T. S. McLENDON.

PORTABLE ELEVATOR.

APPLICATION FILED SEPT. 24, 1913.

1,108,771. Patented Aug. 25, 1914.

Fig. 1.

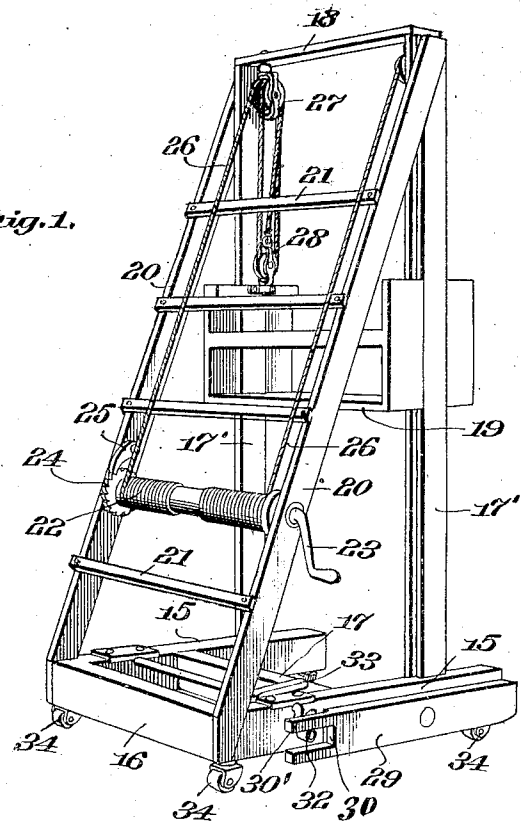


Fig. 2.

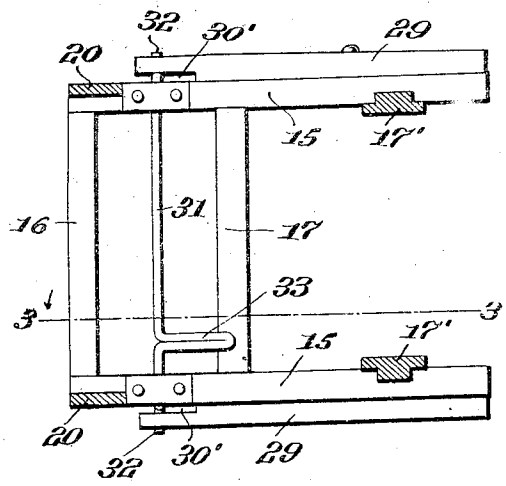
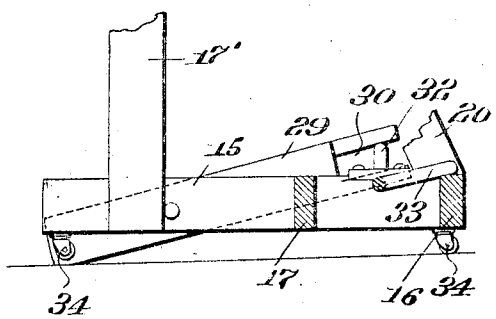


Fig. 3.



Witnesses

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THOMAS S. McLENDON, OF CARROLLTON, GEORGIA.

PORTABLE ELEVATOR.

1,108,771. Specification of Letters Patent. Patented Aug. 25, 1914.

Application filed September 24, 1913. Serial No. 791,637.

To all whom it may concern:

Be it known that I, THOMAS S. McLENDON, a citizen of the United States, residing at Carrollton, in the county of Carroll and State of Georgia, have invented new and useful Improvements in Portable Elevators, of which the following is a specification.

This invention relates to portable elevators for domestic use, and it is an improvement on the device of this class for which Letters Patent of the United States, No. 1051247 were issued to me on January 21, 1913.

The object of the present invention is to simplify and improve the general structure; to improve the arrangement of the hoisting tackle so as to increase the power; to so construct the frame that it may be utilized as a step ladder; and to simplify and improve the construction and operation of the brake whereby the device is secured against moving on its supporting wheels or casters while in active use.

With these and other ends in view which will readily appear as the nature of the invention is better understood, the same consists in the improved construction and novel arrangement and combination of parts which will be hereinafter fully described and particularly pointed out in the claims.

In the accompanying drawing has been illustrated a simple and preferred form of the invention, it being, however, understood that no limitation is necessarily made to the precise structural details therein exhibited, but that changes, alterations and modifications within the scope of the claims may be resorted to when desired.

In the drawing,—Figure 1 is a perspective view of the improved device. Fig. 2 is a horizontal sectional view taken just above the base frame. Fig. 3 is a transverse sectional view taken on the line 3—3 in Fig. 2.

Corresponding parts in the several figures are denoted by like characters of reference.

The base frame of the improved elevator includes side bars 15, a front bar 16 and an intermediate cross bar 17. Guide rails 17′ rising from the side members 15 are connected together at their upper ends by a cap piece 18, said rails serving to guide the car 19. The upper extremities of the rails or uprights 17′ are connected with the front ends of the side members 15 by inclined braces 20 on which latter rungs 21 are secured at suitable intervals. The braces 20 also serve to support the drum or windlass 22 having a crank 23 whereby it may be rotated and a ratchet 24 engaged by a dog or pawl 25 whereby the drum may be held against reverse rotation. Flexible hoisting elements, such as ropes or cables 26, are connected with and wound on the drum, said ropes being guided over pulleys 27 and 28 connected, respectively, with the cap beam and with the car 19, the ends of the ropes being made fast to the pulley blocks connected with the car. It will be seen that by means of the hoisting tackle arranged as herein described, a considerable weight may be lifted with slight effort.

Pivoted on the outer faces of the side members 15 of the base frame are levers 29 which are provided at their front ends with slots 30 and with recesses 30′ adjacent to said slots. A rock shaft 31 which is supported for oscillation on the side members 15 in advance of the cross bar 17 is provided at its ends with cranks 32 accommodated in the recesses 30′ and operating in the slots 30 of the levers, and whereby said levers may be tilted from the normal or initial approximately horizontal position shown in Fig. 1 to the inclined position shown in Fig. 3 when the rear ends of said levers will engage the floor. The rock shaft has an arm or lever 33 whereby it may be actuated, said arm being so arranged that in the various positions of the rock shaft it will rest on the cross bar 17 or the front bar 16 of the frame. The arm 33 is, moreover, disposed at such an angle with respect to the cranks 32 that when the arm rests on the front bar 16, the extremities of the cranks 32 will be positioned slightly in advance of the axis of the rock shaft, or beyond a dead center, thereby supporting the levers 29 in an inclined position. The base frame is provided with low wheels or casters 34 on which it may be readily moved from place to place, and the levers 29 are made of such a length and are capable of being tilted by the cranks 32 to such an extent that when thus tilted the rear ends of said levers will engage the floor and slightly lift the rear wheels or casters 34 from contact with the floor, thus forming an effective brake or device to prevent the elevator frame from being moved on the wheels or casters.

From the foregoing description, taken in connection with the drawing, the operation

and advantages of this invention will be readily understood.

The device not only forms a convenient step ladder for domestic purposes which may be readily moved from place to place, but it also forms an elevator whereby heavy articles, such as sacks of flour, canned goods and the like may be lifted with slight effort so as to be placed on shelves for storing. When used as a step ladder or as an elevator, the device may be firmly anchored in position by simply rocking the shaft 31 so as to tilt the brake levers and place the rear ends thereof in floor engaging position, the front bar 16 and the cross bar 17 serving to limit the movement of the arm whereby the rock shaft is actuated.

Having thus described the invention, what is claimed as new, is:—

1. In a portable elevator of the class described, a base frame including side members, a front bar, and an intermediate cross bar, said base frame having supporting wheels, brake levers pivoted on the side members of the frame and having slots at their front ends, a rock shaft supported on the frame between the front bar and the cross bar and having cranks engaging the slots, and an arm extending from the rock shaft and obstructed terminally by the front bar and the cross bar of the base frame.

2. In a portable elevator of the class described, a base frame having supporting wheels, said base frame including side members, a front bar and an intermediate cross bar, brake levers pivoted on the outer faces of the side bars and having slots at their front ends and recesses in their inner faces adjacent to said slots, a rock shaft supported on the side members of the base frame between the front bar and the cross bar and having terminal cranks accommodated in the recesses of the brake levers and engaging the slots therein, and an operating arm connected with the rock shaft and terminally obstructed by the front bar and the cross bar of the base frame.

In testimony whereof I affix my signature in presence of two witnesses.

THOMAS S. McLENDON.

Witnesses:
J. P. BRADLEY,
H. N. SPENCE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents. Washington, D. C."