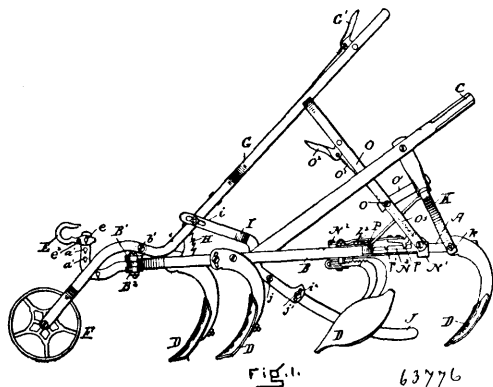


movably mounted upon the arbor, springs interposed between the same, a shoulder formed upon the detachable handle, brackets pivotally mounted upon the shoulders formed upon the handles, a roller journaled in the outer end of the brackets and a separator pivotally supported from the brackets, comprising a plurality of prongs movably held between the guides to compensate for the adjustment of the discs.

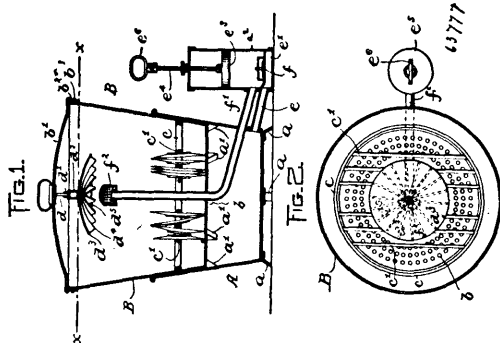
No. 63,776. Cultivator. (Cultivateur.)



Samuel L. Allen, Moorestown, New Jersey, U.S.A., 5th September 1899; 6 years. (Filed 18th March, 1899.)

Claim.—1st. In a cultivator, a struck-up steel clevis provided at its rear end with a slot, and slotted pin hole in combination with a weighted and lugged pin, all operated and arranged substantially as described. 2nd. In a cultivator, a depth regulator consisting of the pivoted hand lever G connected to a wheel, in combination with the lever I, pivoted near the centre of the middle bar, each lever having suitable ground terminations and connected to the runner whereby the depth of the cultivator is regulated fore and aft simultaneously with one lever, substantially as described. 3rd. In a cultivator, a pivoted brace Q, in combination with a handle supporting brace and expander bars, the lower end of said brace Q being pivoted at the centre of motion of said expander bars, whereby the said handles and expander bars are suitably supported, and at the same time allowed freedom of motion, all arranged and operated, substantially as described. 4th. In a cultivator, a truck N, having a latch spring P, in combination with the notched central bar A, and operating lever O, all arranged and operated, substantially as described. 5th. In a cultivator, a triangular bar brace K, attached at its lower side to the central bar, in combination with the laterally sliding handle supporting brace L whereby the handles are firmly supported, and permitted to be swung from one side or the other of the centre, all arranged and operated, substantially as described. 6th. In a cultivator, the combination with the central notch bearing bar, a truck carrying a spring with lug to engage the notches and hinged laterally adjustable side bars, of knuckle joint forming expander bars, and a lever operated sliding truck on said central bar, substantially as and for the purposes described. 7th. In a cultivator, a triangular fixed brace K, provided with a sliding handle supporting brace L, in combination with the braces O, pivoted at their upper ends to the said triangular brace K, and at their lower ends to the expander bars M, at their centres of motion, whereby the said handles are firmly braced horizontally, and vertically, at all positions of the said expander bars, all arranged and operated, substantially as described.

No. 63,777. Dish Cleaner. (Machine à laver la vaisselle.)

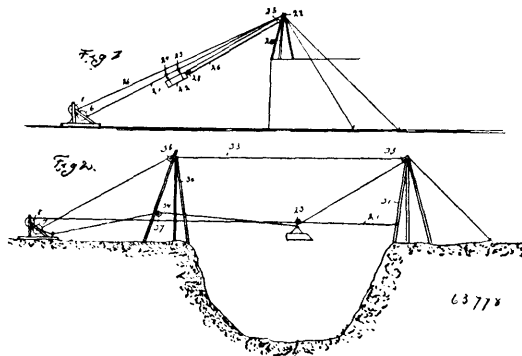


Edgar Shaw, Swampscott, Massachusetts, U.S.A., 5th September, 1899; 6 years. (Filed 2nd May, 1899.)

Claim.—1st In a dish washing apparatus, a reservoir, a dish pan sustained therein revolvably and having means for holding dishes on

edge, combined with the cover, and the spreader supported thereby, a pump having outlet and discharge pipes, the said discharge pipe being extended through the said reservoir and centrally through the bottom of said dish pan and provided with a nozzle, the dish pan being revolvable about the said discharge pipe, substantially as described. 2nd. The reservoir A having rests a^1 , the dish pan B inserted in said reservoir and sustained by said rests, said dish pan having a perforated bottom and a closed cover, and having means for sustaining plates on edge, combined with a spreader suspended from the lower side of said cover, a pump located outside the reservoir and pan having an inlet e , and a discharge pipe f^1 extended through the reservoir and centrally up into the dish pan and provided with a nozzle, substantially as described.

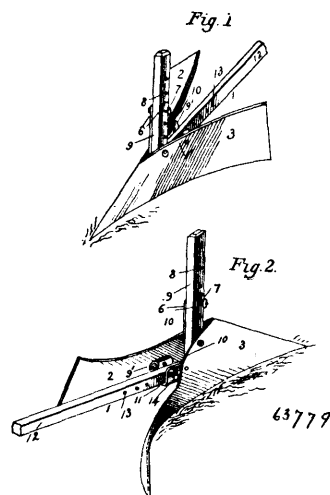
No. 63,778. Hoisting Apparatus. (Ascenseur.)



Robert Johnston, River Falls, Wisconsin, U.S.A., 5th September 1899; 6 years. (Filed 26th April, 1899.)

Claim.—The combination with a mast or other supporting device, of a power mechanism embracing independent winding shafts and a power shaft common to both shafts and with shifting mechanism, a track cable attached at one end to the mast or supporting device and at its other end to one of the winding shafts, a carriage, and a haulage cable attached at one end to the supporting device, thence running through sheaves on the carriage and supporting device, and connected to the other winding shaft, substantially as described.

No. 63,779. Plough. (Charrue.)



John W. Sargeant, Elmwood, Nebraska, 5th September, 1899; 6 years. (Filed 21st April, 1899.)

Claim.—In a device of the character described, the combination with a runner and runner post or standard disposed at right angles and provided respectively with a series of apertures, of a mould-board provided with a pair of parallel standards designed to embrace the runner post and provided with securing mechanism, and a strap connecting the diverging ends of the mouldboards, and provided with a loop for the reception of the runner, and a fastening pin securing the runner therein, substantially as specified.