

**No. 40,852. Attachments for Bicycles.***(Putin pour bicycles.)*

Frank W. Whiteman, Tonawanda, New York, U.S.A., 2nd November, 1892; 6 years.

*Claim.*—1st. A winter attachment for bicycles, comprising a frame-work and driving gear of the ordinary construction, a sled secured to the bicycle fork, a split runner secured to the rear portion of the bicycle so as to embrace the wheel tire, and a tire secured to the rear wheel and provided with projecting spurs, substantially as described. 2nd. The combination, with a bicycle frame and driving gear, of a sled secured to the fork of the bicycle so as to embrace the rear wheel, said runner having a scraper fixed thereon as described, and a tire secured to the rear wheel and provided with projecting spurs, substantially as set forth. 3rd. The combination, with the frame and driving gear of a bicycle fork, a split runner secured to the rear portion of the bicycle so as to embrace the rear wheel, a hub mounted on the rear axle and connected by braces with the bicycle frame, adjustable braces connecting the hub with the split runner, and a tire secured to the wheel and provided with projecting spurs, substantially as described. 4th. In a bicycle of the character described, the combination, with the bicycle fork, of a sled secured thereto, and means for adjusting the sled in relation to the fork, substantially as described. 5th. In a bicycle of the character described, the combination, with the bicycle fork, of a sled, and laterally adjustable bolts mounted in opposite sides of the sled and adapted to support the fork, substantially as described. 6th. The combination with the sled runner, of a concave shoe secured thereto, substantially as set forth. 7th. The combination, with the bicycle frame and the driving wheel, of a split runner secured to the frame so as to embrace the wheel, said runner having braces connecting with the wheel hub, and having inclined shoes thereon, substantially as described. 8th. The combination, with the driving wheel, of a tire having projecting spurs, and a tightening device for tightening the tire upon the wheel, substantially as described. 9th. The combination, with a tire having thickening ends, of screws mounted in the ends of the tire, and a turn-buckle for the screws, substantially as described. 10th. The combination, with a tire having thickening ends with recesses therein, of screws mounted in the ends of the tire, and a turn buckle mounted in the recesses and upon the screws, substantially as described.

**No. 40,853. Method of Transforming and Utilizing Electrical Energy. (Méthode de transformer et d'utiliser l'énergie électrique.)**

Mark Wesley Dewey, Syracuse, New York, U.S.A., 2nd November, 1892; 6 years.

*Claim.*—1st. The method of transformation and utilization of electrical energy, consisting in charging one member of a condenser with electricity of high tension and small volume, thereby inducing a like charge on the other member, and simultaneously therewith and thereby charging the member of another condenser with electricity of low tension and great volume, and then discharging the condensers and passing the transformed electricity through one or more electric translating devices. 2nd. The method of transformation and utilization of electrical energy, consisting in charging one member of a condenser with electricity having certain qualities, thereby inducing a like charge on the other member, and simultaneously therewith and thereby charging the members of another condenser with electricity having qualities different from those possessed by the electricity of the former condenser, and then discharging the condensers and passing the transformed electricity through one or more electric translating devices. 3rd. The method of transformation and utilization of electrical energy, consisting in charging one member of a condenser with electricity of high tension and small volume, and simultaneously therewith and thereby charging a member of a condenser with electricity of low tension and great volume, and then discharging the latter and passing the transformed electricity through one or more electric translating devices. 4th. The method of transformation or conversion of electrical energy, consisting in alternately charging and discharging a member of a condenser with positive and negative electricity respectively, having certain qualities, and simultaneously therewith and thereby alternately charging and discharging a member of a condenser with positive and negative electricity respectively, having different qualities from those possessed by the electricity of the former, and passing the alternate charges and discharges of transformed or converted electricity through one or more electric translating devices. 5th. The method of transformation and utilization of electrical energy, consisting in charging one member of a condenser having a small surface area with electricity, thereby inducing a charge on another member having like surface area, and simultaneously therewith and thereby charging the members of another condenser having greater surface area than the former, and then discharging the latter or greater surface area condenser and passing the electricity therefrom through electric translating devices. 6th. The method of transformation and utilization of electrical energy, consisting in charging one member of a condenser having a small surface area with electricity, thereby inducing a charge on another member having like surface area, and simultaneously therewith and thereby charging the members of another condenser having greater surface area and conductivity than the former, and then discharging the

latter or greater surface area condenser, and passing the electricity therefrom through low resistance supply conductors to electric translating devices. 7th. The method of transformation of electrical energy, consisting in inducing electrostatically by a current of a certain tension, and volume a current of different tension, and volume without changing materially the total energy of the inducing current. 8th. The method of transformation of electrical energy, consisting in electrostatically, and by a current of a certain electro motive force, and volume inducing simultaneously therewith a current of different electro motive force, and volume and maintaining the same or approximately the same total energy in the induced current. 9th. The method of transformation and utilization of electrical energy, consisting in charging a member of a condenser with electricity of a certain tension and volume, and simultaneously therewith, and thereby charging a member of a condenser with electricity of different tension and volume, and then discharging the latter and passing the transformed electricity to one or more electric translating devices. 10th. The method of transformation or conversion of electrical energy, consisting in charging a member of a condenser with electricity, and simultaneously therewith and thereby charging a member of a condenser with electricity of different tension, and then discharging both members. 11th. The method of transformation and utilization of electrical energy, consisting in charging one member of a condenser, having a variable surface area with electricity, thereby inducing a like charge on the other member, and simultaneously therewith, and thereby charging the members of another condenser having a variable surface area with electricity, having different qualities from those possessed by the electricity of the former condenser, and then discharging the condensers and passing the transformed electricity through one or more electric translating devices. 12th. The method of transformation and utilization of electrical energy, consisting in charging the members of a condenser with electricity, and simultaneously therewith and thereby charging the members of another condenser, having a variable surface area with electricity, and then discharging the latter through one or more electric translating devices, and varying the tension and volume of the discharge by varying the surface area of the latter condenser. 13th. The method of transformation and utilization of electrical energy, consisting in charging two condensers of like capacity with electricity, simultaneously therewith and thereby charging two other condensers of like capacity, but different from that of the former two, discharging the latter two condensers, and passing the transformed electricity therefrom through one or more electric translating devices. 14th. The method of transformation and utilization of electrical energy, consisting in charging one or the members of each of the condensers of like capacity with electricity, simultaneously therewith and thereby charging one of the members of each of two condensers of like capacity, but differing from the capacity of the former members, discharging the latter two members, and passing the transformed electricity therefrom through one or more electric translating devices. 15th. The method of transformation and utilization of electrical energy, consisting in charging two condensers of like but small capacity with electricity, and simultaneously therewith and thereby charging two other condensers of like but greater capacity with the former two, discharging the great capacity condensers and passing the electricity therefrom through low resistance supply conductors to electric translating devices. 16th. The method of transformation and utilization of electrical energy, consisting in charging two condensers of like but small capacity and low conductivity with electricity, and simultaneously therewith and thereby charging two other condensers of like but greater capacity and conductivity than the former two, discharging the great capacity condensers, and passing the electricity therefrom through low resistance supply conductors to electric translating devices.

**No. 40,854. Nut Tapping Machine.***(Appareil à tarauder les écrous.)*

Clarence L. Chapman, Erie, Pennsylvania, and Henry Isaac Petrie, Little Falls, New York, U.S.A., 2nd November, 1892; 6 years.

*Claim.*—1st. In a nut tapping machine, the combination, with an inclined chute having the space between its side walls at its inner open end contracted, of a rotary wheel, the inner portion of which enters said contracted space, said wheel having a toothless periphery provided with a notch forming a single radial shoulder, to pick up one nut at a time and carry it outside of the hopper, substantially as shown and described. 2nd. In a nut tapping machine, a nut feeding device comprising a wheel having a shoulder adapted to pick up and carry a nut, and a vibrating inclined chute having flanges upon which the shoulder of the said wheel discharges, substantially as shown and described. 3rd. In a nut tapping machine, a nut feeding device comprising a wheel having a shoulder adapted to pick up and carry a nut, a vibrating inclined chute having flanges upon which the shoulder of the said wheel discharges, and a second chute having a twisted upper end and into which said first chute discharges, substantially as shown and described. 4th. In a nut tapping machine, a spindle having a tap holder adapted to support the tap, and a plunger within said holder to engage the upper end of the tap and push it out of the holder, substantially as shown and described. 5th. In a nut tapping machine, a spindle having a tap holder adapted to support the tap, the spindle being held to slide vertically, in combination with a plunger for automatically disconnecting the tap when the said spindle moves upward, substan-