No. 10,618. Improvements in Hoes.

(Perfectionnements aux houes.)

Thomas B. Lockwood, Baltimore, Md., U. S., 5th November, 1879, for 5 years.

Claim.—A hoe having the rear side of its eye-plate rabbeted to form a straight shoulder and its blade rivetted thereto and meeting said shoulder.

No. 10,619. Improvements on Car-Couplers.

(Perfectionnements aux attelages des wagens.)

John D. Kiely, Toronto, Ont. (Assignee of Orson B. Kendall, Buffalo, N. Y., U. S.), 5th November, 1879, for 5 years.

Claim.—In a railway car draw-head, the opening made in the top of the draw-heads, in combination with the hook or horn rising from the crutre of the opening in the draw-heads and so arranged as to enable the cars to be coupled with safety.

No. 10,620. Improvements on Harvesters.

(Perfectionnements aux moissonneuses.)

Henry A. Howe, Detroit, Mich., U. S., 8th November, 1879, for 15 years.

Claim.— 1st. In a harvester, the recessed main frame with two bearings for the tongue, a foot rest, hollow axle arms, crank shaft support and the lower half of the crank shield cast in one piece; 2nd. In a harvester and in combination with the main frame cast in one piece, the hollow axle arms chilled upon the upper half of their interior surface for the purpose of forming smooth bearings for the axle and preventing the necessity of boring said arms to fit the axle, or the use of boxes; 3rd. In harvesters and in combination with the main frame, the hollow crank-shaft box cast in one piece, with the upper half of the crank shield and socket for ball-joint and adapted to be secured in a recess in the main frame; 4th. In a harvester and in combination with a recessed main frame enclosing the gearing, and in combination with a recessed main frame enclosing the gearing, and in combination with the gearing upon the axle, the rook shaft carrying a spur wheel and

pinion, said shaft being journaled in the sides of the main frame eccentrically to the axis of said spur wheel and shaft and provided with a lever by means of which said spur wheel and shaft are thrown in or out of engagement with the gearing on the axie; 5th. In a harvester and in combination with the axie thereof and the driving wheels, a stationary half of a clute-rigidly secured to the axie and forming a sand protector at the end of the axie baxes and a loose half of a clutch sleeved upon the axie and provided with inclined faced ligs which, by their engagement with the spokes of the wheels, compel or release the engagement of the two parts of the clutch, without the intervention of pawls or levers; 6th. In a harvester and in combination with an adjustable and folding cutter or finger bar, the devices described consisting of the parts 8 9 10 11 12 13 16 17 18 19 20 21 22 24 25 27 and 36 and 8 \$10. by means of which the finger bar is titled to any desired cutting angle, litting to any desired height or folded perpendicularly; 7th. In a harvester and in combination with an adjustable and folding cutter or finger bar, and with devices for tilting, litting or folding said bar, the adjustable wheel at the rear end of the shoe; 8th. In a harvester, and in combination with a finger bar, the concave-snaped shoe 0, the plate R, the wheel P, draw-bar and alignment rod U, rod S, link St, tongue V and the devices for tilting, raising and folding said finger bar and shoe are connected with suitable devices for raising or folding the same; 10 h. In a harvester and in combination with a finger bar and shoe, the plate R with its perforated projection we and lugs #. by which said finger bar and shoe are connected with suitable devices for raising or folding the same; 10 h. In a harvester and in combination with a finger bar and shoe, the plate R with its perforated projection we and lugs #2 by which said finger bar and shoe are connected with suitable devices for raising or folding the same; 10 h. In a harvester and in comb

List of Patents issued to up 22nd November, 1879, but not yet Officially published in the Patent Office Record.

No. 10,621. W. Goldie, Fentonville, Mich., U.S.A., "Shingle Machine," (Extension of Patent No. 10,522), Nov. 8th, 1879.

No. 10 622. P. K. Dederick, Albany, N. Y., U. S. A., "Baling Press," Nov. 8th, 1879.

No. 10,623. W. Lamb, Green Bay, Wis., U. S. A., "Wire Rope Carriage Movement," (Extension of Patent No. 4,359), Nov. 8th, 1879.

No. 10,624. H. McLeod, Hardwood Hill, N. S., "Flexible Harrow," Nov. 8to, 1879.

No. 10,625. J. Rourk, Kingston, Ont., "Railway Switch Point Mover and Fastener," Nov. 8th, 1879.

No. 10,626. B. J. Warden, Cincinnati, Ohio, U. S. A., "Vehicle Dash," Nov. 8th, 1879.

No. 10,627. M. A. Richardson, Bridgeport, Conn. U. S. A., "File Sharpening Process," Nov. 8th, 1879.

No. 10,628. G. L. Anders, Boston, Mass., U. S. A., "Apparatus and Circuits for Signalling in District Telephone Systems," Nov. 8th, 1879.

No. 10.629. L. M. Fitch, Rome. (Assignee of E. R. Fitch, Hubbardsville, N. Y., U. S. A.), "Spring for Platform Wagons," Nov. 11th, 1879.

No. 10,630. H. Alexander, A. A. Ferguson, R. Munro, P. Hastie, and H. J. E. Alexander, Glasgow, Scotland, and J. McDougall and R. Logie, Montreal, Que.. (Assignees of F. A. Walsh, Chicago, Ill., U. S. A.), "Paint Can," (Extension of Patent No. 10,509), Nov. 11th, 1879.

No. 10,631. H. Alexander, A. A. Ferguson, R. Munro, P. Hastie and H. J. E. Alexander, Glasgow, Scotland, and J. McDougail and R. Logie, Montreal, Que., (Assignees of F. A. Walsh, Chicago, Ill., U. S. A.), "Paint Can," (Extenson of Patent No. 10,509), Nov. 11th, 1879.

No. 10,632. C. E. Brush, Toronto, Ont. (Assignee of C. C. Shelby, New York, U. S. A.), "Clasp and Stocking Supporter," Nov. 11th, 1879.

No. 10,633. G. Scott and J. Young, Montreal, Que., "Printers' Metal Quoin," Nov. 11th, 1879.

No. 10,634. H. Harris, Wallaceburgh, Ont., (Assignee of J. Greenwood, Rochester, N. Y., U. S. A.), "Barrel Hoop Dressing Machine." Nov. 11th, 1879.

No. 10,635. A. P. Case, Detroit, Mich., U.S.A., "Car Axle Box Cover," November 11th, 1879.

No. 10,636. The McCormick Harvesting Machine Co., (Assignee of W. R. Baker, Chicago, Ill., U. S. A., "Iron Mower," November 11th, 1879.

No. 10,637. G. Globe, Stanstead, Que., "Spring Mattrass, November 11th, 1879.

No. 10,638. J. Higginbottom and E. Hutchinson, Liverpool, England, "Wheat Duster," November 11th, 1879.

No. 10,639. J. and J. G. Hardy, Vienne, Austria, "Railway Brakes," November 11th, 1879.

No. 10,640. A. Muirhead, Westminster, England, and G. K. Winter, Madras, India, "Quadruplex and Multiplex Telegraphy," Nov. 11th, 1879.

No. 641. W. Gardner, Cleveland, Ohio, U. S. A., "Machine Gun," November 11th, 1879.

No. 10,642. B. Payne, Ox Bow, N.Y., U.S.A., "Snow Plough," November 11th, 1879.

No. 10,643. C. Ellery, Albany, N. Y., U. S. A., "Collating Attachment for Printing Presses, &c.," November 11th, 1879.

No. 10,644. C. Ellery, Albany, N.Y., U.S.A., "Paper Feeding Device," November 11th, 1879.

No. 15,645. A. B. Tracy, Mayville, N. Y., U. S. A., "Check Rein Support," November 11th, 1879.

No. 10,646. H. B. Casgrain, Ottawa, Ont., "Office Fyle," (Extension of Patent No. 150), November 13th, 1879.

No. 10,647. J. W. Upson, Sallma'ge, Ohio, U. S. A., "Apparatus for Screening and Loading Coal," (Extension of Patent No. 4,044), November, 14th, 1879.

No. 10.648. M. Callan, Innerkip, Ont., "Lime Kiln," (Extension of Patent No. 4,040), November 14th, 1879.

No. 10,649. W. Goldie, Fentonville, Mich., U. S. A., "Shingle Machine," (Extension of Patent No. 10,522), November 14th, 1879.

No. 10,650. W. B. Cowan, Guelph, Out., "Parlor Game," Nov. 17th, 1879. No. 10,651. C. D. Rogers, Providence, R.I., U.S.A., "Wire Drawing Machine," November 17th, 1879.

No. 10.652. G. P. Chiles, Camden Town, Eugland, "Improved Floor Covering," 17th November, 1879.

No. 10.653. G. W. Campbell, West New Brighton, N.Y., U. S. A., "Oil Press Plates," 17th November, 1879.

No. 10.654 T. A. Edison, Meula Park, N. Y., U. S. A., "Electric Lamp," 17th November, 1879.

No. 10,655. E. Kelly, Baby's Point, O., "Hair Fins," 17th November, 1879.

No. 10,656. A. Warner, New York, U. S. A., "Preparation of Bened Pork, Hams and Shoulders," 17th November, 1879.

No. 10,657. C. D. Rogers, Providence, R. I., U. S. A., "Bolt Heading Machine," 17th November, 1879.

No. 10.658. C. M. Morris and J. Clark, Jr., Albany, N. Y., U. S. A., "Means of attaching Stove or other legs," 17th November, 1879.

No. 10.659. S. M. Brinton. Coversville (Assignee of C. Smith, Irwins' Station, Penn., U. S. A.), "Smoke Condensing Furnace for Locomotives, &c.," 17th November, 1879.

No. 10.660. A. B. Crapley (Assignee of W. T. Duvall), Geortown, Columbia, U. S. A., "Mill Stone Driver," 17th November, 1879.

No. 10,661. C. P. Chisholm, Oakville, O., "Plant Box" (Extension of Patent No. 4077), 18th November, 1879.

No. 10,662. H. M. Welch, Cowansville, Q., "Side Bar Phaeton," 19th November, 1879.

No. 10.863. J. Tebo, Mariborough, Mass., U. S. A., "Shoe," 21st November, 1879.

No. 10,664. D. H. Seymour and H. R. A. Boys, Barrie, O., "Tallow Cup," 21st November, 1879

No. 10,665. F. Gross, Montreal, Q., "Pnenmatic Camera Shutter," 21st November, 1879.

No. 10,666. J. A. Maloney and G. Richer, Washington, Columbia, U. S. A., "Sand Blast Grain Cleaner," 21st November, 1879.