

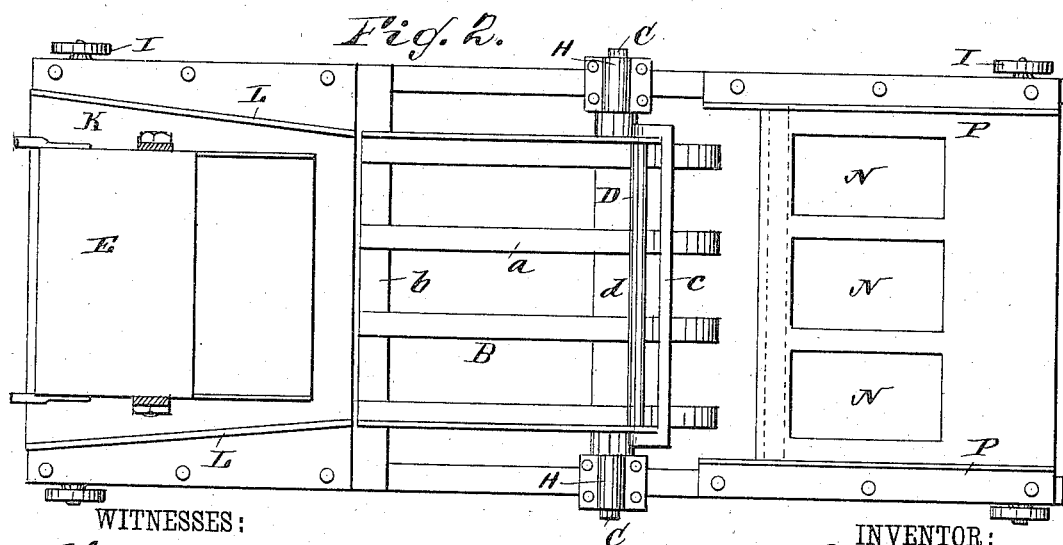
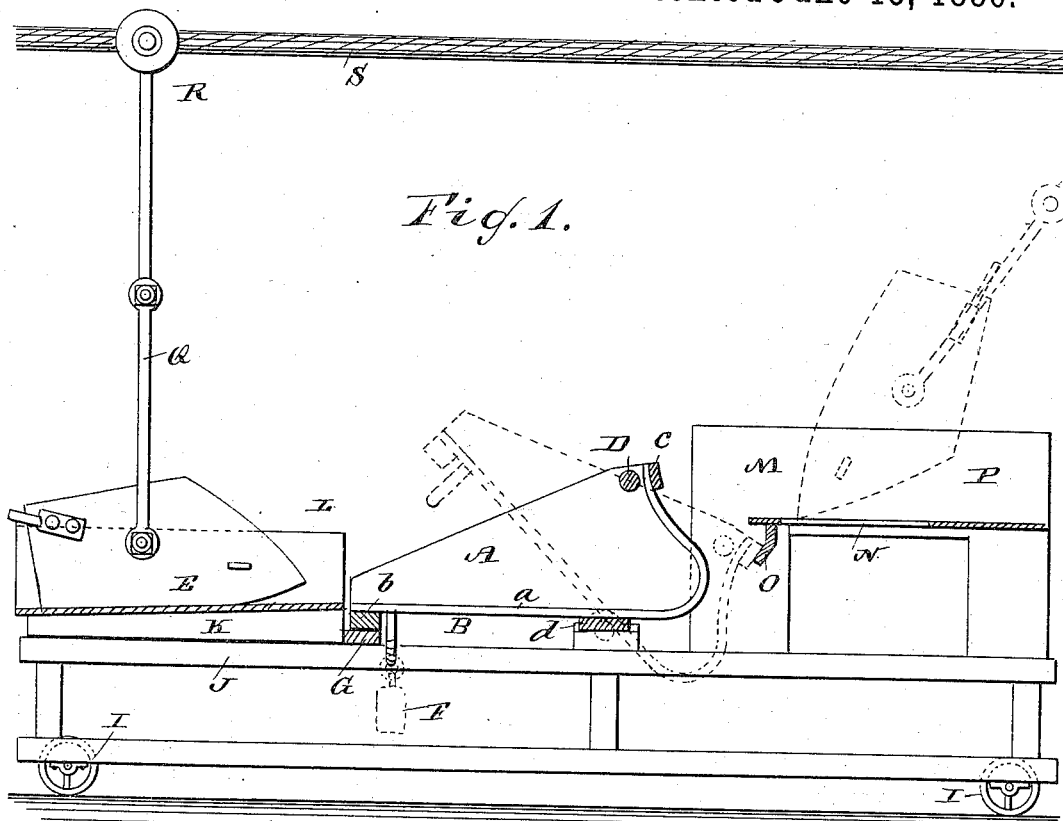
(No Model.)

J. T. EVANS.

AUTOMATIC DUMPING AND DISCHARGING APPARATUS.

No. 343,762.

Patented June 15, 1886.



WITNESSES:

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JOHN T. EVANS, OF ADAMSVILLE, UTAH TERRITORY.

AUTOMATIC DUMPING AND DISCHARGING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 343,762, dated June 15, 1886.

Application filed January 20, 1886. Serial No. 189,739. (No model.)

To all whom it may concern:

Be it known that I, JOHN T. EVANS, of Adamsville, in the county of Beaver and Territory of Utah, have invented a new and Improved Automatic Dumping and Discharging Apparatus, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved dumping and discharging apparatus for discharging ore, coal, and other material from buckets, carriers, &c., on cable railways.

The invention consists in the construction and combination of parts and details, as will be fully described and set forth hereinafter, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a longitudinal sectional view of my improved automatic dumping and discharging apparatus, part of the cable road and a bucket being shown. Fig. 2 is a plan view of the same.

The dumper A consists of the cage B, formed of the curved longitudinal bars *a*, secured to the end bars, *b* and *c*, and to the bar *d*, provided with the pivots C. The bars *a* are curved similar to a sleigh-runner, and are secured to the bar *d* near the curves.

A roller, D, is mounted to turn in the raised part of the dumper-cage, against which roller the mouth part of the entering bucket E strikes.

A weight, F, is secured on the under side of the dumper, near the cross-bar *b*, and serves to swing the open end of the dumper-cage down upon the bar G, provided for the purpose of supporting said open end of the dumper-cage.

The pivots C are mounted to turn in boxes H on the top edges of the side pieces of the base-frame J, mounted on wheels I.

The entry K is formed on the top of the frame J in front of the dumper, and is provided with the upwardly-projecting guides L, which converge slightly toward the dumper, and thus guide the entering bucket E to the open end of the dumper-cage.

The bar G, which supports the open end of the dumper, is at the inner end of the entry K.

The receiver M consists of a raised platform provided with the openings N, and with the bevel-bar O at the edge adjacent to the dumper, and against which bar O the bar *c* of the dumper can strike. The receiver M has the side walls, P, projecting above the top of the receiver.

The bucket E is pivoted to the hanger Q, held by the clip R on the cable S.

The operation is as follows: The filled bucket E enters the entry K, and is guided by the guides L to the open end of the dumper A, into which dumper it passes and strikes the curved ends of the bars *a*, thereby swinging the dumper into the position shown in Fig. 1, the bar *c* of the dumper striking the bar O of the receiver. The bucket E passes horizontally into the dumper—that is, in the position shown in Fig. 1—and when the dumper swings down the closed end of the bucket is swung up, causing the contents of the bucket to slide out of the open end of the bucket and through the openings between the bars *a*. When the bucket is empty, the weight F swings the dumper down again. That part of the contents of the bucket that is deposited on the platform M passes through the openings N of the same. The bucket is drawn over the receiver in the position shown in dotted lines.

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

1. In a dumping and discharging apparatus, the combination, with a supporting-frame, of a dumping-cage pivoted to the said frame, and having an open end to receive a bucket and adapted to be tilted thereby, substantially as described.

2. In a dumping and discharging apparatus, the combination, with a supporting-frame, of a dumping-cage pivoted to the said frame, and having an open end to receive a bucket, and an entry to the dumping-cage for guiding a bucket into the same, substantially as herein shown and described.

3. In a dumping and discharging apparatus, the combination, with a supporting-frame, of a pivoted and counterbalanced dumping-cage having one end open and the other curved upwardly, an entry for guiding a bucket into the said cage, and a stop for arresting the cage

when tilted, substantially as herein shown and described.

4. The combination, in a dumping and dis-
charging apparatus, of the pivoted dumping-
5 cage A, the entry K L in front of the dump-
ing-cage, and the beveled slot-bar O, substan-
tially as herein shown and described.

5. The combination, with the entry K, of the
bar G, the pivoted dumping-cage A, and the
10 receiver M, provided with the beveled bar O,
substantially as herein shown and described.

6. The combination, with the entry K, of the
pivoted dumping-cage A, and of the receiver
M, provided with the openings N, substantially
as herein shown and described.

JOHN T. EVANS.

Witnesses:

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