

**Claim.**—1st. The method of fastening metal bands upon cups or cylinders of porcelain, glass, etc., by forming the inner surfaces of the bands in a scroll form, and the exterior of the vessel to correspond therewith in reverse, whereby they may be fastened together by rotating one upon the other, as hereinbefore set forth. 2nd. A vessel formed of a plastic substance as clay, porcelain, glass, etc., with a metal band having an interior surface in the form of a scroll, to fit upon a corresponding surface upon the vessel, as hereinbefore set forth.

### No. 18,908. Car - Coupling.

(*Accouplage de Wagons.*)

John Goettel, St. Paul, Minn., U. S., 19th March, 1884; 5 years.

**Claim.**—1st. A pivoted hook jaw A connected to lateral bearings S<sub>1</sub> and S<sub>2</sub> of the head N, of the draw-bar F, a lock catch h<sub>1</sub> and the pivoted arm W of the hook jaw carrying said lock catch, substantially as specified. 2nd. In an automatic car-coupling, a lateral hook jaw A pivoted to bearing in the head of the draw-bar F, carrying a pivoted arm W, provided with an automatic lock catch h<sub>1</sub>, substantially as specified. 3rd. The draw-head formed with laterally arranged bearings S<sub>1</sub> S<sub>2</sub> for the pivoted hook jaw A, and laterally opposite the same, a forwardly curved flange guide f, substantially as set forth and described.

### No. 18,909. Combined Bedstead and Dressing Table. (*Bois de Lit et Table à Toilette Combinés.*)

John W. Jones, Toronto, Ont., 19th March, 1884; 5 years.

**Claim.**—1st. As an improved article of furniture, a toilet table B, or its equivalent, having chambers F and J formed within it, in combination with the bedstead A, hinged as described, so that it can be folded within the toilet table B, below the chambers F and J, substantially as and for the purpose specified. 2nd. In an improved article of furniture, the hinged bedstead A, arranged to fold within a toilet-table B, or its equivalent, having drawers and chambers arranged, substantially as and for the purpose specified.

### No. 18,910. Rotating Bars adapted to Dump Cars. (*Barres Rotatives pour Chars à Bascule.*)

William H. D. Newth, Detroit, Mich., U. S., 19th March, 1883; 5 years.

**Claim.**—The bars or slats A adapted to be rotated upon journals b, and provided with counterpoise lugs c having a wrist pin d, in combination with the connecting bar B and a crank or lever C, by means of which the series of bars are simultaneously actuated, substantially as and for the purposes specified.

### No. 18,911. Machine for Lubricating Steam Engines. (*Machine pour Graisser les Machines à Vapeur.*)

J. Vincent Renchard, Windsor, Ont., 19th March, 1884; 5 years.

**Claim.**—1st. In lubricators, the method of injecting lubricants, consisting in a movable and contractible oil-pocket, which becomes filled with lubricant when communicating with the inlet orifice, and by its transit closes said orifice and conveys the pocketed lubricant to discharge orifice, into which it is expelled by the closing or contraction of the pocket, substantially as and for the purpose specified. 2nd. In lubricators and for the purpose of preventing steam or vapors from the engine from entering and mingling with the lubricant in the oil-chamber, the contractible oil-pocket which closes when discharging its pocketed lubricant, substantially as specified. 3rd. In a lubricator and as a means for forming an oil-pocket, two segmental piston rings enclosed in a grooved channel and leaving between their ends a contractible oil-pocket, substantially as described. 4th. In a lubricator and as a means for controlling the oil-pocket formed between two segmental piston-rings, the cams g<sub>1</sub> and g<sub>2</sub> engaging with said piston rings and imparting to them by proper devices, a reciprocating motion, substantially as described. 5th. In a lubricator and as a means for expelling the lubricant from the oil-pocket, the piston-rings j<sub>1</sub> and j<sub>2</sub>, cams g<sub>1</sub> and g<sub>2</sub> and stop-pin M, in combination with the tension device, substantially as and for the purpose described. 6th. In a lubricator and as a means for regulating the size of the oil-pocket, the piston rings j<sub>1</sub> and j<sub>2</sub>, cams g<sub>1</sub> and g<sub>2</sub>, the tension device grooved ring J, arbor F, adjustable crank arm f<sub>6</sub> and connecting rod f<sub>7</sub> connecting with the valve rod b, substantially as described. 7th. In lubricators and to enable the reciprocating or oscillating oil-pocket, mechanism to be freely moved in its transit space and yet exclude any vapor or steam from the engine from entering the oil in the oil chamber through any leakage around said mechanism, the pipe E whereby the steam and hydrostatic pressure may exert a superior force against the oil chamber, causing it to seek an outlet through the discharge passage h<sub>3</sub>, and thus preventing substances from the engine from passing backward or into the oil chamber, substantially as specified. 8th. In lubricators and to provide for the continued lubrication of the reciprocating or oscillating oil-pocket mechanism with new or fresh oil to the exclusion of the old, the pipe E communicating between the boiler and oil chamber, whereby the steam and hydrostatic pressure causes the oil to seek egress into the lesser pressure of the discharge, substantially as specified. 9th. In a lubricator and in combination therewith, the tension device herein described consisting of sleeve G, eared rings g<sub>2</sub>, g<sub>3</sub> and g<sub>4</sub>, spring g<sub>5</sub> and lock-nuts g<sub>7</sub> and g<sub>8</sub>, substantially as described. 10th. In a lubricator, the auto-mechanical device herein described for imparting a reciprocating motion to the piston-rings j<sub>1</sub> and j<sub>2</sub> consisting of the arbor F, fluted sleeve G fitted on the square portion thereof, cams g<sub>1</sub> and g<sub>2</sub>, eared rings g<sub>2</sub>, g<sub>3</sub> and g<sub>4</sub>, spring g<sub>5</sub> and lock nuts g<sub>7</sub> and g<sub>8</sub>, in combination with devices for imparting to the arbor F an oscillating motion from any of the moving members of the engine, substantially as described. 11th. In a lubricator, the inlet h<sub>2</sub> and discharge passage h<sub>3</sub> communicating with each other by a channel filled with the reciprocating pis-

ton rings j<sub>1</sub> and j<sub>2</sub> or their equivalents, so as to cut off direct communication between the same, substantially as described. 12th. In a lubricator, the parts for auto-mechanically operating the feeding device, the same consisting of the oscillating arbor F, fluted sleeve G, cams g<sub>1</sub> and g<sub>2</sub>, grooved ring J provided with stop-pin M and bridge N, the tension device split-ring H and inlet and discharge channels h<sub>2</sub> and h<sub>3</sub>, all combined and operated substantially as described. 13th. In lubricators, the method of effecting the transition of lubricant material from a greater into a lesser pressure, and yet preventing any direct communication between the greater and lesser pressures, resulting from the employment of the following means or their equivalents, namely: the valve D, pipe E, oil chamber A and the reciprocating oil pocket mechanism intervening between the receiving channel h<sub>2</sub> and the discharge passage h<sub>3</sub>, and given motion from a moving member of the engine, substantially as specified.

### No. 18,912. Self-Binding Harvester.

(*Moissonneuse-Lieuse.*)

John O. McLachlan, Patterson, Ont., 19th March, 1884; 5 years.

**Claim.**—The spring K attached to the compressor arm I, and pressing against the needle H, and operating through said needle on the needle shaft G and crank F, thereby giving a momentum to the action of the connecting rod E, and causing the cam wheel A to complete its revolution, as described.

### No. 18,913. Bed Bottom (*Sommier Elastique.*)

Alfonso L. Jaynes, Buffalo, N. Y., U. S., 19th March, 1883; 5 years.

**Claim.**—1st. A spring bed-bottom composed of longitudinal slats A secured to rigid cross-bars C, C<sub>1</sub>, a central slat A secured to flexible strips D, connecting the rigid end sections, and spring B secured at their lower ends to the slats A, A<sub>1</sub> and having their free upper ends connected by chains e, whereby, when the bottom is folded, the flexible strips D will assume a curved position between the parallel rigid end sections, causing the springs attached to the central slat to be held away from the end sections sufficiently to prevent the parallel slats A, A<sub>1</sub> provided with the springs B and arranged parallel to each other, from becoming entangled, as set forth. 2nd. In a spring bed-bottom, the slats A, A<sub>1</sub> provided with the springs B and arranged parallel to each other, each alternate slat carrying one more spring than the next adjacent slat, so that the springs will stand in irregular rows across the bed-bottom, as and for the purpose set forth. 3rd. As an improvement in spiral springs for bed-bottom, the herein-described improvement in spiral springs for bed-bottom, the small end of the spring having two or more of its inner coils at the other end, forming a flat support or base upon which the springs rest, the top coil of the springs being doubled back and formed with a loop b, and its extremity provided with a hook b<sub>1</sub>, as and for the purposes set forth.

### No. 18,914. Friction Brake for Pulleys, &c. (*Frein à frottement pour Poulies, &c.*)

Jacob Tise and Charles H. Tise, Winston, N. C., U. S., 19th March, 1884; 5 years.

**Claim.**—1st. A friction-brake, for revolving wheels, consisting of a swinging arm capable of being swung from one side of the wheel to the other, and permit the wheel to revolve in one direction but prevent its revolving in the other direction. 2nd. The combination with the wheel having an annular flange and fixed to a shaft at one side revolving in bearings, of a brake-arm seated on said shaft at the other side of the wheel, and capable of being swung to rest against the flange of the wheel at either side of the shaft, substantially as described.

### No. 18,915. Bustle. (*Tournure.*)

Charles W. Higby, Jackson, Mich., U. S., 19th March, 1884; 5 years.

**Claim.**—1st. A bustle composed of vertical pockets secured to a waist-band, such pockets being formed from laterally plaited fabric and secured to a lining, and within them vertically secured slightly conical coil springs, substantially as described. 2nd. A bustle in which is combined the following parts: the laterally plaited fabric A, the lining B, pockets C, band D, vertical coil spring E, secured within such pockets by means of eyelets passing through eyes in the ends of such springs, through the lining and stays secured thereto, substantially as specified. 3rd. A bustle wherein the laterally plaited fabric A, lining B, pockets C, band D, wings E, coil spring F, eyelets g and stays b are constructed, arranged and operate, substantially as and for the purposes set forth.

### No. 18,916. Process and Apparatus for Separating Starch. (*Procédé et Appareil pour Séparer l'Amidon.*)

Teile H. Vuller and Jacob W. De Castro, New York, N. Y., U. S., 19th March, 1884; 15 years.

**Claim.**—1st. The process of producing pure starch, which consists in causing the liquid containing said starch to flow into a centrifugal machine and to be separated by said machine into starch and gluten, and of then removing said gluten during the deposit of the starch, substantially as described. 2nd. The process, herein described, of producing pure starch and removing it, which consists in causing a suitable amount of starch water to flow into a centrifugal machine and to be separated thereby into starch and gluten, in continuously removing the gluten as it is deposited, and in removing the starch by the addition to it of a suitable amount of water in the centrifugal machine, substantially as described. 3rd. A centrifugal machine provided with a cutter or removing apparatus, projecting toward the periphery and adapted to be removed inward from the periphery toward the centre, in combination with apparatus whereby such movement may be automatically effected during the operation of the machine, substantially as described. 4th. A centrifugal machine pro-