

7th January, 1875, for 5 years: "Railway Switch." (Aiguille de railroute.)

*Claim.*—1st. The crank shaft D, carrying the cranks a, and a, and the eccentric d, or their equivalents, and arranged in connection with a switch and with a lever F, or F', &c., 2nd. The V shaped or oblique lever F, arranged in the track for automatic connection with the train, and automatic adjustment of the switch. 3rd. The connecting rod E, joining the lever F, and the crank shaft D, and made with an elongated slot at its outer end. 4th. The combination of the crank shaft D, of the automatic switch mechanism with the signal H. 5th. The eccentric d, on the shaft D, fitted into a slot in the bar c, said slot being of extra length for the purpose described; 6th. The crank handle i, applied to the crank shaft D, of the self-acting switch mechanism to constitute means for applying manual power, and also serve as self-acting stop. 7th. The sliding pin g, applied to a railway car or locomotive for automatically acting on the V shaped or oblique lever, F, and adjusting the switch as specified. 8th. The V shaped or oblique levers F, F', &c., arranged to overlap the truck to be acted upon by the flanges of the wheels as shown in Fig. 7, as specified.

No. 4230. WILLIAM S. WOOTON, JOHN G. BLAKE and HARMON H. FULTON, Indianapolis, Ind., U. S., 7th January, 1875, for 5 years: "A Secretary." (Un secrétaire.)

*Claim.*—A secretary constructed in three parts, two of which are together equal in width to the other, each part being provided with compartments or pigeon holes, suitable for storing books, papers, &c., and the two lesser parts hinged to the greater parts to serve as doors to the secretary, as set forth.

No. 4231. RICHARD M. WANZER, Hamilton, Ont., 7th January, 1875, for 5 years: "Improvements on Sewing Machines." (Perfectionnements aux machines à coudre.)

*Claim.*—1st. The slotted shuttle driver O, provided with chamber X, oiler C, sliding on the plunger P, in combination with the shuttle carrier, and driven by the tablet roll S, of the disc R, for driving the shuttle on the horizontal race of a sewing machine. 2nd. The plunger P, pivoted to the plate M, by the pin Q, and made to work in the chamber X, of the shuttle driver O. 3rd. The arrangement of the leg n, on the "take up," J, and the cam E, on the shaft C, for operating said "take up." 4th. The combination of the shuttle driver O, plunger P, operated by the tablet roll S, of the disc R, for driving the shuttle with the cam E, and leg n, of the "take up" J, arranged as specified.

No. 4232. WILLIAM F. COCHRANE, LaFayette, Ind., U. S., 7th January, 1875, for 5 years: "Improvements on Harvesting Machines." (Perfectionnements aux moissonneuses.)

*Claim.*—1st. The main frame A, of a harvesting machine suspended from the foot board J, or tongue-bracket by means of a traction latch pivoted to the frame A, at a point between the main axle C, and counter shaft; 2nd. The main frame A, of a harvesting machine suspended from the foot board J, or tongue-bracket, by means of an adjustable traction latch pivoted to the frame A, at a point between the main axle C, and counter shaft. 3rd. The traction latch adapted for adjustment upon the foot board J, or tongue-bracket by means of the ratchet clutch N, and the ratchet slot in the foot board J. 4th. In combination with the main frame A, of a harvesting machine, suspended from the foot board J, or tongue-bracket by the traction latch at a part between the main axle C, and counter shaft, and adjustable detent S, for the purpose of holding the frame A, and the finger bar H, at the requisite height for cutting grain, as described.

No. 4233. SAMUEL PALING, Woodstock, Ont., 7th January, 1875, (Extension of Patent No. 598), for 5 years: "Window-Blind." (Jalousie.)

*Claim.*—The flexible blind or curtain A, with a roller B, cords C, eyes D, E, and weighted tassel F.

No. 4234. SAMUEL PALING, Woodstock, Ont., 8th January, 1875, (Extension of Patent No. 598), for 5 years: "Window Blind." (Jalousie.)

No. 4235. HENRY A. DIERKES, New York, U. S., 8th January, 1875, for 5 years: "Improvements in Hanging and Operating Bells." (Perfectionnements dans la pose et le fonctionnement des cloches.)

*Claim.*—1st. The hanging and arrangement of the bell A, upon a revolving post or axle B, and otherwise so arranged it as to partially rotate the bell at each stroke of the hammer. 2nd. The ham-

mer and its arm d, d', when arranged as described and operated by the spring follower E; 3rd. The arrangement of the arbor b, upon the bell post or its equivalent in such a manner as to operate the spring follower E, as set forth.

No. 4236. JOHN M. SCHRAMM and CHARLES T. SCHRAMM, Pontotoc, Ill., U. S., 8th January, 1875, for 5 years: "Improvements in the Shingling of Roofs." (Perfectionnements dans la manière de couvrir les toitures en bardeaux.)

*Claim.*—1st. The combination of the board L, strap hinges E, with pins f, and the adjustable plates A, with feet b, all constructed and operating as described. 2nd. The adjustable roofing bracket R. S. M. O. T. I. P. constructed and arranged as described.

No. 4237. JAMES L. MASSIE, Cowansville, Que., 8th January, 1875, for 5 years: "Improvements on Heaters." (Perfectionnements aux poeles sourds.)

*Claim.*—The heater composed of chamber A, with tubes D, set therein with one end higher than the other, as set forth.

No. 4238. CHARLES H. MILLER, Buffalo, N. Y., U. S., 8th January, 1875, for 5 years: "Wooden Pavement." (Pavage en bois.)

*Claim.*—A wooden pavement consisting of blocks A, recessed at the lower end in combination with the supporting sleepers or rails b, as set forth.

No. 4239. JOHN C. CODYÉ, Windsor, Ont., 8th January, 1875, for 5 years: "Water Filter." (Filtre à eau.)

*Claim.*—The combination of granulated lava or pumice stone, and hair-felt, sustained at each end of filter by perforated tin, in the manner specified.

No. 4240. LUTHER A. POWERS, Meriden, Ct., U. S., 8th January, 1875, for 5 years: "Improvements on Rakes." (Perfectionnements aux râtaux.)

*Claim.*—The head A, handle C, and braces E, when the said handle is secured to the head by the hooked bolt D, and the braces to the handle by the hooked bolts F, as set forth.

No. 4241. WILHELM S. VON ESSER, Hamburg, Germ., 8th January, 1874, for 5 years: "Apparatus for Cleaning Boiler Tubes by Steam." (Appareil à vapeur pour nettoyer les bouilleurs.)

*Claim.*—The combination with the smoke box D, and fire tubes C, of one or more perforated steam blow pipes G, made adjustable up or down from the exterior of the smoke box and without opening the latter, into or out of line with consecutive upper and lower rows of the fire tubes, as specified.

No. 4242. WILLIAM A. MARTIN, London, Eng., 8th January, 1875, for 5 years: "Improvements on Furnaces and Furnace Doors." (Perfectionnements aux fourneaux et aux portes de fourneaux.)

*Claim.*—1st. A furnace door so constructed, supported and arranged that it may be opened either inwardly or outwardly as set forth; 2nd. The said door so arranged in its frame and in combination with the sloping plate b, or otherwise that it will direct the air admitted through its opening through instead of over the fuel for the purpose specified; 3rd. In combination with the said door the openings c, and passages f, g, arranged as set forth; 4th. The fire bars h, projecting outside of the front of the furnace and supported in such a manner that they can be turned on their bearers as set forth; 5th. A furnace constructed with the peculiar transverso section shown in figure 3 or with the same transverso section as set forth; 6th. The furnace door a, constructed, supported and arranged as set forth, in combination with a furnace constructed as shown in the drawing.

No. 4243. JOHN G. MULLER, and WILLIAM MULLER, Dayton, Ohio, U. S., 8th January, 1875, for 5 years: "Gas Machine." (Machine à gaz.)

*Claim.*—1st. The arrangement between the gas generator and receiver of the valve E, formed of an outer vessel having an annular portion containing liquid for sealing the movable top or