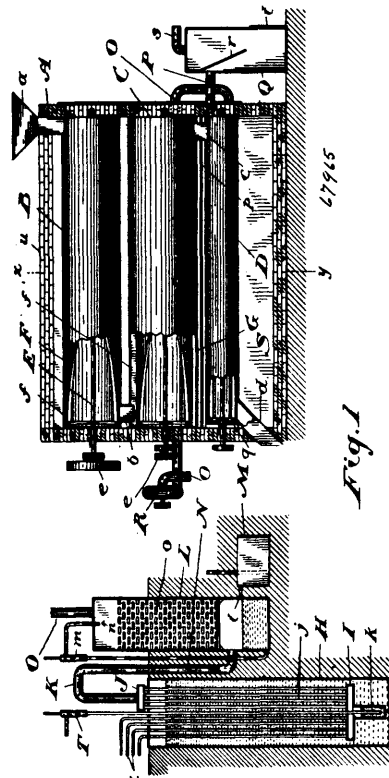


said drums. 3rd. In a logging machine, the combination with a winding drum adapted to receive a cable, and a slack drum adapted to receive the slack from the winding drum, of independent means for positively operating said drums, and means for automatically varying the speed of the slack drum. 4th. In a logging machine, the combination with a winding drum adapted to receive a cable, and a slack drum adapted to receive the slack of the cable from the winding drum, of independent means for positively operating the drum, and means for varying the speed of the slack drum in proportion to the speed of delivery of slack thereto. 5th. In a logging machine, the combination with a winding drum adapted to receive a cable, and a slack drum, adapted to receive the slack from the winding drum, of means for driving the winding drum, means for positively driving the slack drum, and means for decreasing the speed of the slack drum in proportion to the increase in diameter incident to the cable wound thereon. 6th. A logging machine, comprising a winding drum adapted to receive the cable, a slack drum adapted to receive the slack from the winding drum, means for driving the winding drum, means for positively driving the slack drum, and means for automatically varying the speed of the slack drum driving means in proportion to the slack delivered. 7th. In a logging machine, the combination with a winding drum adapted to receive a cable, and a slack drum adapted to receive slack from the winding drum, of means for driving the winding drum, means for driving the slack drum, means for throwing the slack drum into and out of operative relation with respect to its driving means, and means controlled by the slack for varying the speed of the winding drum in accordance with the slack delivered. 8th. In a logging machine, the combination with a winding drum and means for driving it, said drum being adapted to receive a cable of a slack drum adapted to receive a slack from the winding drum, separate means for driving the slack drum simultaneously with the first-named drum, means for throwing the slack drum into and out of operative relation with respect to its driving means, and means for varying the speed of the slack drum in accordance with the slack delivered. 9th. In a logging machine, the combination with a winding drum adapted to receive a cable, of a slack drum adapted to receive the slack from the winding drum, a boiler, an engine connected with the winding drum and adapted to receive energy from the boiler, a throttle for said engine, a second engine adapted for connection with the slack drum and having connections with the boiler to receive energy therefrom, and a separate throttle for the last-named engine whereby said engines may simultaneously drive their respective drums, and the speed of the slack drum may be regulated by the delivery of slack thereto. 10th. In a logging machine, the combination with a winding drum adapted to receive a cable, of a slack drum adapted to receive slack from the winding drum and to rotate simultaneously therewith, a motor for the winding drum, an independent motor for the slack drum positively connected therewith, a common source of energy for the motors, and independent means for regulating the supply of energy to the motors. 11th. In a logging machine, the combination with a winding drum adapted to receive a cable, of means for driving the winding drum, a trip drum adapted for operative engagement with said operating means, a slack drum adapted to receive slack from the winding drum, separate means for driving the slack drum simultaneously with the winding drum adapted for positive engagement therewith, means for throwing the slack drum into and out of engagement with its driving means, and a common source of energy for the several driving means. 12th. In a winding drum, the combination with a shaft having a fixed element thereon, a drum loosely mounted upon the shaft, said drum and fixed element having centering faces adapted for mutual engagement, a second element loosely mounted on the shaft, said second element and drum having adjacent centering faces, and a groove in the second element, a roller adapted to engage with the opposite faces of the groove to drive the element in opposite directions, and means for driving the roller. 13th. In a winding drum, the combination of a shaft having a fixed element thereon, a drum loosely mounted on the shaft and movable into and out of engagement with the fixed element, a centering block loosely mounted on the shaft, and adapted to engage and move the drum into engagement with the fixed element, a pulley in threaded engagement with the shaft and connected with the centering block, a groove in the second element, a roller adapted to engage the opposite faces of the groove to drive the element in opposite directions, and means for driving the roller. 14th. In a winding drum, the combination of a shaft having a fixed element thereon, a drum loosely mounted on the shaft and movable into and out of engagement with the fixed element, a centering block loosely mounted on the shaft and adapted to engage the drum to move it into engagement with the fixed element, means for moving the drum from the fixed element when the influence of the centering block is removed, a pulley having threaded engage-

ment with the shaft and connected with the centering block to move it longitudinally of the shaft, a groove in the second element, a roller adapted to engage the opposite faces of the groove to drive the element in opposite directions, and means for driving the roller. 16th. In a winding drum, the combination of a shaft having a fixed centering element thereon, a drum loosely mounted on the shaft and movable into and out of engagement with the fixed element, a centering block loosely mounted on the shaft and adapted to engage the drum to move it into engagement with the fixed element, means for moving the drum from the fixed element when the influence of the second element is removed, a pulley having threaded engagement with the shaft and connected with the centering block to move it longitudinally of the shaft, a groove in the second element, a roller adapted to engage the opposite faces of the groove to drive the element in opposite directions, and means for driving the roller. 17th. In a winding drum, the combination of a shaft having a fixed element thereon, a drum loosely mounted on the shaft and movable into and out of engagement with the fixed element, a second element mounted loosely on the shaft and movable into and out of engagement with the drum, a pulley in threaded engagement with the shaft and having connections with said second element to move it with respect to the drum, an annular groove in the pulley, a friction roller adapted to alternately engage the faces of said groove, and means connected with the shaft for rotating the roller to vary the rotation of the pulley with respect to the shaft. 18th. In a winding drum, the combination of a shaft having a fixed element thereon, a drum loosely mounted on the shaft and movable into and out of engagement with the fixed element, said drum and element having centering faces adapted for engagement, a second element loosely mounted on the shaft and adapted to engage the drum to move it into engagement with the fixed element, the engaging faces of the second element and the drum itself being self centering, means for moving the drum from the fixed element when the influence of the second element is removed, a pulley having threaded engagement with the shaft and adapted to move on said threads towards and away from the fixed element, connections between said pulley and the second element to cause simultaneous movement thereof longitudinally of the shaft, an annular groove in the pulley, a roller arranged in said groove and adapted to alternately engage the faces thereof, and means for rotating said roller from the shaft.

No. 67,965. Peat Drier. (Schoir à tourbe.)



George Blackburn Jones, Toronto, Ontario, Canada, 4th July, 1900; 6 years. (Filed 1st June, 1900.)

Claim.—1st. In a drier, the combination of a suitable casing, an evaporating cylinder provided at its upper side with one or more openings for the escape of steam, means for heating the said cylinder, a heating cylinder located above the evaporating cylinder so that it may be heated by the steam evaporated therefrom and provided