

Claim.—The manufacture of waterproof articles by the use, in conjunction with cloth, paper, leather, or other suitable material, of the compound material produced by combining the natural deposits of bitumen with the oil residue, or its equivalent, whether the compound be vulcanized, or used without being vulcanized.

No. 15,373. Improvements on Grinding Mills.

(*Perfectionnements aux moulins à moudre.*)

Frank Wilson, John L. Wilson and James E. Wilson, Easton, Penn., 26th August, 1882; for 5 years.

Claim.—1st. The grinding cylinder having diagonally disposed ridges, each ridge being notched or serrated. 2nd. The grinding cylinder having diagonally disposed notches or serrated ridges formed with an abrupt edge and a rounded or inclined edge, in combination with the grinding disk having a roughened face. 3rd. The combination, with the shell A having interior grooves B, flange C with roughened face E and rim D, of the grinding cylinder J, having diagonally disposed serrated or grooved ridges M, disk L having roughened face Q, shaft K and cap plate T. 4th. The combination with the shaft carrying the disk of the cap plate having the screw-threaded and nutted bolts and the cross plate having central socket for the shaft. 5th. The described grinding mill.

No. 15,374. Improvements on Ice Skates.

(*Perfectionnements aux patins.*)

John Bartlett, Oshawa, Ont., 28th August, 1882; for 5 years.

Claim.—1st. An improved skate, having the sole and heel plates connected by means of pintles or pivots (forming toggle joints) to a slotted lever having an adjusting screw rod attached to it and moving with it, whereby the said heel and toe clamps are set or adjusted simultaneously. 2nd. The mode of fastening the heel and toe plates, to the skate or runner, by riveting projecting portions of the skate runner (passing through small slots in the plate) over a double bracketed piece of steel *c*, which fits into and over a slot in the skate runner. 3rd. The mode of affixing the heel knife *L*, so that it enters the boot heel, in a straight line. 4th. The combination, with the runner A, the toe plate B and the heel plate C, of the longitudinally movable sole plate E, the transversely movable sole clamps F and the devices for moving and locking the sole plate. 5th. The combination, with the runner A, the toe plate B provided with slots D and the heel plate C, of the longitudinally movable sole plate E, the transversely movable sole clamps F provided with diagonal slots *c*, the pintles G attached to the sole plate E and passing through the slots *c* *d*, and of devices for moving and locking the sole plate E. 6th. The combination of a longitudinally movable sole plate E with the lever H pivoted to the rear end of the same, and the lever *k* pivoted to the lever H and to the sliding heel clamp L. 7th. The combination, with a skate, of the longitudinally movable sole plate E, the clamps F, the longitudinally movable slotted lever H, the lever K, the pintle K', the screw rod N and the nut O. 8th. The combination, with a skate, of the movable sole plate E, the lever H having its end J bent downwards, and a lipped, or turned-up portion X, the clamp F, the lever K, the pintle K', the screw rod N and the nut O. 9th. The combination, with a skate, of the movable sole plate E, the clamps F, the levers H K and the slot *p* of the heel plate C. 10th. In combination with runner A, the toe plate B with the bracketed piece X provided with a slot *a* and the heel plate C with the bracketed piece X of the longitudinally movable sole plate E provided with a tongue *b*, the clamps F and the levers H K.

No. 15,375. Improvement on Combined Window-Cleaning Chairs and Fire-Escapes.

(*Perfectionnement des chaises pour laver les croisées et aux sauveteurs d'incendie, combinés.*)

Anna Dornitzer, New York, N. Y., U. S., 28th August, 1882; for 10 years.

Claim.—1st. The combination, with the platform A and step frame D, of the clamping device G consisting of clamping bar G₁, blocks G₂ and plates L, racks I, screw H, travelling nut H' and pivoted bars *a*. 2nd. As a means for supporting the combined chair and fire-escape in position on a window sill, the combination, with the screw-adjusted bar (G₁) of the blocks G₂, serrated end plates L and racks I. 3rd. The combination, with the window-cleaning chair provided with platform A, step frame D and suitable clamping devices and hangers, of the rope ladder P, windlass Q, ratchet S, pawl T, connected eccentric regulating lever and cord U V and basket W.

No. 15,376. Process for Treating and Preserving Fermented and Fermentable Liquids.

(*Procédé de traitement et de conservation de liqueurs fermentées et fermentables.*)

Charles W. Ramsay, Brooklyn, N. Y., U. S., 28th August, 1882; for 5 years.

Claim.—The process of arresting, or preventing fermentation in fermented, or fermentable liquids, by first vapourizing the liquid and then subjecting it, while in the vaporous state, to violent shocks, or concussions.

No. 15,377. Process for Treating and Ageing Liquors.

(*Procédé pour traiter et vieillir les liqueurs.*)

Charles W. Ramsay, Brooklyn, N. Y., U. S., 28th August, 1882; for 5 years.

Claim.—The process for oxidizing, or ageing whiskey, brandy, gin, and also distilled and fermented liquids, by first vapourizing the said liquids into a fine spray, or attenuated atomic form, then while in this form, submitting the vapours to shocks, or concussions, and

finally, while still in the vaporous state, impregnating them with atmospheric air, or pure oxygen.

No. 15,378. Improvements in sights for small fire-arms.

(*Perfectionnements aux mires des petites armes à feu.*)

Thomas Gilbert, London, Eng., 28th August, 1882; for 5 years.

Claim.—1st. The manufacture and use of the improved sight for small arms constructed as described and represented in the drawing. 2nd. A sight for small arms having a number of notches on one side. 3rd. A sight for small arms having a number of pieces of silver, or platinum, in notches on the said sight. 4th. A sight for small arms having a number of notches on one side thereof, of a dark colour, the said notches having pieces of silver, or platinum, or the like.

No. 15,379. Improvements in Driving and Carrying Chains.

(*Perfectionnements aux chaînes sans fin et pour transporter.*)

Christopher W. Levalley, St. Paul, Min., U. S., 28th August, 1882; for 5 years.

Claim.—1st. In a chain link cast with the hook B, end bar E, side bars A A reduced thinner than the end bar, a wedge-shaped frictional projection G extending from and supported by the side bars A A, and an aperture C all cast in one piece. 2nd. A chain link cast with the hook B, the end bar E and side bars A A, one of which is made thinner than the end bar E, and a bucket L projecting from said side bars, all cast in one piece. 3rd. A chain link having the hook B the end bar E, side bar A made thinner than the end bar E, which connects the hook with said end bar by the part G, all cast in one piece. 4th. A chain link provided with the hook B, end bar E, side bars A A made thinner than the end bar E, and a bucket for transporting material and the recess C all cast integral with the bucket. 5th. A chain link having a portion G adapted to engage with a driving wheel and having said projection formed hollow, or with a cavity therein, to receive and transport material.

No. 15,380. Improvements on Seamless boots.

(*Perfectionnements des bottes sans coutures.*)

Thomas T. Marshall, Jarvis, Ont., 28th August, 1882; for 5 years.

Claim.—A seamless boot, or shoe, formed from a pattern and crimped on the crimping machine, the foot opening cut after crimping.

No. 15,381. Improvements on waggon gears.

(*Perfectionnements aux trains des wagons.*)

William T. Shaver, Eldora, Iowa, U. S., 28th August, 1882; for 5 years.

Claim.—In combination with the waggon box A, transverse spring K and side springs M, the rocking rod, or equalizer N provided with forked ends *a* and bolt *h*, whereby the waggon gear is made more elastic.

No. 15,382. Improvements in the Manufacture of Boots and Shoe Heels.

(*Perfectionnements dans la confection des talons des chaussures.*)

William S. Childs, Montreal, Que., 29th August, 1882; for 5 years.

Claim.—1st. The art or process of making heels, by connecting together in a mould lifts formed of more than one piece, subjecting same to pressure so as to form them into a block and dividing said block into heels by a band saw. 2nd. The mould A formed with ridges *a* *a*. 3rd. The combination, with the press E, of the mould A placed therein and containing lifts connected together at each end of which is a pressed head. 4th. The combination, with the press E and follower, of the mould A containing lifts and presser heads B B. 5th. In a band sawing machine used for cutting up into heels, blocks of cemented lifts guides placed above and below the table in order to turn the band saw in either direction from a vertical line.

No. 15,383. Improvements in Protectors for Telegraphic Instruments.

(*Perfectionnements aux protecteurs des appareils télégraphiques.*)

Charles T. Howard, Providence, R. I., U. S., 28th August, 1882; (Extension of Patent No. 14,908.)

No. 15,384. Improvements on Protectors for Telegraphic Instruments.

(*Perfectionnements aux protecteurs des appareils télégraphiques.*)

Charles T. Howard, Providence, R. I., U. S., 29th August, 1882; (Extension of Patent No. 14,908.)

No. 15,385. Combined Trap and Ventilator for Sewers and Drains.

(*Trappe-ventilateur d'égout et de fossé.*)

François X. Rousseau, Montreal, Que., 29th August, 1882; (Extension of Patent No. 7805.)

No. 15,386. Fanning Mill.

(*Turarc-cribleur.*)

Thomas Wilson, Richmond, Ont., 29th August, 1882; (Extension of Patent No. 1641.)