

the side of the reservoir and opening into the said supporting shank, all being essentially as set forth. 3rd. The oil reservoir provided with the pocket in its lower part and at one side of it as represented, and having thereto an oil induction tube extending up from such pocket nearly to the top of the said reservoir, and also having the two ducts leading from it, the said pocket to the sight feed glass tubes arranged in the same side of such reservoir all being substantially as set forth. 4th. The two sight feed glass chambers or tubes, as arranged, on one side only of the oil reservoir, substantially and for the purpose as represented. 5th. A sight feed lubricator having its two sight feed glass chambers or tubes arranged at one side only of the oil reservoir, and also having its oil ducts leading from it to the valve chests of the engine cylinders arranged to extend in opposite direction from the reservoir, as set forth. 6th. The combination, with the lubricator provided with the two sight feed glass chambers or tubes arranged at one side only of the oil reservoir of such lubricator, with a light or lantern arranged, substantially as set forth, to illuminate both of the said sight feed glass chambers or tubes at one and the same time. 7th. The combination, with the lubricator provided with the two sight feed chambers or tubes, with a light or lantern arranged to illuminate both of such chambers or tubes at one and the same time.

No. 26,450. Clothes Mangle. (*Calandre*)

William Addison, Hamilton, Ont., 15th April, 1887; 5 years.

Claim.—1st. In a clothes mangle, the standards E, E and F, F hinged together at the bottom P, working in the pivot hinges m, m attached to the wall board K, in connection with the rollers A, A, gear wheels B, B, the spindles c, c, crank D and link L, as set forth. 2nd. In a clothes mangle, the screw bolts G, G and thumb screws J, J, in connection with the standards E and F for compressing and relaxing the rollers A, A, as described. 3rd. In a clothes mangle, the table Y hinged to the standard E, in connection with the arms I, staple V and spindles c in front standards, as shown, all operating substantially as and for the purposes of a clothes mangle as herein set forth and described.

No. 26,451. Dry Goods Blocking Machine.

(*Machine pour Aramer les Draps.*)

Marie L. Laurier, Née Robitaille, (Assignee of Alphonse Laurier,) Montreal, Que., 15th April, 1887; 5 years.

Claim.—The above described folding machine, composed of the rolls B and C, the standards D having the clamps a, a and set screws b, b, bearings c, c and springs d, d, knobs E having the eccentric pins e, e fixed in their shanks and the bed roll C centred on said pins, substantially as shown and for the purpose set forth.

No. 26,452. Draining Well. (*Puisard*.)

Jules Colas, Montreal, Que., 15th April, 1887; 5 years.

Claim.—1st. The combination, in draining-wells made of cast iron rings, of a funnel G as seat of a syphon, as above described. 2nd. The combination of a grate E fixed in cat's hole F, as above described. 3rd. The combination of pins I and clamps H made of cast-iron, with the ring B or other equivalents in bolting or clenching, substantially as and for the purpose hereinbefore set forth.

No. 26,453. Horse Shoe. (*Fer à Cheval*.)

David J. Pryor, Boston, Mass., U.S., 15th April, 1887; 5 years.

Claim.—1st. A horse shoe consisting of the shoe proper A, provided with slots B, openings b, b and lug b, b, in combination with plate C having lugs c and D on its upper side, and on its lower side the toe-calk F, heel-calks G and series of small calks H and bolt E, as described and for the purposes set forth. 2nd. In a horse shoe, the upper shoe proper A, the plate I having recesses i, the washer K and the lower plate C having toe-calk F, heel-calks G, and series of small calks H, secured to each other in the position herein shown and described and for the purposes set forth. 3rd. The combination, with the horse shoe proper, the lower plate and the intermediate plate having a recess on its upper surface, of the washer interposed between the intermediate plate and the lower plate, and adapted to hold the intermediate plate between the shoe proper and the lower plate.

No. 26,454. Locomotive. (*Locomotive*.)

Henry K. Adams, Nashville, Tenn., U.S., 15th April, 1887; 5 years.

Claim.—1st. In a locomotive, the combination with two driving-axes provided with wheels and crank-pins, of a master-shaft receiving motion from the engines and located above the plane of the driving-wheel axles, a crank-disk on said master-shaft, and rods connecting said crank disk with the crank pins on both the driving-wheels, substantially as and for the purpose set forth. 2nd. In a locomotive, the combination, with a master-shaft receiving motion from the engines, and located above the plane of the main axles, of one or more main axles provided with driving wheels, and in means for communicating motion from the master-shaft to the main axles, said axles being mounted in pedestals which are inclined to the plane of the main axles, as and for the purpose set forth. 3rd. In a locomotive, the combination, with a master shaft receiving motion from the engines and located above the plane of the main axles, of one or more main axles provided with driving wheels, and means for communicating motion from the master-shaft to the main axles, said axles being mounted in pedestals which are inclined to plane of the main axles so that their center is tangential to a circle struck from the centre of the master shaft and touching said center line, substantially as and for the purpose set forth. 4th. In a locomotive, the combination, with the engine-shaft A provided with the pinion B, of the master shaft D, spur-gear C, crank disk E, wrist-pin F, driving-wheels H, H, crank pins I, I, connecting rods K, K and pedestals O, O, which are inclined so that their center line l, l is at right angles to the line 22, substantially as and for the purpose set forth.

No. 26,455. Vehicle Wheel. (*Roue de Voiture*.)

Ferdinand W. Starr, Springfield, Ohio, U.S., 15th April, 1887; 5 years.

Claim.—1st. In a wheel, the combination, with the rim thereof having holes for the spoke tenons, of metallic rings fitted into the rim outside of and around the said holes to prevent the rims from splitting. 2nd. In a wheel, the combination, with the rim thereof constructed of wood, of short thin metallic rings having one end sharpened and embedded into the rim around and outside of the holes for the spoke tenons. 3rd. In a wheel, the combination, with the rim thereof constructed of wood, of metallic rings sharpened from their inner side at one end leaving the interior bevelled at said end, and embedded into the rim outside of and around the holes for the spoke tenons, the bevel being such as to cause the rings to flare and clinch themselves in the wood. 4th. In a wheel, the combination, with the rim thereof constructed of wood, of the metallic rings having a flange at one end and embedded into the rim outside of and around the holes for the spokes sufficiently to leave the flange flush, or substantially flush with the rim. 5th. In a wheel, the combination, with the rim thereof constructed of wood, of thin metallic rings having a flange at one end, and having the other end sharpened from the inner side to form a bevel, the embedded into the rim outside of and around the holes for and spokes, the sharpened end clinching itself in the wood and the flange forming a shoulder for the spokes.

No. 26,456. Hat. (*Chapeau*.)

Abraham Brahadi, Montreal, Que., 16th April, 1887; 5 years.

Claim.—1st. A pull-over hat composed of a shape of soft felt coated on the crown to within a distance of its bottom, and along the edge of the brim with adhesive liquid and a pull over covering, all substantially as and for the purposes set forth. 2nd. A pull-over hat having the lower portion of the crown and the brim flexible.

No. 26,457. Sulphite or Bisulphite of Sodium. (*Sulfite ou bi-sulfite de sodium*.)

William O. Crocker and William P. Crocker, Turner's Falls, Mass., U.S., 16th April, 1887; 5 years.

Claim.—1st. The herein-described method of producing sulphite of sodium liquor from sulphate of sodium for the reduction of wood to pulp, consisting in mixing sulphate of sodium with carbonaceous matter, roasting the mixture, leaching out the soluble part, evaporating to dryness, granulating the product, then heating it and agitating it in contact with air or oxygen until incandescence ceases and making into a soluble, substantially as set forth. 2nd. The herein-described method of producing sulphite and bisulphite of sodium liquor from sulphite of sodium for the reduction of wood to pulp, consisting in mixing sulphate of sodium with carbonaceous matter, roasting the mixture, leaching out the soluble part, evaporating to dryness, granulating the product, then heating it and agitating it in contact with air or oxygen until incandescence ceases, converting it into a solution and charging it with a portion of sulphurous acid, substantially as described. 3rd. The herein-described method of strengthening or re-enforcing the action of the sulphite of sodium in making wood pulp, consisting in providing it with an additional portion of sulphurous or other acid before the solution is introduced into the digester, substantially as set forth. 4th. In converting wood into pulp by means of sulphite or bisulphite of sodium, decomposing the sulphide or sulphate of sodium by the addition of calcium, substantially as set forth.

No. 26,458. Process of Making Bisulphite of Sodium Liquor for reducing Vegetable Structures for obtaining Cellulose, etc. (*Procédé de préparation de la lessive de bi-sulfite de sodium pour réduire les structures végétales pour produire la cellulose, etc.*)

William O. Crocker and William P. Crocker, Turner's Fall's, Mass., U.S., 16th April, 1887; 5 years.

Claim.—1st. The herein-described method of producing bisulphite of sodium liquor, consisting in suspending by agitation neutral sulphite of calcium in neutral sulphate of sodium solution, and then charging the mixture with sulphurous acid until decomposition has taken place, as set forth. 2nd. The herein-described method of obtaining bisulphite of sodium liquor, consisting in roasting the acid sulphate of sodium to reduce it to neutral sulphate, and recover one proportion of sulphuric acid, suspending neutral sulphite of calcium in the neutral sulphate of sodium solution, and finally charging the mixture with sulphurous acid, as specified. 3rd. The herein-described method of obtaining bisulphite of sodium liquor from crude acid sulphate of sodium to reduce it to a neutral sulphate and recover one proportion of sulphuric acid, treating the neutral solution with sulphite of calcium suspended by agitation, and charging with sulphurous acid obtained by decomposing the sulphuric acid recovered, as specified. 4th. The herein-described process of obtaining bisulphite of sodium liquor, consisting in suspending by agitation neutral sulphite of calcium obtained by treating the used bisulphite of sodium liquor with oxide or carbonate of calcium in a neutral sulphate of solution, and then charging the mixture with sulphurous acid until decomposition has taken place, as specified.

No. 26,459. Machine for Sewing Straw Braids in Making Hats. (*Machine à coudre les chapeaux de paille*.)

Thomas L. Kay and Summerfield Douglas, Hamilton, Ont., 16th April, 1887; 5 years.

Claim.—1st. The combination, in a feed mechanism, with the ec-