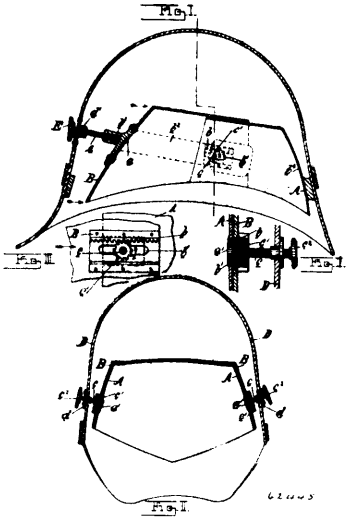
Claim.—1st. The combination with a butter working machine consisting of a rotating conical table and of one or more conical rollers, of ploughs carried by the frame located in advance of the rollers, and adapted to operate as herein specified. 2nd. A butter working machine consisting of a rotating cone-shaped table over or in contact with which revolve one or more fluted rollers, of mechanism for imparting motion to the said table and rollers, and of ploughs carried by the frame of the machine and adapted to gather up and invert the layer of butter spread by the rollers, as and for the purpose set forth. 3rd. A butter working machine consisting of a rotating cone-shaped table over or in contact with which revolve one or more fluted rollers, of mechanism for imparting motion to the said table and rollers, of a plough such as F, carried by a vertically arranged arm adjustably mounted on the frame of the machine so that its vertical position can be varied, of a plough such as G, carried by an elastic or spring arm attached to the frame of the machine, and of a tail-board such as G1, mounted on the plough G, in such a manner that its position with respect to the said plough can be varied in the vertical plane, as and for the purpose set forth. 4th. The combination with a butter working machine, consisting of a rotating cone-shaped table over or in contact with which revolve one or more cone-shaped fluted rollers, of ploughs located between the said rollers, the one so shaped as to gather the butter from the centre towards the periphery of the table and invert it, and the other so shaped as to gather the butter from the periphery of the table towards its centre and invert it, the said plough carrying a vertically adjustable tail-board so shaped as to spread out the layer of inverted butter, as set forth.

No. 62,445. Hat, Helmet and Head Covering.

(*Chapeau, etc.*)

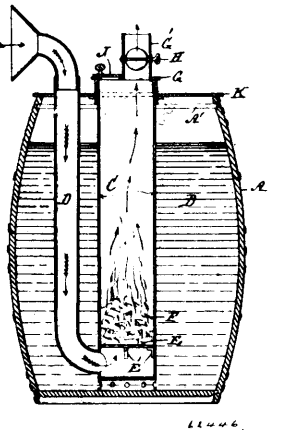


Charles Josiah Ross, 227 High Street, Exter, England, 25th January, 1899; 6 years. (Filed 23rd December, 1898.)

Claim.—1st. A hat, helmet or the like head covering having a head band made in sections secured to the body of the hat, helmet or the like so as to be adjustable to vary the size of the head band, substantially as described. 2nd. A hat, helmet or the like head covering having a head band made in two sections, a front and a rear, the front section being curved to a point at the forehead and the rear section curved downwards at the rear to fit tightly on the rounded part of the back of the head, one of said sections being fixed to the body of the hat, helmet or the like while the other is adjustable by means operated from outside the body of the hat, helmet or the like covering, substantially as described. 3rd. A hat, helmet or the like head covering having a head band made in sections curved to fit tightly to the head, said sections being adjustably connected together by toothed racks secured to one section with which gear pinions the shanks of which rotate in journals in the other section which said shanks pass through eyelets or the like in the side of the hat, helmet or like covering body and are operated from the exterior thereof with an additional adjustable support at the front or rear also operated from outside the hat, helmet or like covering body, substantially as described. 4th. In a hat, helmet or the like head covering having a head band made in sections, means such as hearein described for varying the size of the head band and for supporting the body of the hat, helmet or like head covering on the head band, comprising toothed racks on the head band sections, pinions gearing with said racks and passing through eyelets in the hat, helmet or like covering body, and additional adjustment supports on the said body engaging screwed attachments on the head band sections, substantially as described.

No. 52,446. Cattle Feed Heater.

(*Chauffeur de nourriture d'animaux.*)

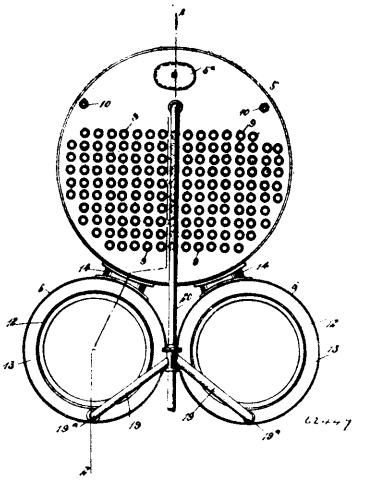


Neil McDougald and Thomas Lougheed, both of Allenford, Ontario, Canada, 25th January, 1899; 6 years. (Filed 10th January, 1899.)

Claim.—A cattle feed heater, comprising a vertical combustion cylinder closed at the bottom, an inlet draft pipe exterior thereto and entering the cylinder at or near its bottom, a grating within the cylinder and above the inlet draft pipe, and a smoke outlet and fuel door at the top of the cylinder, said heater adapted to be partly submerged in the feed contained in a barrel, as set forth.

No. 62,447. Steam Boiler and Furnace.

(*Chaudière à vapeur et fournaise.*)



William Hopkins, Dubuque, Iowa, U.S.A., 25th January, 1899; 6 years. (Filed 3rd October, 1898.)

Claim.—In a boiler, a shell, a series of fire tubes run through said shell, two exterior furnace shells located beneath the boiler shell and running parallel therewith and communicating therewith at each end, a fire wall within each furnace shell, the spaces enclosed by the front portions of the fire walls serving as fire boxes, means engaging said shells and forming a passage establishing communication between the fire walls and the fire tubes of the boiler shell, and pipes, passing respectively from the rear bottom portion of each furnace shell upward to the upper portion of the boiler shell, whereby to lead the water from said lower rear portions back to the boiler shell.

No. 62,448. New Galvanic Element.

(*Elément galvanique.*)

Constantin N. Sedneff, St. Petersburg, Russia, 25th January, 1899; 6 years. (Filed 23rd February, 1897.)

Claim.—1st. A galvanic element, composed of the usual two electrolytes and a third electrolyte consisting of an acid effecting an alternate reduction and oxidation for freeing the electrodes from the hydrogen and oxygen developed when the circuit is closed, substantially as set forth. 2nd. A galvanic element, composed of the usual two electrolytes and of a third electrolyte contained in a separate cell and consisting of an acid effecting an alternate reduc-