of being engaged with and disengaged from said holding device, from either side of said vehicle indifferently, substantially as herein described for the purposes set forth. 2nd. In brake apparatus for vehicles, such as railway waggons, the combination, with a brake block or blocks, of a hand lever arranged to extend transversely, or approximately so, of the vehicle, and capable of being operated from either side of said vehicle, a holding device, with which said hand lever can be engaged, or from which it can be disengaged, as set forth, two rods, connected at one end to the respective arms of said hand lever, a third rod to which the other end of each of the first-mentioned rods is directly jointed, and suitable connections between said third rod and the brake block or blocks, substantially as herein described for the purpose set forth. 3rd. In brake apparatus for vehicles, such as railway waggons, the combination, with a brake block or blocks, of a hand lever arranged to extend transversely, or approximately so, of the vehicle, and capable of being operated from either side of said vehicle, a holding device with which said hand lever can be engaged, or from which it can be disengaged, as set forth, two rods jointed at one of their ends to the respective arms of said hand lever, so as to follow the movement thereof in each direction, a third rod to which the other end of each of the first-mentioned rods is directly jointed, and suitable connections between said third rod and the brake block or blocks, substantially as herein described for the purpose set forth. 4th. In brake apparatus for vehicles, such as railway waggons, the combination with a brake block or blocks, of a hand-lever 9, arranged to extend transversely of the vehicle, or approximately so, and provided with a projection 13, a guide or stirrup 11, having recesses 12 adapted to receive and hold said projection, and suitable connections between said hand lever and brake block, substantially as herein described. 5th. In brake apparatus for vehicles, such as railway waggons, the combination with a brake block, or blocks, of a hand-lever 9, arranged to extend transversely of the vehicle, or approximately so, and provided with a projection 13, a guide or stirrup 11, having recesses 12 adapted to receive and hold said projection, a spring 16 that normally keeps the said hand lever in engagement with said guide or stirrup 11, and suitable connections between said hand lever and brake block or blocks, substantially as herein described for the purpose specified. 6th. In brake apparatus for vehicles, such as railway waggons, the combination, with a brake block or blocks, of a hand-lever 9 arranged to extend transversely of the vehicle, or approximately so, and provided with a projection 13, a guide or stirrup 11, having recesses 12 adapted to receive and hold said projection, a rod 8, rods $8a$, $8a$, each jointed at one end to said rod 8, and at its other end to one arm of said hand lever, and suitable connections between said rod 8, and brake block or blocks, substantially as herein described for the purposes specified. 7th. In brake apparatus for vehicles, such as railway waggons, the combination, with a brake block or blocks, a hand-lever, such as 9, arranged to extend transversely, or approximately so, of the vehicle, and capable of being actuated from either side thereof indifferently, a holding device adapted to hold said lever in the on or off position, a rod 8 arranged to be operated by said lever, means for directly actuating said brake block or blocks, and a spring, such as 14, arranged between said rod 8, and the means for actuating said brake block or blocks, substantially as herein described for the purpose specified. 8th. In brake apparatus for vehicles, such as railway waggons, the combination of a brake block, or blocks, two hand levers jointed together, and with the brake block or blocks, and a holding device for one of said levers, said levers being arranged to extend transversely, or approximately so, of the vehicle, substantially as herein described, with reference to Figs. 25 to 27 inclusive, and Figs. 28 to 30, inclusive of the drawings annexed for the purpose set forth.

No. 35,070. Heel Protector for Rubber Shoes. (*Protecteur pour talons de souliers en caoutchouc.*)

John Siegel, Montreal, Que., Canada, 23rd September, 1890 ; 5 years.

Claim.—1st. In a heel protector, the combination of a plate A, conforming to the size and shape of the heel to be covered, and having the curved instep edge a, and provided with indentations a^1, and perforations a^{11}, and a perforated and indented rim B, having crimps or creases, and the perforated rear extension b, substantially as set forth. 2nd. In a heel protector, the combination of a plate A, conforming to the size and shape of the heel to be covered, and having the curved instep edge a, and provided with indentations a^1, and perforations a^{11}, and a perforated rim B, having crimps or creases, and the perforated rear extension b, substantially as set forth. 3rd. In a heel protector, or the combination of a plate A, conforming to the size and shape of the heel to be covered, and having the curved instep edge a, and provided with perforations a^1 and the rim B, having creases b^{11}, perforations b^{11}, and indentations b^4, substantially as set forth. 4th. In a heel protector, the combination of a plate A, having a curved instep edge a, and perforations a^{11}, and the rim B, having the upper rear extension b, with perforation b^1, and the crimps or creases b^{11}, substantially as set forth. 5th. In a heel protector, the combination of a plate A, conforming to the size and shape of the heel to be covered, and having perforations a^{11}, and the rim B, having crimps or creases, and provided below said crimps or creases with indentations b^4, substantially as set forth. 6th. In a heel protector, the combination of a plate A, conforming in size and shape to the heel to be covered, and having a curved instep edge a, and the rim B, having crimps or creases, substantially as set forth. 7th. In a heel protector, the combination of a plate A, conforming in size and shape to the heel to be covered, and having a curved instep edge a, and a perforated rim B, having a perforated extension b, substantially as set forth. 8th. In a heel protector, the combination of a plate A, conforming to the size and shape of the heel to be covered, and having indentations a^1 and perforations a^{11}, and a perforated rim B surrounding said plate, except at the instep, and having crimps or creases, and a perforated extension b, substantially as set forth. 9th. A heel protector, consisting of a plate A, conforming to the size and shape of the heel to be covered, but slightly smaller and a little narrower near the instep, and a rim B, approximately at right angles to said plate, formed integrally therewith or otherwise, and engaging and holding the edge of the rubber heel plate, and the parts above the same by corresponding configurations.

No. 35,071. Combined Washer and Wringer. (*Machine à blanchir et essoreuse à linge combinées.*)

Samuel Cole, New York, State of New York (assignee of Cassius Adelbert White, Jamaica, Vermont), U.S.A., 23rd September, 1890 ; 5 years.

Claim.—1st. The combination, of the operating crank-shaft, the pitmen, the roller, the rods in which the roller is journalled, the partially revolving shaft, through which the upper ends of the rods pass, the ratchet attached to one end of the roller, a spring-actuated dog, and a lever for throwing the dog into contact with the ratchet, substantially as specified. 2nd. The combination, of the rods W, the shaft Z, through which their upper ends pass, the roller X, the ratchet A^1, the dog, the rod connected to the dog and provided with a stop, the spring placed upon the rod, the plate through which the rod passes, the lever G^1 for operating the dog, substantially as shown.

No. 35,072. Nut Lock. (*Arrête-écrou.*)

Henry Ware, Newark, Ontario, Canada (assignee of Joseph George Ware, Morengo, Iowa, U.S.A.), 25th September, 1890 ; 5 years.

Claim.—In a nut lock, the washers B, and C, the split key F, and the blocks E, constructed and adapted to operate in combination, substantially as and for the purpose hereinbefore set forth.

No. 35,073. Horse Collar. (*Collier de cheval.*)

William Irvine, Muskoka Falls, Ont., Canada, and Joseph Harcourt Parkinson, Bracebridge, Ontario, Canada, 25th September, 1890 ; 5 years.

Claim.—1st. A horse collar, having its top made of flexible material, and its lower portion formed by a throat-piece, adjustably connected to the side of the collar, substantially as described. 2nd. A horse collar, having its top made of flexible material, and the lower portion of its sides of stiff material suitably padded, in combination with a bolt G, and hinged throat-piece H, arranged to adjustably connect the sides of the collar, substantially as and for the purpose specified. 3rd. A horse collar, having its top made of flexible material, and the lower portion of its sides of stiff material, suitably padded, the upper ends of the flexible sides being arranged to overlap each other, so that they may be secured together by means of the bolt C, in combination with the collar pad D and bolt C, the latter being provided with a suitable nut, substantially as and for the purpose specified.

No. 35,074. Hydrant. (*Borne-fontaine.*)

Joseph Redican and James Chamberlain, both of Toronto, Ontario, Canada, 25th September, 1890 ; 5 years.

Claim.—1st. In a hydrant, a valve, having its seat on the inside end of the plug of the hydrant, and connected to a cylindrical sleeve, which is operated by the hose coupling, as it is being screwed on, for the purpose specified. 2nd. The valve B, connected by the bars C to the cylindrical sleeve D, in combination with the extension ring I, formed at the inner end of the tail-piece J, of the hose-coupling J, substantially as and for the purpose specified. 3rd. The valve B, connected by the bars C to a cylindrical sleeve D, substantially as and for the purpose specified.

No. 35,075. Dust Arrester and Ventilator for Railway Cars. (*Garde-poussière et ventilateur pour les chars de chemin de fer.*)

Henry Chance, Fostoria, Ohio, U.S.A., and George N. Matherson Sarnia, Ontario, Canada, 25th September, 1890 ; 5 years.

Claim.—1st. A dust arrester and ventilator attachment for railway cars, having a conducting chamber C, a refrigerating chamber D, communicating therewith, said chamber D communicating with the