frame, of the supplemental grinding-wheel frame pivoted to the main frame, and a handle projected from the supplemental grinding-wheel frame in advance of, and between its pivotal supports, substantially as set forth. 4th. The combination, with the base provided with suitable ways, of the knife-supports mounted and movable on said ways, and provided with a slot elongated in the direction of the line of adjustment of said supports, and a clamping-screw turned through the said slot into the base, whereby the said supports may be held at any desired point of adjustment, substantially as set forth 5th. The combination of the base, the knife-supports, the knife-clamp pivoted midway its length and adapted at its forward end to bear on, and secure the knife, and means, substantially as described, whereby to forcibly elevate the rear end of the clamp, whereby its forward end will be caused to bear firmly on the knife, substantially as set forth. 6th. The combination of the base provided with a slot N, enlarged laterally as at N_1, near its rear end, the knife-supports and the knife-clamp provided midway its ends with a depending lug M_1, adapted to operate through slot N, and provided on its lower end with lateral pins M_2 and bearings M_3, arranged at or near the upper end of the lug M_1, and means, substantially as described, whereby to forcibly elevate the rear end of the knife-clamp, substantially as set forth. 7th. The combination, with the knife-clamp pivoted midway its ends, of the lever O, provided with a wedge o_2, and pivoted to work in a plane substantially at right angles to the movement of the clamp, the wedge being suitably arranged to engage under and elevate the rear end of the knife-clamp, substantially as set forth. 8th. The combination of the main frame pivotally supported at one end, the supplemental frame provided in one end with the grinding-wheel, and pivoted at its other end to the outer end of the main frame, a handle projected from the supplemental frame in rear of its pivot and inclined outwardly, and suitable gearing, whereby to operate the grinding wheel, substantially as set forth.

No. 24,757. Pavement. (*Pavage.*)

Thomas H. Carroll, Toronto, Ont., 18th August, 1886; 5 years.

Claim.—A road bed composed of concrete, asphalt and broken hard stone, laid in the manner described, and having curb-stones B anchored to the concrete base D, below which the land tile drains C are placed, substantially as and for the purpose specified.

No. 24,758. Toboggan. (*Tobaganne.*)

John R. McLaren, Jr., Montreal, Que., 18th August, 1886; 5 years.

Claim.—A toboggan, having the cross-bars, to which the longitudinals are attached, curved or bent, as and for the purposes described.

No. 24,759. Car Axle Lubricator.

(*Boîte à Graisse.*)

Isaie Fréchette, St. Hyacinthe, Que., 18th August, 1886; 5 years.

Claim.—1st. In a device for lubricating car-axles and similar journals, the combination of an endless screw to be rotated by contact with the periphery of the axle or journal to be lubricated, a spring actuated or yielding support for the screw, and a worm-wheel engaging said screw, substantially in the manner and for the purpose set forth. 2nd. In a device for lubricating car axles and similar journals, the combination of a movable supporting plate, an endless screw journalled in bearings carried by said plate, and adapted to be rotated by contact with the periphery of the axle or journal to be lubricated, a worm-wheel pivoted upon the plate to engage said screw, and a spring adapted to carry and press the screw against the car axle or journal, substantially in the manner and for the purpose herein set forth. 3rd. In a device for lubricating car axles and similar journals, the combination of a supporting frame or base plate, a swinging frame or plate pivoted to said frame, an endless screw mounted to rotate in bearings carried by said plate, a worm-wheel pivoted upon said plate to engage the screw, and a spring upholding the plate and adapted to carry and press the screw against the periphery of the axle or journal to be lubricated, substantially in the manner and for the purpose herein set forth. 4th. In a device for lubricating car axles and similar journals, the combination of a base plate or frame, a guard attached to the same to prevent it from turning, a swinging plate or frame pivoted to said base, a spring to uphold the swinging plate or frame, an endless screw journalled in bearings carried by said swinging plate or frame, to be rotated by contact with the periphery of the axle, and a worm-wheel pivoted upon the swinging plate or frame to engage the screw, the base plate being adapted to be inserted in the axle box or reservoir for containing the oil or lubricant, and the worm-wheel so disposed as to be immersed, or partially immersed in the oil or lubricant when in position for use, substantially in the manner and for the purpose herein set forth. 5th. The combination, with an axle or journal, of an endless screw adapted to be rotated by contact with the periphery of the axle or journal, pivoted arms between which the screw is journalled, a worm-wheel engaging said screw and carried by the arms, a base plate or support to which said arms are pivoted, a spring adapted to uplift the arms and screw, and carry the latter against the axle or journal, and a box or reservoir adapted to contain an oil or lubricant and from which the worm-wheel is supplied with oil, substantially in the manner and for the purpose herein set forth. 6th. The combination of the base frame R, swinging frame G, springs O, worm-wheel L and endless screw N, substantially in the manner and for the purpose herein set forth. 7th. The combination of the base frame A, swinging frame G, springs O, worm-wheel L and screw-threaded lubricating roller N, provided with a worm which is lost at each end P on the periphery of the roller, substantially in the manner and for the purpose herein set forth.

No. 24,760. Elevator Floor Stop and Lock.

(*Enrayure d' Ascenseur*)

Robert B. Hamilton and Henry M. Pellatt, Toronto, Ont (assignees of Charles L. Bartels, the assignee of James S Ashton, Rochester, N Y., U.S.), 19th August, 1886, 5 years.

Claim.—1st. In an elevator, the combination, with the car, of a shifting or operating line having balls or stops attached thereto, and a device affixed to the car, adapted to engage with said balls or stops in such manner as to arrest the motion of the car at the desired points by automatically pulling upon said line, substantially in the manner and for the purpose specified 2nd The combination, with an elevator car, of the shifting rope D provided with balls E, E_1, the movable stops C, C_1, connected together so as to move simultaneously toward, or away from the shifting rope, substantially as described 3rd. The combination, with an elevator car, of the shifting rope D provided with balls E, E_1, the movable stops C, C_1, connected together so as to move simultaneously toward, or away from the shifting rope and spring G, substantially as described. 4th The combination, with the shifting rope, of the two balls E, E_1, provided on their inner ends with the elastic cushions F, F_1, substantially as described. 5th The combination, with the shifting rope of an elevator, of the divided ball E and the elastic cushion or collar F, attached to the ball by means of the flange *t*, inserted in a recess in the end of the ball, substantially as described. 6th The combination, with an elevator car, of the shifting rope D provided with balls E, E_1, the movable stop or stops C, C_1, spring G, push J and spring-catch *a*, substantially as described. 7th The combination, with the shifting rope of an elevator car, provided with ball E, of the sliding stops C, C_1, lever *f*, rod H and spring G, substantially as described. 8th. The combination, with a suitable supporting case, of the sliding stops C, C_1, lever *f*, rod H, spring G, push J and spring-catch *a*, substantially as described 9th. The combination, with the shifting rope of an elevator car, provided with ball E, of the body A having funnel K and supporting a movable stop or stops, substantially as described. 10th The combination, with the shifting rope D, provided with ball E, of the body A, sliding stops C, C_1, funnel K and supporting tube O inclosing the shifting rope, substantially as described. 11th. The combination, with the shifting rope D of an elevator car, of the body A supporting a movable stop and provided with detachable segment Q, substantially as described. 12th. The combination, with an elevator car, of the shifting rope D, provided with ball E, and one or more movable stops C, spring G, spring-catch *a*, lever S, adjustable contact piece U, and a series of lugs or projections attached to the side of the elevator well, substantially as described. 13th. The combination, with an elevator car, of the shifting rope D, provided with ball E and one or more movable stops C, spring G, spring-catch *a*, lever S, indicator scale I, adjustable contact piece U, and a series of lugs or projections attached to the side of the elevator well, substantially as described 14th. The combination, with an elevator, of a series of lugs *m*, m_1, arranged out of line with each other on different stories, and an adjustable contact piece applied to the car and arranged to operate the shifting rope by suitable mechanism, whereby the motion of the car is arrested at any desired point, substantially as described.

No. 24,761. Price Ticket

(*Etiquette de Marchandises.*)

Charles Gulath, St. Louis, Mo., U.S., 19th August, 1886, 5 years.

Claim.—1st. A price ticket, having numerals or letters printed or marked upon its face in bold type, and descriptive matter printed or marked upon its face behind the price and in less distinct type. 2nd. In a price ticket, the combination of the back ground B and face part A, the latter being made of metal, with the price stencilled upon it, and descriptive matter printed or pressed upon it, substantially as shown and described for the purpose set forth.

No. 24,762. Apparatus for Crushing and Measuring Fuel, and for Distributing the same in Furnaces.

(*Appareil pour Broyer et Mesurer le Bois et pour le Jeter dans les Fourneaux.*)

James Hodgkinson, Salford, Eng., 19th August, 1886; 5 years.

Claim.—1st. The crushing plate E supported by a spring plate F, substantially as and for the purpose set forth. 2nd. The crusher C, provided with helical blades D, substantially as and for the purposes set forth. 3rd. The distributor H, provided with blades H_1, substantially as and for the purpose set forth. 4th. The combination of the crusher C with distributer H, arranged and operating substantially as and for the purposes set forth. 5th. The combination of hollow shaft L, distributer shaft O, upright shaft R_1 and crusher shaft T, arranged and operating substantially as and for the purposes set forth.

No. 24,763. Machine for Making, Repairing and Clearing Roads. (*Machine pour Faire, Réparer et Nettoyer des Chemins.*)

The American Road Machine Company, Kennett Square, Penn., (assignee of George W. Tast, Pomfret, Ct.) U. S., 19th August, 1886; 15 years.

Claim.—1st. In a machine for working roads by diagonal ploughing operation, the combination of a diagonally-disposed scraping-blade, supported for upward and downward adjustment, in connection with a wheeled carriage, mechanism connected with said blade for independently lifting and depressing the respective ends thereof, and a counterbalance device exerting a force counteractive to the gravity of said blade in its effect on said lifting and depressing mechanism, for the purpose set forth. 2nd. The combination of an upwardly and downwardly adjustable diagonal scraper-blade, a push-frame supporting said blade from the rear, and a counterbalancing device acting in opposition to the weight to the adjustable blade, substantially as set forth. 3rd. The combination of a diagonally-reversible scraper, a vertically-swinging push-frame and a torsional counterbalancing device in connection with said frame, whereby a portion of the gravity of said scraper and frame is counteracted, as and for the purpose set forth. 4th. The combination, substantially as described, of a diagonally-reversible vertically-adjustable scraper-blade, a supporting carriage mounted on front and rear axles and wheels, blade-adjusting