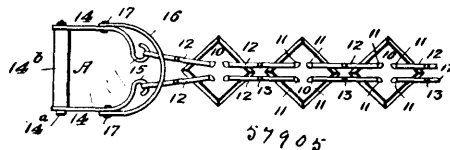


within said bowl and forming a vertical series of chambers at or near the centre of the bowl, and a vertical partition arranged outside of and around said chambers within said bowl, the last partition having irregular surfaces and provided with openings for the cream and blue milk at points in its vertical length closely adjacent to the edges of the first said partitions, all substantially as set forth. 3rd. The combination with the rotary bowl, having ducts for the blue milk, cream and new milk, and means for rotating said bowl, of a central feed tube *g* imperforate to deliver all the milk at one end of the bowl, partitions *m* extending outward from said feed tube, and a cylindrical partition arranged around said partitions *m* and provided with blue milk and cream passages, substantially as set forth. 4th. In a centrifugal creamer, the combination with the bowl *a*, and means for rotating the same, of a cylindrical partition, comprising a plate having protuberances and opposite corresponding recesses, the protuberances bearing directly upon the bowl and holding the cylinder in place, said protuberances being perforated near their apices and bases to allow of the flow of blue milk and cream therethrough and leaving blue milk passages entirely therearound to allow both a vertical and horizontal flow, substantially as set forth. 5th. In a centrifugal creamer, the combination with the bowl and means for operating the same, of a cylinder open at its opposite ends and having protuberances entirely surrounded by passages for the fluid, to allow a free horizontal and vertical flow, each protuberance being perforated near its point of farthest outward projection, and the cylinder being also perforated at the base of its protuberances, substantially as set forth. 6th. In a centrifugal creamer, the combination with the bowl and means for operating the same, of a sheet metal cylinder with protuberances which do not extend continuously around the periphery of the bowl, said protuberances being stamped or pressed in said cylinder to give the same irregularity of shape, the protuberances leaving passages for the fluid entirely around the same and having perforations at or near their apices and bases, substantially as set forth. 7th. In a centrifugal creamer, the combination with the bowl and means for operating the same, of a sheet metal cylinder with discontinuous peripheral protuberances on the outside and corresponding recesses on the inside, the protuberances being entirely surrounded with fluid passages admitting both a horizontal movement of the fluid and a vertical flow as it gradually passes to its exit, said cylinder having perforations for the cream and blue milk, substantially as set forth. 8th. In a centrifugal creamer, the combination with a rotary bowl and means for operating the same, of a perforated partition, comprising a piece of impressed sheet metal turned into cylindrical form, the impressions due to the stamping, forming peripherally discontinuous perforated protuberances on one side of the cylinder and recesses at the other side, the protuberances admitting a vertical flow of fluid between, substantially as set forth. 9th. In a centrifugal creamer, the combination with the bowl and means for operating the same, of a sheet metal cylinder with protuberances and perforations, and a frame having partitions forming a vertical series of chambers, the outer edges of the said partition extending out to the inner side of the cylinder at the bases of the protuberances, and ducts whereby the bowl may be supplied with milk at one end and the cream and blue milk may be separately emitted at the other, substantially as set forth. 10th. In a centrifugal creamer, the combination with the bowl and means for operating the same, of a sheet metal cylinder having protuberances and perforations, and a frame comprising an imperforate milk supply tube having partitions forming a vertical series of chambers and a flange on which the said cylinder is seated, substantially as set forth. 11th. In a centrifugal liquid separator, the combination with the bowl and means for operating the same, of the milk supply tube open to receive the milk at one end of the bowl and to deliver the same at the other, a series of partitions *m* fastened upon said tube and extending laterally therefrom and forming chambers therebetween, said chambers having open communication with one another near said milk supply tube to allow a flow of cream at the cream wall, and direct communication of the said milk tube with said chambers being cut off or closed to prevent an intermingling of the new milk with the cream of the cream wall, substantially as set forth. 12th. In a centrifugal separator, the combination with the bowl and means for operating the same, of the new milk supply tube, open to receive the milk at one end of the bowl and to deliver the same at the other, a series of partitions fastened thereto and extending laterally therefrom, forming chambers between which are open to one another near said tube, to allow a flow of cream at the cream wall, wings *n* arranged between said partitions, and extending from one to another to strengthen said partitions in their relation to one another, substantially as set forth. 13th. In a centrifugal creamer, the combination with the bowl and means for operating the same, of a milk supply tube having a series of laterally extending partitions fastened thereto forming chambers therebetween, which latter are closed from direct communication with the passages for the new milk within said tube, but are open at or near said tube to allow a flow of cream from one chamber to the next, and a cylindrical partition arranged within the bowl at the interior wall thereof, and having perforated protuberances and corresponding recesses, the partition being also perforated at said recesses, the lateral partitions of the milk supply tube extending out to the cylinder, and the recesses serving as fluid passages from one chamber to another, substantially as set forth. 14th. The combination with the rotary bowl and means for operating the same, said bowl having exits and inlets for the new milk, cream and blue

milk, of an interior irregularly formed cylindrical partition, a tube disposed centrally within said partition, and a series of horizontal partitions disposed around said tube, said tube having an opening for the emission of milk at one end of said series of horizontal partitions only, so that the milk will all be forced to flow over the edges of said partitions, substantially as set forth.

No. 57,905. Cutter for Hay Stack.

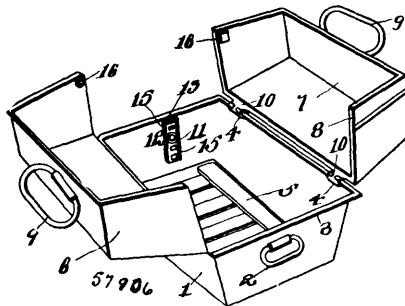
(Machine à couper le foin en meule.)



Hilary J. Twiss, Baker, Oregon, U.S.A., 26th October, 1897; 6 years. (Filed 4th October, 1897.)

Claim.—1st. A stack-cutter consisting of a series of blades, links loosely connected with the said blades, and extending in opposite directions therefrom, the links of opposing blades being pivotally connected, handles consisting of slotted straps, the links of the end blades being passed through the slots of the said straps, and handles pivoted in the said straps and pivotally connected with the links passed through the straps, substantially as and for the purpose specified. 2nd. A cutting apparatus consisting of a series of angular edged blades each having two openings at each side of the transverse centre thereof, and two links located between each blade, the links respectively having their ends loosely held within the openings whereby the links and blades form a continuous flexible chain, substantially as described. 3rd. A cutting apparatus consisting of a series of angular edged blades each having two openings at each side of its transverse centre, two links located between each pair of blades, the links respectively having their ends pivoted within the openings in the blades and each link having a joint intermediate the end thereof whereby a continuous flexible chain is formed, substantially as described. 4th. A cutting apparatus consisting of a series of angular edged blades separated from each other, and links respectively located between each pair of blades, the links being pivotally connected to the blades and serving to form a continuous chain, the links being attached to the blades at points adjacent to their longitudinal centres whereby portions of the blade project on each side of the links and give a double cutting edge, substantially as described. 5th. A cutting apparatus consisting of a series of edged blades, and a link between each pair of blades, the links being respectively pivoted to the blades at points adjacent to the longitudinal centres of the blades, whereby portions of the blades project on each side of the links so as to give the cutting apparatus a double cutting edge, substantially as described. 6th. A cutting apparatus consisting of a plurality of edged blades each with an opening therein the openings being respectively located on opposite sides of the transverse centres of the blades, and a link located between each pair of blades, the links each consisting in two looped strips of material respectively passed through the openings in the blade and having their inner ends respectively pivotally joined to each other, substantially as described. 7th. The combination of two links, a handle having two side portions each with a hook respectively removably receiving the ends of the links, a rigid connection between the side portions of the handle, and a curved rigid strap the ends of which are respectively secured to the side portions of the handle, the strap being provided with an opening receiving the links, substantially as described.

No. 57,906. Bake Pan. (Tourtière.)



Charles Gilbert Sargeant, Exeter, New Hampshire, and Frank Goodwin, Elliott, Maine, both in the U.S.A., 26th October, 1897; 6 years. (Filed 15th October, 1897.)