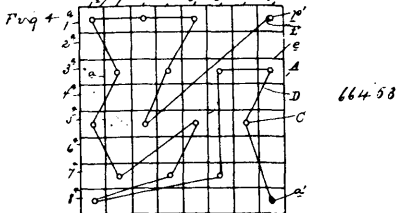
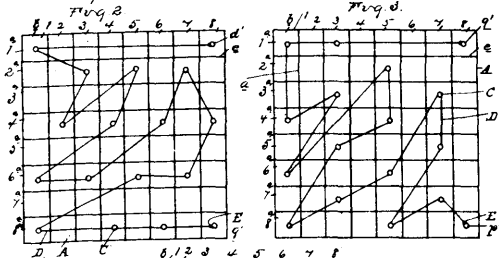
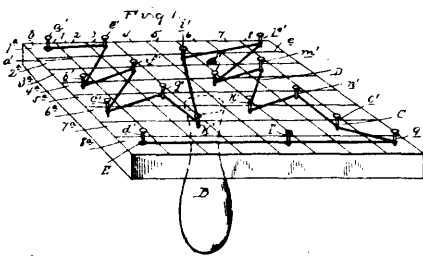
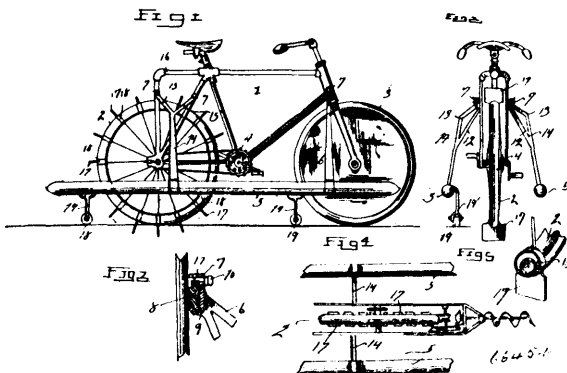


in equal columns, a multiple of pins or projections secured to the board, one pin being located in each corner square and the balance



of the pins being arranged within the columns of squares specified and in the order described, a cord, and means for detachably securing the ends thereof to two of the corner pins, the portion of the cord intermediate the ends being adapted to be partly wound without slack about each of the remaining pins, and the arrangement being such that the winding may be effected without touching any pin twice or crossing the strands. 3rd. In a puzzle, the combination of a board, square in configuration and having marked upon its upper surface or top a multiple of squares arranged in equal columns, a multiple of pins fixed secured upon the board, one pin being arranged in each corner thereof within one of the corner squares, and the balance of the pins being arranged within the columns of squares specified and in the order described, a cord and rings upon the cord ends for detachably securing the latter to a pair of adjacent corner pins, the portion of the cord intermediate the ends being adapted to be partly wound without slack about each of the remaining pins, and the arrangement being such that the winding may be effected without touching any pin twice or crossing the strands.

No. 66,154. Land or Water Bicycle. (Bicycle.)

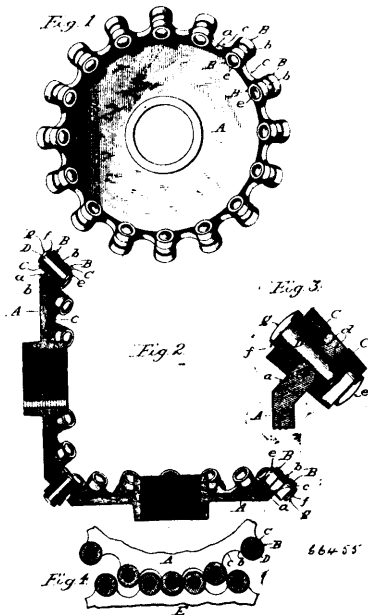


Rickard Möller, Pittsburg, Pennsylvania, U.S.A., 1st March, 1900; 6 years. (Filed 11th December, 1899.)

Claim.—1st. The combination with a bicycle frame, of a pair of floats removably secured thereon, said floats having wheels connected therewith located substantially on a level with the main wheels of

the bicycle. 2nd. The combination with the frame of a bicycle, of a float extending alongside the frame, arms thereon, said arms terminating at their upper ends in a jaw, T-shaped lugs on the frame beneath which said jaws are adapted to engage and means for holding said jaws removably in engagement with said lugs. 3rd. The combination with the frame of a bicycle, of wheels, one of which is provided with paddles which may be extended outside of or turned inside of the rim of the wheel, and floats removably connected to the frame. 4th. The combination with a diamond-shaped frame and a rectangular rear extension 16, secured thereon, of a float, an arm connected therewith, said arm pronged at its upper end, the ends of which prong are removably secured respectively, to the rear end of the diamond frame and to the rectangular rear extension 16.

No. 66,455. Gearing. (Engrenage.)



Charles L. Travis, Minneapolis, Minnesota, U.S.A., 1st March, 1900; 6 years. (Filed 5th September, 1899.)

Claim.—1st. A gear wheel consisting of a disc or body, a series of stationary axles carried at or near the periphery thereof, and rollers carried by said axles in pairs, one roller of each pair on one side of the disc or body and the other roller on the other side thereof. 2nd. In a gear wheel, the combination of a disc or body, a series of axles projecting from opposite faces thereof at or near its periphery, and straight faced rollers applied to said axles on opposite sides of the disc or body. 3rd. In a gear wheel, the combination of a body having its periphery provided with alternate ears or projections and recesses or depressions adapted to receive corresponding ears or projections, and a series of rollers carried in pairs by the ears or projections, the rollers of each pair being on opposite sides of the carrying ear or projection. 4th. The hereindescribed gear wheel, comprising a body A, a series of projections or ears b, a series of depressions c alternating and corresponding in form with the ears b, axles supported by the ears b and projecting on opposite sides thereof, and rollers B applied to said axles. 5th. In a gear wheel, combination of a body or disc provided with peripheral ears or projections b, rivets or fastenings D passing through the ears b and projecting on opposite sides thereof, bushings encircling said fastenings and secured thereby to the ears b, and rollers encircling the bushings, substantially as and for the purpose set forth. 6th. In combination with disc or body A having counterbored ears or projections b, sleeves or bushings having their inner ends seated in the counterbores of the ears, rollers encircling said sleeves, and fastenings passing through the sleeves and serving to retain said sleeves and the rollers in position. 7th. The combination substantially as herein set forth, of two co-acting gear members, each provided with projecting ears and intervening recesses, said ears being provided on both outer faces with rollers, substantially as shown and described. 8th. A bevel gear consisting of a body or disc A having a peripheral flange at an angle to the plane of rotation, and provided with alternate projections and depressions, and sectional conical rollers carried by and upon opposite sides of said projections and having their axes and their longitudinal surfaces radial to a common point or centre in the axial line of the wheel. 9th. The combination of two bevel gear wheels each comprising a disc or body having a peripheral flange at an angle to said body, formed with alternate projections and depressions, each wheel provided with a series of rollers arranged