

# The Canadian Patent Office

## RECORD

Vol. IX.—No. 11.

NOVEMBER, 1881.

Price in Canada \$2.00 per An.  
United States - \$2.50 "

### CONTENTS.

INVENTIONS PATENTED.....	263
INDEX OF INVENTIONS.....	CCLXXV
INDEX OF PATENTEES.....	CCLXXVI
ILLUSTRATIONS.....	279

### INVENTIONS PATENTED.

#### No. 13,503. Improvements on Reaping Machines. (*Perfectionnements aux moissonneuses.*)

John Harris, Brantford, Ont., 1st October, 1881; for 5 years.

*Claim.*—1st. A reaping machine in which the rake head spindle is driven by a sprocket wheel, capable of easy removal, so that it can be replaced by a larger or smaller one. 2nd. A rake head spindle A held in double bearings and having at one end a pinion C, meshing with the rake wheel D, in combination with the detachable sprocket wheel E. 3rd. A chain F passing over a pinion on the main driving spindle G, and connecting it to detachable sprocket wheel E on the rake head spindle A, in combination with the spring belt tightener H. 4th. A reaping machine in which the throat is made adjustable upon the rake head. 5th. The casting J in which the throat I is formed, and an extension of the track L, in combination with the bolt K passing through an oblong slot in the said casting. 6th. A crank lever O connected to the tripping block N, by the rod P, and to a foot lever within reach of the driver, by the rods and lever marked Q, in combination with an arm Qi attached to the crank lever O and overlapping the face of the rake wheel D. 7th. A pin or pins R on the rake wheel D, in combination with the arm Qi, on the crank lever O, for operating the tripping block N. 8th. A reaping machine having an adjustable rake head or jack. 9th. The rake head or jack B, held to the bracket S by a bolt T passing through a slot or elongated hole. 10th. The wrought or malleable iron arch S securely bolted to the frame of the machine and braced by the rod U, in combination with the rake head or jack B, made adjustable on the said arch.

#### No. 13,504. Improvements on Refrigerator Cars. (*Perfectionnements aux chars frigorifiques.*)

Charleton B. Hotchins, Ann Arbor, Mich., U. S., 1st., October, 1881; for 5 years.

*Claim.*—1st. A freight car wherein the floor is curved from the centre downwards towards each end, and wherein the floor, walls and roof are constructed as described, the side walls and roofs having the same curvature and in the same direction as the floor, and supported upon a base or sill frame. 2nd. In combination with a car body wherein the floor is curved from the centre downwards towards each end, and wherein the floor walls and roof are constructed as described, the side walls and roof conforming to the curvature of the floor, and supported upon a base or sill frame which is trussed, an inner shell entirely separated from said car body, and not attached or secured thereto except by an intermediate filling of any suitable non-conducting material. 3rd. In combination with a car body, with an inner shell supported as described, a corrugated iron floor, the curvature of which conforms to the curvature of the roof and floor of said car body, with corrugations running lengthwise of said body, supported upon lateral timbers, which are in turn supported by the side walls of the inner shell and provided with a drip pipe or pipes. 4th. In combination with a car body and inner shell, inwardly and outwardly opening doors secured together by the means described. 5th. A refrigerator constructed with curved joint side walls curved bottom and top, and with an inner shell of like curvature, and separated from the body by packing, in combination with an ice chamber in the top of the shell, with a slate covering of the floor and walls of the shell. 6th. A refrigerator car provided with an ice chamber, and with steam pipe or pipes, by means of which the temperature of the car may be kept at any desired degree.

#### No. 13,505. Apparatus for Checking the Waste of Water. (*Appareil pour contrôler la déperdition de l'eau.*)

Ellen C. Furny, St. Louis, Mo., U. S., 1st October, 1881; for 5 years.

*Claim.*—1st. A checking valve or stopping piston actuated by water admitted through a contracted orifice, adapted to close, or nearly close, the eduction port after the passage of a certain amount of water, by the difference in pressure on its opposite sides, in combination with a passage from the induction to the eduction pipes, or ducts, and a valve or equivalent device for partially resisting the flow of water through said passage. 2nd. A checking valve adapted to close, or nearly close the eduction opening while permitting a small leak or passage of water to connect the water chambers or ducts, on the opposite sides of the valve, when the valve is in its closed position. 3rd. The combination of case A, ports B and C, cylinder valve F, having an orifice *g* in its bottom, and valve H *h* for closing, or nearly the discharge pipe C. 4th. The combination of case A, induction port or pipe B, eduction port or pipe C, with gravitating valves F and H *h*, the latter sliding within the former, and the former in communication with the induction opening through a small orifice *g*, in free communication with the eduction opening except when said opening is closed or partly closed by valve H *h*. 5th. The combination of case A, induction and eduction pipes or ducts B and C, with valves F and H *h*, operating to close, or nearly close said ports. 6th. The combination of case A, valves F and H *h*, induction and eduction passages or pipes B and C, small passage *g* and small leak passage *c* or *a*. 7th. The combination, with the piston valve H *h* having water passages *b*, of the gravitating disk valve I.

#### No. 13,506. Improvements on Plumb Levels. (*Perfectionnements aux niveaux à plomb.*)

William L. Eveland, Port Stanley, Ont., 1st October, 1881; for 5 years.

*Claim.*—1st. The combination of an extensible reach carriage frame, a frame carrying a plummet, a level pointer operated by said plummet, and a scale or scales indicating the position of the plummet or that of the level pointer. 2nd. The combination of the lower extension bar A mounted on wheels B, upper extension bar C mounted on wheels T, secured slidingly to bar D, by the key E, a frame K carrying a plummet L, and level indicator or pointer M, and scale arcs I I, or a dial face. 3rd. The combination of the bar D having sliding motion endwise on bars A and C, frame K provided with dial face, and carrying plummet L, and pointers S connected by cog rocker Q, and pinion R.

#### No. 13,507. Improvements on Visual Indicators. (*Perfectionnements aux indicateurs visuels.*)

Chester H. Pond, New York, N. Y., U. S., 1st October, 1881; for 5 years.

*Claim.*—1st. The art or method of operating an electro-visual indicator, or the first indicating system thereof, which consists in successively and rapidly closing and breaking its actuating circuit until the total number of such closures and breaks taken together corresponds to the position in a series of characters, of the character which is to be displayed, and then ceasing or pausing such manipulation. 2nd. The art, method or system of transmitting compound numerical signals, which consists in, first, alternately closing and breaking the circuit at successive short and equal intervals, until the number of such breaks and closures taken together represent the single numeral which is to be transmitted; second, prolonging or continuing the condition of the circuit, whether open or closed, by which the transmission of said group of signals is complete for an interval exceeding the interval between the signals of the group; third, restoring the circuit, if it be in the opposite of its normal condition, to the normal condition, and, fourth, performing the necessary manipulations of the circuit, to transmit the second single numeral of the compound numerical signal. 3rd. An automatic signal transmitter constructed so as to transmit groups of simple signals by alternately breaking and closing the circuit at short and equal intervals, and to separate said groups by prolonging the terminal signal of each group, whether said signal was produced by opening or by closing the circuit. 4th. A visual indicator adapted to display one character of a series through an opening in a fixed screen, the character displayed being determined by the number of breaks and closures in the circuit which controls its operation, and the preceding characters of the series being moved past the opening so rapidly as to