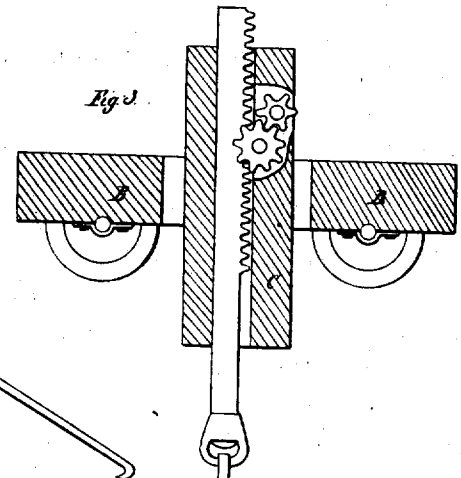
8543X

T. Potter, Sr.

Balance Scales.

Patented Dec. 17, 1834.

Fig 3.



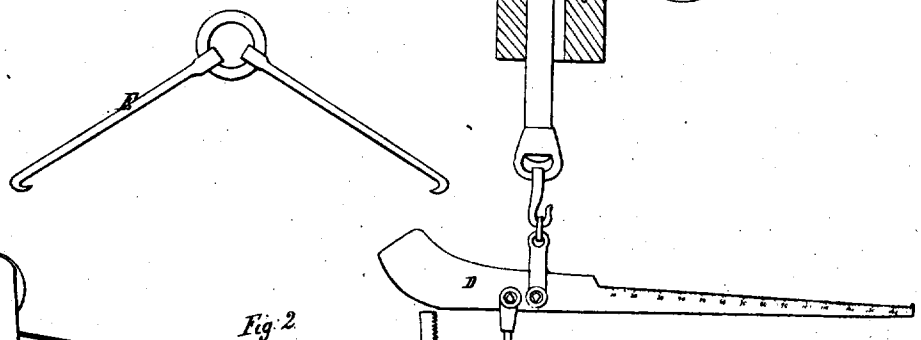


Fig 2.

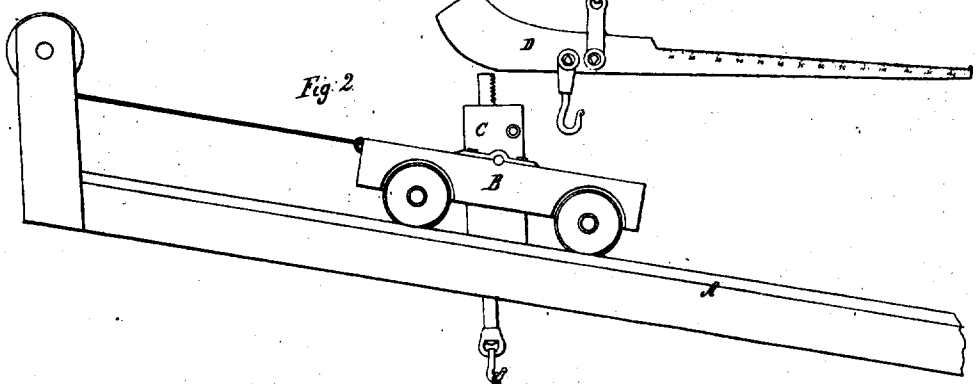
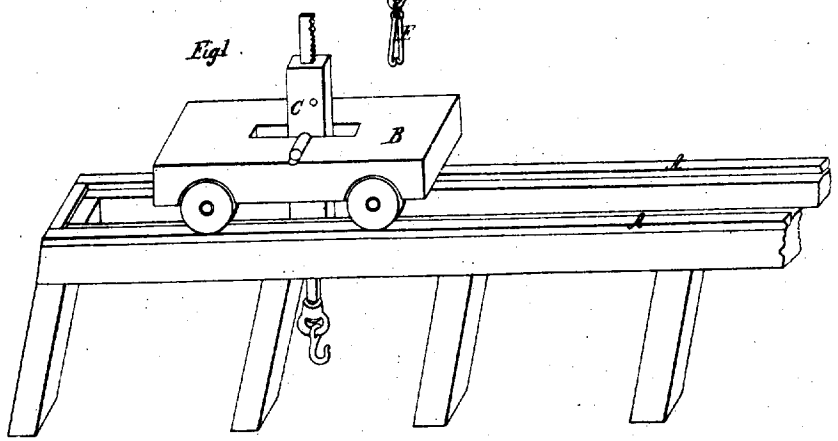


Fig 1.



15 Dec 17, 1834 189.

Thomas Potter Sen.r of the County of Warren, Kentucky.

Letters Patent.

6543X

The schedule referred to in these Letters Patent and making part of the same containing a description in the words of the said Thomas Potter Sen.r himself of his improvement in a machine for removing weights from place to place & for loading and unloading Boats warehouses &c.

To all to whom these presents shall come;

Be it known that I Thomas Potter Sen.r of the County of Warren and State of Kentucky, have invented a new and useful improvement in Mechanicism to wit: A machine or engine for removing weights from place to place & for loading & unloading Boats Warehouses &c &c. and that the following is a full and exact description of the construction and operation of the said machine or engine as invented or improved by me,

Beams of strong timber or other material 55 feet in length, more or less, and a foot square more or less, are to be procured. If 55 or more feet in length is desired, the timber may be spliced so as to consist of more than a single beam. These beams are to be elevated to any height desired, and are to be supported by strong posts, standing perpendicular or otherwise, and sufficiently numerous to prevent the beams from swagging and the rows of posts at bottom, to be 8 feet apart, more or less, the two beams are to be precisely horizontal & parallel with each other, and may be placed at any desirable distance apart, say one foot more or less. The ends of these beams, are to be connected together by strong timbers or other material, so as to cause the beams to retain their parallel position.

From the upper outside of these beams, there is to be raised perpendicular side rails composed of timbers or other suitable material, three inches thick, more or less, these side rails are to be connected at their ends by rails of equal height.

On the upper sides of these beams, are to be laid iron or steel rails or plates to extend from one end to the other, two inches in breadth, more or less. A Car is to be constructed of 4 wheels 10 inches, more or less in diameter of cast iron or other suitable material and with or without flanges, and the wheels of the car are to be

by Drawing Lee Clapp of Balmage

8543X

suitable wreadth to run on the rails or platy aforesaid, If the wheels are made without flanys, then the car is to be kept to its proper place and made to run on the rails or platy by means of horizontal friction wheels placed in the car, so that their fairpheery will just bear against the side rails which must be of such height as will allow the friction wheels of the car to come in contact with them, The axletrees of the cars are to be of iron or other suitable material 2 inches in dimmeter, more or less, and are to be let into a block 6 feet in lenght more or less and 2½ feet wide, more or less, into which block mortises are made to let the wheels revolve freely around the axletrees according to the model herewith sent, thro the center of this block which constitutes the Car, a hole is to be mortised 18 inches in length more or less, & 8 wide more or less, on the top of the block suitable notches on each side of the mortise are to be cut, for the elevator to rest in. The elevator is an instrument made like a common jack screw the bar of which is to be ten feet long, more or less, and is to pass down thro the hole mortised in the center of the block, and thro the opening left between the transverse beams. At the end of the bar there is to be a swivel to which a scale or grapples is attached, so that the scale may be turned around as convenience may dictate, The scale or grapples in lieu of the scale is to receive the weight intended to be moved, whatever it may be. It is then to be raised by turning the levers which work the elevating bar, and then carried to the place desired by moving the car on the rails. The weight to be moved is to swing below the car and rails Instead of an elevator constructed upon the principle of the jack screw if found to be more convenient, a system of pullies may be used by attaching them to the car, or in place of the pullies, the wheel and axle or windlass may be used, and whether the one or the other is used the weight is to be elevated so as to swing under the car and rails and then to be moved to the place desired, by moving the car on the rails. The beams and rails thereon may not be horizontal and still they will, by means of the car be run on them as aforesaid, and the elevator be very useful in performing the same services which are contemplated to be performed when precisely horizontal, when the beams make an angle with the horizon, the car may be made to ascend by means of a windlass attached to either end of the beams and

8543 X 191

a rope or chain connecting or attaching the car to the windlass I design using the foregoing machine or engine for the following purposes, First—in loading or unloading boats, ships, and water craft of every kind, the model to be sent shows a projection of seven feet over each end of a boat from which it is apparent that a load of rock, or heavy material of any kind may be taken in at one end, put out at the other & placed conveniently in any part of the boat, such a boat and machine attached would be very useful in building Mill Dams removing rock on water courses &c &c.

Second in transporting heavy articles of merchandize and produce from warehouse to wharves and from wharves to warehouses, This is to be done by constructing a stationary way by beams placed horizontally or at an angle with the horizon on posts let into the ground as already described,

Third, In transporting heavy burdens of all kinds and descriptions, by erecting permanant or temporary ways as aforesaid, and to be used in removing rock earth, wood, logs, minerals, and any conceivable article from place to place The machine for these purposes will be useful in removing rock, and dirt from cellars, supplying saw mills with saw logs, & for all other purposes where it is desirable to remove heavy weights with ease and convenience

My invention chiefly consists in the construction of a way for transporting heavy weights in such manner as to allow the weight transported to swing below the way on which the car is to moved to which car the weight is to be attached as already described. The invention may be denominated the elevating and transporting rail way or engine.

Witnesses
Jas. R. Stiles
Jon.a Gibson

Thomas Porter, Senior.

Drawing

Ex.d
C.H.W.

1290 nds