

**No. 15,569. Improvements on Electric Couplings and Train Telegraphs.** (*Perfectionnements aux accouplages et aux télégraphes électriques des trains de railroutes.*)

Edward D. Parker, Salina, Kansas, U. S., 3rd October, 1882; for 5 years.

*Claim.*—1st. In an electric apparatus for signalling on trains, the combination of the circuit closer F fitted for operation by the cord or rope p with the main circuit wires a a of the locomotive, and branch wires c d. 2nd. In an electric apparatus for signalling on trains, the combination, with the electric wires a a, of the coupling formed with the springs h h, plates i i and tongues g g of non-conducting material, said plates i and springs h being integral and attached to the wires a whereby, when the coupling is detached, the circuit is closed through the springs h h and, when coupled, electric continuity of the line wires is secured, the plates i i being separated from each other at all times.

**No. 15,570. Improvements on hay and straw Cutting Machines.** (*Perfectionnements aux hache-paille.*)

David W. Carpenter and Edwin Shaw, Walton, N. S., 3rd October, 1882; for 5 years.

*Claim.*—1st. The combination of feeding roller A and ratchet wheel E, with pawl H and lever G. 2nd. The combination of lever M, with slot K and adjustable weight S. 3rd. The combination of lever M, slot K and rods O O, with feeding roller A.

**No. 15,571. Improvements on Undergarments.** (*Perfectionnements aux sous-vêtements.*)

Thomas B. Farrington, Minneapolis, Minn., U. S., 3rd October, 1882; for 5 years.

*Claim.*—1st. A pair of drawers composed of an upper cloth part A and close fitting lower knit part B joined above the calf. 2nd. A pair of drawers having knit extremities extending from the ankle to a point above the calf, said extremities having two more contractile parts, one about the ankle and the other about the leg, at a point above the calf and below the knee. 3rd. A garment composed of the cloth part A and the knit extremities B, the upper margin of said knit portions enlarged by increase of stitches to practically equal the cloth part in size. 4th. A garment composed of a cloth body and knit ends, said knit ends produced in a flat web and widened at the top by additional stitches upon the selvaige edges to equal the width of the cloth part at the point of juncture, and vertically seamed in line with the inclined seam of the cloth part. 5th. In combination with the body A, the knit end having its upper portion knit in polka stitch and its lower, or free portion, knit in one and one stitch.

**No. 15,572. Improvements on Wind Mills.** (*Perfectionnements aux moulins à vent.*)

Blanchard Chamberlain, Joseph H. Wilson, Robert Lamb, George H. Palmer and Harry E. Palmer, Bellefontaine, Ohio, U. S., 3rd October, 1882; for 5 years.

*Claim.*—1st. The combination, with counterbalance rod and chain L and feathering rod N, of the rack G and vertical governor shaft A, provided with vane arm A', arm E and segment arm F. 2nd. The combination of feathering rod N, rack G, governor shaft A, arms E F and A', vane C, bracket B, turn-table B', collar I, lug K and securing device J. 3rd. The combination of ratcheted plate V, latch 37, on the gearing frame, and tripping rod W carried by the tail vane.

**No. 15,573. Improvements on Scaffolds.** (*Perfectionnements aux échafaudages.*)

William E. Dean and John C. Dean, (assignees of George W. Smith,) Harlansburg, Penn., U. S., 3rd October, 1882; for 5 years.

*Claim.*—In a scaffold, the combination, with the upright or slightly inclined posts A, having adjustable forked braces a provided with hooks a', or means of attachment for the platform, of hoisting ropes thereto, of the platform D, the sliding uprights C, having horizontal bars H fitted to move upon the posts A, the handled shaft or drum B having passed through it the platform hoisting rope F, passed in contact with pulleys c hung upon the uprights C, said rope having its ends secured to the hooks a' of the braces a, the levers c' pivoted to the uprights C and bearing in sockets in the posts A, and of the cords c' connected to the outer end of said levers and passed over the platform D.

**No. 15,574. Improvements in Means for Extinguishing Fires on Railway Trains.** (*Perfectionnements aux moyens d'éteindre les feux sur les trains de railroutes.*)

Robert C. Blackall, Albany, Charles D. Hammond, Jesse W. Sprong, Slingerlands, and Samuel Huntington, Albany, N. Y., U. S., 3rd October, 1882; for 5 years.

*Claim.*—The combination, with the boiler of a locomotive, of a feed water injector C, having a delivery pipe E for connecting said injector with a check valve F, attached to said boiler, provided with a branch pipe E' and stop valves e' and e' arranged for the purpose of optionally discharging the entire volume of water passing through the injector, either into, or outside of said boiler, or for dividing the volume of water.

**No. 15,575. Improvements in a Sap Spout and Pail.** (*Perfectionnements à un seau et siphon pour la sève.*)

Charles C. Post, Burlington, Vt., U. S., 3rd October, 1882; (Extension of Patent No. 1729).

**No. 15,576. Improvements on Step Ladders.**

(*Perfectionnements aux échelles à queue.*)

Henry P. Spencer, Detroit, Mich., U. S., 4th October, 1882; for 5 years.

*Claim.*—The combination in a step ladder, of the side pieces A entire at their extremities and slit between the ends, the steps B, prop C, the brace D, the central rod d and the sliding sleeve a concealing a cam which is operated by the lever d.

**No. 15,577. Improvements on Hoop Cutting Machines.** (*Perfectionnements aux machines à tailler les cercles.*)

David F. Holston, Defiance, Ohio, U. S., 4th October, 1882; for 5 years.

*Claim.*—1st. A machine for the purpose of cutting hoops from veneers in which is combined, with the necessary frame, an adjustable feed mechanism, a vertically reciprocating knife, a pressure foot and a stop. 2nd. A machine for cutting hoops from the edge of veneers, wherein the reciprocating movement of the knife is compelled by a cam of the main shaft, and the rotary motion of the feed roll is intermittently compelled by another cam, also secured to said main shaft. 3rd. In a machine for the purpose of cutting hoops from the edge of veneers, the combination of the rolls C D, adjustable roll E and pressure foot N, for the purpose of feeding and confining the veneer while being cut. 4th. The combination of the frame A, bed B, rolls C D, vertically adjustable roll E, boxes F, standard G, lever H, weight I, vertically reciprocating knife J, cams K O, shaft L, lever P, pitman M Q, crank R and ratchet wheel S.

**No. 15,578. Improvements in the System of Constructing Roads.** (*Perfectionnements au système de construction des chemins.*)

William B. Henning, Waterloo, Jacob B. Casebeer and Timothy G. Matheny, Auburn, Ind., U. S., 4th October, 1882; for 5 years.

*Claim.*—1st. The combination, with a flat surfaced or slightly crowned road or other thoroughfare, of drain pipe lines underneath said road surface, the said pipe lines serving as drain pipe lines, aerating pipe lines and heating pipe lines. 2nd. The combination, with a flat surfaced or slightly crowned road or other thoroughfare, having a system of pipe lines there under, of connecting sections and aerating chambers for the said pipe lines. 3rd. The combination, with a flat surfaced or slightly crowned road or other thoroughfare, having a system of drain, pipes, connections, and aerating chambers, of filtering sections underneath the said road surface and over the said pipe lines.

**No. 15,579. Paper Bag Machine.** (*Machine à sacs de papier.*)

Duncan Macmillan, London, (Assignee of Thomas R. Rhoder, Westminster), Ont., 5th October, 1882; (Extension of Patent No. 7978.)

**No. 15,580. Improvements on Steam Boilers.** (*Perfectionnements aux chaudières à vapeur.*)

Samson Fox, Leeds, Eng., 5th October, 1882; (Extension of Patent No. 8185.)

**No. 15,581. Improvements in Sleeping Cars.** (*Perfectionnements dans les wagons dortoirs.*)

Gustave Levi and Adolphus Davis, Montreal, Que., 5th October, 1882; (Extension of Patent No. 8000.)

**No. 15,582. Improvements on Sleighs.**

(*Perfectionnements aux traîneaux.*)

Johan C. F. Pagel, Detroit, Mich., U. S., 5th October, 1882; for 15 years.

*Claim.*—1st. A sleigh wherein the back, bottom and body raves are formed from one continuous piece A. 2nd. A sleigh wherein the back, bottom and body raves are formed from one piece, in combination with the broad arms C also formed from one piece.

**No. 15,583. Improvements in Steam Boilers.**

(*Perfectionnements aux chaudières à vapeur.*)

Samson Fox, Leeds, Eng., 5th October, 1882; (Extension of Patent No. 8046.)

**No. 15,584. Improvements on Steam Boilers.**

(*Perfectionnements aux chaudières à vapeur.*)

Samson Fox, Leeds, Eng., 6th October, 1882; (Extension of Patent No. 8046.)

**No. 15,585. Improvements on wagon racks.**

(*Perfectionnements aux râteliers des wagons.*)

Alpheus McCallum, Kars, Ont., and James F. Cass, L'Original, Ont., 6th October, 1882; (Extension of Patent No. 7967.)

**No. 15,586. Improvements on Fence Posts.**

(*Perfectionnements aux pieux des clôtures.*)

Edward J. Major, Montreal, Que., 6th October, 1882; (Extension of Patent No. 14,916.)

**No. 15,587. Improvements on Fence Posts.**

(*Perfectionnements aux pieux des clôtures.*)

Edward J. Major, Montreal, Que., 7th October, 1882; (Extension of Patent No. 14,916.)