

**No. 21,202. Gravity Friction Ratchet.***(Embrayage à Friction.)*

Anson D. Simpson, Niverville, N.Y., U.S., 4th March, 1885; 5 years.

*Claim.*—1st. The loose slotted disk B, having eccentric inner projection B<sub>2</sub>, the recessed disk C and segments E, E<sub>1</sub>, and the adjustable ring D having inner projections D<sub>1</sub>, arranged to operate substantially as specified for the purpose set forth. 2nd. In a gravity friction ratchet, the combination, with the disk, having a double tangent hub forming a double eccentric, of the two segments, having their inner edges straight, in order to engage the hub at a point where the tangent meets the arc, and having their outer edges curved on a regular semicircular line, and of the circular cap fitting over the pieces substantially as described.

**No. 21,203. Moccasin. (Moccasin.)**

Joseph A. Verret, Lorette, Que., 4th March, 1885; 5 years.

*Claim.*—1st. A moccasin having an enclosed front, consisting of the gores F, F<sub>1</sub>, sewn to the tongue G and to the inside of tops B, of the moccasin, as set forth, to prevent ingress of snow to the foot. 2nd. As an improved article of manufacture, a moccasin composed of the sole A having attached loops I, vamp c having tongue D, gores F, F<sub>1</sub>, and tops B, lacing studs E, as set forth.

**No. 21,204. Axle Box and Skein.***(Boîte à Graisse et Douille d'Essieu.)*

Lawrence Bimel and William Bimel, St. Marys, Ohio, U.S., 4th March, 1885; 5 years.

*Claim.*—1st. The combination, with the axle arm A, having the flanges C and d, of the ring J, loosely fitted upon the arm between the said flanges, substantially as described, whereby the ring may be retained in place and hold the wheel in place. 2nd. The combination, with the arm A, provided with the apertured flange C, of the flaring shield E, having ears f, adapted to engage the apertures in the flange C, as and for the purpose specified. 3rd. The combination, with the arm A, having the flanges d and C and the hub H thereon, of the ring J, loosely fitted upon the arm between the said flanges, and secured to the hub by bolts e, and the flaring shield E, having ears adapted to engage the flange C, as shown and described. 4th. The combination, with the arm A, having the flanges C and d, and the ring J, loosely fitting the arm between the flanges, of the axle box G, having the internal enlargements and the convex end b provided with an oil hole and screw plug a therefor, substantially as described, whereby an oil chamber is formed in the said convex enclosure and around the arm, as set forth.

**No. 21,205. Shovel. (Pelle.)**

Henry J. Welch, Carthage, N.Y., U.S., 4th March, 1885; 5 years.

*Claim.*—1st. In a snow shovel, the combination of the reversible blade and the head block, with the handle, the securing bolt E, and strap F, substantially as described. 2nd. In a snow shovel, the blade A, having double edges G, G, and central perforation, and adapted to be reversed, substantially as described.

**No. 21,206. Snow Plough. (Charrue à Neige.)**

Peter B. Brazel, Cheboygan, Mich., U.S., 4th March, 1885; 5 years.

*Claim.*—1st. The combination, with the plough frame or main frame, and the supporting runners, of the adjustable plough G, G, the adjustable pivoted or hinged wings E, E, and pivoted or hinged bars F, F, substantially as and for the purpose hereinbefore set forth. 2nd. The combination, with the side beams A, A, of the metallic guide-ways h, h, connected thereto, the plates H, H, provided with the plough G, G, the cross bar K and the screw-rods and nuts k, k<sub>1</sub>, substantially as and for the purpose hereinbefore set forth.

**No. 21,207. Metallic Fence. (Clôture Métallique.)**

George Q. Adams, Quincy, Ill., U.S., 4th March, 1885; 5 years.

*Claim.*—1st. An iron fence post, constructed in the form of a half circle, with inward flanges a, and having an open space between said flanges, substantially as and for the purpose set forth. 2nd. A metallic base or foot board, consisting of the body D of any form, with the ledge b, and off-set e, substantially as and for the purpose set forth. 3rd. In a woven or wire board fence, the post A and base board D, in combination with the pickets B and twisted wires C, constructed of metal as shown, substantially as and for the purpose set forth.

**No. 21,208. Grain Grinding Machine.***(Machine à Moudre les Grains.)*

Samuel Vessot, Quebec, Que., 4th March, 1885; 5 years.

*Réclame.*—10. La combinaison d'un aplatisseur, avec un appareil à moudre, les deux montés sur la même charpente. 20. La combinaison de la roue j sur son arbre ot reposant dans les coussinets l, l, avec la roue f et ses rainures f<sub>2</sub> sur l'arbre pt des meules. 30. La combinaison du contre-centre ou vis r, avec le ressort s, et les entremises at, at, pressant sur les coussinets l, l. 40. La combinaison des contre-centres p, p et leurs supports e<sub>2</sub>, e<sub>2</sub>, avec les coussinets l, l, et les entremises at, at, et le ressort et les coussinets o, o. 50. La combinaison des grattoirs s, s, avec les roues j, f, de l'aplatisseur. 60. La combinaison de l'entonnoir carré e avec son support x. 70. La combinaison de la tremie c, avec ses accrochoirs b<sub>1</sub> et b<sub>2</sub>, et le cercle b. 80. La combinaison du tourne-broche pt, avec les accrochoirs b<sub>1</sub> et b<sub>2</sub>, la roue z, la charpente g et sa petite poulie motrice k<sub>1</sub>. 90. La combinaison de la courroie k, ses pattes r, r, avec les piliers en tube q, q et le cercle b. 100. La combinaison de l'entonnoir a, avec sa tirette d et ses agrafes at, av, c le cercle b appuyé sur ses piliers q, q. 110. La combinaison de la vis de pression h, avec la plaque d'acier m et l'arbre pt, ses coussinets ot, ot, la poulie motrice k<sub>1</sub> et le ressort zt

120. La combinaison de la poulie motrice k<sub>1</sub>, son arbre pt, avec la roue d'air i, la roue f, la poulie k et la caboche u des meules. 130. La combinaison de l'entonnoir f, avec la rondelle en cuivre ut, son ressort h, ses agrafes at et la u. 140. La combinaison de la caboche u, avec la charpente k et la rondelle en plomb vt. 150. La combinaison du porte-moulange s<sub>1</sub> et ses ailes ventilateurs courbés a<sub>2</sub>, avec l'arbre pt. 160. La combinaison du porte-moulange s<sub>1</sub>, fait et posé, tel que décrit, avec la vis r et l'arbre pt. 170. La combinaison des meules et la caboche u, et son trou de ventilation wt, avec le porte-moulange s<sub>1</sub> et la vis r. 180. La combinaison de deux meules à moudre, dont un côté à des rayons presque droits z<sub>1</sub>, et en dehors de ces rayons plus long de dents renversées r<sub>2</sub> qui l'autre face q<sub>1</sub> qui a aussi des rayons inclinés r<sub>1</sub>, lesquels rayons se croisent avec les rayons z<sub>1</sub>, et ce pour les fins tel que décrit. 190. La combinaison de meules à moudre ayant des dents creusées en gorge. 200. La combinaison de petites dents en travers w, avec les rayons z<sub>2</sub> et z<sub>2</sub>, et les dents renversées r<sub>2</sub> et q<sub>2</sub>, et ce pour les fins tel que décrit. 210. La combinaison des deux meules avec le porte-moulange s<sub>1</sub>, et le porte-moulange e<sub>2</sub>. 220. La combinaison du sas t et ses supports d<sub>1</sub> et e<sub>1</sub>, et son tourne-broche y, avec les roues m et n. 230. La combinaison de l'arbre ot, avec son collet fixe e<sub>2</sub> et son collet mobile q<sub>2</sub>. 240. La combinaison de la roue d'engrenage j<sub>2</sub> et l'arbre ot, avec la roue d'engrenage j<sub>2</sub> et l'arbre pt. 250. La combinaison, avec la charpente k, du bras ajustable k<sub>2</sub>, et ce pour les fins tel que décrit.

**No. 21,209. Differential Pulley.***(Poulie Différentielle.)*

George Smith, jr., New York, N.Y., U.S., 5th March, 1885; 5 years.

*Claim.*—1st. In a differential pulley, of the character herein set forth, the upper and lower sheaves grooved for the reception of the rope, each sheave being composed of two sections movable together, the sections in the two sheaves bearing the same relative proportions to each other, substantially as shown and described. 2nd. In a differential pulley, the combination, with the two grooved sheaves, proportioned as explained, and the fall of the operating rope wound over and under the larger sections of the two sheaves, from outside to outside, under the fall and over and under the smaller sections of the two sheaves, from outside to outside, and spliced, substantially as shown and described. 3rd. In a differential pulley, having the two grooved sheaves, proportioned as explained, the rope wound thereon as explained, and the fall, the spring actuated rollers mounted upon the frame of the pulley block and serving to guide the hand portions of the rope, substantially as set forth. 4th. In a differential pulley, the upper and lower sheaves grooved for the reception of the rope, the axes of the two sheaves being inclined with respect to each other, substantially as shown and described.

**No. 21,210. Capillary Filter.***(Filtre Capillaire.)*

John A. Tupper, Salt Lake City, U.T., U.S., 5th March, 1885; 5 year.

*Claim.*—1st. A filter consisting of the combination of a filtering vessel, provided with a series of wick tubes projecting into it upward and through its bottom, a series of wicks in said tubes, their upper ends hanging over the tops of the tubes, and their lower ends extending down within the tubes sufficiently far to cause the wicks to act, as capillary siphons, and a receiving vessel for the filtered liquid arranged beneath the bottom of the said vessel, and receiving the drip from said wicks, substantially as and for the purposes set forth. 2nd. The combination, to form a capillary filter, of two or more filtering vessels constructed to fit one above another, and each provided with wick tubes, enclosed within it, extending upward from its bottom, with a closed receiving vessel for the filtered liquid, arranged beneath, and fitting the lowermost filtering vessel, substantially as set forth, whereby the liquid in the upper vessel is subjected to successive capillary filtrations, and the wicks are concealed and protected.

**No. 21,211. Reversible Self-heating Smoothing Iron. (Fer à Repasser Reversible à Chauffage Continu.)**

George T. Kearns and John H. Noble, London, Ont., 5th March, 1885; 5 years

*Claim.*—1st. The body A of a reversible self-heating smoothing iron constructed in two sections a<sub>1</sub>, and a<sub>2</sub>, substantially as shown and described and for the purpose specified. 2nd. The body A, of a reversible self-heating smoothing iron constructed in two sections a<sub>1</sub>, and a<sub>2</sub>, and providing with ventilating apertures T, T, substantially as shown and described and for the purpose set forth. 3rd. The body A, of self-heating smoothing iron provided with an opening at the rear end, and a sleeve C at the front end, with the uprights b<sub>5</sub>, and b<sub>6</sub>, lever E, pin D, spring clip J, handle B, provided with flanges b<sub>8</sub>, annular ring b<sub>3</sub>, and annular flange b<sub>4</sub>, substantially as shown and described and for the purpose specified. 4th. In combination with a smoothing iron, the lamp reservoir H, non-conductor L, plate G, annular flange b<sub>7</sub>, clamps J<sub>1</sub>, and wick tube a<sub>3</sub>, substantially as shown and described and for the purposes specified. 5th. The non-conductor L, placed between the lamp reservoir H, and body of the iron A, substantially as shown and described and for the purpose specified. 6th. The annular ring b<sub>3</sub>, provided with apertures d<sub>1</sub>, d<sub>1</sub>, and the annular flange b<sub>7</sub>, provided with apertures d<sub>2</sub>, d<sub>2</sub>, substantially as shown and described and for the purpose set forth.

**No. 21,212. Light Vehicle. (Voiture Légère.)**

Samuel Toomey, Canal Dover, Ohio, U.S., 5th March, 1885; 5 years.

*Claim.*—1st. A trussed vehicle pole, formed of two outwardly bowed strips and a middle strip, for the purpose herein specified. 2nd. A trussed vehicle-pole, formed of two outward strips and a middle strip, made wide at the middle and narrow at the ends, for the purposes specified. 3rd. In combination with a vehicle-pole, hounds trussed in the part forward of the cross-brace, substantially as and for the purpose herein specified. 4th. An arched axle trussed with two arches of