

**No. 33,617. Apparatus and Connection for Charging and discharging Storage Batteries.** (*Appareil et raccordement pour charger et décharger les accumulateurs.*)

William P. Kookogey, Brooklyn, N.Y., U.S., 7th February, 1890; 5 years.

**Claim.**—1st. The combination of the following elements: An electric generator and charging circuit, a storage cell or battery, a working circuit, an electro-magnet forming part of such working circuit, and commutating mechanism controlled by such electro-magnet and operating a series of circuit closers and breakers, whereby the storage cell or battery is alternately connected in circuit with the charging circuit and with the working circuit, substantially as described. 2nd. The combination of the following elements: An electric generator and charging circuit, a storage cell or battery, a working circuit, an electro-magnet forming part of the working circuit, a local battery and circuit of which the working circuit forms a part, and commutating mechanism controlled by such electro-magnet and operating a series of circuit closers and breakers, whereby the storage cell or battery is alternately connected in circuit with the charging circuit and with the working circuit, substantially as described. 3rd. The combination of the following elements: An electric generator and charging circuit, a storage cell or battery, a working circuit, an electro-magnet forming part of such working circuit, commutating mechanism controlled by such electro-magnet during the period of discharge and operating a series of circuit closers and breakers, whereby the storage cell or battery is alternately connected in circuit with the charging circuit and with the working circuit, a local battery and circuit of which the working circuit forms a part, and a second electro-magnet in the local circuit controlling the change of the commutating mechanism from the position of charge to that of discharge, and thereby also breaking the local circuit, substantially as described. 4th. The combination of the following elements: An electric generator and charging circuit, a storage battery consisting of a number of cells, a working circuit and commutating mechanism operating a series of circuit closers and breakers, whereby the storage battery may be alternately connected in parallel in the charging circuit and in tension series with the working circuit, substantially as described. 5th. The combination of the following elements: A primary galvanic battery and charging circuit, a storage battery consisting of a number of cells, a working circuit and commutating mechanism operating a series of circuit closers and breakers, whereby the storage battery may be alternately connected in parallel in the charging circuit and in tension series with the working circuit, substantially as described. 6th. The combination of the following elements: An electric generator and charging circuit, a storage battery consisting of a number of cells, a working circuit, an electro-magnet forming part of such working circuit, commutating mechanism controlled by such electro-magnet and operating a series of circuit closers and breakers, and circuit connections between the various cells, whereby the storage battery is alternately connected in parallel with the charging circuit and in tension series with the working circuit, substantially as described. 7th. The combination of the following elements: An electric generator and charging circuit, a storage battery consisting of a number of cells, a working circuit, an electro-magnet forming part of such working circuit, a local battery and circuit of which the working circuit forms a part, commutating mechanism controlled by such electro-magnet and operating a series of circuit closers and breakers, and circuit connections between the various cells, whereby the storage battery is alternately connected in parallel in the charging circuit and in tension series with the working circuit, substantially as described. 8th. The combination of the following elements: An electric generator and charging circuit, a storage battery consisting of a number of cells, a working circuit, an electro-magnet forming part of such working circuit, commutating mechanism controlled by such electro-magnet during the period of discharge and operating a series of circuit closers and breakers, with circuit connections between the various cells, whereby the storage battery may be alternately connected in parallel in the charging circuit and in tension series with the working circuit, a local battery and circuit of which the working circuit forms a part, and a second electro-magnet in the local circuit controlling the change of the commutating mechanism from the position of charge to that of discharge, and thereby also breaking the local circuit, substantially as described. 9th. The combination of insulating piece G having attached to it conducting strips D and E and conducting arms c, d, e, etc., and pivoted at its ends at such a point that gravity will hold the arms d, c, etc. within their respective cups, with the lever m carrying an armature, and the electro-magnet f forming part of the working circuit, substantially as and for the purpose described.

**No. 33,618. Lubricant and Paint Oil.**

(*Huile lubrifiante et à peinture.*)

Adolph Sommer, Berkeley, Cal., U.S., 7th February, 1890; 5 years.

**Claim.**—1st. The herein described process for increasing the lubricating power of lubricants that by themselves do not readily unite oil capable of readily combining with chloride of sulphur and an amount of chloride of sulphur varying with the degree of viscosity herein desired and in neutralizing the combination. 2nd. The lubricants, which consists in adding to them an amount of a sulpho-chlorinated oil or fat varying with the degree of viscosity of lubricity desired. 3rd. The herein described process for converting the oils of marine animals into readily drying compounds, which consists in combining them with chloride of sulphur. 4th. The herein described process for converting the compounds of chloride of sulphur which consists in incorporating with them either before or after the addition of the chloride of sulphur to the natural oil an appropri-

ate manganese compound. 5th. The herein described process for manufacturing paint oils from marine animal-oils, which consists in combining the marine animal oil with chloride of sulphur if need be also with a manganese preparation and diluting the compound with a volatile hydrocarbon. 6th. The herein described paint oils and lubricants, consisting in solutions of sulpho-chlorinated fatty bodies, in ethereal or empyreumatic oils, in fluid or solid fatty bodies, in light or heavy hydrocarbons, or in mixtures of such substances.

**No. 33,619. Waterproofing and Preserving Leather.** (*Imperméabilisation et conservation du cuir.*)

Adolph Sommer, Berkeley, Cal., U.S., 7th February, 1890; 5 years.

**Claim.**—1st. The improvement in waterproofing and preserving leather and hide, consisting in impregnating the leather and hide with sulphur-chlorinated fatty bodies, substantially as described. 2nd. The improvement in waterproofing and preserving leather and hide, consisting in impregnating the leather and hide with a solution of the sulpho-chlorinated fatty bodies in oils, fats, resinous substances or hydrocarbons, substantially as described. 3rd. Leather and hide impregnated with sulpho-chlorinated fatty bodies, as set forth.

**No. 33,620. Change Tray.**

(*Plateau à monnaie.*)

John F. Clarke, Essex Centre, Ont., 7th February, 1890; 5 years.

**Claim.**—1st. A change tray, arranged to have a tilting or rocking movement, substantially as set forth. 2nd. A change tray, consisting of the combination, with a support, of a tray engaged thereupon, said tray having a tilting movement, substantially as set forth. 3rd. A change tray, consisting of the combination, with a support, of a tray engaged thereupon and having a tilting movement, said tray provided with a contracted mouth, substantially as set forth. 4th. A change tray arranged to have a tilting or rocking movement and provided with a lip A, substantially as set forth. 5th. A change tray, consisting of the combination, with the support, of a tray A arranged to have a tilting or rocking movement and a base tray, substantially as and for the purpose described.

**No. 33,621. Process for Producing Ornaments of Different Colours.** (*Procédé de production des ornements de couleurs variées.*)

Robert Himmel, Berlin, Germany, 7th February, 1890; 5 years.

**Claim.**—The improved method of manufacturing many coloured ornaments, figures, etc., from layers or veneers of different coloured materials, or plates of either wood, metal, or other suitable material or materials, of several different colours, laid one over the other, and removing portions of the successive layers to expose those underneath, substantially as described.

**No. 33,622. Carriage Axle.** (*Essieu de voiture.*)

Felix Mercier, Montréal, Que., 7th February, 1890; 5 years.

**Résumé.**—Un nouvel article de manufacture. Un essieu métallique pour voitures de toute nature, composé d'une boîte C, en combinaison avec la taraudage D, percé d'un trou F, le tout maintenu ensemble au moyen de l'érou de recouvrement spécial E, b, c, d, e, h, l, m, n, et de la goupille à ressort G, f, g, h, le tout tel que plus haut décrit et pour les fins sus-mentionnées.

**No. 33,623. Cover for Cooking Utensils.**

(*Couvercle pour les ustensiles de cuisine.*)

William Henry and Charles Stuart, Dunganon, Ont. (assignees of Archibald D. Cooper, Bay, Mich., U.S.), 8th February, 1890; 5 years.

**Claim.**—1st. A cover A for cooking utensils, having formed in it a number of perforations B, fitted with a lid D suitably secured to a number of perforations B, fitted with a lid D suitably secured to the cover A, and a lip C fitted to the rim a of the said cover, substantially as and for the purpose set forth.

**No. 33,624. Rope Clamp or Buckle.**

(*Serre-câble ou boucle.*)

Jesse Kinney and Julian G. Dickinson, Detroit, Mich., U.S., 8th February, 1890; 5 years.

**Claim.**—1st. In a buckle for fastening ropes, strings, straps, etc., the combination of the loop a and hinged jaw B, substantially as described. 2nd. In a buckle for fastening ropes, strings, straps, etc., the combination of the loop a, hinged jaw B having a notch f, substantially as described. 3rd. In a buckle for fastening ropes, strings, straps, etc., the combination of the frame A, having loops a and B, of the jaw B hinged thereto and having the notches f and h, substantially as described.

**No. 33,625. Bench Vice.** (*Etau d'établi.*)

Charles Wies and James M. Lockey, Faulkton, S.D., U.S., 8th February, 1890; 5 years.

**Claim.**—1st. The combination of the tubular body A, having a fixed jaw B and channelled shank C, the movable jaw D having a shank E provided with notches F on the upper face, the lever H, having a cam projection K engaging with the notches, said lever fulcrumed to the body A, substantially as set forth. 2nd. The cutter M, applied as set forth.