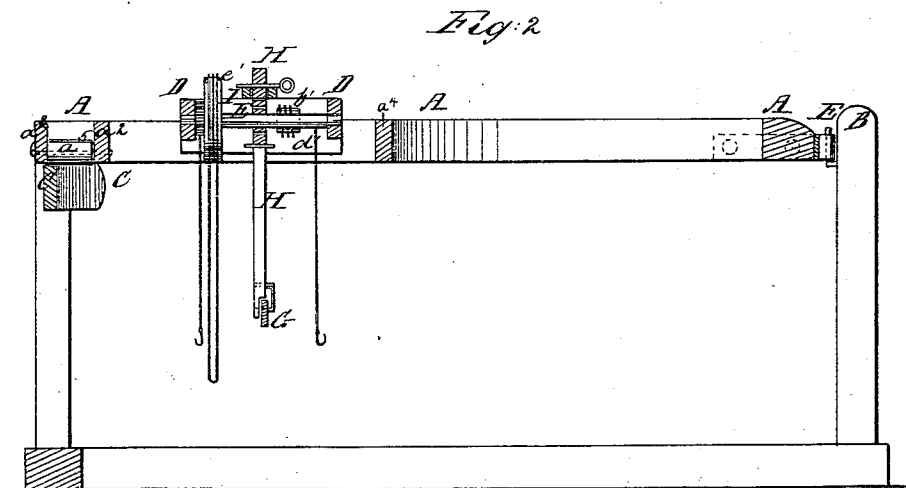
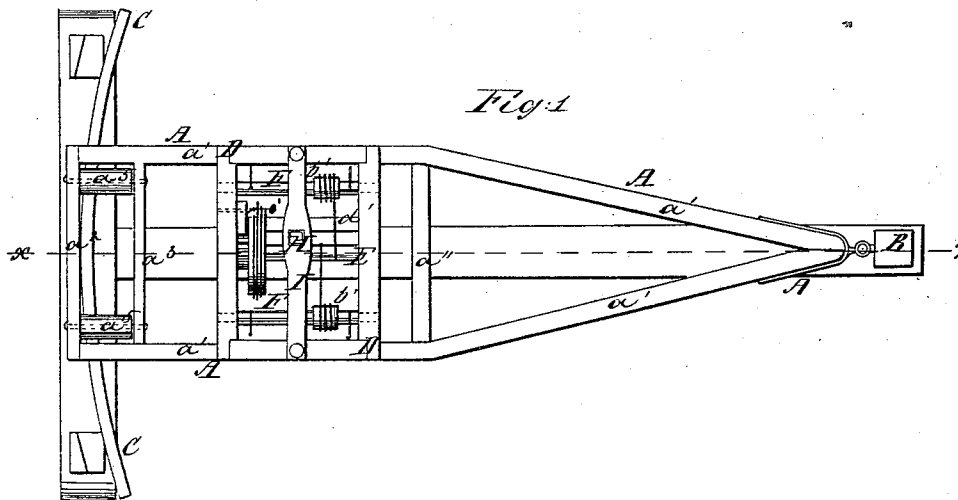


A. J. Weed,

Derrick.

No 82,774.

Patented Oct. 6, 1868.



Witnesses.

Am A Morgan
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ANDREW J. WEED, OF HARDWICK, VERMONT.

Letters Patent No. 82,774, dated October 6, 1868.

IMPROVEMENT IN SUGAR-PAN DERRICK.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, ANDREW J. WEED, of Hardwick, in the county of Caledonia, and State of Vermont, have invented a new and useful Improvement in Apparatus for Lifting and Transporting Sugar-Pans; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a top view of my improved apparatus.

Figure 2 is a vertical longitudinal section of the same, taken through the line *x x*, fig. 1.

Similar letters of reference indicate like parts.

My invention has for its object to furnish a simple and convenient apparatus for raising and removing the pans from the furnace in sugar-houses, which shall be so constructed and arranged that the pans may be removed from the furnace easily and promptly when required, and which shall at the same time be wholly out of the way when not in use.

And it consists in the construction and combination of the various parts, as hereinafter more fully described.

A is a frame, consisting of two side-bars, *a*¹, and three cross-bars, *a*², *a*³, and *a*⁴. The cross-bars *a*² *a*³ *a*⁴ are made of the same length, and are placed, the one, *a*⁴, between the side-bars *a*¹, at or near their centres, and the two, *a*² *a*³, near each other, between the outer ends of the said side-bars *a*¹, as shown in figs. 1 and 2. The inner ends of the side-bars *a*¹ are brought together, and are hinged or pivoted to some suitable support, B.

Between the cross-bars *a*² and *a*³ are pivoted two friction-rollers, *a*⁵, which roll along a circular track, C, suspended from the beams of the sugar-house, or from some other suitable support.

D is a rectangular frame, resting and sliding longitudinally upon the side-bars *a*¹ of the frame A, between the cross-bars *a*² and *a*⁴, so that its position may be easily adjusted to the position of the particular pan to be raised.

To the frame D are pivoted three shafts, E F F, the shaft E being at the centre of the frame D, and the shafts F being placed, one upon each side of and parallel with the said shaft E, and near the sides of said frame D, as shown in fig. 1.

To the shaft E is attached a drum, *e*¹, around which two or three turns of an endless rope should be passed, for convenience in operating said shaft.

The shaft E is also provided with a ratchet-wheel and pawl to hold it securely in any position to which it may be revolved.

The shafts F have drums, *b*¹, formed upon them, of a greater diameter than the shaft E. The drums *b*¹ should be connected with the shaft E by ropes, so that the shafts F may be revolved by the revolution of the shaft E to wind up the ropes attached to the ends of the said shafts, and by which the pan is supported.

G is a cross-bar, pivoted to the lower end of the vertical bar H, and the lower edge of which, near its ends, is notched so as to fit upon the edges of the pan, to steady it while being raised and transported from the furnace. The vertical bar H passes through a guide or keeper attached to the cross-bar *d*¹ of the furnace D, and through the cross-bar I, attached to the upper part of the said frame D, where it is secured in place by a pin passing through one or the other of the holes formed through the said vertical bar H, above the cross-bar I, to prevent the said vertical bar from dropping down too far.

By this device the pans can be easily and promptly raised from the furnace, and transported to any desired part of the sugar-house.

Having thus described my invention, I claim as new, and desire to secure by Letters Patent—

1. The pivoted or hinged frame A, constructed substantially as described, in combination with the circular track C, as and for the purpose set forth.
2. The combination of the adjustable sliding frame D, shaft E, drum *e*¹, shafts F F, cross-bar I, adjustable vertical bar H, and pivoted bar G, with each other and with the pivoted frame A, substantially as herein shown and described, and for the purpose set forth.

Witnesses:

EDSON WEED,

T. C. BATCHELDER.

ANDREW J. WEED.