

### No. 24,747. Ventilating Attachment for Stoves. (*Appareil de Ventilation pour Poêles.*)

Warren M. Brinkerhoff, Auburn, N. Y., U. S., 14th August, 1886; 5 years.

**Claim.**—1st. The combination, with a stove, of a ventilating passage separate from the flues of the stove communicating with the outer air at its lower end, and discharging into the smoke outlet of the stove at its upper end, the said passage diverging out of a direct course and traversing a greater distance than the length of the parts of the stove, or its connections adjacent thereto, the whole of the diverging portion of said passage lying in close proximity to the wall of the stove or its outlet, substantially as described. 2nd. The combination, with a stove, of a ventilating passage separate from the flues of the stove communicating at its lower end with the outer air, and discharging into the smoke outlet within a short distance of the stove, said ventilating passage being provided intermediate its end with an annular portion, substantially as described. 3rd. The combination, with a stove, of an annular passage lying adjacent to the walls of the smoke outlet, and a ventilating passage communicating with the outer air at its lower end, and with the said annular passage at its upper end, the said annular passage also communicating with the smoke outlet within a short distance of the stove, substantially as described. 4th. The combination, with a stove, of an annular passage lying adjacent to the walls of the smoke outlet, and a ventilating passage communicating with the outer air at its lower end, and with the said annular passage at its upper end, the said annular passage communicating with the smoke outlet on the side opposite the entrance of the ventilating passage, substantially as described. 5th. The combination, with a stove, of a ventilating passage separate from the flues of the stove, communicating with the air at its lower end, and rising therefrom and discharging into the smoke outlet of the stove, the said passage being provided intermediate its ends with a return portion, the direct and return portion lying adjacent to the wall of the stove or smoke outlet, substantially as described. 6th. The combination, with a stove, of a ventilating passage communicating with the open air at its lower end, the said passage at its upper end being provided with an annular or coiled portion lying adjacent to the walls of the smoke outlet of the stove, and discharging into the same, substantially as described.

### No. 24,748. Clutch for Electric Arc Lamp. (*Griffe de Lampe Electrique à Arc.*)

Clarence B. Noble, Cleveland, Ohio, U.S., 14th August, 1886; 5 years.

**Claim.**—1st. In a clutch for electric arc lamps, the combination, with a vertically moving hollow carbon-holder containing, within itself, a loosely fitting tilting friction disk held stationary on one side by a wire or rod, also contained within the holder and attached above to the lamp frame, with the opposite side of the disk supported by a wire or rod contained within the holder and connected above to the core or armature of a helix, said helix being connected in circuit with the lamp carbons, for tilting the disk and causing it to impinge against the inside of holder to grip and elevate it, the parts being arranged substantially as shown. 2nd. In clutches for electric arc lamps, the hollow carbon-holder consisting of a tube or cylinder and containing, within itself, a loosely fitting tilting friction disk and wires for tilting and tripping the disk, to respectively tighten and loosen the grip of the disk against the interior of carbon-holder, for separating and feeding the carbons, the said wires passing up through the holder and being connected one with the lamp frame, the other with the armature core of the helix, said helix being in electric circuit with the lamp carbons, the parts being arranged substantially as described. 3rd. The combination, in a clutch for electric arc lamps, of a hollow carbon-holder, a loosely fitting clutch disk operating therein and supported on opposite sides by wires passing up through said holder, one wire or rod supporting one side of the disk and attached above to lamp frame, with the other wire or rod supporting the opposite side of the disk and attached above to the armature or core of the helix, said helix being electrically connected in circuit with the lamp carbons for tilting the disk and causing it to impinge against the inside of carbon-holder to grip and elevate it, and adjustable stops to limit the upward movement of the helix core for regulating the length of the arc, all the parts being arranged as and for the purposes shown. 4th. The combination, in clutches for electric arc lamps, of a hollow carbon-holder D and wires I and G, for respectively tilting and tripping the disk G, to tighten and loosen its grip on the inside of the carbon-holder for separating and feeding the carbons, the said wires passing up through the holder and being connected above G with the lamp frame, and I with the helix or armature core C of the helix C, said helix being electrically connected in circuit with the lamp carbons P and N, and the adjustable stop C, or its equivalent, located over the helix core, to limit the upward movement of the core and regulate the length of the arc, the parts being arranged substantially as specified.

### No. 24,749. Elliptic Spring. (*Ressort Elliptique*)

William G. Simpson, Guelph, Ont., 16th August, 1886; 5 years.

**Claim.**—1st. An elliptic spring in which the upper and lower plates are formed out of one piece of metal, substantially as shown and described. 2nd. An elliptic spring in which the eye A is formed in the centre of the plates a and b, and the eye B out of a correspondingly shaped plate a and b, the two plates being connected together, substantially in the manner specified. 3rd. An elliptic spring in which the eye A is formed in the centre of the plate a and b, and the eye B out of a correspondingly shaped plate a and b, the two plates being connected together, in combination with a series of outer plates d, substantially as and for the purpose specified.

### No. 24,750. Steam Engine. (*Machine à Vapeur.*)

Charles E. Robertson, Montreal, Que., 16th August, 1886; 5 years.

**Claim.**—1st. The combination of a triple cylinder having passages and pistons, substantially as described, with steam chest N having

extension, O and P, and valves Q, U and S, the whole substantially as described. 2nd. In combination with the ports F, E, I and M, the valves Q, U and S, constructed, arranged and operated substantially as described.

### No. 24,751. Steam Boiler. (*Chaudière à Vapeur.*)

Robert W. King, Georgetown, Ont., 16th August, 1886; 5 years.

**Claim.**—1st. A steam boiler in which the furnace is placed within the inner shell, and the outer shell is surrounded by a closed space communicating with the chimney or main flue, the combination of a series of tubes placed between the inner and outer shell of the boiler, and connecting the furnace with the outer space, substantially as and for the purpose specified. 2nd. The inner shell B surrounding the furnace A, and connected at its lower end to the outer shell C, by the plate D, resting on the wall K, in combination with a series of tubes F, arranged to connect the furnace A with the space J, substantially as and for the purpose specified. 3rd. The inner shell B surrounding the furnace A, and connected at its lower end to the outer shell C, by the plate D, resting on the wall K, in combination with the dead plate J and tubes F, substantially as and for the purpose specified. 4th. The inner shell B surrounding the furnace A, and provided with a covering plate I, having an annular flange a formed on it, to receive the set-screw or screws b, in combination with the coal magazine H, arranged substantially as and for the purpose specified. 5th. The tubes F connecting the furnace A with the space J, in combination with the openings L formed in the wall K, and protected by detachable doors O, substantially as and for the purpose specified.

### No. 24,752. Wind Mill. (*Moulin à Vent.*)

Frederick B. Bouteiller, Belle Rivier, Ont., 18th August, 1886; 5 years.

**Claim.**—1st. In a windmill, the combination, with the vertical shaft and the adjustable sails, of the disk M on said shaft, the governor, the connections N between said disk and sails, and the adjustable weights L on said connections, substantially as described. 2nd. In a horizontal windmill, the combination, with the vertical shaft, the disk M sleeved thereon, and provided with a plurality of holes m, and the governor, of the adjustable sails, the eyes O secured thereto, the connections N having hooked ends engaging said holes and eyes, and the weights L adjustably sleeved on said connections, substantially as described.

### No. 24,753. Traction Wheel. (*Roue de Traction.*)

Morgan Loring and Eli H. Anspaugh, Columbia City, Ind., U. S., 18th August, 1886; 5 years.

**Claim.**—The traction wheel herein described, the rim thereof having a flat periphery, and provided on opposite sides with a series of spaced rectangular lugs arranged singly thereon, the outer edges of which are flush with the edges of the rim, their inner edges forming with the unobstructed flat portion of the rim a space E, as shown and described and for the purpose set forth.

### No. 24,754. Straw-Cutting Machine. (*Coupe-Paille.*)

Manus C. Beaupré, Charlotteville, Ont., 18th August, 1886; 5 years.

**Claim.**—1st. The combination of the endless band or belt M, carrying knives suitably attached thereto, with the roller B, of raw hide or other suitable material, substantially as described and for the purposes specified. 2nd. The combination, which may be attached to a thrashing machine, of the roller B with the knives A, A, carried on endless band or belt M, substantially as described and for the purposes specified.

### No. 24,755. Button-Fastening for Corsets, etc. (*Queue de Bouton pour Corsets, etc.*)

Sherwood B. Ferris, Lakewood, N. J., U. S., 18th August, 1886; 5 years.

**Claim.**—In corsets and other garments, or articles of wear, provided with flexible button fastenings, the article or garment provided with buttons b, carried by tapes or flexible strips c, passed forward and backward successively through the centre portions of the buttons, and secured to the garment at their terminal portions under cover and inclosure by a seamed portion of the garment, essentially as shown and described.

### No. 24,756. Harvester Knife Grinder. (*Rémouleur de Couteaux de Moissonneuses.*)

John F. Webster, Elkhart, Ind., U.S., 18th August, 1886; 5 years.

**Claim.**—1st. The combination of the support or standard, the main frame pivoted thereto, a geared drive-wheel keyed to the outer end of the pivotal connection, the supplemental frame pivoted to the outer end of the main frame, a pinion G<sub>1</sub> journaled in line with the pivotal connection between the two frames, and meshing with the gear of the drive-wheel, the grinding-wheel supported on the outer end of the supplemental frame and having its shaft provided with a gear-pinion G<sub>2</sub>, a gear-pinion H<sub>2</sub>, meshed with the pinion G<sub>1</sub>, and journaled in line with the pivot between the main and supplemental frames, and keyed to, and rotating with the pinion B<sub>2</sub>, whereby the grinding-wheel may be revolved in any position of the main or supplemental frame, substantially as described. 2nd. The combination of the curved support or standard B, the main frame, the supplemental frame pivoted to the main frame, the grinding-wheel journaled in the supplemental frame and having its shaft provided with a pinion G<sub>1</sub>, the gear H<sub>2</sub> keyed to the pivotal connection between the two frames and meshed with pinion G<sub>1</sub>, pinion C<sub>2</sub> keyed to gear H<sub>2</sub>, and the drive-wheel geared with pinion C<sub>2</sub>, and journaled on the pivotal connection between the standard and the main frame, all substantially as set forth. 3rd. The combination, with the main