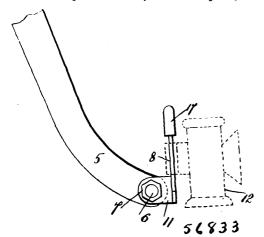
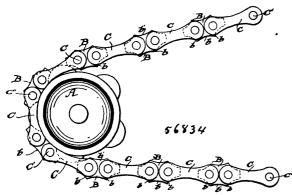
No. 56,833. Bicycle Lock. (Serrure de bicycles.)



West Montgomery Carson, New York, State of New York, U.S.A. 28th July, 1897; 6 years. (Filed 17th June, 1897.)

Claim.—1st. A holder and lock for lamps or lanterns for bicycles or similar vehicles, said holder consisting of an upright plate which is adapted to be secured to the frame of the vehicle, and which is provided with an upwardly directed extension, and a lock which is adapted to be connected with said extension, substantially as shown and described. 2nd. A holder and lock for lamps or lanterns for bicycles or similar vehicles, said holder consisting of an upright plate which is adapted to be secured to the frame of the vehicle, and which is provided with an upwardly directed extension, and a lock which is adapted to be connected with said extension, and is lock consisting of a casing provided with a spring, and said extension being provided with a notch or recess in connection with which said spring operates, substantially as shown and described. 3rd. A support and lock for the lamps or lanterns of bicycles and similar vehicles, consisting of a plate as 8, having an upwardly directed extension, in one side of which is formed a notch or recess, and a lock comprising a casing which is open at its lower end and into which said extension is adapted to be inserted, said casing being provided with a spring which is adapted to engage with said notch or recess, and which is adapted to be operated by a key, substantially as shown and described.

No. 56,884. Sprocket Gearing. (Roue dentée.)

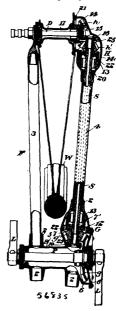


Charles O. Hall, Cincinnati, Ohio, U.S.A., 28th July, 1897; 6 years. (Filed 19th June, 1897.)

Claim.—1st. In combination with the sprocket-wheel of different diameters, the smaller wheel having curved sprockets and marginal projecting rims, the larger wheel having sprockets and a periphery which is made up of said sprockets and alternate bearing surfaces or segments, the curve of which has the same radius of curvature as the marginal rim of the smaller wheel, together with a chain having central links with curved bearing surfaces which are adapted to contact with the sprockets and faces of the sprocket wheels, and outer links, the contacting edge of which has the same radius of curvature as the marginal projecting rims of the smaller sprocket wheel, substantially as shown. 2nd. A sprocket chain made up of a series of central links of the sides of said links, having edges shaped to present three concave bearing surfaces, the central bearing surface having the same radius of curvature as the peripheries of the sprocket-wheel, the end concave bearing surfaces having the same radius of curvature as the peripheries of the sprocket-wheel, the end concave bearing surfaces having the same radius of curvature as the sprockets and outer links, the contracting edges of which are shaped to correspond with the periphery of the smaller sprocket-wheel, substantially as shown and for the

purpose set forth. 3rd. In combination with the sprocket-wheels having convex sprockets, of a chain having central links for engagement with said convex sprockets, the end portions of the links where they engage with the sprockets being concave, and an intermediate concave bearing edge, substantially as shown and for the purpose set forth. 4th. A sprocket chain made up of a series of central links and side links connected thereto, the central links having concave end bearing portions adapted to engage the periphery of the sprocket-teeth, substantially as shown and described.

No. 56,835. Bicycle. (Bicycle.)



Francis H. Richards, Hartford, Connecticut, U.S.A., 28th July, 1897; 6 years. (Filed 21st June, 1897.)

Claim.—1st. In a bicycle of the class specified, in combination, a crank-shaft bracket and a driving-wheel bracket each having a longitudinally and a laterally disposed gear-receiving case, a sideframe tube extending between the said brackets and having a removable connection at one end with the laterally-disposed gear-receiving case of the crank-shaft bracket, and having a removable connection at its opposite end with the laterally-disposed gear-receiving case of the driving-wheel bracket, means for removably connecting the sidethe driving-wheel bracket, means for removably connecting the side-frame tube with said gear receiving cases, a crank-shaft carried by the crank-shaft bracket and carrying a bevel-gear inclosed by the longitudinally-disposed gear-receiving case of said bracket, a driving-wheel carried by the driving-wheel bracket and carrying a bevel-gear inclosed by the longitudinally disposed gear-receiving case of said bracket, two oppositely-disposed side gears mounted, one in fixed bearings in the laterally-disposed gear-receiving case of the crank-shaft bracket and meshing with the crank-shaft gear, and the other mounted in fixed bearings in the laterally-disposed gear-receivother mounted in fixed bearings in the laterally-disposed gear-receiving case of the driving-wheel bracket and meshing with the drivingwheel gear, and a rigid side shaft incased by the side-frame tube and having laterally and longitudinally-movable connection at its opposite ends with the two side gears, respectively. 2nd. In a bicycle, a crank-shaft bracket and a driving-wheel bracket each bleving a laterally-projecting open-ended gear-receiving case, in com-bination with a side shaft inclosing tube carrying open-ended caps at opposite ends thereof adapted for fitting the laterally-projecting cases of said brackets. 3rd. In a bicycle, the combination with the crank-shaft bracket and the driving-wheel bracket, each of which has an open-ended gear-receiving case, and with the side shaft inclosing tube carrying open-ended caps at opposite ends thereof removably fitted to the laterally-projecting cases of said brackets, of a crank-shaft inclosed by said crank-shaft bracket and having a gear inclosed by the casing of the driving-wheel bracket, two independent side shaft gear-wheels inclosed by and having fixed bearings in the laterally-projecting cases of the two brackets, one in each case, and a side shaft inclosed by the side shaft inclosing tube and case, and a side shart inclosed by the strice shart inclosing due and having laterally-movable connections at opposite ends with the two side-shaft gears. 4th. In a bicycle, a crank-shaft-inclosing bracket comprising a tubular body portion having a crank-shaft-gear-receiving case at one end thereof, and having a laterally-projecting side-shaft-gear-receiving case at one side thereof, and having a laterally-projecting side-shaft-gear-receiving case at one side thereof, and projecting side-snate-gear-receiving case at one side thereof, and caps removably secured to said gear-cases. 5th. In a bicycle, in combination, the main bracket having the open flared end and cup-shaped lateral extension which form housings for the pedal-shaft gear and side-shaft gear, a cap removably secured to the flared end of said bracket, a cup-shaped cap removably fitted to the lateral extension of said bracket, a rear bracket and a side