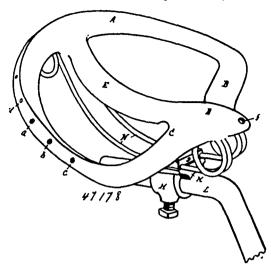
bicycle seat, made with a semi-circular rear support, a front pommel with radial branches extending from the pommel to the



support at its middle part, and at its ends combined with a spring support, and means for adjusting the inclination of the seat with reference to the seat post, substantially as described.

No. 47,179. Axle. (Essieu)



James Miller and Frank H. Boucher, both of Orlando, Florida, U.S.A., 5th October, 1894; 6 years.

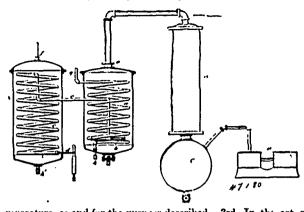
Claim.—ist. The combination with an axle having its opposite ends provided with tapered bores terminating in threaded sockets, of opposite spindles tapered at each side of their centres and terminating at each end is a threaded tenon for engaging the sockets and fitting the bores, the spindle being thereby made reversible, substantially as described. 2nd. In an axle, the combination with the opposite metal ends provided at their inner ends with oppositely threaded sockets, reversely threaded continuous intermediate rods engaging the threads of the sockets, and the vertical strut rods connecting the intermediate rods, substantially as described. 3rd. In an axle, the combination with the opposite metal ends having upper and lower flanges, intermediate webs and bored vertical ribs, of spindles at the outer ends of the castings, upper and lower tiestrips embracing the axle, and fastening devices passed through the strips and the bored ribs, substantially as described. 4th. In an axle, the combination with the opposite metal ends provided at their inner ends with oppositely threaded sockets, the intermediate rods provided with threaded ends fitting in the sockets, vertical rods or struts provided at their ends with heads having sockets receiving the intermediate rods and spindles, substantially as described. 5th. In an axle, the combination of the metal ends provided with vertical bores, intermediate rods connecting the ends, standards provided with horizontal arms having bores registering with those of the ends, and fastening devices extending through said bores, and securing the standards to the ends, substantially as described. 6th. In an axle, the combination of the netal ends, intermediate rods connecting the ends, and plates provided with sockets to receive the intermediate rods and having opposed faces adapted to bear against and be secured to hounds, substantially as described. 7th. In an axle, the combination of the plates 16, extending inward from the intermediate rods, and the plates 16, extending inward

## No. 47,180. Process of and Apparatus for Distilling Glycerine. (Procédé et appareil pour distiller la glycerine.)

Joseph Van Ruymbeke and William F. Jobbins, both of Chicago, Illinois, U.S.A., 5th October, 1894; 6 years.

Claim.—1st. In the art of distilling glycerine or similar liquids, the upper end of the same, the still A, and heating cylinder E, supthe improvement which consists in ejecting expanded and reheated steam into the liquid maintained at distilling temperature, as and for the purpose described. 2nd. In the art of distilling glycerine scribed. 17th. In a distilling apparatus, the combination of the

or similar liquids, the improvement which consists in heating the liquid by independent means, and inejecting expanded and reheated steam into the independently heated liquid maintained at distilling



temperature, as and for the purpose described. 3rd. In the art of distilling glycerine or similar liquids, the improvement which consists in maintaining the liquids to be distilled, at a high vacuum, and in injecting expanded and reheated steam into the liquid, mainand in injecting expanded and reflected steam into the injudy, maintained at distilling temperature, as and for the purpose described.

4th. In the art of distilling glycerine or similar liquids, the improvement which consists in maintaining the liquid to be distilled at a high vacuum, in independently heating the liquid, and in injecting expanded and reheated steam into the independently heated liquid maintained at distilling temperature, as and for the purpose described. 5th. In the art of distilling glycerine or similar liquids, the improvement which consists in maintaining the liquid to be distilled at a high vacuum, heating the liquid by means of confined steam, and in injecting expanded and reheated steam into the neated liquid, maintained at distilling temperature, as and for the purpose described. 6th. In the art of distilling glycerine or similar liquids, the improvement which consists in maintaining the liquid to be distilled at a high vacuum, in heating the liquid by means of confined stram, in expanding free steam before entering the still, in reheating such expanded steam by such confined steam so as to compensate for reduction of temperature caused by the expansion, and in injecting the expanded and reheated steam into the heated liquid maintained at distilling temperature, as and for the purpose described. 7th. A distilling apparatus, consisting of a still, an expansion coil, a heating cylinder for the expansion coil, and a perforated delivery pipe in the still and connected with the expansion coil, substantially as described. Sth. A distilling apparatus, consisting of a still, a vacuum pump connected with the still, an expansion coil, a heating cylinder for the expansion coil, and a perforated delivery pipe in the still and connected with expansion coil, substantially as described. 9th. A distilling apparatus, consisting of a still, a heating coil in the still, an expansion coil, a heating cylinder for the expansion coil, and a perforated delivery pipe in the still and connected with the expansion coil, substantially as described. 10th. A distilling apparatus, consisting of a still, a vacuum pump connected therewith, a heating coil for heating the contents of the still, an ex-pansion coil connected with the still and with a source of steam suppansion coil connected with the still and with a source of steam supply, and a reheater for reheating the expansion coil, substantially as described. 11th. A distilling apparatus, consisting of a still, a vacuum pump connected therewith, means for heating the contents of the still, an expansion coil connected with the still and with a boiler, and a reheater for heating the expansion coil, substantially as described. 12th. A distilling apparatus, consisting of a still, a vacuum pump connected therewith, a heating cylinder, an expansion coil in said heating cylinder and connected with the still, and source of supply for steam in the said heating cylinder and axygonium coil coil in said neating cylinder and connected with the still, and source of supply for steam in the said heating cylinder and expansion coil, substantially as described. 13th. A distilling apparatus, consisting of a still, a vacuum pump connected therewith, a heating cylinder adjacent to the still, and connected with a source of steam supply, a heating coil within the still, and an expansion coil in said heating cylinder and connected with the still, substantially as described. 14th. A distilling apparatus, consisting of a still, a vacuum pump connected therewith, a heating cylinder adjacent to the still and connected with a source of steam supply, a heating coil within the still, connected with the same source of steam supply, a distributing pipe within the still, and an expansion coil within said heating cylinder and connected with said distributing pipe, substantially as described. 15th. A distilling apparatus, consisting of a still, a vacuum pump connected therewith, a heating cylinder adjacent to the still, connected with a source of steam supply, a heating coil within the still, connected with the same source of steam supply, and an expansion coil within said heating cylinder, connected with the still and supplied with steam from the same source of steam supply, substantially as described. 16th. In a distilling apparatus, the combination of the standards F, the braces G and H, bolted to the upper end of the same, the still A, and heating cylinder E, sup-