

the upper crowns carry brushes that revolve over such screening surface for the purpose of facilitating the screening operation, substantially as described. 6th. An apparatus for grinding grain consisting of several concentric pairs of horizontal annular grinding crowns, of which the lower crowns are stationary while the upper ones rotate, the annular spaces between the upper crowns constituting air chambers that are enclosed at top by a sheet metal cover in which are formed hoodlike openings presented in the direction of rotation, so as to catch up the air and thereby facilitate the passage of the fine material through the sieves that form the bottoms of the said chambers, substantially as described.

No. 37,132. Machine for Preparing Metal Surfaces for Etching. (*Machine à préparer les surfaces des métaux pour les graver.*)

George James Bellamy Rodwell and the Firm of Bertram & Co., all of Toronto, Ontario, Canada, 10th August, 1891; 5 years.

Claim.—1st. A vulcanized rubber sheet having names, business devices, or ornamentations sunk in or raised on its surface, which surface is covered with prepared ink, the said sheet being held in such a manner that it may be applied and reapplied in exactly the same position upon the metal plate, substantially as and for the purpose specified. 2nd. A vulcanized rubber sheet A, having names, business devices or ornamentations sunk in or raised on its surface, which surface is covered with prepared ink, the said sheet being connected to a rigid bar or bars B, hinged at *a*, in combination with the bed-plate C, lamp D, and metal plate or saw E, substantially as and for the purpose specified. 3rd. A vulcanized rubber sheet A, having names, business devices or ornamentations sunk in or raised on its surface, and a canvas back fixed to it of which portions are removed immediately behind the finer work of the design, the said sheet being connected to a rigid bar or bars B, hinged at *a*, to the bed-plate C, in combination with the lamp D, located below the bed-plate C, at the point where the sheet A is indicated, and of the metal plate or saw E, substantially as and for the purpose specified.

No. 37,133. Cleaner for Wires and Tracks. (*Nettoyeur de fil métallique et de voie-trôlée.*)

John Bauer, Ottumwa, Iowa, U.S.A., 10th August, 1891; 5 years.

Claim.—1st. In a machine for cleaning snow or ice from overhead wires, the combination of a steam generator with an extensible steam conductor communicating therewith and adapted to jet the steam against the wire, substantially as described. 2nd. The combination of a steam generator with an extensible steam conducting pipe, a trolley, and steam jets attached to the upper end thereof, substantially as specified. 3rd. The combination of a steam conductor consisting of a pair of telescoping steam pipes, the devices for sustaining them in about a vertical position, the steam jet on the upper end of the upper pipe, with the devices for automatically lengthening the conductor, and a steam generator, substantially as described. 4th. The combination of the steam generator and a steam conductor communicating therewith, formed of telescoping pipes, with the devices for automatically lengthening said conductor, the sustaining devices therefor, and a guide trolley and the steam jet pipes attached to the upper end thereof, substantially as and for the purpose described. 5th. In a track cleaning device for electric railways, the combination of the supporting car, the steam generator thereon, and the steam pipe for jetting steam upon the track rails, with the steam conductor consisting of a pair of telescoping steam pipes communicating with the generator and upheld in about a vertical position, the trolley on the upper end of the higher pipe and the steam jet joints connected therewith, and the sustaining frame and devices for automatically lengthening the conductor, all constructed and arranged to operate as described.

No. 37,134. Cereal Food. (*Céréale alimentaire.*)

Thomas B. Taylor, Jackson, Michigan, U.S.A., 11th August, 1891; 5 years.

Claim.—1st. As an article of manufacture, the herein described wheat flakes formed from wheat in its natural dry condition, substantially as described. 2nd. As an article of manufacture, the herein described wheat flakes having the bran separated and the fine starchy flour bolted out therefrom, substantially as described. 3rd. The flaky cereal food herein described, consisting of about the twelve parts of gluten, the four parts of sugar, the two parts of gum, and about five parts of the starch of the wheat, substantially as described. 4th. The process of making the described flaky cereal food, said process consisting in first cleaning or scouring the wheat, then reducing or breaking the wheat, then scalping or separating the bran from the food, then bolting out or removing from the food the fine starchy flour, and finally smoothing or softening the food, substantially as described.

No. 37,135. Electric Arc Lamp. (*Lampe électrique à arc.*)

Charles W. Hazeltine, St. Louis, Missouri, U.S.A., 11th August, 1891; 5 years.

Claim.—1st. The method of prolonging the life of carbons in electric arc lamps, which consists in applying a protective tip or shield to such lamps near the arc to prevent rapid consumption of carbon, and automatically maintaining the same relative position of the arc and tip as the carbons are consumed. 2nd. An arc lamp having a suitable protective tip or shield applied to such lamp near the arc, and regulating mechanism for maintaining the same relative position of the arc and tip as the carbons are consumed. 3rd. An electric arc lamp having a protective tip of infusible material ap-

plied to the upper carbon near the arc, through which protective tip the upper carbon may feed freely, and cords or chains, and pulleys for sustaining said protective tip and feeding it by the movement of the upper carbon.

No. 37,136. Buckle for Waist Belts, etc. (*Boucle pour ceintures, etc.*)

Stephen Henry Manners, North Melbourne, Victoria, Australia, 11th August, 1891; 5 years.

Claim.—1st. The combination and arrangement of the roller *h*, with a buckle made of one piece of sheet metal slotted and afterwards folded to form a casing as at figures 1, 2, and 3, a mouth such as *d*, with teeth *e*, an inclined top *f*, flat bottom *g*, and also two passages *a*, and *b*, substantially as hereinbefore described, and as illustrated in my drawings. 2nd. The combination with a handle *m*, of two buckles 1 and 1, such as herein described and illustrated, and for the purpose specified.

No. 37,137. Antifricition Bearings.

(*Coussinet de tourillon sans friction.*)

Frank Cleveland Pitcher, Medford, Massachusetts, assignee of Willard Frank Wellman, Belfast, Maine, both in U.S.A., 11th August, 1891; 5 years.

Claim.—1st. The combination, with a journal, of a box made in separable sections, each having a semi-circular cavity and an end wall having a semi-circular recess, said cavities forming a circular roller holding chamber surrounding the outer portion of the journal, while the recessed end walls form a neck closely fitting the inner portion of the journal, and a series of antifricition rollers inserted in said chamber and surrounding the journal, said rollers being shorter than the chamber, as set forth. 2nd. As an improvement in antifricition bearings, a box composed of two separably connected sections *b, b*, each having a semi-circular cavity *c* and an end wall *b'*, having a shouldered recess *b''*, and a cap *g*, attached to the outer ends of the sections, said cavities *c* forming a circular chamber, while the recesses in the end walls constitute a shouldered orifice, combined with a journal having a shoulder formed to fit said shouldered orifice and abut against the shoulder therein, said journal being of uniform diameter from its shoulder to its outer end, and a series of antifricition rollers *d*, and smaller intermediate rollers *d'*, located in the annular space surrounding the journal, said rollers being shorter than the cavity or chamber which contains them, as set forth.

No. 37,138. Book Rest. (*Appui pour livres.*)

William Dawson, Ogontz, Pennsylvania, U. S. A., 11th August, 1891; 5 years.

Claim.—1st. The combination of the flat base-piece having a configuration adapting it to be sat upon, the upright telescoping standard mounted at its lower end at one end of the base-piece, and having the socket at its upper end, the ball fitted in the standard socket, the clamp for securing the ball against movement, and the book rack carried by the ball, substantially as and for the purpose set forth. 2nd. The combination of the book rack having the ledge-strip along its lower edge, the rock shafts pivoted in openings through the outer or front edge of the ledge-strip, the cranked holding fingers adjustable lengthwise of the rock shafts, the discs attached to the rock shafts, the turning spring-actuated disc supported by the ledge-strip between the holding fingers, the lever turning beneath the ledge-strip and secured to the spring-actuated disc, and the connecting rods, each pivoted at one end to the end of the rock-shaft discs, and at the other end to the spring-actuated disc, substantially as and for the purpose set forth.

No. 37,139. Spring Motor for Sewing Machines. (*Moteur à ressort pour machines à coudre.*)

Auguste Bronner and Laurent Schoch, both of Montreal, Quebec, Canada, 12th August, 1891; 5 years.

Claim.—1st. In a spring motor for sewing machines, a brake composed of the pulley O, shoe P, brake bar p, bracket p, spring p, plate p, and lever p', substantially as described and for the purposes set forth. 2nd. In a spring motor for sewing machines, a stopping device composed of the pulley O, having the holes o', pin Q, and lever q', substantially as described and set forth. 3rd. In a spring motor for sewing machines, the arrangements of the gear wheels E, D, F, H, I, K, and L, substantially as described and for the purposes set forth.

No. 37,140. Cover for Carriages. (*Couverture de voiture.*)

Benjamin Franklin Partridge, Portsmouth, Michigan, U.S.A., 12th August, 1891; 5 years.

Claim.—The carriage cover B, having eyes I, at the folds, in combination, with the frames between which it is suspended, the upper of which is provided with mounted slotted corners, adjustable jointed rods L, and the variable cross-frame H, the rope D, fastened to the base of the cover at opposite ends and passing through eyes I, the pulleys F, the hooks F', and the eye F'', the whole co-operating, as and for the purpose set forth.

No. 37,141. Thill Couplings. (*Armon de limonière.*)

William A. Maddy, Pomeroy, Ohio, U. S. A., 12th August, 1891; 5 years.

Claim.—1st. In a thill coupling, the combination, with the main plate longitudinally slotted in its forward portion, and having the