

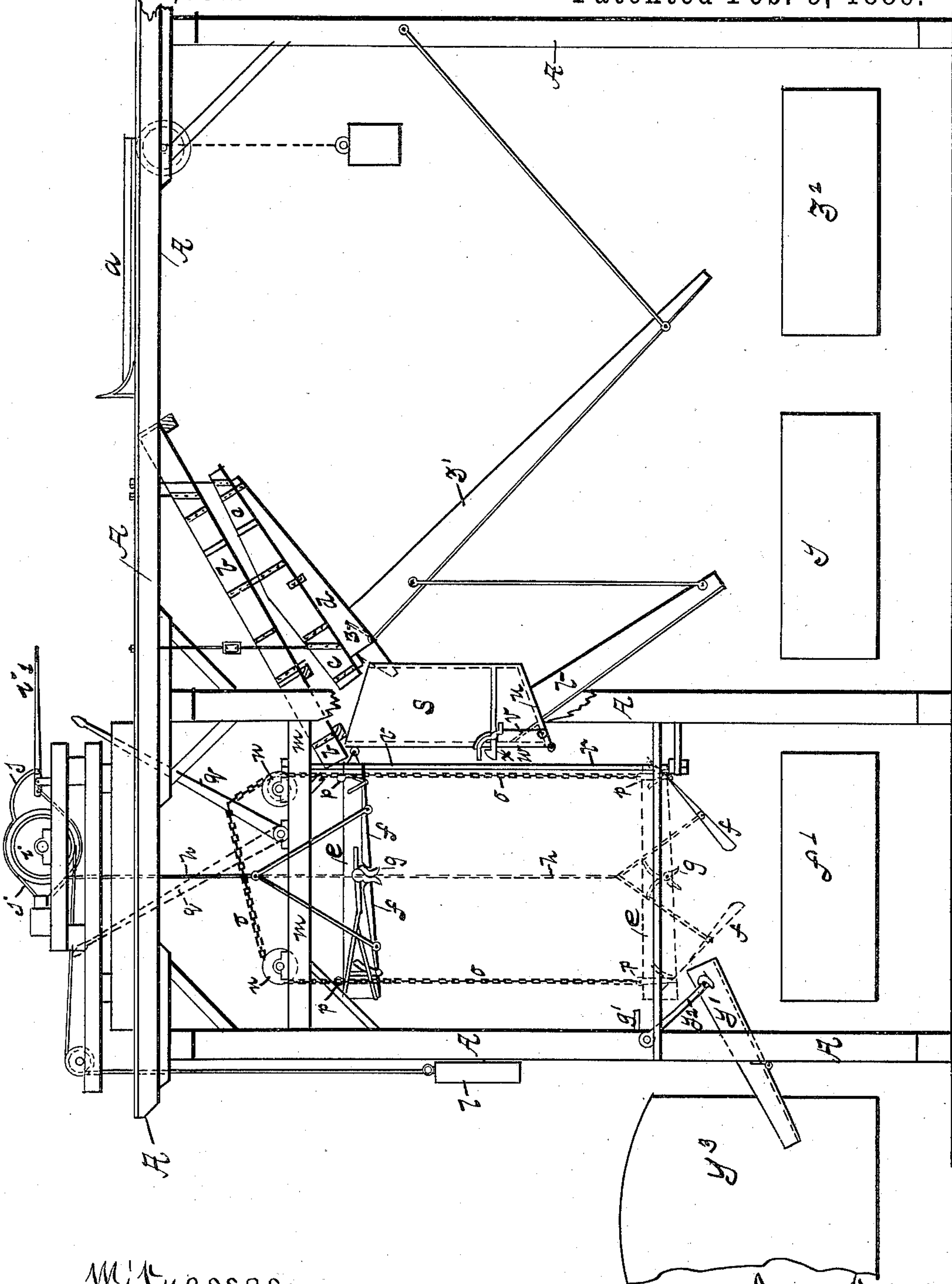
(No Model.)

W. W. ROSENSTEEL.

COAL TIPPLE.

No. 335,632.

Patented Feb. 9, 1886.



Witnesses:
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COAL-TIPPLE.

SPECIFICATION forming part of Letters Patent No. 335,632, dated February 9, 1886.

Application filed July 1, 1885. Serial No. 170,428. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM W. ROSENSTEEL, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Coal-Tipples; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawing, which forms part of this specification.

My invention relates to an improvement in coal-tipples, the object being to provide a tipple whereby the coal may be separated into different grades by means of inclined chutes and screens, or may be loaded on cars without separation; and, further, to provide means whereby the large or lump coal may not be broken in its descent from the tipple to the cars below, and that the large or lump coal may be weighed separately while discharging the run of the mines into a single car.

In the accompanying drawing I have represented my improved tipple provided with a carriage or way-pan, for the reception of large or lump coal, and suitable means for dropping the same in the car beneath, and screens for separating and distributing the various sizes of coal.

To put my invention into practice I construct a frame, A, of suitable size and form of construction, placed over several parallel railway-tracks. Near the rear end of the frame A, I place a dumping device, *a*—such as are in common use—on which the cars from the mines are placed. In front of this dump *a* is placed three inclined chutes, *b c d*, the one above the other. The floor of the first and second chute is constructed with parallel bars of iron, forming a screen. The bars of the chute *b* are more widely separated than those of the one below. At the lower extremity of the chute *b* is a carriage or way-pan, *e*, the bottom *f* of which is hinged and secured by a latch, *g*, placed at the side. This carriage *e* is suspended by a rope, *h*, wound several times about a drum, *i*, on the top of the frame A. This drum *i* is provided with a breaking device, *j*, and counter-weight *l*. Above the carriage *e*, on a cross-timber, *m*, of the frame A is placed pulley *n*, which car-

ries a chain, *o*, having both ends *p* secured to the carriage *e*. A lever, *q*, is attached to the chain *o*, which when thrown to the left tilts the carriage *e* and discharges its contents forward into box-car. Perpendicular guides *r* serve to steady the carriage *e* when moving up or down. Below the mouth of the second chute, *c*, is placed a bin, *s*, for the reception of such small or nut coal that may have dropped through the screen of the chute *b* above, and having a chute, *t*, leading from the bottom *u*, and provided at the top with a flap, *v*, that when dropped closes the mouth of the chute *t* and prevents the coal from passing through. A trap-door, *w*, is placed in the front of the bin *s*, and provided with a latch, *x*, that when open and the flap *v* down will allow the coal to drop into the carriage *e*, if placed below, or into the car *y*, if desired. The bottom *u* of the bin *s* is inclined toward the carriage *e*, the better to discharge itself. The door *w*, when down, forms a chute, which is opened and closed by the carriage *e* when moving up or down.

Near the lower end of the chute *d* is placed a flap, *z*, which when vertical will allow the fine coal or slack to run down the chute *z'* into the car *z²* below. When the same flap *z* is in a horizontal position, it will close the mouth of the chute *z'* and leave an unobstructed passage to the bin *s*.

Another inclined chute, *y'*, is hinged to the frame A below the lowest point reached by the carriage *e*, and secured in position by a hook, *y²*. This chute *y'* can be placed in a vertical position and out of the way of moving cars.

In operating my improved tipple the car from the mines is placed on the dump *a* and its contents discharged forward into the chute *b*. The large or lump coal is carried into the carriage *e*, while the small or nut coal drops through the screen in the bottom of the chute *b*, then into the bin *s*. The dust or slack finds its way into the chute *d*, placed below, and thence by way of the chute *z'* into the car *z²*. The carriage *e* being filled with large coal, the brake-lever *z'* of the drum *i* is raised, which allows the carriage *e* to drop until the latch *g* strikes the pin *g'*, projecting from the frame A, and releasing the bottom *f* the coal is drop-

ped into the car *f'* below. The weight of the carriage *e*, when relieved of its contents, will close the doors *f*, which will immediately be secured by the latch *g*. The counter-weight *l*,
 5 will bring the carriage *e* back to the mouth of the chute *b*, in position for the reception of another load. Should it be desired to discharge the coal into another car, *y*³, placed in front of the tippie, the carriage *e* is dropped some distance and the lever *q* is thrown forward, which,
 10 by means of the chain *o*, tilts the carriage *e* and discharges its contents forward into the chute *y'*, and thence to the car *y*³ below. By closing the flaps *z v* over the openings of the
 15 chutes *z' l* and opening that in the front of the bin *s* the entire coal, or what is known as the "run" of the bank, can be discharged into the car *f'*.

Having thus described my invention, what
 20 I claim, and desire to secure by Letters Patent, is—

1. In a coal-tippie having a dumping device, *a*, and provided with screens for separating the large and small coal, a bin, *s*, provided with a chute, *t*, at the bottom, and flap
 25 *v* for closing the same, a door, *w*, and latch *x*, and an inclined bottom, *u*, for discharging its contents, substantially as described.

2. In combination with a coal-tippie of the character described, a traveling carriage, *e*, 30 suspended on a drum, *i*, provided with a brake, *j*, and counter-weight *l*, and having hinged bottoms *f*, and latch *g*, and vertical guides *r*, operated as described.

3. In combination with a coal-tippie of the 35 character described, a traveling carriage, *e*, suspended to a drum, *i*, and balanced by a counter-weight, *l*, a chain, *o*, secured at each end *p* of the carriage *e*, pulleys *n*, and lever *q*, operated substantially as described. 40

4. In combination with a coal-tippie such as described, the chutes *b c d*, bin *s*, carriage *e*, and drum *i* for operating the same, brake *j*, and counter-weight *l*, substantially as and for the purpose herein described. 45

5. In combination with a coal-tippie such as described, having a bin, *s*, with inclined bottom *u*, trap-door *w*, with vertical sides, and latch *x*, that when dropped forms a chute adapted to be operated by a vertically-moving carriage or way-pan *e*, substantially as set forth. 50

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Witnesses:

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