No. 8566. Improvements on Saw Mill Carviages. (Perfectionnements aux charriots des

Henry Hiscock, Mount Forest, Ont., 20th March, 1878, for 5 years

Henry Hiscock, Mount Forest, Oht., 20th March, 1878, for a years

Clobin—1st. The two parallel rack bars D having a reciprocal incovement
lengthwise in a frame G carrying a shaft F laving a cog pun in E intervening the bars D which on alternate ends, are provided with camps. I for
scenring the log endwise. 2nd In combination with the frame t-the ratchet
drum K on shaft F lever L having pauls M and springs N, for retaining
the bars D fixedly when the clamps I are holding the log., 3rd. The knee
standards A provided with sides R nating pauls S for elevating the bars D. 4th. In combination with the knee standard A the dog T connecting rod I
lever V and segment rack W for holding the log by dogging.

No. 8567. Improvements on Threshing Machines. (Perfectionnements aux machines à buttres

Francis W. Glen, Oshawa, Ont., 20th March, 1878, for 5 years.

Claim. In case hardening the point Cr of a threshing machine cylinder and concave tooth C.

Xo. 8568. Improvement on Weather Strips. (Perfectionnement des bourrelets de portes.)

David O. Hink, Maryville, Miss., U.S., 20th March, 1878, for 5 years.

Claim. A weather strip provided with an extension slide, clamped between the drop and spring.

No. 8569. Improvements on Blind Fixtures. (Perfectionnements aux rouleaux des videaux.)

Thomas H. Stanton, London, Ont., 20th March, 1878, for 5 years.

Claim.—1st. The combination of the cords J K L, hooks A B I and roller liprovided with enlarged turned ends O P, 2nd In combination with the above the cord I, hooks C D II and roller G provided with enlarged turned eds M N

Improvements on Steam Boilers. No. 8570. (Perfectionnements and chaudieres a capeur.)

William H. Wilson, William C. Harris and Rollin D. Rockwell, Westfield, N.Y., U.S., 20th Murch, 1878, for 5 years.

-1st, The combination of the annular base A and the segmental estime—183, the combination of the annual case h and the segments setting D D₁, constructed so as to receive the magazine G and suitably connected together at the top, and to the base at the bottom—2nd The combination of the annual raties h with the sections D D₁ the steam pipes a apples b b and top connections, and the magazine G.

No. 8571. Improvements on Handles for Saws. (Perfectionnements aux manches de seies.)

Eben M. Boynton, New York U.S. 20th March 1878, for 5 years.

"Raim.-1st. A cross-cut saw handle consisting of a common hand saw bandle D and an upright handle E secured thereto, 2nd A saw handle hadde D and an upright handle E secured thereto, 2nd A saw handle provided with an internal chamber to receive files and similar tools, and with a sacrew cap or equivalent device for closing its end; 3rd. In combination with a saw provided with ears j, the handle D provided with hole g and the handle E provided with the bolt f washer h and hook i 4th, saw handle provided with an extension rod or bolt F K expanding and contacting by series inguities of the content of the washer handle provided with the big i and the threaded hole in its upper end, the washer is mounted on the bolt, and the non-rotating handle E provided with the later of mounted by the content K. internal bolt or screw K.

No. 8572. Improvements on Gas Apparatus. (Perfectionnements aux ampareils a gaz.)

William Smith, Pittsburgh, Pa., U.S., 20th March, 1878, for 15 years.

Claim -ist. The combination of a series of vertical retorts having deflectrights, furning the central flue and side flues, with a series of channelled and perforated side walls, and central flue chamber. 2nd. The long and maily growed and perforated the lining for gas retort furnaces. 3rd. The flask shaped gas-retort provided with the neck and oil inlet, and addition to be set vertically; 4th. In combination who the flask-shaped vertical retorts, the lives or bearing blocks arranged thereunder

No. 8573. Improvements on Reaping Machines. (Perfectionnements aux moissonneuses.)

John Pattison, Dorking, Ont., 20th March, 1878, for 5 years

Claim—1st. The combination with, and the application of swivel gear to the working or driving parts of reaping and mowing machines, 2nd. The starknucke marked O separately, as well as in combination with the working parts of reaping and mowing machines.

No.8574. Improvements on a Child's Waggon. (Perfectionnements a une voiture d'enfant.)

Frank X. Reno (Assignee of Abbott Q. Ross), Cincinnati, Ohio, U.S., 20th March, 1878, for 5 years.

China.—Ist. The combination of a toy galloping horse mounted upon a carrage, and intermediate means between the horse and the propelling devices of the carriage whereby the galloping of the horse will cause the propulsion of the carrange or circ yeria. 2nd. The combination of the galloping proposess of the carriage or erective, and, the commission of unsupon of the proposes of the carriage, mechanism of transmitting the motion from one to the other, and propolling means under the control of the rider. 3rd The combination of the galloping horse, the rems for actuating it, the wheels of the carriage and intermediate mechanism for transmitting motion from the horse to the wheels; 4th The shafts B united in front to form a horsema.

No. 8575. Improvements on Grain Separators. (Perfectionnements aux séparatours des grains.)

James Donnelly, Columbus, Ohio, (Assignee of Edward S. Clark, Buffalo, N.Y.,) U.S., 22nd March, 1878, for 5 years.

Claim.—1st. The wings of a fan for faming mills made in sections D and D₁, the section D of each wing being stationary on the arms, and the section D adjustable thereon. 2nd. The stationary curved guirnt-screen J placed in front of the fan above the lower set and in rear of the upper set of the movable screen in the show, 3rd. The springs K for supporting and adjusting the shoe.

No. 8576. Improvements on Vehicles. •

(Perfectionnements and voitures.)

Schastian Gilzinger and Abel A Crosby Rondont, NY., US., 22nd March, 1878, for 5 years.

 $im \rightarrow A$ which constructed with U shaped springs arranged in pairs with the fold of one spring apposite to the fold of the other, and the ends of the springs secured to the salls of the body, and to the side bars or other supporting devices.

No. 8577. Improvements in Stringing Sleigh Bells. (Perfectionnements dans l'enfilage des grelots.)

Frank Armstrong, Bridgeport, Ct., U.S., 22nd March, 1878, for 5 years, Claim,—18t. A series of hinged metallic plates with bells attached thereto, and provided with suitable end fastenings, 2nd. The plates a a, when made in two parts, and connected at their overlapping ends by the shank of the bell, or other rivet.

No. 8578. Improvements on Millstone Dressing Machines. (Perfectionnements aux machines a rhabiller les meules.)

Samuel I. Griscom Pottsville Pa. (Assignce of Thomas McFeely, Union, Ind.) U.S., 22nd March, 1878, for 5 years.

Claim.—Ist. The combination of the bed-plate B provided with a projection h and adapted to the surface of the stone, with the guide base A connected to the said projection. 2nd, The combination of the bed-plate of a milistone dressing machine with the base plate A adapted to be both titted vertically and adjusted horizontally on the said bed-plate.

No. 8579. Improvements on Millstone Dressing Machines. (Perfectionnements aux machines à rhabiller les meules.)

Samuel E Griscom Pottsville, Pa., (Assignee of Thomas McFeely, Union, Ind.,) U S , 22nd March, 1878, for 5 years.

Claim.—1st. The carriage bed pivoted to the sliding frame B and adapted to be inclined in respect to the same for dressing furrows: 2nd. The combination of the bed B, its ears Q and slotted standard G with the bed D hung to the ears Q provided with screws K and nuts F adapted to the standards: 3rd. The combination of the pivoted bed D with carriage C and its operating mechanism carried by, and adapted to rock with the bed

No. 8580. Improvements on Glass Vessels.

(Perfectionnements aux vases de verres.) Daniel W. Norris, Elgir, 101, U.S., 22nd March, 1878, for 5 years.

Claim.—1st. An increed glass vessel for containing and transporting haptids, having an elastic metallic run extending under the edges of the bquids, having in clastic metallic run extending under the edges of the bottom for the purpose of furnishing a support for the vessel without exchaling right through the bottom when the incased vessel is raised, 2nd The combination of a glass vessel, paper side case, and metal top covering; 3rd. In combination with an incased glass vessel, a glass neck or collar around the supply or discharge oritice, having external screw threads, a metal covering around the peripherty of the collar, and having seriew threads and a seriew cap ring, or nozzle adapted to overlap the inetal covering, 4th. The combination of the lifting bail or handle and the inclosing case with a screw neck anda cap or ring seriewing or otherwise secured around said neck, and lapping over the top covering whereby, in lifting the vessel, the whole or a portion of the weight is supported by the seriew neck: 5th. In combination with the incased glass vessel herein described, the supplemental wooden bottom, 6th. The combination with a glass vessel, of a fixed metal cover provided with ears for the carrying bail.

No. 8581. Attachment for Bridling Brushes. (Appareil a serrer les pinecaux.)

Charles Boeckh, Toronto, Ont., 22nd March. 1878, for 5 years.

Claim.-An independent and adjustable bridle for paint, whitewash and other brushes, formed by a stout wire band C, in combination with plates D D to allow of their adjustment upon the screws E used to secure the bridle to the handle B.

No. 8582. Improvements in Lanterns. (Perfectionnements dans les lanternes.)

Alfred L. Baron, Evan F. Cash and David Raukin, Bellaire, Ohio, U.S., 22nd March, 1878, for 5 years.

Claim.—1st. The method of counterbalancing the air currents in a lantern Claim.—1st. The method of counterbalancing the air currents in a lantern by admitting fresh arraken from above the outer globe through connecting chambers into the cone, and fresh air through the sides of the base to points above the cone, the two currents being kept separate and apart; 2nd. The combination of the air chamber to the tween the two globes, the air chamber C., between the double walls of the upper part of the base, and the air chamber C't between the top of the oil reservoir and the diaphragm above it, said air chamber being closed except for the entrance of air above the outer globe and for the extra of air into the interior of the cone: 3rd In combination with upper base A+ of a lantern, of the air chamber C2 in the same, the openings J J1 made through the side of such upper base; 4th. The combination of the openings J J2 and the perforated disc N; 5th. The combination of