# The Canadian Patent Office Record

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## CONTENTS.



## INVENTIONS PATENTED.

### No. 13,306. Gas Motor Engine. (*Machine à gaz.*)

Nicholas A. Otto, Dentz, Germany, 23rd August, 1881; (Extension of Patent No. 6,479.).

### No. 13,307. Gas Motor Engine. (*Machine à gaz.*)

Nicholas A. Otto, Dentz, Germany, 24th August 1881; (Extension of Patent No. 6,479.)

### No. 13,308. Improvements on Axle Boxes.

(*Perfectionnements aux boites à graisse.*)

Joseph N. Smith, Jersey, N. J., U. S.. 24th August, 1881; (Extension of Patent No. 9,173.)

### No. 13,309. Stove Grate. (*Grille de poêle.*)

George H. Hansbury, Milwaukee, Wis., Alfred S. Hubbell and Henry S. Hubbell, Buffalo, N. Y., U. S., 24th August, 1881; Extension of Patent No. 6,603.)

### No. 13,310. Stone Extractor. (*Charriot épierreur.*)

Joseph Filion, St. Eustache, Que., 24th August, 1881; (Extension of Patent No. 6,614.)

### No. 13,311. Improvements on Stand Boilers.

(*Perfectionnements aux chaudières verticales.*)

William W. Austin, Lowell, Mass., U. S., 24th August 1881; for 5 years

*Claim.*—1st. The combination of a stand boiler shell A, a cold water induction pipe B entering said shell A, pipe C to carry the cold water from the bottom of the boiler, and a hot water induction pipe $D^1$ entering the upper end of the boiler, with a deflector *g* adapted to direct the hot water nearly horizontally in the upper portion of the boiler. 2nd. The combination of a stand boiler shell A, a hot water carrying pipe D on the outside of said shell, having an induction pipe at *d* in the side of the boiler pipe $D^1$ entering the top of the boiler, and three way cock *f*. 3rd. The combination of a stand boiler shell A, a pipe B to admit cold water entering through the bottom of said boiler shell A, a pipe B to admit cold water entering through the bottom of said boiler, and a pipe $D^1$ to admit hot water entering the upper part of said boiler, with a coil $D_3$. 4th. The combination of stand boiler shell A, a pipe $D^1$ entering the upper part of said boiler and provided with a deflector *g*, or its equivalent, with the perforated plates L secured in the interior of said boiler. 5th. The combination of a stand boiler shell A, a pipe B to admit cold water entering through the bottom of said boiler, and extending upward a short distance within the interior of said boiler, and a pipe C leading from the interior of the boiler to the range passing through the bottom of the boiler, its upper end within the boiler being above the inner end of the pipe B, and a sediment discharging pipe E extending from the lower end of the boiler.

### No. 13,312. Improvements in Hand Power.

(*Perfectionnements aux machines à bras.*)

Joseph Ouellet, Jonction de la Chaudière, and Paul E. Grandbois, Fraserville, Que., 24th August 1881; 1881; for 5 years.

*Claim.*—1st. The combination of a shaft provided with two oppositively projecting cranks and operating lever, and two pitmen extended from opposite ends of said lever to the respective cranks. 2nd. In combination with the lever and its movable guide, the shaft provided with two cranks and the pitman connecting the respective cranks with the opposite end of the levers. 4rd. The combination of a lever, a a movable or yielding guide to prevent end motion of the lever, a shaft provided with two oppositely projected cranks, and two pitmen extended from the cranks to opposite ends of the lever. 4th. The combination of the base frame, the vertically slotted standard C, lever B, trunnions *h*, shaft A having cranks *a b*, and the pitman *c d*.

### No. 13,313. Improvements on Snow Clearing Machines. (*Perfectionnements aux machines à enlever la neige.*)

John W. Close Buffalo, N. Y., U. S., 24th August 1881: for 5 years.

*Claim.*—1st. In a snow clearer with hollow walls A A and steam spaces C, an arrangement for receiving and distributing steam or other heat, in combination with receptacle B for melted snow, and devices for throwing or conducting it to either side of the road or track. 2nd. In combination with the snow receptacle in the bottom B of the snow clearer, the ejectors K L and the ejection pipe M connected with any suitable pump L, also the steam heated wheel for the purpose of throwing melted, or partially melted snow from the receptacle to the side of the track or road.

### No. 13,314. Improvements on Snow Ploughs.

(*Perfectionnements aux charrues à neige.*)

Patrick H. Mentzer, Thomas J. Mentzer and John Mentzer, (Assignee of William W. Button,) Shenandoah, Iowa, U.S., 24th August 1881; for 5 years.

*Claim.*—1st. The snow plough composed of the turntable B, pivoted beam C, ways D, pin E, cutter F, wings J, chains K and windlass M provided with ratchet wheel O and pawl N. 2nd. The combination, with the beam C, of the wings J hinged to the rod H and chains K, whereby when the plough moves forward the wings are shut, and when backward the wings are opened and the snow drawn backward and discharged upon either side. 3rd. The combination, with the beam C, bolt c and turntable B, of the pin E and perforated ways D, whereby the plough may be turned to either side and fixed in position. 4th. The combination, with the beam C, wings J and chains K, of the windlass M provided with ratchet wheel O, pawl N and handles P, whereby the wings may be adjusted when the plough is about to be backed.

### No. 13,315. Improvements on Electric Arc Lights. (*Perfectionnements aux lumières électriques en arc.*)

Thomas A. Edison, Mento Park, N. J., U. S., 26th August 1881: for 15 years.

*Claim.*—1st. The method of producing a steady arc and insuring the smooth consumption of the carbons in an electric arc light employing carbon pencils or rods, consisting in revolving one or both of such carbon pencils or rods. 2nd. The combination of the carbon pencils or rods with a motor or mechanism, for revolving either or both of such carbon pencils or rods. 3rd. The combination of the motor or mechanism for revolving either or both of the carbon pencils or rods, with a guide or guides, near the point of the revolving carbon or carbons. 4th. The combination, with the carbon pencils or rods, of an electro motor, for revolving either or both of the carbon pencils. 5th. The combination, with a motor or driving mechanism, of a carbon holding rod, sliding freely through a part revolved by the motor, but connected so as to turn with such part, and mechanism for controlling the longitudinal movement of such rod. 6th. The combination with the carbon holding rod, of the armature lever, playing between two magnets, and governing the feed of the carbon carried by such rod. 7th. The combination carbon holding rod, of the armature lever controlled by two magnets connected in multiple arc, such lever being connected with the holding rod so as to govern its movement. 8th. The combination, with the rod D, of the armature lever G controlled by magnets H I, and carrying pawls *o k* having arms *l m*, and the stops *n o*.

### No. 13,316. Improvements on Composite Roofs. (*Perfectionnements aux toitures composites.*)

John Brokenshire, Kingston, Ont., 26th August 1881. for 5 years.

*Claim.*—1st. A roof constructed by laying felt over flat strips of wood running up and down from ridge to eaves, and in covering the same with cement. 2nd. Tapping the edges of the next felt roll over the sides of the previous one, and tacking the same on the strips of wood over which the felt is laid, thus permitting freedom of movement in the felt