

T. Davis,

Motor.

No. 110,212.

Patented Dec. 20. 1870.

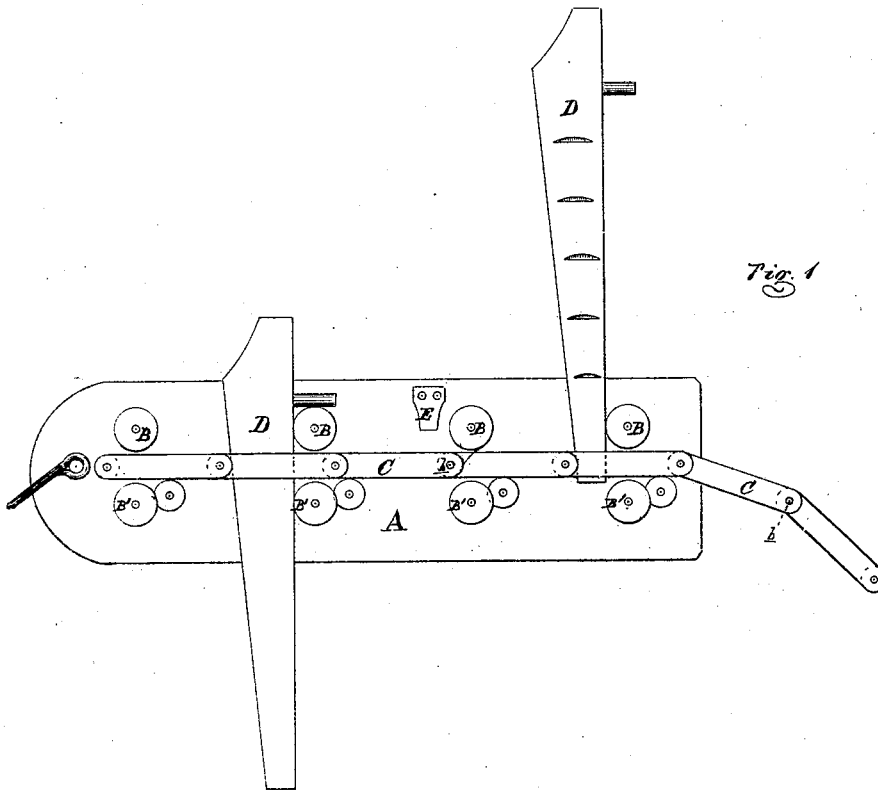


Fig. 1



Fig. 2

ATTEST
Fredrick Stebbins
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THOMAS DAVIS, OF DETROIT, MICHIGAN.

Letters Patent No. 110,212, dated December 20, 1870.

IMPROVEMENT IN MOTIVE-POWER APPARATUS.

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

To whom it may concern:

Be it known that I, THOMAS DAVIS, of Detroit, in the county of Wayne and State of Michigan, have invented a new and useful Improvement in a Wedge-Power; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon and being a part of this specification, in which—

Figure 1 is a side elevation of my device, with the near side plate removed.

Figure 2 is a plan of the chain.

Like letters indicate like parts in each figure.

The nature of this invention relates to a new and novel application of the wedge to the raising or moving of heavy bodies, and consists in the arrangement within a suitable case or frame of friction-rollers, in pairs, in the length of the frame, and in the employment of a double bar-link chain between the said rollers, the pivots of the chain carrying friction-rollers, the chain with its load being moved forward by wedges successively driven between the rollers of the frame and those of the chain, giving the latter great tractive power, as more fully hereinafter set forth.

In the drawing—

A represents a suitable frame or case, constructed of two parallel beams joined together by suitable cross-bars, which may be provided with friction-rollers to support the chain, if desired, and as shown.

B are friction-rollers, journaled at equal distances apart in the frame A, and below each is a corresponding one, B'.

C is a bar-link chain, composed of parallel bars, *a*, pivoted together, and each link to the adjoining one by the cross-bar *b*, which have sleeved on them friction-rollers *c*.

The end of the chain is inserted in the frame between the upper and lower series of the rollers B; then a wedge, D, is inserted behind the roller of the first link of the chain, and in front of the first pair of rollers in the frame. Then, by forcing down home the wedge, the chain is drawn in a distance equal to the difference in the width of the point and head of the wedge, when a second wedge is in like manner inserted and driven, carrying the chain a further distance along, when the first wedge may be withdrawn. The process is continued until the weight is moved the desired distance.

Of course the frame must be suitably anchored, and the chain properly secured at its other end to the weight to be moved.

The wedges may be forced in by any known means, by screws, levers, or otherwise, and, to prevent them from flying out from the great pressure on them, may be securely held, as they are driven, by spring-pawls E arranged on the side beams of the frame A, to engage with notches cut in the sides of the wedges.

It will readily be seen that this arrangement affords an enormous power at a small cost, applicable to many purposes.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination of the wedges D with a bar-link chain, C, constructed as herein described, and a series of fixed or stationary friction-rollers, B B', arranged in the frame A, when operating in the manner and for the purpose substantially as herein set forth.

THOMAS DAVIS.

Witnesses:

FREDERICK EBERTS,
SAM. J. SPRAY.