

**No. 10,982. Improvement in Railway Frogs.**  
(*Perfectionnements aux rails de croisement des chemins de fer.*)

Barpee R. Starratt and F. G. Smith, Truro, N. S., 1st March, 1880; for 5 years.

*Claim.*—1st. The V-shaped portion H, constructed in one piece and provided with keepers a a, whereby the pointed end of this part of the frog is held down; 2nd. The combination of the keys F G with the part H and wing rails I I of a railroad frog, whereby the frog is held in place and given an elastic bearing; 3rd. The wing rails I I provided with keepers c c; 4th. The combination with the part H and wing rails I I, the transverse plate E E; 5th. The combination with the planks B D of the plates C C, whereby chairs are formed for the rails to rest upon.

**No. 10,983. Improvements on Middlings Purifiers.**  
(*Perfectionnements aux épurateurs des gruaux.*)

Thomas B. Osborne, New Haven, Conn., and Kingsland Smith, New York, U. S., 4th March, 1880; for 15 years.

*Claim.*—1st. The process for purifying flour consisting in passing the ground material and at the same time agitating it beneath movable electrified surfaces; 2nd. The combination of a receiver, for the ground material, arranged and operating to agitate the ground material passing thereon with one or more movable electrified surfaces, above the surface of the ground material passing in the receiver; 3rd. The combination of a receiver, for the ground material, arranged and operating to agitate the ground material passing therein, with one or more movable electrified surfaces above the surface of the ground material passing in the receiver, and a blast arranged to discharge a current of air through the ground material; 4th. The combination of a receiver for the ground material, arranged and operating to agitate the ground material passing thereon, with one or more movable electrified surfaces above the surface of the ground material passing in the receiver and adjustable cushion, to regulate the power of the attracting surfaces; 5th. The combination of a receiver for the ground material, arranged and operating to agitate the ground material passing thereon, with one or more movable electrified surfaces above the surface of the ground material passing in the receiver and troughs, to receive the particles from the electrified surfaces; 6th. The combination of a receiver for the ground material arranged and operating to agitate the ground material passing thereon, with one or more movable electrified surfaces above the surface of the ground material passing in the receiver troughs, to receive the particles from the electrified surfaces and moving sweeps, to discharge the material from the troughs.

**No. 10,984. Ore Washing and Amalgamating Machine.**  
(*Machine à laver et amalgamer les minerais.*)

John H. Wilhelm, Denver, Col., U. S., 4th March, 1880; for 5 years.

*Claim.*—1st. A revolving cylinder consisting of a water-tight portion A, screen B and band C, and a central perforated shaft W; 2nd. The hopper E, constructed to fit around the shaft and forming a channel on each side thereof; 3rd. The belt-shaped cylinder A, provided with the rods c, frames A<sup>2</sup> and leaves a<sup>2</sup>; 4th. The screen B, combined with the guides K k and sluice box J; 5th. The combination of the perforated shaft W, stuffing box I and water pipe j; 6th. The outside circular projection or flange C, with projection m n at the large end of the screen B; 7th. The rod z on the worm B; 8th. The ejecting ledges B<sup>2</sup> arranged in the large end of the screen B.

**No. 10,985. Yarn Winding and Twisting Machine.**  
(*Machine à renvider et retordre les fils.*)

James Coltham, King, Ont., 4th March, 1880; for 5 years.

*Claim.*—The method of winding from reels two or three strands of yarn upon bobbin T, for the purpose of twisting the same by the rotation of the same bobbin, when placed in the clamp S, also in the winding of the twisted yarn upon the bobbin M and the revolving and regulating speed of the same by means of the friction roller N.

**No. 10,986. Improvements on Fire Extinguishers.**  
(*Perfectionnements aux extincteurs d'incendie.*)

Abraham Stoner, Baton Rouge, La., U. S., 4th March, 1880; for 5 years.

*Claim.*—A force pump composed of the cylinder A, short tube a, end-valved conical tube d and top-valved conical frustrum B, having water nolets c.

**No. 10,987. Improvements on Car Axle Lubricators.**  
(*Perfectionnements aux godets-graisseurs des essieux des chars.*)

William G. Mitchell, Brooklyn, N. Y., U. S., 4th March, 1880; for 5 years.

*Claim.*—1st. The combination of a spiral spring adapted to rest on the bottom of the axle box, a flexible jacket enclosing said spring on its sides and bottom, and a wiper roller mounted in bearings secured to the spring and serving to transfer the lubricating material to the journal of the axle; 2nd. The combination of a spiral spring adapted to rest on the bottom of the axle box, a flexible jacket enclosing said spring on its sides and bottom, a wiper roller, a flexible sheet metal frame, fastened to the spring and provided with ears to form the bearings for the axle of the wiper roller, absorbent pads secured to the flexible sheet metal frame, on opposite sides of the wiper roller, and wicks depending from said pads; 3rd. The combination of a spiral spring adapted to rest on the bottom of the car axle box, a porous flexible jacket enclosing said spring on its sides and bottom, a wiper roller journaled within the spring and a convex pad secured on the bottom of the flexible porous jacket, for absorbing the oil from the bottom of the axle box and bringing the same in reach of the wipers.

**No. 10,988. Improvements in Sewing Machines.**  
(*Perfectionnements aux machines à coudre.*)

William M. Smith, Philadelphia, Penn., U. S., 4th March, 1880; for 5 years.

*Claim.*—1st. The combination, with the needle bar A, of a carrier C, supporting the needle in line with the needle bar, and appliances whereby the carrier is moved laterally backward and forward, while carried vertically with the bar; 2nd. The combination with the needle carrier C, of devices for reciprocating it laterally while carried by the needle bar, and appliances for changing the lateral working position of the needle, without interfering with the extent of its lateral reciprocation; 3rd. An attachment consisting of a carrier and appliances for connecting it to a needle bar, a driving cam adapted to one of the shafts of the machine and intermediate appliances, whereby the carrier is operated from the cam to vibrate the needle beneath the bar; 4th. The combination of the needle bar A, pivoted carrier C and operating appliances; 5th. The combination with the pivoted carrier C, of the vibrating lever E, slide J, connecting rod I and cam L; 6th. The combination of the carrier lever E, slide J and rod I connected adjustably to the lever.

**No. 10,989. Improvements on Snow Ploughs.**  
(*Perfectionnements aux chasse-neige.*)

Israel L. Rosenfeld, Maks J. Lasar and Adolph J. Grinberg, New York, U. S., 5th March, 1880; for 15 years.

*Claim.*—1st. The combination of a longitudinally inclined platform mounted on a wheeled truck, and longitudinal revolving clearers arranged above the platform for the purpose of throwing the snow off the platform; 2nd. The combination of a longitudinally inclined platform mounted on a wheeled truck, longitudinally revolving clearers arranged above the platform, and gearing adapted to transmit motion from one of the truck axles to the clearers; 3rd. The combination of a longitudinally inclined platform mounted on a wheeled truck, longitudinal revolving clearers arranged above the platform, vertically adjustable bearings to the clearer shafts and adjusting mechanism acting simultaneously on the bearings at both ends of the clearer shafts; 4th. The combination of a longitudinally inclined platform mounted on a wheeled truck, longitudinal revolving clearers arranged above the platform, vertically adjustable bearings to the clearer shafts and gearing adapted to transmit motion from one of the truck axles to the clearer shafts, so arranged that the latter may be moved to different levels by means of their bearings without being thrown out of gear; 5th. The combination of a longitudinally inclined platform mounted on a wheeled truck, longitudinal revolving clearers above the platform and gearing adapted to transmit motion from one of the truck axles to the clearer shafts, so constructed that the direction of rotation of the clearer is reversible independent of the direction of movement of the apparatus; 6th. The combination of a longitudinally inclined platform mounted on a wheeled truck, longitudinal revolving clearers above the platform, a vertically movable head gate for the purpose of retaining the snow on the platform in the back movement, of the apparatus and means for elevating the head gate; 7th. The combination of a longitudinally inclined platform mounted on a wheeled truck, longitudinal revolving clearers arranged above the platform, a head gate which is constructed with side arms pivoted to swing in a vertical plane, for raising and lowering the head-gate, and means for elevating the head gate; 8th. The combination of a longitudinally inclined platform mounted on a wheeled truck, longitudinal revolving clearers above the platform and vertical wings arranged on opposite sides and on a rear portion of the apparatus, for the purpose of compacting the snow; 9th. The combination of a longitudinally inclined platform mounted on a wheeled truck, longitudinal revolving clearers arranged above the platform, side wings mounted on vertical hinge joints, braces attached to the side wings, for sustaining the same in their outer or normal positions, and catches for locking the wings in an inner position.

**No. 10,990. Horse Hay Rake.**  
(*Râteau à cheval.*)

John Haggart and Roderick Cochrane, Brampton, Ont., (Assignees of James E. Wiener, Friendship, N. Y. U. S.,) 5th March, 1880; (extension of patent No. 4,641) for 5 years.

**No. 10,991. Improvements on Overdraw Checks for Horses.**  
(*Perfectionnements aux fausses-rènes.*)

James A. Lakin, Westfield, Mass., U. S., 5th March, 1880; (Extension of patent No. 4,491) for 5 years.

**No. 10,992. Improvements on Car Wheels.**  
(*Perfectionnements aux roues des chars.*)

Frank A. Fouts, Washington, D. C., U. S., and Andrew Holland, Ottawa, Ont., 5th March 1880; for 5 years.

*Claim.*—A locomotive truck on car wheel, having maintread a of main flange d having supplementary outer flange e outside supplementary tread b, and inside supplementary tread c.

**No. 10,993. Shipping tank for fluids.**  
(*Réservoir pour le transport des fluides.*)

August W. Schulenburg, St. Louis, Mo., U. S., 5th March, 1880; for 5 years.

*Claim.*—1st. In combination with the tank, the supports B B, having the sets of recessed bearings b<sup>1</sup> b<sup>2</sup> b<sup>3</sup> b<sup>4</sup> and the rollers b, by means whereof the said rollers can be changed to the positions shown; 2nd in combination with the tank, the supports B B having bearings b<sup>1</sup> b<sup>2</sup> b<sup>3</sup> b<sup>4</sup> at the sides of said supports, and the rollers b, the said parts being so arranged that the same rollers, placed transversely will also suit to be placed longitudinally with relation to the tank.

**No. 10,994. Improvements on Preserving Fish.**  
(*Perfectionnements dans la conservation du poisson.*)

Thomas F. Wilkins, London, Eng., 5th March, 1880; for 5 years.

*Claim.*—The use of glacial monophosphoric acid and sugar for preserving fish.