No. 814,933. PATENTED MAR. 13, 1906.

I. E. BENDICKSON.

CONVEYING DEVICE.

APPLICATION FILED AUG. 9, 1905.

Fig. 2

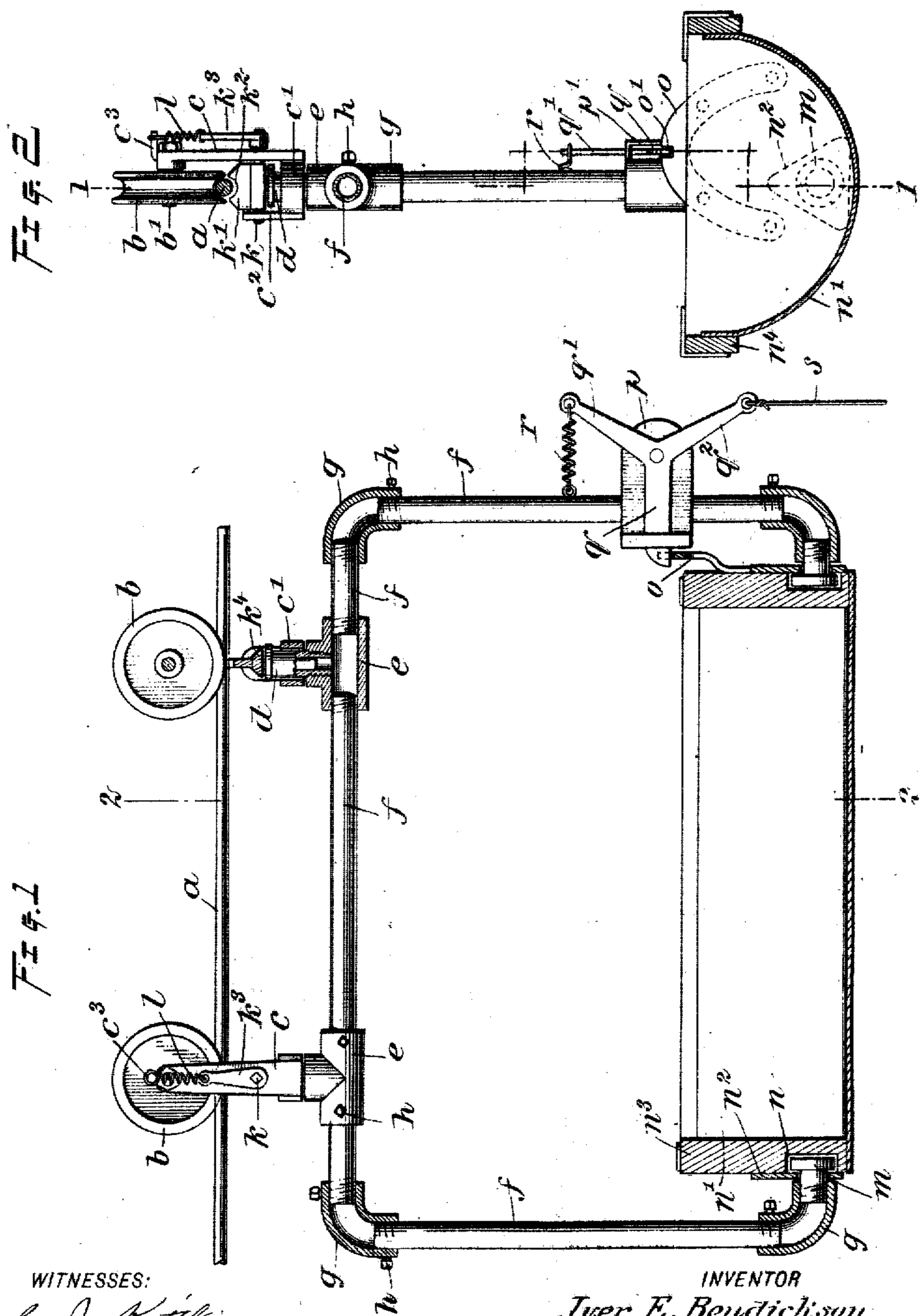

Fig. 1

WITNESSES:

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IVER E. BENDICKSON, OF CAMBRIDGE, WISCONSIN, ASSIGNOR OF ONE-THIRD TO CRIST LEGREID AND ONE-THIRD TO FRANK WOELLFER, OF CAMBRIDGE, WISCONSIN.

CONVEYING DEVICE.

No. 814,933. Specification of Letters Patent. Patented March 13, 1906.

Application filed August 9, 1905. Serial No. 273,386.

To all whom it may concern:

Be it known that I, IVER E. BENDICKSON, a citizen of the United States, and a resident of Cambridge, in the county of Dane and State of Wisconsin, have invented a new and Improved Conveying Device, of which the following is a full, clear, and exact description.

My invention relates to a conveying device which while capable of general use is especially adapted for application to a trolley system for cleaning out stables and for similar purposes.

The principal objects of the invention are to provide a simple and strong construction of frame for supporting a carrier mounted in such a manner as to be easily dumped and formed in such a way as to readily discharge all material therefrom when moved to dumping position.

Further objects of the invention are to provide means for controlling the dumping of the carrier and for keeping the frame on the trolley-track.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference designate corresponding parts in all the figures.

Figure 1 is a side elevation of a portion of a trolley-track and carrying device constructed in accordance with my invention and shown partly in section on the line 1 1 of Fig. 2, and Fig. 2 is a sectional view on the line 2 2 of Fig. 1.

I have shown a trolley-rail *a*, which may be of any ordinary construction, and on this rail are mounted two or more trolley-wheels *b*. These wheels are mounted on shafts *b'*, carried by brackets *c*. Each bracket is provided with a socket *c'*, by means of which it is swiveled on a head *d*, that is mounted in a T-joint *e*. These T-joints are connected together by wrought-iron pipes *f*, and these pipes extend downwardly in the general form of a rectangle, so as to constitute a frame. They are held together at the corners by ordinary joints *g*. The pipes are screwed into the T's and joints and are fixed thereto by set-screws *h*, so as to prevent their turning and also prevent the frame from getting out of plumb. On each bracket *c* is an upwardly-extended projection c^2, and from this to the main part of the bracket extends a shaft *k*. Fixed to this shaft is a shield *k'*, having a depression k^2 in its upper surface adapted to guard the trolley-rail *a*. This depression is of sufficient size to permit the rail to enter it and just clear its edges. On the shaft *k* is fixedly mounted an arm k^3, which by means of a spring *l* is connected with a projection c^3 on the bracket *c*. It will be seen that this spring normally keeps the plate *k'* in elevated position when the device is operated to perform the desired function, but that it is yieldable, and consequently when passing around corners or over switches it may if necessary yield to permit the carrier to move in the desired manner. Ordinarily the top of the head *d* is sufficiently below the flat under side k^4 of the plate *k'* to permit motion of the plate on its pivot in this manner; but if the frame *f* is lifted accidentally or otherwise the top of this head engages the surface k^4 and prevents the guard from turning, thus keeping the wheel on the track.

The frame *f* is designed for supporting a car or carrier for receiving the material to be conveyed. It is accordingly provided with studs *m*, which enter depressions *n* in a carrier *n'* and pivotally support the carrier at a point below its center of gravity. A triangular plate n^2 is placed over each depression *n*, so as to secure the head of the stud *m* in position in a manner which will be readily understood. The carrier *n'* is formed of semicircular shape of galvanized iron or similar material, as is shown in Fig. 2, so that when it is tilted on its pivots it will necessarily discharge its entire load. The carrier is provided with wooden end pieces n^3 and longitudinal outside bars n^4 for strengthening it. In order to provide for holding the carrier in an upright position, it is supplied with an upwardly-extending plate *o*, which has a slot *o'*. On the frame is mounted a plate *p*, and upon this is pivoted a latch *q*. This latch extends through a guard *p'* on the plate and is adapted to engage the notch *o'* when the notch is brought into proper position for such engagement. It will be noticed that the upper surface of the plate *o* is curved in such a manner as to cause the latch to ride up upon it until it reaches the notch, when the carrier is moved upwardly about its pivots. The latch *q* is provided with an upwardly-extending arm *q'*, which is connected, by means of a spring *r*,

with the frame and normally holds the latch in operative position. The latch is also provided with a downwardly-extending arm q^2, which by means of a flexible connection *s* is adapted to be manipulated by the operator, so as to disengage the latch from the notch. When this is done, the carrier will rotate by gravity and dump its contents.

The operation of the whole device will be readily understood from the above description.

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

1. A conveying device, comprising a frame formed of pipes secured together by pipe-fittings, set-screws secured in said fittings to prevent movement of the pipes with respect thereto, a pair of studs mounted in said frame, and a carrier having depressions for receiving said studs at a point below the center of gravity of the carrier, said carrier being of semicircular cross-section, whereby its contents may be easily dumped.

2. A conveying device, comprising a frame formed of pipes secured together by pipe-fittings, set-screws secured in said fittings to prevent movement of the pipes with respect thereto, a pair of studs mounted in said frame, a carrier having depressions for receiving said studs at a point below the center of gravity of the carrier, said carrier being of semicircular cross-section, a spring-latch for normally holding the carrier in upright position, and means for disengaging the latch from the carrier.

3. A conveying device comprising a frame, a carrier supported thereby, said frame consisting of a series of pipes and pipe-fittings connecting the pipes together; said fittings at the top of the frame being in the form of T's, each T being provided with a head and a swivel-bracket mounted on each head for supporting an overhead-trolley wheel.

4. A conveying device, comprising a frame, a carrier pivotally supported by the frame at a point below its own center of gravity, said carrier having a curved plate extending upwardly therefrom and provided with a notch near its upper end, a pivoted latch adapted to engage said notch, resilient means for holding said latch in the notch, means for disengaging the latch from the notch, said frame consisting of a series of pipes and pipe-fittings connecting the pipes together, certain fittings at the top of the frame being of the form of T's, each T being provided with a head, and a swiveled bracket mounted on each head for supporting a trolley-wheel.

5. A conveying device comprising a frame for supporting a carrier, a bracket movably mounted with respect to the frame, a trolley-wheel supported by the bracket, a movable plate on the bracket having a depression for receiving a portion of a track for said wheel, and means for holding said plate in such position as to constitute a guard for the track.

6. A conveying device comprising a frame for supporting a carrier, a bracket connected with the frame, a wheel supported by the bracket, a movable plate mounted on said bracket, said plate having a depression for receiving a portion of a trolley-track and means for holding said plate in such position as to constitute a guard for the track, said means comprising an arm fixedly mounted with respect to the plate, and a spring connecting said arm with the bracket.

7. A conveying device, comprising a frame for supporting a carrier, a swiveled bracket on the frame, a trolley-wheel mounted on the bracket and adapted to ride upon a trolley-rail, a pivotally-mounted plate on said bracket, said plate having a depression for receiving the lower portion of the trolley-track, and means for holding said plate in elevated position to constitute a guard for the track.

8. A conveying device, comprising a frame for supporting a carrier, a swiveled bracket on the frame, a trolley-wheel mounted on the bracket and adapted to ride upon a trolley-rail, a pivotally-mounted plate on said bracket, said plate having a depression for receiving the lower portion of the trolley-track, and means for holding said plate in elevated position to constitute a guard for the track, said means comprising an arm fixedly mounted with respect to the plate and a spring connecting said arm with the bracket.

9. A conveying device, comprising a frame having a head, a bracket connected with said head, a shaft rotatably mounted on the bracket, a plate fixed to the shaft and having a depression for receiving the lower part of a trolley-rail, said plate constituting a guard for the trolley-rail, and a trolley-wheel mounted on the bracket above said guard, said plate having a flat lower surface adapted to engage said head to prevent the rotation of the plate and shaft when the head is lifted into engagement with said flat surface.

10. A conveying apparatus comprising a frame having a head, a bracket connected with said head, a shaft rotatably mounted on the bracket, a plate on the shaft having means for engaging a part of a rail, said plate constituting a guard for the rail, and a wheel mounted on the bracket, said plate having a flat surface adapted to engage the head to prevent the rotation of the plate and shaft when the head is moved into engagement with the flat surface.

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

IVER E. BENTHSON

Witnesses:
H. O. TEXLIZ,
B. A. THRONSON.