an adjustable stop to limit and vary the movement of the sliding frame, as set forth 7th. In an apparatus for preserving eggs, the combination of an open main frame A, having a series of tracks or ways A_2, a series of sliding frames B mounted on and suspended between the tracks of the main frame and having limiting shoulders d_1, a series of grooved rollers C independently-journalled in the frames B, and having bearing-wheels C_1 at their ends, bearing on the tracks or ways to support the frames B, and revolve the rollers, stop blocks E having holes e, and stop-pins D, removably secured in the holes e and adapted to alternately strike the shoulders d_1 to limit the movement of the frames B, substantially as described.

No. 23,533. Weigh Bridge. (*Balance-Bascule.*)

Joseph Roar, Mount Albert, Ont., 5th March, 1886; 5 years.

Claim—1st. In a portable weigh bridge, a series of levers pivoted, as shown, to standards having concaved tops and protecting cars or flanges, as shown and for the purpose specified. 2nd. In a portable weigh bridge, the combination of the centre lever pivoted, as shown with the adjusting nut and beam of the scale, as shown, and for the purpose specified. 3rd In a portable weigh bridge, the combination, with the frame A, B, of the levers D and G, standards e, pivots F, and scale-beam H, all adjusted as shown and for the purpose specified 4th In a portable weigh bridge, the hinged rod L, arranged and operating as shown, in combination with the scale-beam H, and lever G, as and for the purpose specified.

No. 23,534. Water Motor. (*Moteur à Eau.*)

John Hughes, Toronto, Ont., 5th March, 1886; 5 years.

Claim.—1st. The ports C and D, arranged to connect the cylinder and valve-chest as specified, in combination with the check-valves N, arranged substantially as and for the purpose specified. 2nd A water motor in which the cylinder and valve-chest are connected together by the ports C, D, the chambers L communicating one with each port C, D, in combination with the check-valves N, arranged substantially as and for the purpose specified. 3rd. A water motor provided with ports C, D, the chambers L communicating one with each port C, D, and communicating with the valve-chest F, through holes M, in combination with the check valve N, substantially as and for the purpose specified.

No. 23,535. Railway Tie.

(*Traverse de Chemin de Fer.*)

Eben N. Higley, Somersworth, N.H., U.S., 5th March, 1886; 5 years.

Claim.—1st. In a railway-tie, substantially such as described, the slot N having the enlarged section r, and the smaller section s, the smaller section standing at an angle to the larger section, substantially as and for the purpose set forth 2nd. The bed-plate or chair K, provided with the slots t, in combination with the tie A, substantially as described. 3rd As a new article of manufacture, the railway chair or bed-plate K, provided with the slots t, and side slots a, substantially as set forth. 4th. In a railway-tie, the bed plate K, provided with the slots t, and the side slots a, in combination with the slots t, and the side slots a in combination with the tie A, provided with the slots N, having the sections r, s, and the bolt H having the shoulders b, substantially as described. 5th. In a railway-tie, the bed-plate K provided with the slots t, and the side slots a, in combination with the tie A provided with the slots N, having the sections r, s, the bolts H having the shoulders b, the nuts J, the clamps E, and the rails, substantially as described. 6th. The improved railway-tie herein described, the same consisting of the sections B, C, provided with the flanges m, f, d, having the apertures z, and slots N having the sections r, s, substantially as described. 7th. The improved railway-tie herein described, the same consisting of the sections B, C, provided with the longitudinal flanges m, d, and the transverse flanges f, said flange m being provided with the aperture z, and the slots N, substantially as set forth. 8th. The improved railway-tie herein described, the same consisting of the sections B, C, provided with the longitudinal flanges m, d, and the transverse flange with f, said flange m being provided with the aperture z, and the slots N, having the sections r, s at an angle to each other, substantially as set forth 9th As a new article of manufacture, a sheet-metal railway-tie having its sides inclined to form a spring-rest for the rails, and provided with flanges adapted to engage the earth and hold the tie in position when in use, substantially as described.

No. 23,536 Apparatus for Extracting Particles of Steel or Iron. (*Appareil pour Extraire des Parcelles d'Acier ou de Fer.*)

Frank E Fisher, Detroit, Mich., U.S., 5th March, 1886; 5 years.

Claim—1st The combination of a magnetic cylinder composed of magnets extending longitudinally the full length of the cylinder, a dynamo for producing a current through the helices of the magnets, substantially as described, for successively breaking the circuit of the magnets, with a hopper located above and extending partially around the revolving magnetic cylinder, as and for the purposes described 2nd. The combination of a magnetic cylinder composed of magnets extending longitudinally the full length of the cylinder, and arranged parallel to, and annularly around, the shaft of the cylinder, a dynamo for producing a current through the helices of the magnets, and means, substantially as described, for successively breaking the circuit of the magnets, with a hopper located above and extending partially around the revolving magnetic cylinder, as and for the purposes described. 3rd. The combination of the hoppe A, the spout A_2, and the chute A_1, with the magnetic cylinder located between the hopper and chute, and partially surrounded by the hopper, and composed of magnets extending longitudinally the length of the cylinder, a dynamo for producing a current through the helices of the magnets, and means, substantially as described, for successively breaking the circuit of the magnets as they pass over the chute, as and for the purpose described. 4th. The combination of a magnetic cylinder comprising electro magnets composed of the loops b, poles b_1, and insulators or diamagnetic metal b_5, with the arms wound from end to end, a dynamo for producing a current through the helices of the magnets, a hopper located above and partially surrounding the cylinder, a spout and a chute below the cylinder, and means, substantially as described, for successively breaking the circuit of the magnets as they pass over the chute, as and for the purpose described. 5th. The combination of a magnetic cylinder, comprising electro magnets extending the full length of the cylinder, and composed of loops b, poles b_1, and insulator or diamagnetic metal b_5, a dynamo for producing a current through the helices of the magnets, and means, substantially as described, for intermittently breaking the circuit of the magnets, substantially as described.

No. 23,537. Calendar and Blotting Pad.

(*Calendrier-Buvard.*)

Hazen Morse, Buffalo, N.Y., U.S., 5th March, 1886; 5 years.

Claim.—The combination of the calendar, of which A A is a slot, or piece partly cut out, so as to permit the sight of the disc B B eyeletted to top sheet E E, and yearly calendar below, with the sheets of blotting paper fastened together, making a "Combination Calendar and Blotting Pad," substantially as and for the purpose hereinbefore set forth.

No. 23,538. Refrigerator. (*Garde-Manger.*)

Joseph Lalonde, Winnipeg, Man., 5th March, 1886; 5 years.

Claim.—The combination of the cases having single or double panels forming the space C, the cold air tube F, the shelf E having the perforation O and the outlet pipe G, substantially as and for the purpose hereinbefore set forth.

No. 23,539. Flour Bolt. (*Bluteau.*)

George T. Smith, Jackson, Mich., U.S., 5th March, 1886; 5 years.

Claim.—1st. In a flour bolt, the combination of the beater shaft, a bearing for the outer end of the beater shaft, the reel head provided with a trunnion surrounding the beater shaft, the driving gears connecting the beater shaft with the trunnion arranged between the beater shaft bearing and the reel head, and a casing surrounding the gearing to prevent the tailings from entering the gearing, substantially as set forth. 2nd In a flour bolt, the combination of the beater shaft, a bearing for the outer end of the beater shaft, the reel head provided with a trunnion surrounding the beater shaft, gearing arranged between the beater shaft bearing and the reel head, and the casing below the gearing, adapted to receive the oil dropping from the bearings and prevent said oil from mingling with the tailings, substantially as set forth. 3rd. In a flour bolt, the combination of the beater shaft, the reel head provided with a trunnion surrounding the beater shaft, gearing connecting the beater shaft with the reel head, and a shell surrounding the gearing and made in two parts, of which one part is attached to the casing, and the other part is attached to, and revolves with, the reel head, substantially as set forth. 4th. In a flour bolt, the combination of the beater shaft, the reel head provided with a trunnion surrounding the beater shaft, gears connecting the beater shaft and the reel head, and a casing surrounding the gearing and made in two parts, of which one part is attached to the casing, and the other part is of less diameter and attached to and revolves with the reel head, substantially as set forth. 5th. In a flour bolt, the combination of the beater shaft, the reel head provided with a trunnion surrounding the beater shaft, gearing connecting the beater shaft with the reel head, the casing at the tail end of the bolt, a partition arranged parallel with said casing, and a short distance inside thereof, a flange projecting rearward from the reel head and fitting closely a circular opening in the partition openings through the reel head for the passage of the tailings, and a casing between the partition and the tail end casing of the bolt to prevent material from contact with the casing, substantially as set forth. 6th. In a flour bolt, the herein-described reel head consisting of the trunnion, the circular plate 22, the casing flange 23, the peripheral flange 28, the flour guard 26 and the spokes connecting the peripheral flange with the casing flange, substantially as set forth. 7th. In a flour bolt, the combination, with the beater shaft, and the reel head provided with a trunnion which surrounds the beater shaft, of a metal bridge-tree provided with bearings for the beater shaft, the trunnions and their connecting gears, the bridge-tree and the lower portions of the bearings being in one piece of metal, substantially as set forth. 8th. In a flour bolt, the combination, with the beator shaft and the reel head, provided with a trunnion which surrounds the beater shaft, of a metal bridge-tree provided with bearings for the beater shaft, the trunnions and their connecting gears, the bearings for the trunnion and the bearings for the inner ends of the gear shafts projecting inward beyond the vertical plane of the outer face of the reel head, and having supporting brackets, the bearings and the brackets being all formed in one piece of metal, substantially as set forth. 9th. In a flour bolt, the combination, with the two conveyors arranged side by side, of the sprocket wheels on the conveyor shafts, the sprocket wheel 51, the chain and the adjustable sprocket wheel 52, substantially as set forth. 10th. In a flour bolt, the combination of the conveyors, the sprocket wheels on the conveyor shafts, the shaft 36, gearing connecting the beater shaft with shaft 36, the sprocket wheel 51, and the chain, substantially as set forth. 11th. In a flour bolt, as a means for driving the conveyors, the combination, with the beator shaft and the reel, of a shaft geared to the beator shaft and to the reel and carrying a sprocket wheel, and a chain and sprocket wheels connecting the sprocket wheel on the shaft with the conveyors, substantially as set forth. 12th. In combination with a revolving reel, a conveyor below the reel, a vibrating brush arranged on a line parallel with the axis of the reel, a rock-shaft also arranged on a line parallel with the axis of the reel, and carrying the brush, a rotating wheel arranged within the casing and driven by the conveyor, and means connected to the rock shaft and actuated by the rotating wheel for vibrating the brush, substantially as set forth. 13th In combination with a revolving reel, a conveyor below the reel, a vibrating brush arranged on a line parallel with the axis of the reel, a rock-shaft