



CONTENTS.

INVENTIONS PATENTED.....	229
ILLUSTRATIONS.....	249
INDEX OF INVENTIONS.....	I
INDEX OF PATENTEES.....	II

INVENTIONS PATENTED.

No. 15,043. Improvement on Can Filling Apparatus. (*Perfectionnement des appareils à remplir les boîtes métalliques.*)

William West, Keene, Ont., 28th June, 1882: for 5 years.

Claim.—1st. In a can filling apparatus, and in combination with the vertical fish receiving chute J and the vertically reciprocating plunger I guided as shown, the can E adjustable upon the driving shaft, the vertical rod F, the lever arm G and the connecting rod or link H. 2nd. The horizontal trough L opening into the upper part of the chute J, in combination with the reciprocating carrier K, moving in said trough so as to transfer the fish into the vertical chute. 3rd. In combination with the carrier K moving in the trough L, the lever arm M connected to the carrier by a link and having the fork or notch Mt, in combination with the vertically reciprocating bar N. 4th. The hinged swinging gate T opening or closing the passage between the trough L and the chute J, and having the toothed segment S, in combination with the reciprocating bar N with its rack R engaging said segment. 5th. The cylindrical receiver, having one side open, and the edge forming a knife V so that a supply of fish may be forced through the opening from the chute J and cut off and formed to enter the can by the rotation of the knife. 6th. The cylindrical knife and shaper V turning within the chute J and provided with the notched flange W, in combination with the curved lever Z and rotating gear wheel a. 7th. In combination with the cylindrical knife and shaper V with its notched flange W, curved operating lever Z, the disk i supporting the lever and adjustable upon the gear a by slots and screws j, so as to regulate the movements of the knife. 8th. The cylindrical knife and shaper V with the notched flange, and the curved pivoted lever Z and spring b, rotated by the gear wheel a, in combination with the stationary pin c, whereby the pawl p is disengaged at each semi-revolution of the knife. 9th. In combination with the hollow rotating knife and former V operating within the chute J, the eccentric gears a at meshing with each other, to drive the knife with a variable speed. 10th. In combination with the hollow intermittently rotating cylindrical knife and former V and the eccentric driving gears a at, the piston n reciprocating through the cylindrical knife, and the sleeve upon which the gear a turns and the stem or extension h, operating lever and cam. 11th. The hinged swinging gate T, toothed segment S and vertically moving bar N and rack R, in combination with the latch r and the arm t connected with the plunger.

No. 15,044. Improvements on Refrigerators. (*Perfectionnements aux garde-manger.*)

William C. Kewn, Rochester, N. Y., U. S., 4th July, 1882: for 5 years.

Claim.—The outer vessel A, inner vessel B, covering cap C and lid E, arranged and constructed so as to surround the whole of the outer surface of inner vessel B with cold water, while allowing of the escape of heated air through apertures d in the cap.

No. 15,045. Improvements on Couplings for Tubing. (*Perfectionnements aux jointures des tuyaux.*)

Edmund C. Converse, Pittsburg, Penn., U. S., 4th July, 1882: for 5 years.

Claim.—1st. In couplings for tubing, a coupling collar having an inner central ring against which the ends of the tubing bear, an annular recess at each end for the reception of calking material, and a series of wings extending across the mouth of each annular recess to support the tube section. 2nd. In couplings for tubing, a coupling collar B, having a central ring c and an annular calking recess d at each end,

having inwardly flaring sides f. 3rd. In couplings for tubing, a coupling collar B provided with an annular calking recess d at each end, and a series of wings k extending across the mouth of each annular recess. 4th. In couplings for tubing, the combination of a coupling collar having an annular recess at each end, for the reception of calking material, and a series of wings extending across the mouth of each annular recess, with tubing having one or more lugs at each end, adapted to catch under the wings on the collar.

No. 15,046. Improvements on Lubricators. (*Perfectionnements aux graisseurs.*)

Omar H. Jewell and George A. Stannard, Chicago, Ill., U. S., 4th July, 1882: for 5 years.

Claim.—1st. In a lubricator, the cylindrical base H having vertical oil hole b extending centrally therethrough and through the screw stem a, said base being countersunk on its bottom to form a seat for a conical check valve, and having tubular extension c, bored to form the oil pump cylinder, and provided with perforations dd near its lower end, the rod F with plunger-head f, the check-valve u with spring o, and auxiliary valve p with spring r. 2nd. A lubricator composed of base A having cylinder c with perforations d, screw stem a and perforated diaphragm M of glass tube D, cap C, with stuffing box e and screw plug m of plunger-rod F, and check-valve u with spring o, thimble N, valve casing O, check valve p and spring r. 3rd. A lubricator composed of base A having cylinder c with perforations d, screw stem a and perforated diaphragm M of glass tube D, cap C with stuffing box e, screw plug m and diaphragm L of plunger-rod F, and check valve u with spring o. 4th. In a lubricator, the plunger-rod F passed through a stuffing-box e and having socketed arm G, in combination with the operating-rod I guided in eyes jj having spring J, screw collar k and arm H that enters the socket in arm G and is adjustably secured by set screw h.

No. 15,047. Improvements on Aerial Vessels. (*Perfectionnements aux vaisseaux aériens.*)

Albert L. Blackman, New York, N. Y., U. S., 4th July, 1882: for 5 years.

Claim.—1st. A vessel for aerial navigation, consisting of a hull and gas-field subdivided into compartments, the whole constructed within one shell or envelope on one general frame, in the form of a grayling fish, or shuttle, the salmon fish or cylinder carried by an easy incline to a central point forward and by an abrupt curvature to a certain point astern, provided with raising, lowering and propelling screws in the sides, journaled in revolving cylinders u and connecting with actuating machinery through belts p, or revolving shafts a passing into and within the vessel. 2nd. A vessel for aerial navigation consisting of a hull and gas-field subdivided into compartments by longitudinal and transverse-vertical gas-tight partitions. 3rd. A vessel for aerial navigation having a hull and gas-field within one envelope, the gas-field divided into sections by gas-tight transverse sections. 4th. A vessel for aerial navigation having a hull and gas-field within one envelope, constructed on one general frame of metal in form of a cylinder terminating forward in a long pointed cone and astern in a short curved cone, the hull divided into cabin and other rooms, and the gas-field divided into sections by transverse gas-tight partitions. 5th. A vessel for aerial navigation comprising a hull and gas-field constructed within one envelope of steel, silk, linen, canvas or such thin metal that combines tensile strength and lightness to serve the purpose described. 6th. A vessel for aerial navigation comprising a hull and gas-field constructed within one envelope of silk, linen, canvas, steel or other thin metal in the form of the grayling fish, or salmon fish, a shuttle or a cylinder having a long conic prow forward, and a short conic stem actuated by internally arranged machinery through raising, lowering and propelling side-screws, journaled or revolving cylinders u n. 7th. A vessel for aerial navigation comprising a hull and gas-field, within one general envelope constructed on one general frame of metal, in the form of a shuttle or salmon fish, the hull divided into cabin and other compartments, and the gas-field divided into transverse sections by gas-tight partitions, and having a well or chimney passing out through the top. 8th. A vessel for aerial navigation comprising a hull and gas-field, constructed on one general frame of metal in the form of a grayling, or salmon fish, a shuttle or a cylinder carried by an easy incline to a central point forward and by an abrupt curvature to a central point astern, the whole