

the peat consisting of a chamber composed of a cylinder and a frustrum of a cone with inlet and outlets for the peat, a helix mounted axially in such chamber, and means for rotating same, of a steam jacket encircling such cylinder, and a source of supply of superheated steam with connections between it and said jacket, all as shown and described. 4th. The chamber *II*, *12* with steam jacket *i*, and tubes *e*, connecting interior of said cylinder with outer air, as and for the purposes set forth. 5th. In combination with the chamber *I* formed as above described, one or more open tubes communicating with same and carried in a cylinder secured at the forward end of said chamber *I*, all as and for the purposes described. 6th. In combination with the forming cylinder *L* carrying tubes as above described, and with the steam jacket *i* of the chamber *I*, of a steam jacket encircling the cylinder *L* and communicating with steam jacket *i*, as shown and described. 7th. The combination of the hopper *HI*, chamber *I*, steam jacket *i*, helix *J* and means whereby same may be rotated, cylinder *L*, steam jacket *L* and tubes *II*, and diaphragms *p*, *p*, *pi*, and connections for introducing into the said steam jacket, helix shaft and cylinder *L*, substantially as herein set forth, 8th. The combination, with the cylinder *L* carrying tubes *l*, of an automatic variable cut-off, as and for the purpose described.

**No. 30,885. Whiffletree Hook.**  
(*Crochet de palonnier.*)

Targe G. Mandt, Stoughton, Wis., U.S., 7th March 1889; 5 years.  
*Claim.*—As a new article of manufacture, a whiffletree hook consisting of a socket piece *B*, a rounded shank *E* formed on the outer end of the said socket, a crescent-shaped piece *C* formed integral with the said shank, and having its rear lower curved end *D* of a greater width than its upper curved end *F*, and terminating in an outwardly extending stud or bolt *G*, substantially as described.

**No. 30,886. Steam Radiator.**  
(*Calorifère à vapeur.*)

Thaddeus C. Joy, Titusville, Penn., U.S., 7th March, 1889; 5 years.  
*Claim.*—In a steam radiator, in combination, a plurality of steam circulation sections *A*, *A* for heating air, said sections being hollow formed with steam inlet and outlet openings connected by thimbles, and provided with oppositely placed upright ribs which form vertical uninterrupted air column ways between the sections of uniform cross sectional area from bottom to top of the sections, substantially as and for the purpose described.

**No. 30,887. Harness.** (*Harnais.*)

John Gray, Jefferson, Iowa, U.S., 7th March, 1889; 5 years.  
*Claim.*—The combination, with the hame staple and with the tug-clip twisted at right angles as set forth, of an elongated draft link interposed between the staple, and clip to insure a direct draft and a flexible double-jointed connection.

**No. 30,888. Machine for Squeezing the Juices out of Lemons.** (*Pressoir à citron.*)

James Ferguson, Barrie, Ont., 7th March, 1889; 5 years.  
*Claim.*—The combination of the lever *E* with pinion on one end working in a rack, toothed piston rod moving in the box *D* containing the openings *I* in the base *F*, all arranged and combined as shown and described for the purpose set forth.

**No. 30,889. Spring Seat.** (*Siège élastique.*)

Henry S. Hale, Philadelphia, Penn., U.S., 7th March, 1889; 5 years.  
*Claim.*—The combination of a series of coil-springs with a wide, thin, flexible metallic plate covering a large area of the seat, and directly supporting the upholstery and secured to the tops of said springs, the said parts being adapted to fit between the support on the bottom of the seat, and the upholstery on top, the wide plate offering an extended surface for support of said upholstery.

**No. 30,890. Electric Thermostat.**  
(*Thermostat électrique.*)

Etna H. Davis and Reuben Westervelt, Elmira, N.Y., U.S., 7th March, 1889; 5 years.

*Claim.*—1st. In a thermostat, an expansible piece forming a terminal of an electric circuit, a contact piece forming the opposite terminal, and an automatic cut-out for the terminals, the said cut out being brought into operation when contact is made, whereby the contact-points will be automatically short circuited at each contact. 2nd. In a thermostat, an expansible piece forming a terminal of an electric circuit, a contact piece forming the opposite terminal, and an electric magnetic cut-out which is brought into operation when contact is made, whereby the contact points will be automatically short circuited at each contact. 3rd. In a thermostat, an expansible piece forming a terminal of an electric circuit, contact pieces forming corresponding terminals, each located in a separate branch circuit, and an electro-magnetic cut-out which is brought into operation when contact is made between the expansible piece and either of the other terminals, whereby the contact points will be automatically short circuited at each contact, as for the purpose set forth. 4th. The combination, with an electro-magnetic motor and a pair of branch circuits connected therewith, of a thermostat adapted to close one branch or the other, on an increase or decrease of the temperature, and an electro-magnetic cut-out for closing a short circuit around the thermostat contacts, as and for the purpose set forth.

**No. 30,891. Side Spring for Vehicles.**  
(*Resort de côté pour les voitures.*)

James F. Thomas, Alexandria, Neb., U.S., 7th March, 1889; 5 years.  
*Claim.*—The combination, with the vehicle body and its front and

rear axles, of the side springs *G*, *G*, bowed laterally inward, and constructed with an inwardly curving central portion *g*, thence diverging in straight lines outward and clipped to the head block and rear axle, the bolts *d*, *d*, and the central hook-shaped bolts *e*, *e*, arranged upon the exterior of the apex sides of the curved portions *g*, *g*, and engaging at their hook ends with said curved portions of the springs, and uniting them with the frame work of the body of the vehicle, substantially as and for the purposes specified.

**No. 30,892. Fish Weir.** (*Parc de mer.*)

Joseph O'Brien, Carleton, Saint John, N.B. 7th March, 1889; 5 years.

*Claim.*—1st. The second or landing pound *C*, provided with an open floor or grating, wholly or partially covering the area, and elevated seaward to allow small fish to pass through the meshes into open water and escape capture, in combination with a great pound *B* having a plank floor *I*. 2nd. In a fish weir, the second or landing pound having a gate *N* seaward, provided with a grating, as set forth.

**No. 30,893. Meter for Measuring Electrical Currents.** (*Compteur des courants électriques.*)

William H. Douglas, Stourbridge, Eng., 7th March, 1889; 5 years.

*Claim.*—1st. An improved meter for measuring electrical currents, consisting of two thermometers, one of which is effected by the electrical current. 2nd. Connecting two thermometers by a differential gearing of wheel work, whereby the quantity of electrical current passing is indicated by means of a hand upon a dial or with lever. 3rd. In electrical meters, the snail in combination with the duplicate racks or levers, and indexing mechanism for registering its movement, substantially as and for the purpose herein set forth. 4th. The general combination of thermometers and clock work or motor, substantially as herein set forth, for the purpose of measuring electrical currents.

**No. 30,894. Petroleum Oil Stove.**

(*Poêle à pétrole.*)

Jacques A. Vagner, Paris, France, 7th March, 1889; 5 years.

*Claim.*—1st. In a petroleum or oil stove, the two superposed rings *q*, *q*, combined and arranged to form a wick cooler, substantially as described and shown. 2nd. In a petroleum or oil stove, the single ring *q* forming a wick cooler, substantially as described and shown. 3rd. In a petroleum or oil stove, the plate or basin *q* having the holes *s* and forming wick cooler, substantially as described and shown. 4th. In a petroleum or oil stove, the plate or basin *q* having the holes *x*, *x*, and the rings *q*, *q*, or their equivalent, and attached to the plate *q* supporting the chimney *t*, in combination with the lamp and the whole enclosed within a covering or body, substantially as described.

**No. 30,895. Electric Temperature Regulator.** (*Régulateur électrique de la température.*)

Edna H. Davis and Reuben Westervelt, Elmira, N. Y., U. S., 7th March, 1889; 5 years.

*Claim.*—1st. The combination, with a main supply pipe for steam or other fluid in a heated state, of a valve in the said pipe, a branch pipe leading to a fluid box or chamber, a second branch pipe leading from the said chamber to the said valve, and an electric motor controlling the passage of the fluid through the chamber, as and for the purpose set forth. 2nd. The combination, with a main supply pipe for conveying steam or other heating fluid, of a valve in the said pipe, and a branch pipe leading from the main pipe to the said valve through a chamber, and an electric motor for controlling the passage of the fluid through the chamber, as and for the purpose set forth. 3rd. The combination, with a tilting arm extending into a fluid chamber, of a diaphragm surrounding the arm and sealing the end of the chamber, and a pair of valves in operative connection with the inner end of the arm, whereby the chamber may be gas or air-tight, and still admit of the valves being operated, as set forth. 4th. In a valve controller, the chamber *V*, inlet and outlet pipes 2 and 5, and exhaust *L*, valves 3 and 4 and levers *Y* and *Z*, in combination with the rod or arm *T* and the head *X*, as and for the purpose set forth.

**No. 30,896. Manufacture of Artificial Compound in Imitation of Wood.**  
(*Fabrication d'imitation de bois.*)

Bruno Harrass, Böhlen, Germany, 7th March, 1889; 5 years.

*Claim.*—1st. The method herein described of making an artificial wood compound that is impervious to moisture and withstands the attacks of rodents, which consists in mixing with wood or similar fibre a resinous compound, binding the fibre together with a glutinous material which is rendered insoluble in water by means of bichromate of potash, and subsequently adding solutions of resin soap and alum, and a small quantity of slacked lime, substantially as herein described. 2nd. The method herein described of making an artificial wood compound that is impervious to moisture and withstands the attacks of rodents, which consists in, first mixing wood fibre or cellulose with a solution of resin in caustic soda lye, to which mixture resin powder is added, then incorporating with this mixture a binding material consisting of an agglutinating substance mixed with cellulose and bichromate of potash, the compound thus formed having afterwards added thereto solutions of resin soap and alum, and a small quantity of slacked lime, as described. 3rd. The method herein described of preparing wood or cellulose fibre for forming an artificial wood compound, by first mixing the same with a heated solution of resin in caustic soda lye, and then adding pulverized resin, substantially as set forth. 4th. As a new article of manufacture, an artificial wood compound that is impervious to moisture and