

stantially as and for the purpose set forth. 6th. The combination of the plate metal baling press tube or case, with the roller and the ears or projections from the case connecting the same, for the purpose set forth.

No. 29,076. Straw-Burning Attachment to Stoves. (*Poêle consommant la paille.*)

Thomas J. McBride, Winnipeg, Man., 2nd May, 1888; 5 years.

Claim.—1st. The combination, with the combustion chamber having a collar B at the smoke outlet, of the slotted angular plates C, D, and E, F and G, H, bolted adjustably together and to said collar, to suit the front opening of a stove, as set forth. 2nd. In a straw-burning attachment, a feed or fuel drum provided with a pipe or duct L, connecting with the upper part, and discharging downwardly into the combustion chamber or its smoke outlet, as set forth. 3rd. In a straw-burning attachment, the draft inlet having a boxing M, provided with an internal valve N to close by pressure of gas in the combustion chamber, when stronger than the draft, as set forth. 4th. The combination, with the feed drum, of the forked lever O and rack P, for lifting fuel out of the combustion chamber, and retaining it in said feed drum, when combustion of fuel is not desired. 5th. In the herein described straw-burning attachment, the combustion chamber A provided with a dumping door R in the bottom, and having an outwardly attached ash receptacle, as set forth. 6th. A straw-burning attachment to stoves, consisting of a combustion chamber A, having a collar B at the smoke outlet, and adjustable angular plates C, D, E, F, G, H at the top and sides of said collar, the bottom of said chamber provided with a door R and ash receptacle J, and an automatic valve N within a boxing M, enclosing the draft opening, a fuel drum K seated on top of said combustion chamber, and provided with a forked lever O extending downward into the combustion chamber, and a pipe or duct L, connecting the fuel drum and combustion chamber, as set forth. 7th. The ring T, having an annular groove at top and bottom, in combination with the combustion chamber A and fuel drum K, to make a smoke-tight joint, as set forth.

No. 29,077. Stove for Burning Straw, etc.

(*Poêle consommant la paille, etc.*)

Thomas J. McBride, Winnipeg, Man., 2nd May, 1888; 5 years.

Claim.—1st. A stove consisting of an oven 2, a flue 9 surrounding said oven, a fire-box 3 in said flue, a smoke outlet 8 over said fire-box and in connection with said flue, a combustion chamber 14 and a straw fuel reservoir above said combustion chamber, substantially as set forth. 2nd. A stove having a fuel reservoir 15 over a combustion chamber 14, a flue therefrom leading around an oven, said combustion chamber provided with bars 25 to support straw fuel while being burned, a rake 18 to clear the fire, grates 20 below the rail, a draft entrance 15 opposite to the smoke outlet, an ash receptacle 26 and with or without a fuel receptacle 24, as set forth. 3rd. A stove for burning straw fuel, having a removable feed receptacle 24, within a reservoir 15, seated above a combustion chamber, in connection with the throat of a flue surrounding an oven, substantially as set forth. 4th. In combination with the combustion chamber 14, a rake 18 to clear ashes from the straw fuel while being burned, and a sliding grate 20, for the purposes set forth. 5th. In combination with a stove, a fuel reservoir 15, provided with doors c, and located above a combustion chamber 14 to feed fuel thereto, as set forth.

No. 29,078. Feed and Water Tray for Chickens. (*Plateau pour la nourriture et l'eau des poulets.*)

Henry J. Mouzon, Bamberg, S.C., U.S., 2nd May, 1888; 5 years.

Claim.—1st. The herein shown and described cap composed of a single piece of sheet material bent to form sides which are provided with a series of vertical openings, and having ends connecting the sides and closing them in, substantially as and for the purpose specified. 2nd. The herein shown and described poultry feeding device composed of the shallow tray A and the cap, consisting of the middle portion made of a single piece of sheet material bent to form sides, which have vertical openings and extensions resting upon the bottom of the tray, and the ends which close in the sides and rest on the ends of the tray, substantially as specified.

No. 29,079. Felt Sock Machine.

(*Machine à chaussettes de feutre.*)

David Spiers, (assignee of Walter Glasby,) Galt, Ont., 3rd May, 1888; 5 years.

Claim.—1st. A tube roller B having a tapered end, in combination with the auxiliary pressure roller F, carried on the shaft E, set at an angle parallel with the tapered end of the roller B, substantially as and for the purpose specified. 2nd. A tube roller B having a tapered end, in combination with the auxiliary pressure roller F, carried on the shaft E, set at an angle parallel with the tapered end of the roller B, and of the pin G, located substantially as and for the purpose specified. 3rd. A feed roller H, located between the roller A and tapered portion of the tube roller B, in combination with the said tapered tube roller B and pressure rollers C and F, arranged and operating substantially as and for the purpose specified. 4th. A feed roller H, located between the roller A and tapered portion of the tube roller B, in combination with the said tapered tube roller B and pressure rollers C and F, and a pin G, arranged and operating substantially as and for the purpose specified.

No. 29,080. Sleigh or Cutter Runner.

(*Patin de traîneau.*)

Richard H. Jones, Plattsville, and John Avery, Clinton, Ont., 3rd May, 1888; 5 years.

Claim.—1st. A sleigh or cutter runner R, in combination with a strengthening bar, brace or flange S, substantially as shown and described and for the purpose specified. 2nd. The sleigh or cutter run-

ners R, R, having a bar, brace or flange S, in combination with the cross-bars H, H, substantially as shown and described and for the purposes specified.

No. 28,081. Storage Battery.

(*Batterie d'emmagasinage.*)

Grosvenor P. Lowrey, (assignee of Charles D. P. Gibson), New York, N.Y., U.S., 3rd May 1888; 5 years.

Claim.—1st. A shell, coil or capsule filled with the oxydized active material of a storage battery plate. 2nd. A shell, coil or capsule filled with the oxydizable active material of a storage battery plate. 3rd. A storage battery plate having openings or perforations into which shells or capsules filled with active material are inserted and secured. 4th. The method of forming storage battery plates, which consists in, first perforating the same, then inserting shells or capsules filled with active material into the perforations, interlocking the plates and capsules by pressure, and finally subjecting the plates to the action of an electric current in a suitable electrolyte. 5th. A storage battery plate, the active material of which is placed within cells or openings formed in said plate and partly covered by portions of the metallic body of the plate, whereby the active material is held in place and also is kept in contact with the electrolyte.

No. 29,082. Lasting Machine.

(*Machine à enformer.*)

Charles B. Lancaster, (assignee of Charles H. Kelloy,) Boston, Mass., U.S., 3rd May, 1888; 5 years.

Claim.—1st. In a lasting machine, the combination of the four-square system of shafts and bevelled gearing B, B, B, B, herein described, the four cams D, D, D, D, one mounted upon each of said shafts, and the four sliding boxes E, E, E, E, for carrying and operating the heel, toe and side lasting plates respectively, all substantially as herein set forth. 2nd. In a lasting machine, the combination of the four-square system of shafts and bevelled gearing B, B, B, B, herein described, the four cams D, D, D, D, one mounted upon each of said shafts, and the four sliding boxes E, E, E, E, for carrying and operating the heel, toe and side lasting plates respectively, each of said boxes being provided with adjustable bearings e, e, for the purpose herein set forth. 3rd. In a lasting machine, the improved gripping and releasing device herein described, consisting of the pivoted jaws H, H, the links h, h, and the operating rod I, all substantially as set forth. 4th. In a gripping device for lasting machines, the combination, with the plate F, of the hollow shell f, the pivoted jaws H, H, links h, h, and operating rod I, all substantially as set forth. 5th. In the gripping device of a lasting machine, the combination, with the upper and lower plates G, F, of the post L, secured to the lower plate and passing through the upper plate, and the wedge cam K, formed in two parts, one fixed at the post and the other adapted to turn around the same upon the plate G, all substantially as set forth. 6th. In a lasting machine having an overhanging gripping attachment, the improved device for raising and lowering the same, consisting of the hollow post L, the rod M, working therein and bearing at its lower portion upon a down-hold, and the cam-lever N, all substantially as set forth. 7th. In a lasting machine, the combination, with inwardly sliding lasting plates, of springs, substantially as described, extending downwardly on the inner side and below the edge of the upper to be lasted, and adapted to hold the same with a yielding grip against the inward pressure of the slides, all substantially as set forth. 8th. In a lasting machine, the combination, with the vertical rods which support and raise the heel and toe of the last, of the transverse bar R, stirrup-piece S and lever f, operated from the principle source of power in the machine, to raise and lower the said posts, all substantially as set forth.

No. 29,083. Argand Lamp. (*Lampe à Argand.*)

Frank Rhind, Meriden, Conn., and Charles S. Upton, New York, N.Y., U.S., 3rd May, 1888; 5 years.

Claim.—1st. A cylindrical wick holder having an inner and an outer shell with a downwardly extending portion, as shown in Fig. 3, having the inner and outer shells connected to each other, as at z, to form a continuous cover for the wick at the sides. 2nd. A cylindrical wick holder having downwardly extending portions with openings for the wick, and having closed portions y for the cut away portions of the wick, as shown and described. 3rd. A double shell cylindrical wick holder having a continuous opening at the top, and open and closed portions at the bottom. 4th. A double shell cylindrical wick holder having a semi-cylindrical extension at the bottom, the edges of the two shells being joined at the sides of the extension for the purpose of bracing the parts and preventing the rack from receding from the pinion wheel. 5th. A cylindrical and double shell wick holder having one or more extensions, or isolated portions, to accommodate the corresponding portions of the cylindrical wick. 6th. A cylindrical wick holder having a continuous casing inside and outside of the wick, and closed portions where the wick is cut away for the purpose of protecting the wick. 7th. The double shell cylindrical wick holder having the parts braced against each other, as shown and described, and the outer shell being provided with friction teeth for holding and securing the wick. 8th. The combination of the double shell wick holder with the double shell burner, the said parts being arranged substantially as shown and described. 9th. The combination of the lamp burner having the pinion wheel, arranged substantially as described, with the double shell wick holder having the rack in the outer shell of said holder. 10th. A circular and cylindrical lamp wick made of a single piece of material, which has one or more cut away portions with edges secured from raveling, as shown and for the purposes set forth. 11th. A circular and cylindrical wick for argand burners, the said wick forming a single piece of material and having cut away portions stitched at the edges to protect the material from raveling, as and for the purposes set forth. 12th. The lamp burner having the centre draft tube c, the conical perforated tube f having a spreader f, as described, and the perforated tube tube g, all arranged substantially as and for the purposes set forth.