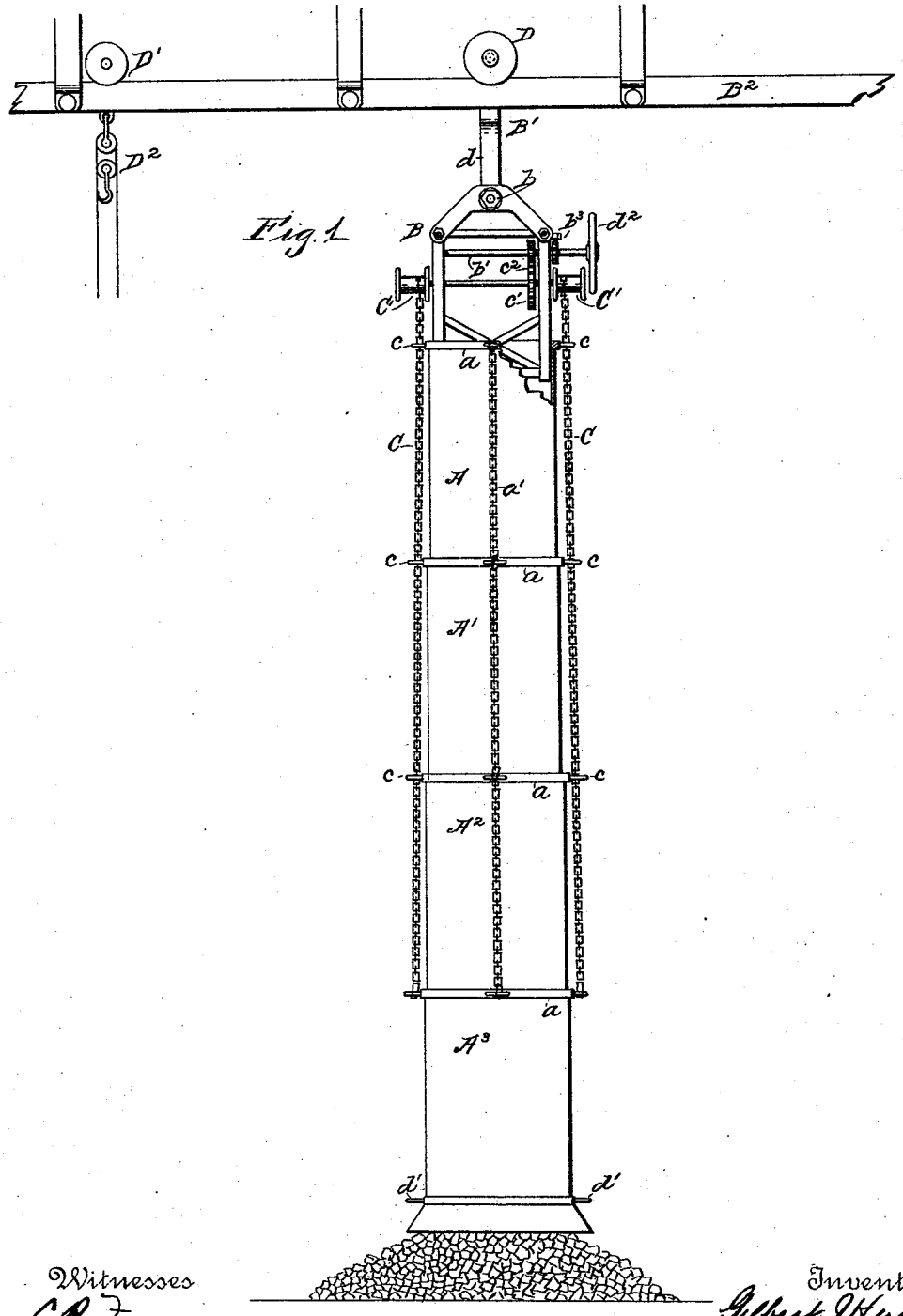
(No Model.) 2 Sheets—Sheet 1.

# G. J. HERBERT.

## COAL PILER.

No. 455,328. Patented July 7, 1891.

Fig. 1.




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(No Model.) 2 Sheets—Sheet 2.

# G. J. HERBERT.

## COAL PILER.

No. 455,328. Patented July 7, 1891.

Fig. 2.

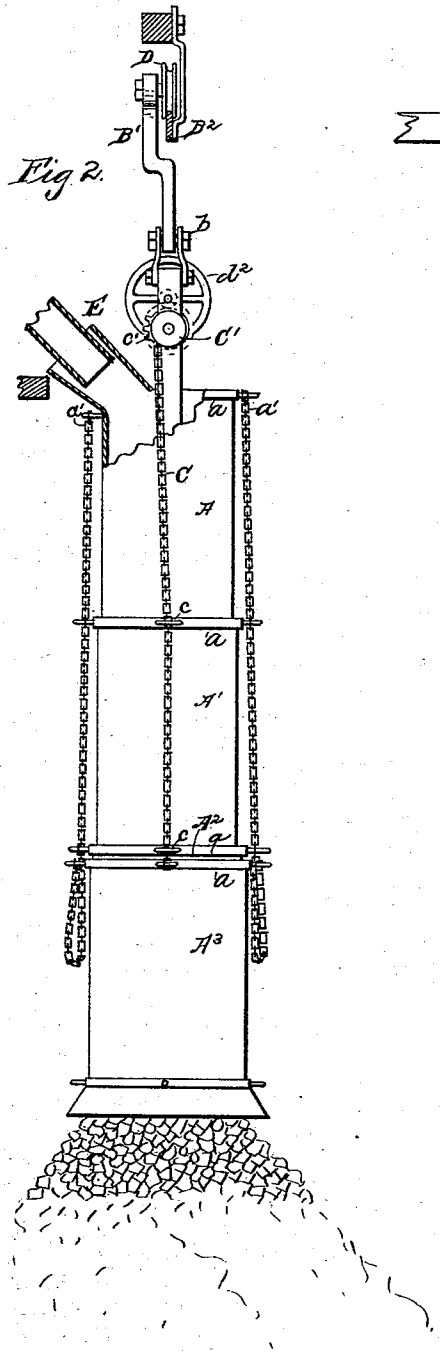
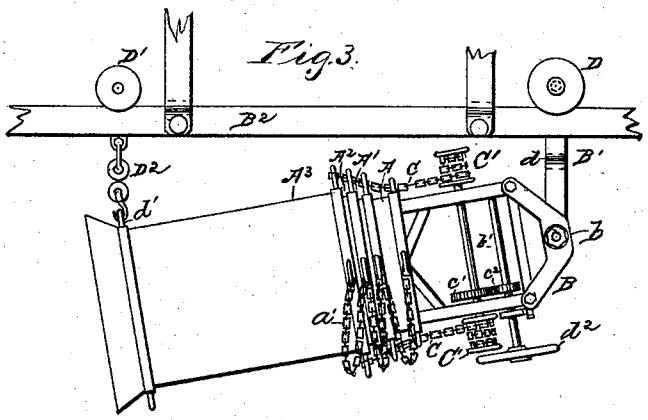
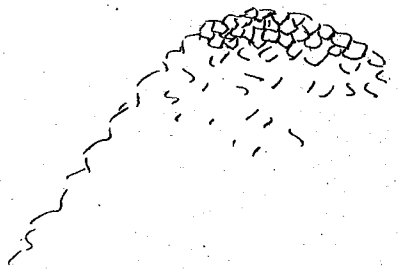



Fig. 3.



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# UNITED STATES PATENT OFFICE.

GILBERT J. HERBERT, OF EAST ORANGE, NEW JERSEY.

## COAL-PILER.

SPECIFICATION forming part of Letters Patent No. 455,328, dated July 7, 1891.

Application filed October 15, 1890. Serial No. 368,208. (No model.)

*To all whom it may concern:*

Be it known that I, GILBERT J. HERBERT, of East Orange, in the county of Essex and State of New Jersey, have invented a certain new and useful Improvement in Coal-Pilers, of which the following is a specification.

This invention relates to devices for piling coal in yards, bins, or pockets, or in loading vessels with coal, the object being to prevent breakage to a considerable extent; and it consists in a movable telescopic chute having a swinging connection with its support or carriage, so that its free end may be drawn upward.

In the accompanying drawings, Figure 1 is a side view of an apparatus embodying my improvement. Fig. 2 shows the device partially telescoped, and Fig. 3 shows it as wholly telescoped and drawn up to a substantially horizontal position.

Referring by letter to the drawings, A A' $A^2$ $A^3$ designate tubular sections of the piler constructed to slide or telescope one section within another, and the sections are here shown as rectangular in cross-section. One end, preferably the upper end, of each section is provided with a shoulder or band *a*, and at opposite sides flexible stays *a'* are secured to the bands *a*. I have shown the stays *a'* in the form of chains, and they are designed as supports for all of the sections below the top section A, which has a frame B rigidly secured to it, and this frame B has a pivotal or hinge connection *b* with a carriage B' movable on a hanger or track $B^2$.

C C designate chains or analogous devices secured at the lower ends to the lower section $A^3$ and engaging at the upper end with a windlass C', having bearings in the frame B. The chains C pass loosely through eyes or rings *c*, attached to the upper ends of the sections intermediate of the frame B and the lower section.

It is obvious that when the windlass C' is rotated to wind the chains thereon the lower section $A^3$ will be drawn upward over the section $A^2$ until the section $A^3$ shall have reached the shoulder *a* of the section $A^2$, and then the section $A^2$ will also be drawn upward onto the section next above, and the piler may thus be telescoped until the lower section surrounds all of the other sections, as shown in Fig. 3.

As a means for rotating the windlass C, I have shown it as provided with a gear-wheel *c'*, meshing with a gear-wheel $c^2$ on a shaft *b'*, having bearings in the frame B, and provided at its outer end with a hand crank or wheel $d^2$. The shaft *b'* may have a stop $b^3$, here shown in the form of a ratchet.

The carriage B' consists of a hanger *d* and a trolley D at its upper end movable lengthwise of the track $B^2$. The track $B^2$ is arranged parallel with or adjacent to a platform, and it is evident that the piler may be moved to any desired place.

D' designates a trolley also on the track $B^2$, and from this trolley a tackle $D^2$ is suspended, which may be engaged with a ring *d'* at the bottom of the section $A^3$ when it is desired to raise the piler in a substantially horizontal position so as to clear a pile or piles of coal over which it may be moved.

In using this piler the lower end extends nearly to the ground, as shown in Fig. 1, and coal is dumped into its upper end, preferably through a chute E. The coal will spread slightly on the ground and the piler will gradually fill, and then the lower section may be drawn up, as previously described, which allows more coal to discharge upon the pile.

Having described my invention, what I claim is—

In a coal-piler, the combination, with a track and a carriage movable thereon, of a frame pivotally connected to said carriage below the track, a piler suspended from said frame and consisting of tubular telescopic sections, flexible supports connecting said sections, a windlass having bearings in the frame and swinging therewith, and chains connected at one end with the lower of said sections and at the other end with the windlass, substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GILBERT J. HERBERT.

Witnesses:

WILLIAM M. ILIFF,

WM. A. POLLOCK.