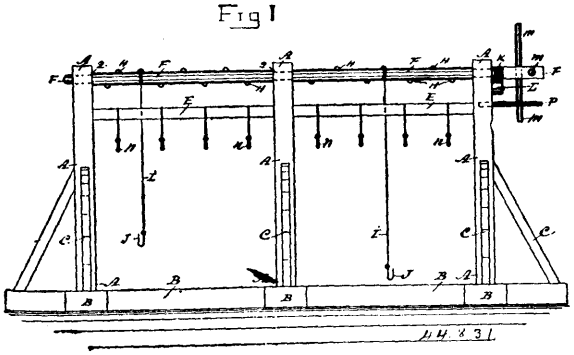
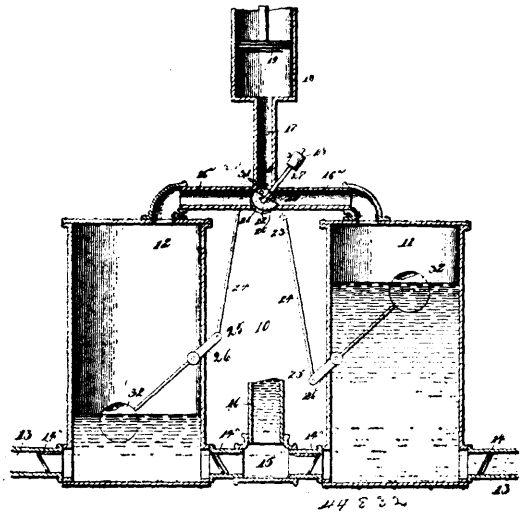
handles M, and the pin P, substantially as described and set forth. 2nd. The combination with the general frame work having a series

Fig 1



of hooks N, suspended from the longitudinal bars E, substantially as described and set forth. 3rd. The framework of the machine having open bearings, and provided with dog L, and pin P, the shaft F having ratchet teeth K, fastenings H, cords I, hooks J, and the cross handles M, in combination with the bars E, provided with a series of suspended hooks N, substantially as described and set forth.

No. 44,832. Pump. (*Pompe.*)

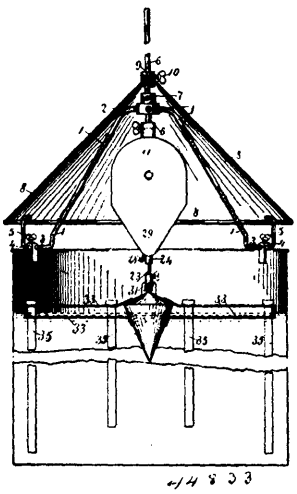


Melchi M. Groove, Garfield, Washington, U.S.A., 6th December, 1893; 6 years.

Claim.—1st. A pump comprising chambers having valved inlets and outlets at their lower ends, and an air pipe having branches connected with the upper ends of the chambers, of an air inlet valve at the juncture of the two branches to divert air into either chamber, floats pivoted within the said chambers, and connections between the floats and the said valve, substantially as specified. 2nd. A pump comprising chambers having valve controlled inlet and outlet openings, a pipe having branches connected respectively with the upper ends of the chambers, and said pipe connecting also with an air pump, and being provided with an adjacent exhaust, a three way valve arranged in the air pipe at the the juncture of its two branches, and adapted to divert air to either chamber and simultaneously connect the other chamber with said exhaust, floats arranged in the chambers, and connections between the floats and said valve whereby the latter is reversed as the chambers are alternately filled and emptied, substantially as specified. 3rd. A pump comprising chambers having valve controlled inlet and outlet openings, a pipe having branches connected respectively with the chambers, and said pipe connecting also with an air pump, a valve arranged in the air pipe at the juncture of its branches, and adapted to divert air to either chamber, floats arranged in the chambers, a tilting gravity arm fulcrumed concentrically with the valve, pins carried by the valve in the path of said arm, and a rocking lever operatively connected to the floats, and provided with studs to engage said arm, substantially as specified. 4th. The combination with the chambers provided with suitable valved inlet and outlets, and an air pipe connected at an intermediate point to an air pump and at its ends to said chambers, of a valve arranged in said air pipe to divert the air into either chamber, floats arranged in the chambers, a rocking lever fulcrumed upon the spindle of said valve and connected at its extremities to said floats, a weighted lever fulcrumed upon the spindle of the valve, pins carried by the valve in the path of said arm, and lugs carried by the rocking lever to engage the arm and reverse its position, substantially as specified.

No. 44,833. Milk Agitating Machines.

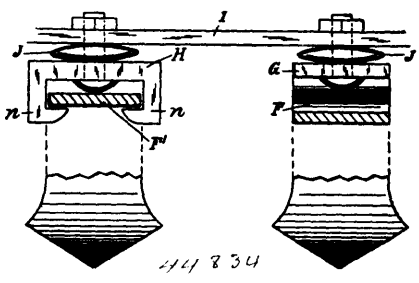
(*Agitateur pour le lait.*)



Benjamin Ewing, Brighton, Ontario, Canada, 6th December, 1893; 6 years.

Claim.—1st. In a milk agitating machine, the float constructed of buoyant material or of materials in the form to give sufficient displacement for buoyancy, said float having arms provided with means to carry pendent strips to be immersed and having at its top means whereby it is connected to be operated, substantially as and for the purpose set forth. 2nd. In a milk agitating machine, the supporting frame or tripod composed of legs as described and provided with clamps whereby they are secured to a milk can, substantially as and for the purpose set forth. 3rd. In a milk agitating machine, the combination of the supporting frame having means whereby it is secured on a milk can, the vertical rod carried by the central hub of said frame, and the shield as specified and secured adjustable on said vertical rod, substantially as shown and described. 4th. In a milk agitating machine, the combination of the supporting frame having means whereby it is secured on a milk can, the vertical rod adjustably secured in the hub of said frame, and the clockwork motor secured to the lower end of said rod, substantially as shown and described. 5th. In a milk agitating machine, the combination of the supporting frame having means whereby it is secured on a milk can, the vertical rod adjustably secured in the hub of said frame, the shield adjustably secured on said vertical rod, and the clockwork motor secured on the lower end of said vertical rod, substantially as shown and described. 6th. In a milk agitating machine, the combination of the supporting frame having means whereby it is secured on a milk can, the vertical rod adjustably secured in the hub of said frame, the shield adjustably secured in the hub of said frame, the shield adjustably secured on said rod above said frame, the clockwork motor secured to the lower end of said rod, the float having radial arms carrying immersed strips, and means on said float whereby it is connected to said motor, substantially as shown and described.

No. 44,834. Cultivator. (*Cultivateur.*)



William Hewitt, Brantford, Ontario, Canada, 6th December, 1893; 6 years.

Claim.—1st. The socket arm E, formed with the sockets *b* and *c*, and means for pivotally securing and supporting said arm, in combination with a tooth F', substantially as set forth. 2nd. The socket arm E, formed with the sockets *b* and *c*, and means for pivotally securing and supporting said arm, in combination with the tooth F, and spring G, substantially as set forth. 3rd. A tooth holder H, formed with the downwardly and inwardly projecting arms *n*, *n*,