

D. avec le pêne supérieur J, pour fermer la porte à clef à l'intérieur; 4o. La combinaison du ressort I, rivé au dos du pêne inférieur D, s'engageant dans l'encoche d, de la tête du pêne supérieur J, avec le pêne supérieur J, pour le rendre dormant; 5o. La combinaison particulière de la détente M, du pêne supérieur J, et de la gâchette F, du levier K, et du ressort I, s'engageant dans l'encoche d, de la tête du pêne supérieur J, avec le pêne supérieur J, et celle du pêne inférieur D.

Claim.—1st. The combination of the detent M, with the upper bolt J, for retaining it inside of the lock; 2nd. The combination of the detent M, and of the upper bolt J, having the notch a, of the groove b, with the key of the upper bolt J, to keep it engaged and fixed in the lock when the door of a cell is opened; 3rd. The combination of the lower bolt D, with the upper bolt J, to lock the door inside; 4th. The combination of the spring I, rivetted on the back of the lower bolt D, engaging in the slot d, of the head of the upper bolt J, with the upper bolt J, to make it dormant; 5th. The peculiar combination of the detent M, of the upper bolt J, and of the follower F, of the lever K, and its spring L, of the lower bolt D, and of its follower F, of the spring I, engaging in the slot d, of the head of the upper bolt J, with the key of the upper bolt J, and that of the lower bolt D.

No. 6001. Electro-Harmonic Telegraph.

(*Telegraphic electro-harmonique.*)

Elisha Gray, Chicago, Ill., U. S., 23rd May, 1876, for 15 Years.

Claim.—1st. The art of telegraphically transmitting composite tones which consists in working a closed circuit with a continuous current from a main battery, portions of the whole of which current are thrown into vibration at will by the transmitters; 2nd. The art of telegraphically transmitting and analyzing composite tones, which consists in working a closed circuit with a continuous current from a main battery, portions of the whole of which current are thrown into vibration at will by the transmitters, each set of vibrations being audibly reproduced by a corresponding receiver; 3rd. The combination of a series of transmitters each operated by a local battery, a main battery, an electric circuit through which a continuous current flows from said battery, and shunt or short circuits between the main battery and transmitters; 4th. The combination of a series of transmitters, a main battery connected therewith by short or shunt circuits, a closed electric circuit through which a current continuously passes from the main battery, and a series of analyzing receivers included in the circuit.

No. 6102. Safety Lock. (*Serrure de sûreté.*)

Joseph A. Quesnel, Arthabaskaville, Que., 23rd May, 1876, for 5 years.

Résumé.—La combinaison du pêne surnuméraire et vertical H, et sa gâchette J, avec le petit pêne E, d'une serrure A, pour en faire une serrure dite de sûreté.

Claim.—The combination of the super-numerary and vertical bolt H, and its follower J, with the small bolt E, of a lock A, to make what is called a safety lock.

No. 6103. Blast Furnace for Reducing Ores.

(*Fourneau contenant pour réduire les minerais.*)

Ananias Smith, Clifton, Ont., 23rd May, 1876, for 5 years.

Claim.—1st. The combination of the shaft A, combustion chambers C, pipes U, and W, connecting through intermediate pipes with a steam boiler L, and fuel tank K, connected by a pipe M, 2nd. The combination of a superheater O, steam boiler L, pipe M, liquid fuel tank K, pipes U, and W, with the combustion chambers C, and interior or shaft A, of the furnace; 3rd. The combination with the inside or shaft of the furnace, of one or more water slabs arranged within the same.

No. 6104. Composition of matter to be used Medicinally and as Food.

(*Composé médicamenteux et alimentaire.*)

John L. Johnston, Sherbrooke, Que., 23rd May, 1876, for 5 years.

Claim.—A mixed compound of Beef and other meats with Albumen.

No. 6105. Improvements on Root-Cutters.

(*Perfectionnements aux coupe-racines.*)

Nazaire Aubut, Trois-Pistoles, and Théophile Aubut, Ste. Flavie, Que., 23rd May, 1876, for 5 years.

Résumé.—La combinaison des couteaux à dents H, et des lames à dents G, avec la roue verticale F.

Claim.—The combination of toothed knives H and toothed holes G, with the vertical wheel F.

No. 6106. Improvements on Tobacco Pipes.

(*Perfectionnements aux pipes.*)

Mark Thomson, Cowansville, Que., 23rd May, 1876, for 5 years.

Claim.—1st. The cylindrical tube B closed at one end by cork plug E, and at the other end by enlarged screw D, on end of mouth piece, 2nd. The combination with the cylindrical tube B, of the porous material F.

No. 6107. Improvements on Oscillating Valves. (*Perfectionnements aux soupapes oscillantes.*)

John Fairburn, Upton Station, Que., 23rd May, 1876, for 5 years.

Claim.—The oscillating valve A, receiving steam internally through pipe I, having a single port a, in combination with a cylinder having the steam inlet ports F, F, coinciding with the port a, and the ports G, G, exhausting above the valve and terminating in a passage E, leading toward each end of the cylinder.

No. 6108. Improvements on Sewing Machines. (*Perfectionnements aux machines à coudre.*)

John C. Burton, St. Thomas, Ont., 23rd May, 1876, for 5 years.

Claim.—1st. The plate A, having pillars B, B, leaving the spindle C, provided with a grinding wheel D, and pulley E, 2nd. The provision of a rest G, branching from the pillar B, and bending over the grinder D; 3rd. The rest G, having hole H, for receiving the needle while being pointed.

No. 6109. Improvements on Cultivators.

(*Perfectionnements aux cultivateurs.*)

William Green, Brantford, Ont., 23rd May, 1876, for 5 years.

Claim.—1st. The radial links or chains 1, 2 and 3, and lateral links 4 and 5, in combination with a crank pin; 2nd. The cast iron plate D, with flanges E, and F, and the crank plate G, with helical teeth N, formed on the side or edge, and also strap M, between crank pin and pin I; 3rd. The gauge O or crank plate G, in connection with index S, on stay Q, the blocks X and bent lever Y.

No. 6110. Railroad Car Coupling.

(*Attelage de wagons de railroute.*)

George W. Green and Abraham D. Green, Greensville, Ont., 23rd May, 1876, for 5 years.

Claim.—1st. The combination of the stud B, with pin D; 2nd. The combination of the link after E, E, with the coupling box A.

No. 6111. Improvements on Potato-diggers.

(*Perfectionnements aux arrache-patates.*)

James Kenly and Patrick Kenly, Gloucester, Ont., 3rd May, 1876, for 5 years.

The scoop C, and screen D, the combination of the crank shaft J, and rake bars I, provided with rake heads K.

No. 6112. Improvements on Steam Engine Exhausts.

(*Perfectionnement des soupapes d'aspiration de vapeur.*)

Henry D. Dwyer, North Hartland and James M. Foss, St. Albans, Vt., U. S., 23rd May, 1876, for 5 years.

Claim.—1st. The combination of the pipes A and A', with the exhaust passages of a steam engine; 2nd. The combination of the conical shaped head B, a series of movable plates F, and the cap B, having a partially rotary movement upon said head to move the plates; 3rd. The combination of the conical shaped head B, the movable plates F, the cap B, and the exhaust nozzle I.

No. 6113. Improvements on Seeding Machines. (*Perfectionnements aux machines à semer.*)

Peter Milne, Langton, Ont., 23rd May, 1876, for 5 years.

Claim.—1st. The seed box C, having a supplementary sliding bottom J, stotted, subdivided transversely, and both subdivisions operated by levers K; 2nd. The combination with a wheel A, having cam cylinders G, G, the levers E, E, and agitator D; 3rd. The provision to the seed box C, of the slide N.

No. 6114. Improvements in Railway Signals.

(*Perfectionnements dans les signaux de railroutes.*)

Thomas Sills, Fort Erie, Ont., 23rd May, 1876, for 5 years.

Claim.—1st. The combination of the lamp I, and the shade J, 2nd. The combination of the lamp I, and the shade J, with the semaphore arm K; 3rd. The combination of the lamp I, and the shade J, with the semaphore arm K, also the switch fastener N.

No. 6115. Improvements on Metallic Roofs.

(*Perfectionnements aux toitures métalliques.*)

John Power, Kingston, Ont., 23rd May, 1876, for 5 years.

Claim.—1st. A sheet metal roof that will allow of contraction and expansion in all directions; 2nd. The mode of applying sheet metal covering to roofs by strips G, secured at intervals to the sheeting A, and formed to lock slidingly with engaging rails D, interposed at suitable distances between and rivetted to the sheet B, up-turned at their edges, to form ridges with the pitch of the roof and the joints of the up-turned edges rivetted and soldered or otherwise made watertight; 3rd. The combination with the sheets B, of the rails D, and strips G, fixed to the roof sheeting A; 4th. The sheets B, B, rivetted and soldered to the rails D, and secured to the roof sheeting A, by strips C.

No. 6116. Apparatus for Walling Wells.

(*Appareil à murer les puits.*)

Azariah Moore, Shellsburg, Iowa, U. S., 23rd May, 1876, for 5 years.

Claim.—1st. A series of radius arms, upon the outer ends of which the wall may be supported, said arms being pivoted to a centre column and provided with a releasable detent contrivance capable of being operated from the top of the well to allow of the tilting of the arms when the implement is withdrawn from the well; 2nd. The combination with the pivoted radius arms A, of the column D, ring or collar E, and lever F; 3rd. The combination of the radius arms A, the adjustable bearings B, and collar E, provided with a detent contrivance whereby the apparatus may be adjusted to different diameters; 4th. A device for walling wells from the surface, a series of radial arms formed to support the wall while being lowered, and to be released, and withdrawn from beneath the same when the wall is in place; 5th. The combination with the radius arms A, of the ends or chains z, z, attached to the inner ends of the arms and congregated together at z; 6th. The combination with the column D, and collar E, the spring catch N, inserted in the side of the column.

No. 6117. Manufacture of Grain Cradle

Fingers. (*Fabrication des branches des javaliés.*)

Christopher P. Keley and James L. Multer, Richwoodville, N. Y., U. S., 23rd May, 1876, for 5 years.

Claim.—1st. The application of a denticulated (or serrated) edged curved or straight knife, fastened in a rotary cutter head cylinder, to a tapering piece of timber, cutting or grooving it out so as to form a set more or less in number of grain cradle fingers, at the same time giving them an elliptical or other sectional form; 2nd. The bending of the fingers, before being entirely separated from each other at the sides or ends.