

# The Canadian Patent Office

## RECORD

Vol. IX.—No. 3.

MARCH, 1881.

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

### CONTENTS.

INVENTIONS PATENTED.....	37
INDEX OF INVENTIONS.....	LII
INDEX OF PATENTEES.....	LIII
ILLUSTRATIONS.....	55

### INVENTIONS PATENTED.

#### No. 12,230. Electric Railway Signalling Apparatus. (*Appareil électrique à signaux de chemin de fer.*)

Henry B. Hayes, Woburn, and Joshua Gray, Medford, Mass., U. S., 17th January, 1881; for 5 years.

*Claim.*—1st. A magneto-electric railway signal, in which are combined a signal and devices whereby to generate a current of electricity by the rotation of an armature through the medium of a passing train of cars or locomotive over the track and to thereby actuate said signal. 2nd. A magneto-electric railway signal consisting of a magneto-electric machine adapted to be operated from a passing train of cars, a magnet adapted to receive a current of electricity from said machine and a signal device constructed to be set in operation by the said magnet. 3rd. In combination with the rack bar of a signal device, and the clutch gear mechanism whereby said bar is adapted to move in one direction by the rotation of the gear-ring only, and in the opposite direction by the rotation of the whole train so as to operate the signal device. 4th. The combination with a danger signal of devices whereby the same may be set by the movement of a train of cars, and electrical appliances also arranged to be operated by the train whereby the said weight may be released from a distant point to actuate the signal. 5th. The combination, in a railway signal, of a guided sliding rack-bar D, levers B C, train of wheels, detent, signalling devices, electro-magnet constructed and arranged to release the detent when excited. 6th. The combination with the magneto-electric apparatus, of the spindle carrying the armature, rack bar gear with a pinion on said spindle, lever C and lever B arranged to be operated by a projection on one of the cars of the train. 7th. The combination with the signal mechanism, rack-bar, detent, armature and magnet, of a lever and appliances for throwing the armature away from the magnet when the said bar is raised. 8th. The combination of the magnet bar D, spindle d, ratchet c, arm f, pawl i and lever e. 9th. The combination with the rack-bar D and train of wheels, of a driving gear wheel W consisting of two sections the innermost having inclined recesses containing balls or rolls L.

#### No. 12,231. Cooking Stove. (*Poêle de cuisine.*)

Charles Fawcett, Sackville, N.B., 17th January, 1881; (Extension of Patent No. 5,747.)

#### No. 12,232. Improvements on Cultivators. (*Perfectionnements aux cultivateurs.*)

Benjamin F. Eaton, Coxsack, N.Y., U. S., 19th January, 1881; for 5 years.

*Claim.*—1st. The combination with the curved spring tooth E, of the stiffening piece E<sub>1</sub> mate with a similar curve fitted and secured to the said tooth. 2nd. The combination with the spring tooth E, of the pointed digger ends a, each at an opposite end of said tooth. 3rd. The combination with the spring tooth E having pointed ends a, of the removable digging point E<sub>2</sub>. 4th. The combination with the curved spring tooth F, of the reversed curved spring support F<sub>1</sub> secured to the frame of the cultivator, rearward of the tooth and being against the rear side of the same. 5th. The stiff share tooth G made with V-shaped digging ends C and gradually contracted width of intervening body C<sub>2</sub>, whereby the greater extension of width of said digging ends will be made greater than the width of said intervening body. 6th. The stiff share tooth G made sectional and composed of the removable half portions G<sub>1</sub> G<sub>2</sub>, abutting together at Z and secured to standard G. 7th. The share tooth G formed of removable sections G<sub>1</sub> G<sub>2</sub>, each a duplicate of the other, and capable of reversible situations on standard G. 8th. The combination with curved spring teeth, of the stiff share tooth for operation with the soil.

#### No. 12,233. Improvements on Treating Oils. (*Perfectionnements dans le traitement des huiles.*)

Donald C. Cattnach, Providence, R. I., U. S., 19th January, 1881; for 5 years.

*Claim.*—1st. Stirring the oil in a closed tank, applying to the oil thus stirred a regulated amount of heat, and forcing into the current of oil a stream of air also at regulated temperature, whereby a portion of the oil is alternately exposed to the action of the current of air and of the heated surface. 2nd. The process of treating linseed and kindred oils by first heating the oil in contact with water at the temperature specified; second, heating it in contact with the air at the specified temperature, and, third, stirring it in a closed tank heated as described with a stream of air at regulated temperature applied to the current of oil. 3rd. A horizontal tank having a rounded bottom and an elevated top, in combination with a shaft carrying blades adapted to give the oil a rotary movement within the tank and with a blower and pipe arranged upon the side of said tank adapted to discharge a current of air into the current of oil, at the proper point across said current of oil, and also in combination with heating apparatus. 4th. In combination with the described tank having the rounded bottom and elevated top and having also a shaft placed longitudinally in said tank and carrying blades adapted to give the oil rotary movement, a blower and a slotted tube extending the entire length of the tank, having connection with an air heating device and adapted to discharge air into the current of oil. 5th. The combination with the tank having a horizontal shaft and stirring blades and heating apparatus at the bottom of said tank, of an air heating apparatus and a slotted pipe for introducing the heated air to the oil and of a hood L and pipe I.

#### No. 12,234. Improvements on Fence Posts. (*Perfectionnements aux pieux des clôtures.*)

William De Lany, Cobourg, Ont., 19th January, 1881; for 5 years.

*Claim.*—1st. A post made of a single piece or bar of iron with the upper portion A and the lower or sunken portion B bent at right angles to the horizontal portion C, and the two parts A B connected and strengthened by braces c. 2nd. The twisted horizontal part C, in combination with parts A B to prevent them from springing and vibrating. 3rd. The part B having a bend a at bottom, and spurs b near top and the part A, in combination with the looped chair E embracing the said part B above the spurs b, and the braces c connected to said part below the spurs and to the part or post A. 4th. The double angular post A B C in combination with a horizontal looped chair D at base of the vertical part A, and an upright looped chair E at or near the top of the vertical part B. 5th. The part A, having tongues g, the part B having a bottom bend a and spurs b, and the part C connecting the parts A B, all constructed of a single piece or bar of iron and forming an improvement in metal fence posts.

#### No. 12,235. Improvements on Screw Heads. (*Perfectionnements aux têtes des vis.*)

John Eckford, San Antonio, Texas, U. S., 19th January, 1881; for 5 years.

*Claim.*—1st. A counter sinking screw head having notches or cutting edges on the under side or bevel thereof, the continuous series of cutters A and deep and flat interspaces or notches B, completely filling the circle or bevel of the head, said notches opening through the top of the head and thus forming the serrated crown.

#### No. 12,236. Improvements on Tire Tighteners. (*Perfectionnements aux machines à refouler les bandages des roues.*)

George W. Rishel, North Mountain, and Elias Rishel, Turboxville, Pa., U. S., 19th January, 1881; for 5 years.

*Claim.*—1st. The combination of the jaws A A<sub>1</sub> provided with jacks D D, operated by levers E E and projections G H, with the hook I and link J having serrated scroll wedge K, and the cam lever L. 2nd. The hinged jaws A A<sub>1</sub> having projections G H, in combination with the link J, hook I wedge K and cam lever L.

#### No. 12,237. Improvements on Paper Files. (*Perfectionnements aux serre-papiers.*)

Laning L. Ferris, New York, U. S., 19th January, 1881; for 5 years.

*Claim.*—1st. The combination with the slotted plate B, of the two curved