

No. 4853. EMMONS R. STOCKWELL, Theresa, N. Y., U. S., 15th June, 1875, for 5 years: "Improvement on Carriage Tops." (Perfectionnements des soufflets de voitures.)

*Claim.*—The bow-iron branches B, having sockets C, for receiving the ends of the carriage-bows.

No. 4854. JOHN F. DONOGHUE, Springfield, and GEORGE CROMPTON, Worcester, Mass., U. S., 15th June, 1875, for 5 years: "Anti-Incrustation Battery for Boilers." (Batterie à anti-incrustation pour les chaudières à vapeur.)

*Claim.*—A spiral of copper-wire, partially incased or embedded longitudinally in a base of zinc.

No. 4855. WILLIAM GRIFFITH, Toronto, Ont., 15th June, 1875, for 5 years: "Improvements in Locks." (Perfectionnements dans les serrures.)

*Claim.*—1st. The plain metal-plates A, A', in combination with the shoulder-pins D, and lugs C; 2nd. The set-bolt G, in combination with the recess I, in the bolt E.

No. 4856. JAMES L. GREGORY, (assignee of W. Redheffer) St. Louis, Mo., U. S., 15th June, 1875, for 5 years: "Combined Egg-Beater, Churn and Ice-Cream Freezer." (Appareil à battre les œufs et faire la crème à la glace et baratte combinés.)

*Claim.*—1st. The combination with a can having a convex-bottom of a beater A, composed of hollow perforated frustums of cones A'; 2nd. The hollow perforated frustums of cones A, mounted on a metal tube A<sub>1</sub>, and united to a wooden-handle A<sub>2</sub>; 3rd. The combination of the tight-tub D, provided with an interior grooved ring E, having the notches e, with a can or receiver B, provided with radial arms F; 4th. The combination of the tight tub D, having a grooved-ring E, the can B, having the radial arms F, with the base G; 5th. The combination with the can B, with studs H, and beater A of a detachable base provided with clamping hooks I, for securing it to the can; 6th. The base J, composed of the wooden core J<sub>1</sub>, and metal sheathing J<sub>2</sub>, with fastening down-pieces J<sub>3</sub>.

No. 4857. ALBIN TAPLIN, Forestville, Ct., U. S., 15th June, 1875, for 5 years: "Mode of Forming Sheet Metal Screw Threaded Collars." (Mode de fabrication des cols métalliques en vis.)

*Claim.*—The improvement in the art of forming threaded sheet-metal collars which consists of first threading the blank in the flat, and afterward forming said threaded portion into a collar.

No. 4858. HOLLIS W. MERRILL, and JAMES W. HOITT, Lynn, Mass., U. S., 15th June, 1875, for 5 years: "Boot and Shoe Tip." (Carre de chaussure.)

*Claim.*—A boot and shoe-tip, composed of prepared raw-hide, and permeated throughout with a suitable colour.

No. 4859. ANDREW TOLTON, Eramosa, O, 15th June, 1875, for 5 years: "Improvements on Machines for Threshing Peas" (Perfectionnements aux machines à battre les pois.)

*Claim.*—1st. The combination of a fan, a cutter and a separator operating conjointly, in which the vines are cut during the operation of threshing; 2nd. In combination with a cutting box and fan, a pneumatic tube P, for conveying hay and straw during the operation of cutting.

No. 4860. DAVID LISTER, Toronto, Ont., 15th June, 1875, (Extension of Patent No. 472), for 5 years: "Improvements on the Art of Welding Iron and Steel, and for purifying the same in Smelting and Puddling Furnaces, and in a composition of matter for that purpose." (Perfectionnements dans l'art de souder le fer et l'acier et de les purifier dans les fourneaux de forge et de puddlage, et une composition pour cet objet.)

*Claim.*—A new and useful art or process of welding iron and steel, and purifying the same in smelting and puddling furnaces by using in such art or process equal parts of caustic-soda, and caustic-potash, united or separately as described; and also a new and useful composition of matter composed of caustic-soda and caustic-potash united in equal parts or separately, to be used in the said process of welding iron and steel, and purifying the same in smelting and puddling furnaces.

No. 4861. LOUIS BRUSH, Buffalo, N. Y., U. S., 15th June, 1875, for 5 years: "Improvements in Passage Tickets." (Perfectionnements aux billets de passage.)

*Claim.*—A passage-ticket extending over two or more lines of railroads or divisions thereof, consisting of a passenger strip containing a continuous list of the stations, on the entire route and a series of coupons for the different roads or divisions, not good for fare but forming a voucher for each road or division, to be detached by the different conductors, while the passenger portion forms a continuous ticket and stop-over check.

No. 4862. EDGAR McMULLEN, Montreal, Que., (Assignee of D. W. De Forest), 15th June, 1875, for 5 years: "Improvements on Machines for Manufacturing Tobacco." (Perfectionnements aux machines à fabriquer le tabac.)

*Claim.*—1st. The combination of gears g, m, f, f, drum E, rolls B, C, belt A, and pivoted-frame G; 2nd. The combination of gears g, m, f, f, drum E, rolls B, C, frame G, and the sliding-roll D, band S, and treadle T.

No. 4863. WILLIAM N. WHITELEY, Springfield, Ohio, U. S., 15th June, 1875, for 5 years: "Mower and Reaper." (Fancheuse-moissonneuse.)

*Claim.*—1st. The main-frame constructed in one single piece of wrought-metal; 2nd. The main-frame of wrought-metal, constructed in such a manner that both its branches are united at the point of connection with the finger-beam; 3rd. The bracket K, attached to the main frame, for the purpose of securely sustaining the rear inner end of the finger-beam, in its proper place, by means of the hinge-joint-attachment; 4th. The adjusting-device J, H, one part being connected with the pole B, and the other permanently to the main-frame A, so that the driver can, by means of the lever, raise and lower the rear of the main frame, and the heel of the cutting apparatus and adjust the same to different heights, while the machine is in motion; 5th. The combination of the angle-rod K, in front of the knut-bar, with the independent plates or supports q, fastened to the under side of the finger-beam, in such manner that the front upper edge of said angle-rod forms a continuous narrow bearing on which the sections of the knife rest, and the independent supports (or plates) q, form bearings for the rear-edge of the knife back, whereby the surface-bearings of the knife upon the guards and angle rod is materially reduced, the open space thus formed between the bearings preventing gumming or clogging from dirt in the field; 6th. The combination of the plates (or supports) q, fastened to the finger-beam in such manner as to wedge firmly between the guards, and thereby prevent any side-motion of the guards, whereby one rivet through each guard-hinge is sufficient to fasten them securely to the finger-beam; 7th. Communicating motion to the reeling and raking apparatus from the driving-wheel, by means of the cog-gearing, one wheel being connected to the master-wheel, and one held in position by the stationary master-wheel axle to communicate motion from the master-wheel to the reeling and raking apparatus; 8th. The combination of the rake-supporting-arch N, and spindle S<sub>1</sub>, carrying the crown wheel-pinion a<sub>1</sub>, of the rake, the rake-cam and the driving mechanism of the rake from the main-wheel and axle; 9th. The combination and arrangement of the cord or chain-mechanism connected directly to the front switch, whereby the driver can at will keep the switch closed, and by that means suspend the action of the rake from discharging the grain when the rake is set to work automatically; 10th. The cam-guard constructed of two pieces jointed together at a point co-incidental with the joint or hinge, upon which the finger-beam rocks or turns, for the purpose of conforming to the oscillating movements of the cutting-apparatus.

No. 4864. DANIEL J. TOPLEY, Brooklyn, N. Y., U. S., 17th June, 1875, for 5 years: "Fire Extinguisher." (Extincteur d'incendie.)

*Claim.*—1st. The combination with the shell A, of the bolsters G, formed and arranged to serve the double purpose of pockets and of a knapsack-bearing; 2nd. The combination of the clamps D<sub>1</sub>, and sliding band D<sub>2</sub>, with the sleeve B, provided to receive the acid-cartridge, whereby the said cartridge is positively and rigidly held against the thrust of the breaking-bar C<sub>1</sub>; 3rd. The sliding breaking bar C<sub>1</sub>, provided with the central point or spur C<sub>2</sub>, and the lateral points or spurs C<sub>3</sub>, whereby the fracture of the acid cartridge is started by the former, and spread, and completed