

one within the other, main draft and check draft pipes leading from the respective compartments, and means to rotate the inner cylinder, actuated by the deflection of the thermostat. 3rd. A thermostat consisting of a bar of expansible material secured at both ends and adapted to bend centrally when expanded by heat, in combination and in engagement with one arm of a crank lever, bearing against one side, and means to connect said lever to a regulator.

No. 42,602. Steam Muffler.

(Appareil pour assourdir la vapeur.)

Caleb E. Healy, Detroit, Michigan, U.S.A., 13th April, 1893; 6 years.

Claim.—1st. Mechanism for absorbing and consuming exhaust steam from an engine, consisting of the enlarged condensing chamber C, provided with the discharge pipe *c*¹, the jacket chamber D provided with the connecting and discharge pipes *c*, *d*², and E, in combination with the superheating and perforated coil E¹, arranged to operate, substantially as described. 2nd. In means for condensing, superheating, and consuming exhaust steam, a condensing chamber C, an exhaust pipe extending into this chamber, a drain pipe *c*¹, a steam connection with a jacketed chamber D, perforated partitions with openings arranged on alternate sides of the jacketed chamber, a vent exhaust pipe leading from this chamber, and a perforated coil extending from this pipe and situated in close juxtaposition to the mouths of the boiler flues, substantially as described.

No. 42,603. Food Cutter.

(Appareil pour couper la viande, le pain, etc.)

Martin Fader, Bayside, Ontario, Canada, 13th April, 1893; 6 years.

Claim.—In a food cutter, the combination of a knife moving in ways, with a gauge board formed with flanges and having a varying thickness of the board upon opposite sides of these flanges, the side boards of the cutter containing vertical grooves upon their inner sides for the reception of the flanges of the gauge board, substantially as described.

No. 42,604. Envelope. (Enveloppe.)

Jesse Williams Alton, New Whatcom, Washington, U.S.A., 13th April, 1893; 6 years.

Claim.—1st. The combination with a permanent envelope having an opening, of a temporary wrapper having a flap adapted to pass through said opening and provided with a gummed surface by which it may be secured, substantially as set forth. 2nd. The combination with a permanent envelope having an address opening, of an independent temporary wrapper, provided with a gummed surface by which it may be secured, substantially as set forth. 3rd. The combination with a permanent envelope having a name address opening, of a temporary address wrapper, having a gummed surface adapted to pass over the envelope flap and be stuck to the envelope, substantially as set forth. 4th. The combination with a permanent envelope having an address opening and a tuck opening, of a temporary wrapper to inclose the matter to be sent and hold the address, said temporary wrapper provided with a gummed flap to pass through said tuck opening and adapted to pass over the envelope flap and be gummed to said envelope, substantially as set forth. 5th. The combination of a permanent envelope, and an independent temporary address carrying wrapper supplemental and complementary to said envelope, and adapted to be used in place of that part of the envelope ordinarily destroyed by the first use, substantially as set forth. 6th. The combination with a permanent envelope, of an independent sealing flap, substantially as set forth. 7th. The combination with a permanent envelope provided with a sealing flap opening, of an independent sealing flap having one portion of less width and another portion of greater width than the length of said sealing flap opening, substantially as set forth.

No. 42,605. Attachment to be Applied to Measuring Tapes. (Attache pour ruban à mesurer.)

John J. Oxley, Montreal, Quebec, Canada, 13th April, 1893; 6 years.

Claim.—1st. In combination with a measuring tape and its terminal link, of thumb pins hinged upon the outer bar of such link, as set forth. 2nd. In combination with a measuring tape and its terminal link, of thumb pieces A, A, with points B, B, hinged together about one end of said link, as set forth.

No. 42,606. Mould for Making Plaster Slabs.

(Moule pour faire les barres à plâtrer.)

Thomas Curran, New York, State of New York, U.S.A., 13th April, 1893; 6 years.

Claim.—1st. A mould for forming plaster slabs with dove tail cavities and projections, consisting of the moulding sheet and frame made integral, and the whole sheet and frame being composed of soft rubber, substantially as set forth. 2nd. A mould for forming plaster slabs with dove tail cavities and projections, consisting of the moulding sheet and the surrounding frame A B B, made integral with said sheet, and the whole sheet and frame being composed of soft rubber, substantially as set forth.

No. 42,607. Heating Apparatus. (Appareil de chauffage.)

Hiram John Wattles and Charles Marion Lukens, both of Syracuse, New York, U.S.A., 14th April, 1893; 6 years.

Claim.—1st. In a heater, the combination, with the cylinder, D, provided with the dome *a*, which is closed as its top, of the conductor E, extending up into the dome, said conductor being open at the top and flanged at its bottom, forming a cover over the outer edges of the fire pot, and a heater for the air passing down the indirect flue *c*, as shown and described for the purposes specified. 2nd. In a heater, the combination of the cylinder D, provided with the dome *a*, the conductor E open at the top and flanged at its bottom, covering the outer edges of the fire pot, the casing G, surrounding the cylinder and the cold air pipe *g* opening into the chamber, substantially as shown and described and for purpose specified. 3rd. In a heater, the cylinder D, having the dome *a*, the conductor E, open at its top and flanged at its bottom, and covering the outer edges of the fire pot, the casing G surrounding the cylinder, and the cold air pipe *g*, provided with the blower *i*, and opening into the chamber, all combined and operating substantially as described and for the purpose specified. 4th. In a heater, the combination with its fire pot, of a cold air conductor K extending from the outer portion of the heater and passing vertically up through the central portion of the fire pot to a suitable height above it, substantially as shown and described and for the purposes specified. 5th. In a heater, the combination with its fire pot of a cold air conductor K leading from the exterior of the heater and extending vertically up through the fire pot, terminating a suitable distance above it, the said discharge end provided with a deflector *l* upheld in non contact therewith, substantially as described and shown and for the purposes specified.

No. 42,608. Car Coupler. (Attelage de chars.)

Edwin B. Reid, Barrie, Ontario, Canada, 14th April, 1893; 6 years.

Claim.—1st. An improved automatic car coupler consisting of a draw head shaped substantially as shown and provided with one-half of a locking roller B, actuated by a spring and arranged to engage with the other half of a locking roller carried in a similarly formed draw head, substantially as and for the purpose specified. 2nd. Two draw heads A, each formed with a nose *b*, arranged to fit into a recess formed on the other draw head, in combination with a pin designed to fit into a hole formed by the two draw heads engaging with each other, substantially as and for the purposes specified. 3rd. An improved automatic car coupler, consisting of a draw head shaped substantially as shown and provided with one-half of a locking roller B, movably held in position by the key C, actuated by a spiral spring on the rod D, and arranged to engage with the other half of a locking roller carried in a similarly formed draw head, substantially as and for the purpose specified.

No. 42,609. Clamp for Brush Fibre.

(Agrafe pour fibres de brosse.)

William S. McDonel, Windsor, Ontario, Canada, assignee of William H. Gates, Detroit, Michigan, U.S.A., 14th April, 1893; 6 years.

Claim.—1st. A clamp for the purpose specified, composed of the parallel side rails joined at their ends, said rails having the oppositely arranged and inwardly extending partitions forming pockets between their adjacent sides, and an open space between their opposed ends extending longitudinally through the centre of the clamp, as set forth. 2nd. In a clamp, the combination of the parallel side rails, the vertical end portions joining said rails and having a groove or way therein, said rails having the laterally extending partitions, and the notches or depressions in their upper edges between said partitions, substantially as specified. 3rd. The combination of the clamp having the parallel rails provided with the lateral partitions, the vertical end portions joining said rails and having the ways therein, and the follower blade adapted to reciprocate in said ways, by means of which the fiber is folded and separated within the clamp, substantially as specified.

No. 42,610. Brush. (Brosse.)

Joseph S. Edgar, Windsor, Ontario, Canada, assignee of William H. Gates and Forbes C. Welsh, Detroit, Michigan, U.S.A., 14th April, 1893; 6 years.

Claim.—1st. In combination with the brush body having the annular recess in its under face and the socket leading centrally therefrom, the metal ferrule located in said annular recess, the stem having the brush fiber secured transversely thereto, one end of said stem being secured within the socket, and the fiber being folded within the ferrule with its ends projecting outward, substantially as specified. 2nd. A brush body having an annular recess in one of its faces, and an annular socket leading centrally therefrom into the body of the brush, combined with the ferrule, the stem having on opposite faces a tuft of fiber crossing said stem and being attached thereto at the point of crossing, one end of said stem being confined within the socket, the bristles of fibers being folded within the ferrule, and the brad or nail securing said stem to the brush body, substantially as specified. 3rd. In combination with the brush body having the annular recess therein, the socket leading centrally therefrom, the metal ferrule in said annular recess, the stem having on its opposite faces the tuft of bristles, the staples securing said bristles to the stem, one end of said stem passing into the socket, the bristles being