

### No. 8725. Improvements in Steam Generators.

(*Perfectionnements dans les générateurs de vapeur.*)

Birdsall Holly, Lockport, N. Y. U. S., 30th April, 1878, for 5 years.

*Claim.*—1st. A train or series of steam boilers connected together and to a feed water supplying apparatus and to a draft flue, by pipes and flues furnished with cocks or valves and dampers, whereby, at the will of the engineer, all of the boilers can be used for generating high pressure steam or a portion of the train or series to be used for generating high pressure steam, and the others for heating and supplying feed water for those generating high pressure steam. 2nd. A train or series of steam boilers connected together and to a feed water supplying apparatus, and to a draft flue, by pipes and flues furnished with cocks or valves and dampers, whereby, at the will of the engineer, all of the boilers can be used for generating high pressure steam, or a portion of them to be used for generating high pressure steam and the other portion for generating low pressure steam. 3rd. A train or series of boilers connected together and to a feed water supplying apparatus and to a draft flue, by pipes and flues furnished with cocks or valves and dampers, whereby, at the will of the engineer, all of the boilers can be used for generating high pressure steam, or a portion of them to be used for generating high pressure steam, a portion for generating low pressure steam, and a portion for heating and supplying feed water for the high and low pressure boilers. 4th. The combination of the smoke flue D b b, waste heat pipes D<sub>1</sub> D<sub>2</sub> and the dampers c<sub>1</sub> c<sub>2</sub> c<sub>3</sub> c<sub>4</sub> c<sub>5</sub> c<sub>6</sub>, with two or more boilers A<sub>1</sub> A<sub>2</sub> and stack D<sub>1</sub>. 5th. The combination of the smoke flue D b b, having dampers c c, waste heat pipe D<sub>1</sub> and its damper c<sub>1</sub>, two or more boilers A<sub>1</sub> A<sub>2</sub> and stack D<sub>1</sub>. 6th. The combination of the boilers A<sub>1</sub> A<sub>2</sub>, smoke flue D b b, waste flues D<sub>1</sub> D<sub>2</sub> and the dampers c<sub>1</sub> c<sub>2</sub> c<sub>3</sub> c<sub>4</sub> c<sub>5</sub> c<sub>6</sub> and the stack D<sub>1</sub>. 7th. The combination of the pump C, pipe B, train or series of boilers, and the feed water pipes and cocks belonging to boiler A<sub>1</sub>. 8th. The combination of the pump C, pipe B, train or series of boilers, and the feed water pipes and cocks belonging to boiler A. 9th. The combination with a train, series or battery of boilers, of the high and low pressure steam conveying pipes E G and their cocks.

### No. 8726. Improvements on Gas Lighters.

(*Perfectionnements aux allumeurs à gaz.*)

George H. Kitchen, John F. Kitchen, Rye, N. Y., and Frederick Mc Lewee, New York. (Assignees of John R. Scattargood, Newark, N. J. U. S.), 30th April, 1878, for 5 years.

*Claim.*—1st. The tube A provided with the nozzle b and air opening d at or near opposite ends, to constitute a gas lighter of which the flame is supplied by gas; 2nd. The combination of the tube A having the nozzle b at one end, and the air opening d at or near the other end, with the valve or cock e. 3rd. The combination of the key or wrench B, with the tube A having the nozzle b and air opening d.

### No. 8727. Improvements on Hose Reels.

(*Perfectionnements aux rouets à tuyaux élastiques.*)

Frederick M. Sheppard, New York. (Assignee of Butley B. Douglas, Newark, N. J.), U. S., 30th April, 1878, for 5 years.

*Claim.*—The combination of the standards A supported upon a four wheeled truck, the bolts C, rungs E, nozzle holder J, nut U and latch L.

### No. 8728. Improvement on Lubricating Compositions.

(*Perfectionnement aux composés lubrifiants.*)

Bridget French, (wife of John French), Rochester, N. Y., U. S., 30th April, 1878, for 5 years.

*Claim.*—A compound composed of petroleum or other oil, plumbago, bees-wax, Brazil or myrtle wax, tar or pitch, tallow and carbonate of soda, or other alkali.

### No. 8729. Apparatus for the Manufacture of Salt.

(*Appareil pour la fabrication du sel.*)

Henri Ransford, Brighton, Eng., 30th April, 1878, for 5 years.

*Claim.*—1st. The combination with the pan A, of the upper pan or evaporator B, in such manner that the steam rising from the lower pan may be condensed on the under side of the upper pan or evaporator, at the same time heating its contents whilst the water resulting from such condensation is conveyed away. 2nd. The combination of the pan A with the upper pan or evaporator B and the gutter C.

### No. 8730. Improvements on Fruit Dryers.

(*Perfectionnements aux séchoirs à fruits.*)

Rufus Moore, Kingsville, Ont., 30th April, 1878, for 5 years.

*Claim.*—1st. The reservoirs B and E having their tops made in the form of trays. 2nd. The pipe legs D D connecting the reservoirs B and E. 3rd. The funnel C communicating with the reservoir B.

### No. 8731. Improvements on Tobacco Pipes.

(*Perfectionnements aux pipes à tabac.*)

Jonathan Davis, St. Paul, Min., U. S., 30th April, 1878, for 5 years.

*Claim.*—1st. In a pipe bowl, the combination of the inner shell A divided into two compartments, by the partition C, and provided with spiral grooves a on the outside, communicating with ducts leading to said compartments, and the outer shell over said inner shell, and the fire pot D sitting within said inner shell. 2nd. In a pipe stem, the combination of the body G divided into two compartments by the partition g, said compartments communicating with each other, by means of spiral channels on the outside of said body, and the outer casing and supplemental stem H secured in the lower part of the body.

### No. 8732. Improvements on Calendars.

(*Perfectionnements aux calendriers.*)

William W Kitchen, Grimsby, Ont., 30th April, 1878, for 5 years.

*Claim.*—A calendar composed of the plate A and revolving wheel B, the former divided into seven sections, each section containing letters and numerals of months and days, and the latter, letters indicating the seven days of the week, spaced correspondingly to such sections, so that from date of day and date of one period, the day and date of another period within the year may be ascertained.

### No. 8733. Improvements in Meter Valves.

(*Perfectionnements aux valves-manomètres.*)

Birdsall Holly, Lockport, N. Y., U. S., 30th April, 1878, for 5 years.

*Claim.*—1st. The longitudinally adjustable valve plug of cone form which is applied to be uninfluenced by the direct pressure of the steam upon it within its chamber, in combination with a valve chamber, having a perforated diaphragm across it for the cone plug to work in back and forth and an inlet passage between one end or head of the chamber and the said diaphragm and an outlet passage between the other end or head of the chamber and said diaphragm, whereby a suitable receiving chamber on one side of the diaphragm for high pressure steam is provided, and a like chamber for low pressure steam on the other side of the diaphragm is also provided, and the passage of the steam which is at high pressure, into pipes which are to conduct the steam at various pressures or at low pressure, is controlled. 2nd. The valve plug chamber, made in two parts, and with its diaphragm confined beneath the ends of these parts by a coupling device.

### No. 8734. Improvements on Postal Cards.

(*Perfectionnements dans les cartes postales.*)

Franklin W Brooks, New York, U. S., 30th April, 1878, for 5 years

*Claim.*—1st. A return postal card composed of two separable parts with message blanks or surfaces on the respective parts, said message blanks or surfaces being so arranged as to be used successively without inclosing any writing, while each message can be retained by the party to whom it is addressed. 2nd. A return postal card composed of two separable parts, each having a stamped address blank or surface, and adapted to receive successively two messages without inclosed writing, the first message with its appropriate address and post-mark being on one part of the card so as to be retained by the party who receives it, while the other part of the card is adapted to receive the reply and its appropriate address and post-mark. 3rd. Two separable parts, each having a blank or surface for a message to appear on the exposed back of the card, the reply blank or surface being inclosed and protected during the transmission of the first message by the removable part bearing said message. 4th. Two separable parts, each having a blank or surface for a message to appear on the exposed back of the card with the reply blank or surface on a card of sufficient stiffness, and the blank or surface for the first message on thin and light paper. 5th. A return postal card composed of a double card or sheet of thin paper with a fold at one edge, and a reply card inclosed within said double card, each card having a full size stamped address blank or surface, and a full size message blank or surface, so arranged that neither message will be inclosed, and so that the message of each card will be permanently connected with its appropriate address and post-mark. 6th. A double card or sheet having closed longitudinal edges and open ends, and a reply card inclosed within said double card, and confined therein, but so as to be inspected through said open ends of the double card, each card having a full size of stamped address blank or surface, and a full size message blank or surface for carrying two messages successively without inclosed writing. 7th. A double card or sheet, having closed longitudinal edges, and a reply card inclosed within said double card, and united therewith at one of said closed edges, this edge being perforated or partially severed so that by tearing off said edge, the inclosed card will be simultaneously disclosed and detached.

### No. 8735. Bark Cutting Machine.

(*Machine à couper l'écorce.*)

William Shaw, Kingman, Me., U. S., 30th April, 1878, for 5 years.

*Claim.*—In a revolving cutting drum, a screen d surrounding the lower half of said drum, and operating in connection with the revolution of the drum, to screen the bark and return to coarser portions to be recut.

### No. 8736. Improvements on Slates.

(*Perfectionnements aux ardoises.*)

Harry C. Goodrich, Chicago, Ill., U. S., 30th April, 1878, for 5 years

*Claim.*—A slate frame having cord passed through and over its edge to form a muffler thereon

### No. 8737. Improvements on Horse Shoes.

(*Perfectionnements aux fers à cheval.*)

Jacob Russell, Newark, John J. Reimer and Christian E. Moller, Hoboken, N. J., U. S., 30th April, 1878, for 5 years.

*Claim.*—1st. Rolling the bar with a ledge or offset along one edge, next forming a crease in said ledge, bending the bar into form, and finally by direct pressure forming the solid toe and heel calks and reducing the bar between the calks; 2nd. Forming the creases e in the bar, for making a horse-shoe by obliquely set dies. 3rd. A machine-made horse-shoe constructed with inclined creases e e. 4th. A horse-shoe constructed with solid toe calk and an offset or ledge extending in front of the toe-calk and adapted to supply the metal for the toe-clip.

### No. 8738. Improvements on Compressed Lamps.

(*Perfectionnements aux lampes comprimées.*)

Thomas T. Turnbull and Charles N. Armstrong, Montreal, Que., (Assignees of Emile Grivel, Paris, France), 2nd May, 1878, for 5 years.

*Claim.*—1st. Compressed cakes of solid soap, composed of salt, flour or meal, ground piment, ground white pepper, meat, suet, onions, without broth added thereto. 2nd. In compressed cakes of soap, composed of salt, flour or meal, ground piment, ground white pepper, meat, suet, onions and broth added thereto.

### No. 8739. Improvements in the Manufacture of Tubing.

(*Perfectionnements dans la fabrication des tuyaux.*)

William McKenzie, New York, U. S., 2nd May, 1878, for 5 years

*Claim.*—1st. A tube or tube blank, having a solid end and a hook for engaging the tube drawing machinery. 2nd. The method of cleaning tubes by drawing them while hot through a scraping die. 3rd. The process of refining and welding imperfect tubes, by heating them to a welding heat, and while hot passing them repeatedly through rolls. 4th. The process of making new and perfect tubes from old or imperfect tubes without altering their cylindrical form.