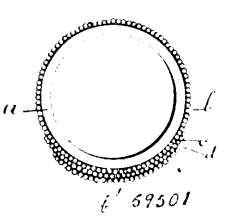
press upon the tube as the wheel rotates, an extension tube extending from the end of the tube on the ring to the air tube of the tire of the wheel and a suitable valve interposed between the pump and the air tube of the tire, as and for the purpose specified. 2nd. An automatic pumping attachment for bicycles comprising a ring secured to the wheel concentric to the axle, a tube secured on the periphery of the ring, a roller suitably supported and designed to press upon the tube as the wheel rotates, an extension tube extending from the end of the tube on the ring to the air tube of the tire of the wheel and a suitable valve interposed between the pump and the air tube of the tire and a cam projection secured to the ring and bridging the space between the opened and closed ends of the air tube on the ring, as and for the purpose specified. 3rd. An automatic pumping attachment for bicycles comprising a ring secured to the wheel concentric to the axle, a tube secured on the periphery of the ring, a spring-pressed arm suitably supported on the frame, a roller pivotally held in the end and designed to press upon the tube as the wheel rotates, an extension tube extending from the end of the tube on the ring to the air tube of the tire of the wheel and a suitable valve interposed between the pump and the air tube of the tire, as and for the purpose specified. 4th. An automatic pumping attachment for bicycles comprising a ring secured to the wheel concentric to the axle, a tube secured on the periphery on the ring, a spring-pressed arm, a spindle extending through one end of the same, an arm secured in the end of the axle in the end of which such spindle is held and a roller pivotally held in the end and designed to press upon the tube as the wheel rotates, an extension tube extending from the end of the tube on the ring to the air tube of the tire of the wheel and a suitable valve interposed between the pump and the air tube of the tire, as and for the purpose specified. 5th. In an automatic pumping attachment for bicycles, in combination, the concentric ring, the arms secured to same and to the wheel in proxmity to the hub, the compressible tube on the periphery of the ring, the arm extending from the axle and secured to the same, the spindle held in the end of the arm, the double arm pivotally held in the end of the spindle and the roller in the end of the double arm and the spiral spring encircling the spindle and hooked at one end on the arm attached to the axle and hooked at the other end to the double arm, so as to maintain a downward pressure upon the roller, as and for the purpose specified. 6th. In an automatic pumping attachment for bicycles in combination the concentric ring, the arms secured to the same and to the wheel in proximity to the hub, the compressible tube on the periphery of the ring, the arm extending from the axle and secured to same, the spindle held in the end of the arm, the double arm pivotally held in the end of the spindle and the roller in the end of the double arm and the spiral spring encircling the spindle and hooked at one end on the arm attached to the axle and hooked at the other end to the double arm, so as to maintain a downward pressure upon the roller, the extension on the double arm and the co-acting spring hook catch secured to the end of the arm attached to the axle, as and for the purpose specified. 7th. In combination, the concentric ring, the tube held to the periphery of the same, the roller and suitable pressure means for maintaining it to press upon the tube on the ring, the valve comprising the inner and outer casing with rubber end having flat abutting sides, the central passage-way, the cap and notched casing and screw pin extending through the cap and the tube extending into the collar inside the cap, and the tube extending from the opposite end of the valve to the air tube of the tire, as and for the purpose specified.

No. 59,501. Bicycle Tire. (*Bandage de bicycle.*)



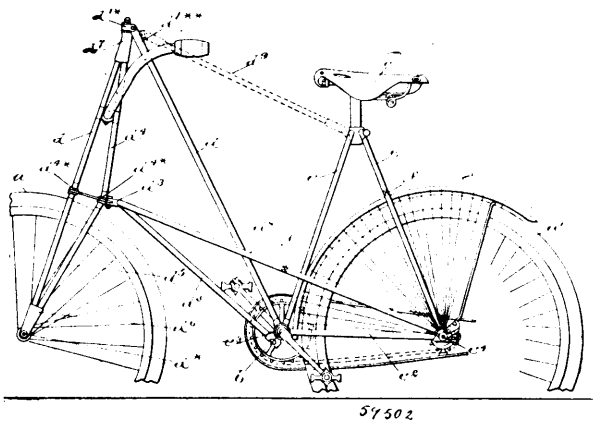
James Frederick Preston, Boston, Henry R. Perkins, and William H. Lawrence, Newburyport, all of Massachusetts, U.S.A., 2nd April, 1898; 6 years. (Filed 23rd December, 1897.)

Claim.—A knitted, braided, or woven bicycle tire, made of a single series of threads, except the tread or outer part thereof, which is composed of fabric made of two or more series of threads, so arranged that the second and third series of threads cover respectively the interstices in the series lying inside of it, substantially as, and for the purpose above described.

No. 59,502. Velocipede. (*Vélocipède.*)

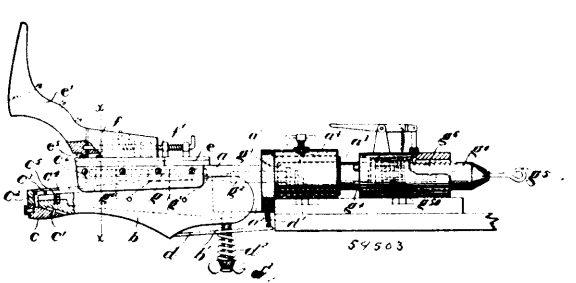
Norris Fowler Willott, 28 Shaftsbury Avenue, and Oliver Barnett, 22 Sloane Street, all in the County of Middlesex, England, 2nd April, 1898; 6 years. (Filed 10th January, 1898.)

Claim.—1st. A velocipede frame comprising two triangles formed by the parts d, d^1, d^{11} and e, e^1, e^{11} the part d^{11} being upwardly inclined and fixed with a fitting d^3 pivotally connected with the fork frame above the wheel a the triangles at their apices being con-



nected by a rigid bar d^9, whilst at their bases they are united by a bracket carrying the pedal axle, the whole device being tied together and stiffened by a main stay d^8 extending in a single span from the fitting d^3 to a fitting e^4 at the rear extremity of the base of the rear triangle, substantially as herein shown and described and for the purpose stated. 2nd. A velocipede frame comprising two triangles formed by the parts d, d^1, d^{11} and e, e^1, e^{11} the part d^{11} being upwardly inclined and fixed with a fitting d^3 pivotally connected with the fork frame above the wheel a, whilst the triangles are unconnecced at their apices but are united at their bases by a bracket carrying the pedal axle, the whole device being tied together and stiffened by a main stay d^8 extending in a single span from the fitting d^3 to a fitting e^4 at the rear extremity of the base of the rear triangle, substantially as herein shown and described, and for the purpose stated. 3rd. A velocipede frame provided with a main stay d^8 extending in a single span from the bearing for the rear axle to the forward extremity of the frame, substantially as shown and described and for the purpose stated. 4th. The peculiar construction and arrangement of parts constituting a velocipede frame, substantially as herein shown and described.

No. 59,503. Boot and Shoe Treeing and Shaping Machine. (*Machine à emboucher et former les chaussures.*)



George Henry Clark, Boston, Massachusetts, U.S.A., 4th April, 1898; 6 years. (Filed 7th March, 1898.)

Claim.—1st. A shoe shaping or treeing form composed essentially of a back part, and a fore-part, movable one with relation to the other to extend the form, comprising means whereby all the circumferential measurements of said form below the ankle being reducible to the ankle measurement of the shoe when the parts of said form are extended, substantially as described. 2nd. A shoe shaping or treeing form consisting essentially of a back part and a fore-part constructed to slide longitudinally one with relation to the other, and having all the measurements below the ankle less than the ankle measurement of the shoe when the parts of said form are extended to draw on and off the shoe, and an expanding device for spreading the parts of said form, substantially as described. 3rd. An expansible shoe shaping or treeing form adapted for shaping a shoe having its ankle and ball measurements approximately equal, said form comprising means for reducing it whereby said shoe, with its top or ankle portion closed may be drawn off said form, substantially as described. 4th. In a shaping or treeing machine for boots and shoes, the combination of a back part and a fore-part, the shank of which adjacent the heel is removed, reducing the instep measurement of said fore-part to the ankle measurement of the shoe, one of said parts being movable in and out with relation to the other part to reduce the heel measurement of the form to said ankle measurement of the shoe, substantially as described. 5th. In a shaping or treeing machine for boots and shoes, the combination of a back part and a fore-part, the instep measurement of