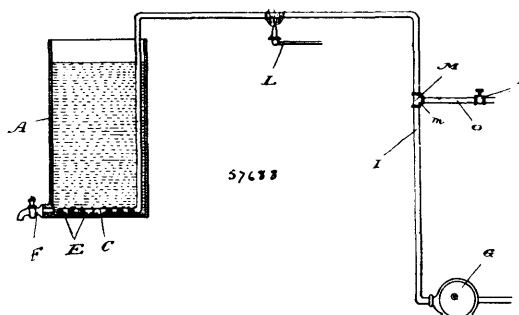


Claim.—The oscillating cylinder, and the slide-valve, having its stem projecting from the rear end of the cylinder, combined with a bracket secured to the end of the cylinder, a rock-lever pivoted in the upper end of the bracket, having its upper end forked to engage with the valve-stem and its lower end provided with a pin or roller, a stand P, valve-operating link pivoted on the stand, and provided with a curved groove, a handle secured directly to the link and extending in a line with the cylinder, and a segment to lock the handle in place, substantially as described.

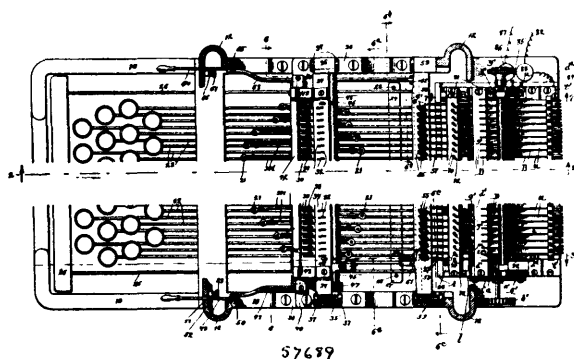
No. 57,688. Process of Obtaining By-Products from Milk. (*Procédé pour obtenir des produits du lait.*)



Walter Cole, Toronto, Ontario, Canada, 6th October, 1897; 6 years. (Filed 2nd July, 1897.)

Claim.—1st. A process of obtaining by-products from buttermilk, skimmed milk and whole milk, which consists in subjecting the milk to a natural or artificial process of fermentation, and then passing through it air at a comparatively high temperature, substantially as specified. 2nd. A process for obtaining by-products from buttermilk, skimmed milk and whole milk, which consists in subjecting the milk to a natural or artificial process of fermentation, then raising the milk to a temperature ranging preferably from 85 to 90 degrees Fahrenheit, and passing through it air at a comparatively high temperature, substantially as specified.

No. 57,689. Typewriter and Telegraphic Transmitter. (*Transmetteur de cloigraphes et télégraphes.*)



The World Flash Co., Chicago, Illinois, U.S.A., assignee of Charles E. Yetman, Oak Park, Illinois, both in the U.S.A., 6th October, 1897; 6 years. (Filed 8th September, 1896.)

Claim.—1st. The combination with the individual finger-key and with the transmitter switch shifter corresponding thereto and actuated thereby, of a mechanical connector device suitably extended between said key and shifter to interlock the same and a throw-off under the operator's control to cast said connector at will and free the shifter from its finger-key, substantially as described. 2nd. The combination with the individual finger-key and with the transmitter switch shifter corresponding thereto and actuated thereby, of the mechanical connector pivoted to said finger-key and interlocking with its shifter and a throw-off under the operator's control to cast said connector at will and free the shifter from its finger-key, substantially as described. 3rd. The combination with the finger-key and with the separate transmitter switch shifter corresponding thereto and actuated thereby, of the mechanical connector extended from said key and interlocked in loose one-way engagement with said shifter, during descent of the key, whereby said key moves the shifter in unison from the normal while both return separately thereto, substantially as described. 4th. The combination with the individual finger-keys and with the corresponding series of transmitter switch shifters, of the set of mechanical connectors extended between and interlocking the respective keys and shifters to actuate any selected key and shifter together and a

throw-off under the operator's control to simultaneously dis-unite in common plural shifters from their finger-keys and connectors, substantially as described. 5th. The combination with the individual finger-keys and with the series of transmitter switch shifters corresponding thereto and actuated thereby, of the mechanical connectors uniting each shifter with its finger-key, and a throw-off common to several connectors, and under the operator's control to cast said connectors in unison at will and free the shifters from their finger-keys, substantially as described. 6th. The combination with the individual finger-keys and with the corresponding series of transmitter switch shifters, of the set of separable mechanical connectors extended between the respective keys and shifters to actuate any selected key and shifter together, and a throw-off common to several connectors and under the operator's control to cast said separable connectors in unison at will and free the shifters from their finger-keys, substantially as described. 7th. The combination with the individual finger-keys, of the series of transmitter switch shifters corresponding thereto, mechanical connector devices extended from said keys to the shifters to actuate the selected shifter in unison with its companion key and a throw-off within the operator's control to simultaneously dis-unite plural finger-keys from the corresponding switch shifters, substantially as described. 8th. The combination with the series of finger-keys and with the corresponding series of transmitter switch shifters actuated thereby, of the mechanical connectors pivoted to the respective keys and interlocking with the shifters and a throw-off under the operator's control common to several connectors to cast the same at will and free the shifters from the keys, substantially as described. 9th. The combination with the individual key-levers, of the series of upright transmitter switch shifters corresponding thereto and actuated in right-line movement thereby, the mechanical connectors uniting each shifter with its lever and a throw-off common to several connectors and under the operator's control to cast said connectors in unison at will and free the shifters from their key-fingers, substantially as described. 10th. The combination with the individual finger-keys and their type-bars, of the corresponding series of switch shifters at the electric transmitter, the mechanical connectors extended from said keys and interlocked in loose one-way engagement with said shifters during descent of the respective keys, the rotating shaft having circuit make-and-break devices thereon severally under control from the separate shifters and a set of latches, one for each shifter, and released separately by the rotating shaft to restore the selected shifter to normal position free and distinct from its finger-key, substantially as described. 11th. The combination with the individual finger-keys, and their type-bars, of the corresponding series of switch shifters at the electric transmitter, the mechanical connectors extended from said keys and interlocked in loose one-way engagement with said shifters during descent of the respective keys, the rotating shaft having circuit make-and-break ring sustained loosely and intermittently thereon under control from said shifter, a latch to hold said shifter depressed and having a trip pawl thereon projected by said shifter into the path of the make-and-break ring and engaging at intervals therewith to restore the selected shifter to normal position free and distinct from its finger-key, substantially as described. 12th. The combination with the individual finger-keys and with their type-bars, of the electric transmitter having a series of shifters corresponding to the several keys, a mechanical connector extended between each shifter and its key, and a throw-off common to several connectors whereby said shifters may be engaged with or disengaged in unison from the finger-keys appropriate thereto, substantially as described. 13th. The combination with the individual finger-keys and with their type-bars, of the electric transmitter comprising a rotating shaft, a set of symbol disks actuated thereby and a series of shifters corresponding to the several finger-keys and respectively controlling the separate transmitter disks, a mechanical connector extended between each shifter and its finger-key, and a throw-off common to several connectors whereby said shifters may be engaged with or disengaged in unison from the finger-keys appropriate thereto, substantially as described. 14th. The combination with the individual finger-keys and with their type-bars, of the electric transmitter comprising a rotating shaft, a set of symbol disks mounted loosely about said shaft and carried intermittently thereby, a series of shifters corresponding to the several finger-keys and respectively sustaining the separate symbol disks free from the shaft, a mechanical connector extended between each shifter and its key and a throw-off common to several connectors to engage or disengage them in unison, substantially as described. 15th. The combination with the individual key-levers, the series of trippers carried thereby and the keeper common to said trippers to shift the same, of the series of jacks engaged by said trippers, the pivoted type-bars and the links uniting said bars and jacks, substantially as described. 16th. The combination with the individual key-levers having pivoted trippers thereon, of the series of jacks to control the type-bars, the keeper common to said trippers and suitable means for moving said keeper whereby the trippers are thrown into or out of engagement with the jacks, substantially as described. 17th. The combination with the individual key-levers and its type-bar, of the rotating shaft at the electric transmitter, the symbol disk mounted loosely about said shaft and carried intermittently thereby, a switch shifter sustaining said disk free from the shaft and connector mechanism extended from the key-lever and engaging said shifter loosely to throw the same whereby the lever and shifter move in unison from normal position but return sep-