

No. 4738. DAVID RENSILAW, Cohasset, Mass., U. S., 18th May, 1875, for 5 years: "Improvements on Steam Generators." (Perfectionnements aux générateurs de vapeur.)

*Claim*.—1st. A section for a sectional boiler, consisting of an upper pipe H, opening into the steam drum; two lower pipes G, the pipes H, arranged above and at the same distance from each of the pipes G, and connected to each of the pipes G, by a series of pipes J and K; 2nd. A boiler consisting of an upper water body H, H, and the steam drum L, the upper water body opening into the steam drum, and two lower water bodies G, G, the upper water body being connected to each of the lower water bodies by a series of pipes J, and K.

No. 4739. CARL W. SULZBACH, Virginia City, Nev., U. S., 19th May, 1875, for 15 years: "Apparatus for preventing Steam Boilers from Exploding." (Appareil pour empêcher l'explosion des chaudières à vapeur.)

*Claim*.—1st. The combination and arrangement of the float cylinder A, regulating cylinder E, safety cylinder C, alarm wheel K, floats D, E, and F, levers 1, 2, and 3, valves 4, 5, and 6, and pipes 7, 8, and 9; 2nd. The combination and arrangement of the cylinder H, to operate the belt shift I, when connected by the pipes 7 and 8, with the floats D and E, levers 1 and 2, and valves 4 and 5; 3rd. The safety cylinder C, having the control piston K, to operate the hook rods I and N, and the jointed leg L, for the purpose of discharging the counter weight Q, and opening the safety valve when operated by means of the float F; 4th. The pipe 9 (having the opening or pipe n, to operate the alarm wheel K) in combination with the crank K, wire r, and bell J, when operated by means of the float F.

No. 4740. JOHN BEST, (Assignee of Z. B. Cushner) Chicago, Ill., U. S., 18th May, 1875, for 15 years: "Improvements on Flat Irons." (Perfectionnements aux fers à repasser.)

*Claim*.—1st. The double or two part hollow iron with holes to admit air and shaped to be fitted into each other and fastened by the groove in the spindles at the front and the button in the back; 2nd. The spindle S, or axis passing lengthwise through the iron with the grooves M, to hold fast the front of the two parts of the iron, and the projections at the front and back of the iron to hold the handle, lever and catch; 3rd. The construction and application of lamp A, with jets or burners J, J, and fastenings F, F, suspended from the spindle S; 4th. The construction and application of the lever L, to the spindle S, and handle H; 5th. The construction and application of two springs G, to the handle H, and the lever L.

No. 4741. HENRY BAUGHMAN, Doran's Gold Mine, S. Ca., U. S., 18th May, 1875, for 5 years: "Saw Gummer and Sharpener." (Appareil à affûter et donner la voie aux scies.)

*Claim*.—1st. The flanged and slotted tapping clamp P, in combination with the clamp L and block K, for holding a hand saw while being operated upon by the gumming wheel A; 2nd. The opening K, formed in the block K, for the escape of the shavings; 3rd. The swinging frame T, and guide pulleys U, L, in combination with the adjustable frame S, and guide pulleys Q, Q.

No. 4742. PLATT C. INGERSOLL, Greenpoint, Brooklyn, N. Y., U. S., 18th May, 1875, for 5 years: "Improvement on Bed Bottoms." (Perfectionnement des fonds de lits.)

*Claim*.—1st. The combination of the slat C, spring H, and metallic strip G, having its ends passed through the slats C, and fastened down on the upper side of the slat C; 2nd. The combination with a slat C, of the loops or staples E, and supporting bars D; 3rd. The strips J, of leather or other fabric, in combination with the slats C, and loops or staples E.

No. 4743. JOHN ASH, Montreal, Que., 18th May, 1875, for 5 years: "Compound to prevent the Bites of poisonous Insects, Mosquitos, &c." (Composition préservant des morsures des insectes venimeux, maringouins, etc.)

*Claim*.—The combination of camphor, Stockholm tar and olive oil in the proportions specified.

No. 4744. RICHARD DUDLEY, Erie, Pa., U. S., 18th May, 1875, for 5 years: "Spring for

Supporting Waggon Tongues." (Ressort pour supporter les limons de voitures.)

*Claim*.—1st. The springs a, a, when attached at their back ends either to the rear of the bounds B, B, or around the axle or bolster E, and the front ends projecting into an adjustable yoke D; 2nd. The springs a, a, as constructed and attached, and connected at the front ends by means of the yoke D, with adjusting holes d, d, and in combination with the bounds B, B, and tongue A, A.

No. 4745. ALONZO W. OLDS, Green Oak Station, Mich., U. S., 18th May, 1875, for 5 years: "Improvements on Fences." (Perfectionnements aux clôtures.)

*Claim*.—The combination of the posts A, A, braces B, B, rails D, and wire binder C.

No. 4746. DAVID S. CORNELL, Warwick, Ont., 18th May, 1875, for 5 years: "Improvements on Washing Machines." (Perfectionnements aux laveuses.)

*Claim*.—The rigid plates E, E, connecting the journals of the feed-rollers D, D, D, at both ends, (the springs F, F, supporting the journal bearings of said rollers), whereby the rollers D, D, combinedly have a yielding depression from the fixed roller B, when the clothes are fed to the machine.

No. 4747. RICHARD DAINE, Dartmouth, N. S., 18th May, 1875, for 5 years: "Improvements on Stove-pipe Dampers." (Perfectionnements aux clefs de tuyaux.)

*Claim*.—1st. The combination of thimble A, and damper; 2nd. The combination of thimble A, and damper with stop-bar C.

No. 4748. CHARLES O. GARDINER, Springfield, Ohio, U. S., 18th May, 1875, for 5 years: "Improvements on Seeding Machines." (Perfectionnements aux semoirs.)

*Claim*.—1st. A force feed for grain drills consisting of a feed cup or case, and a vertically laterally adjustable feed wheel mounted therein; 2nd. A force feed for grain drills consisting of a vertically revolving disc or wheel A, mounted within the cup or case B, one side of said cup being left open of the full diameter of the wheel and the opposite side having a central opening for the hub of the wheel only, so that said wheel may be adjusted laterally with reference to the case to regulate the feed; 3rd. In combination with the case B, the laterally adjustable feed-wheel A, provided with the teeth d, on its side at the outer edge, facing the vertical wall of the case; 4th. In combination with the feed cup or case having its side wall provided with the central opening, the vertically laterally adjustable feed wheel or disc A, provided with the hub C, and mounted in the cup as shown, so that the grain is fed between the side faces of the cup and wheel; 5th. In combination with a vertical feed wheel or disc, a feed cup having an internal shoulder or gauge-point b; 6th. In combination with the feed-wheel A, and driving shaft k, the sleeve H, mounted on the shaft and provided with the spiral groove i, and the fixed stud h, bearing in said groove as shown; 7th. The slide E, in combination with the lever L, and the laterally adjustable wheel A; 8th. In combination with the shaft K, and its spirally threaded or grooved collar H, having the arm I, attached and the fixed stud h, the spiral scale M; 9th. A spiral scale as shown, in combination with a lever which both swings about a centre and moves laterally; 10th. The slide or cut off E, provided with the shoulder n, in combination with the hub C, and the cap provided with the corresponding shoulder.

No. 4749. JOHN NOLAN, Malone, N. Y., U. S., 19th May, 1875, for 5 years: "Improvements on Water Wheels." (Perfectionnements aux roues hydrauliques.)

*Claim*.—1st. The concave convex disc A, and ring B, each having an inwardly sloping periphery and respective rims a, b, arranged parallel, and buckets C; 2nd. The buckets C, arranged tangentially between the rims a, b, and having a graduated curve descendingly between the periphery of the disc A, and ring B.

No. 4750. JOSEPH D. HUSBAND, Jr., St. Louis, Mo., U. S., 19th May, 1875, for 5 years: "Fire Kindler." (Allumeur de feu.)

*Claim*.—1st. A fire kindler made from a block of suitable material constructed with draft flues for admitting the draft into or through the block for intensifying the heat and obviating smothering of the