

The Canadian Patent Office

RECORD

Vol. XVI.—No. 4.

APRIL, 1888.

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

INVENTIONS PATENTED.

NOTE—Patents are granted for 15 years. The term of years for which the fee has been paid, is given after the date of the patent.

No. 28,785. Hydrocarbon Furnace.

(Foyer à hydrocarbures.)

Charles H. Land, Detroit, Mich., U.S., 3rd April, 1888; 5 years.

Claim—1st. The combination, with a furnace chamber having an air and vapour blast, of a muffle provided with openings in its top, and a counter air-blast pipe communicating with the interior of the muffle, substantially as described. 2nd. The combination, with a furnace chamber having escape flues, a muffle in said chamber, and a burner for heating the same, of a counter blast pipe located over the escape flues of the furnace chamber, whereby it is superheated and adapted to convey a counter blast into the furnace chamber to drive off injurious gases from the work, and to admit determined gases to the work without chilling the muffle, substantially as described. 3rd. The combination, with a muffle-furnace having a movable door and a burner for heating the furnace, of a sliding and swinging counter blast pipe adapted to communicate with the interior of the muffle, said pipe being located over the escape-flues of the furnace and connected with the movable furnace door, substantially as and for the purposes described. 4th. The combination, with a furnace chamber, a muffle having top openings, a burner and an air blast exerting a pressure upon the products of combustion, of a counter blast to communicate with the interior of the muffle and force the products of combustion out under a greater pressure than that operating the blast in the combustion chamber, substantially as and for the purposes described. 5th. The combination, with a furnace chamber, a muffle and a heating burner, of a removable door and a counter blast pipe located over the escape flues of the furnace chamber, substantially as described. 6th. The combination, with a muffle furnace provided with burner and a removable door, of an air blast pipe communicating with the burner, and a counter blast pipe supporting said door, substantially as described. 7th. The combination, with a muffle furnace provided with an air and vapour blast, of a counter blast pipe communicating with the air and vapour blast and adapted to communicate with the interior of the furnace, substantially as described. 8th. The combination, with a muffle furnace provided with vents of a muffle perforated upon its upper surface, said furnace provided with one or more burners, the construction being such that the carbonic dioxide generated within the furnace will penetrate the muffle substantially as described. 9th. The combination of a furnace chamber, an open muffle arranged in said furnace chamber and having top perforations, and a heating burner provided with an air blast and communicating with the furnace chamber to force the residue of combustion through the muffle and resist the encroachment of the atmosphere into said open muffle, substantially as described. 10th. The combination, with a furnace chamber, provided with a removable cover and a muffle, of air and oil supply pipes and a blow pipe located in front of the open muffle, substantially as described.

No. 28,786. Apparatus for Indicating Static or Dynamic Force, or other Measurement, on Prepayment of a Coin. (Appareil pour indiquer la force statique ou dynamique, ou autre mesurage, en déposant une pièce de monnaie.)

Frederick C. Lynde, Manchester, Eng., 3rd April, 1888; 5 years.

Claim—1st. An apparatus for indicating static or dynamic force or other measurement, consisting of a concealed indicator, in combination with a generator of electric sparks, or electric or other artificial light produced temporarily by a coin, which renders the position of the said indicator visible, substantially as hereinbefore described. 2nd. The combination of a fixed visible dial or scale, and a concealed movable pointer or index rendered temporarily visible by the action of a coin completing an electric circuit, substantially as hereinbefore described. 3rd. The combination of a visible pointer with a dial or scale, the marks of figures of which are concealed and rendered temporarily visible by the action of a coin producing artificial light.

4th. The combination of a concealed indicator with an electric generator, circuit wires, tubes of mercury, fork or bent wire, suspending cord, descending self-emptying and ascending coin-box, substantially as hereinbefore described. 5th. The combination of a concealed indicator and source of artificial light produced by means of a descending self-emptying and ascending coin-box, substantially as hereinbefore described.

No. 28,787. Process and Apparatus for Manufacturing Gas. (Procédé et appareil de fabrication du gaz.)

James J. Johnston, Columbiana, Ohio, U.S., 3rd April, 1888; 5 years.

Claim—1st. The process herein described of combining atoms of hydrogen and carbon of crude petroleum oil with atoms of oxygen and nitrogen of atmospheric air, and thereby forming a fixed gas, which consists in forcing atmospheric air under great pressure through crude petroleum oil heated in a vessel to a degree that will not evolve vapour therefrom, separating the resulting gas from the oil in said vessel, then conducting the gas through a series of bodies of said oil contained and heated in other vessels and separating the gas from the oil in each vessel, substantially as described. 2nd. The process herein described of combining atoms of hydrogen and carbon of crude petroleum oil with atoms of oxygen and nitrogen of atmospheric air, and thereby forming a fixed gas, which consists in forcing atmospheric air under a high degree of pressure through crude petroleum oil heated in a vessel to a degree that will not evolve vapour therefrom, separating the resulting gas from the oil in said vessel, then conducting the gas under a diminishing pressure through a series of bodies of said oil contained and heated in other vessels, and separating the gas from the oil in each vessel, substantially as described. 3rd. The process of generating gas from crude petroleum oil and solid hydrocarbons, which consists in heating said oil to a degree below the point of evolving vapour therefrom, compressing air to a high degree and conducting it through a body of said oil contained in a vessel, separating the resulting gas from the oil in the same vessel, conducting the gas successively through a series of other vessels containing heated oil and separating it therefrom in each vessel, then conducting the gas through heated solid hydrocarbons, and finally superheating the combined gases for fixing them, substantially as described. 4th. The process of generating gas from crude petroleum oil and solid hydrocarbons, which consists in heating said oil to a degree below the point of evolving vapour therefrom, compressing air to a high degree, heating the air and conducting it through a body of said oil contained in a vessel under pressure, separating the resulting gas from the oil in the same vessel, conducting the gas successively through a series of other vessels containing heated oil and separating it therefrom in each vessel, then conducting the gas through heated solid hydrocarbons and a detorsive agent, then superheating the gas, conducting it through a liquid and finally storing it in a holder, substantially as described. 5th. The combination of an air pump and a series of vessels provided with means for heating the same, pipes communicating with the top of one and the bottom of the next vessel, and air distributing and foam arresting devices within said vessels, substantially as described. 6th. The combination of an air pump, an air receiver and heater, a series of vessels provided with means for heating the same, pipes communicating with the top of one and the bottom of the next vessel, and air distributing and foam arresting devices within said vessels, and a suitable holder, substantially as described. 7th. The combination of an air pump, a series of vessels provided with means for heating the same, pipes communicating with the top of one and the bottom of the next vessel, and air distributing and foam arresting devices within said vessels, a carbon enriching retort, a superheater, a washer and a holder, substantially as described. 8th. A generator provided with a partition having a series of perforations therein, a chamber below said partition and a supply for said chamber, a perforated diaphragm near the upper end of the generator, and a discharge pipe above said diaphragm, substantially as described.

No. 28,788. Puzzle. (Jeu de patience.)

Isaac T. H. Brown, Toronto, Ont., 3rd April, 1888; 5 years.

Claim—A puzzle produced by etching or otherwise creating a figure or design in one or more colors, in fragments, upon a transparent or