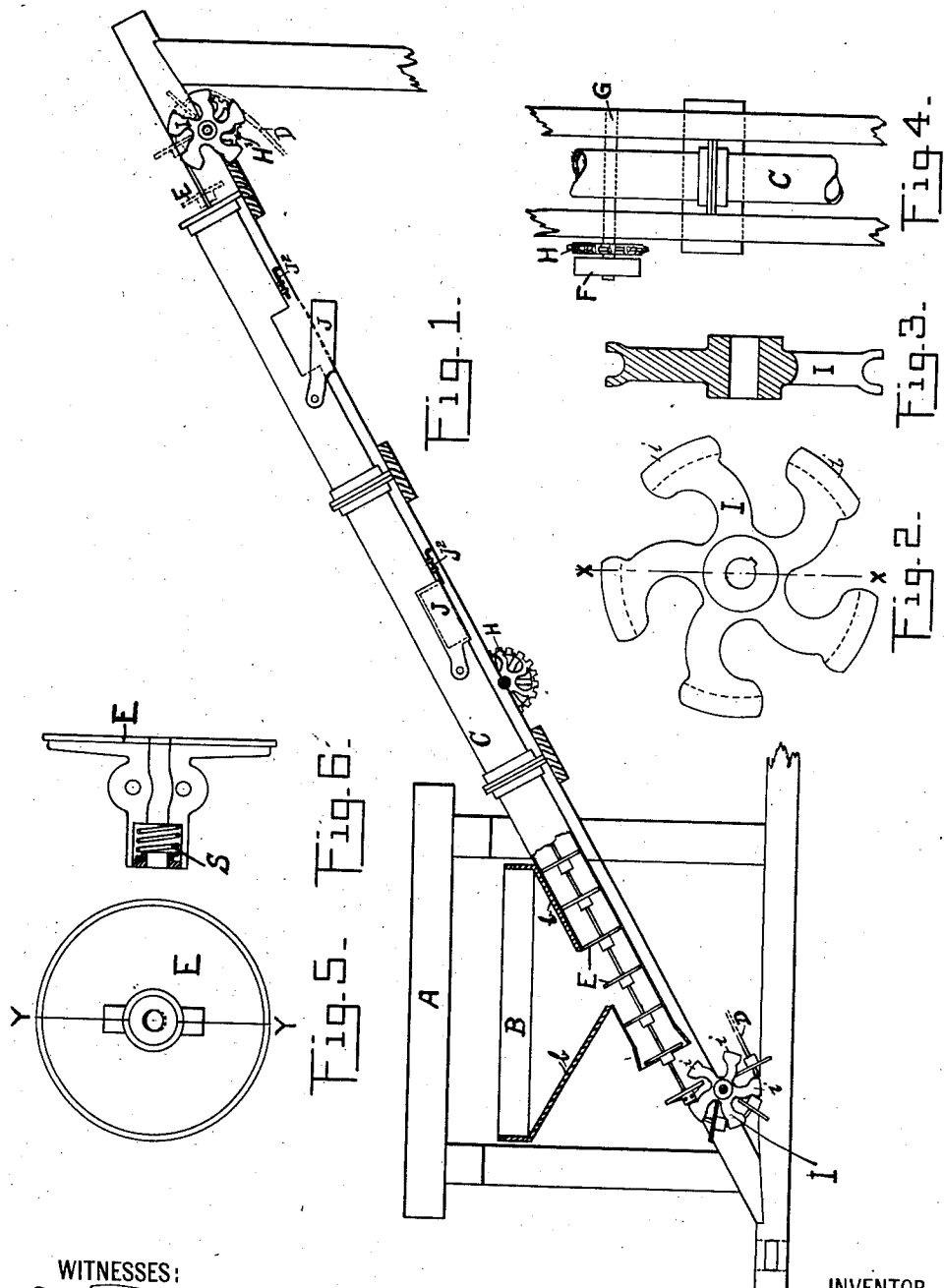


No. 833,141.

PATENTED OCT. 9, 1906.

E. C. VAN NOUHUYS.
COAL CONVEYER.
APPLICATION FILED MAR. 23, 1906.



WITNESSES:
Dudley C. Ward
Lucius Damorell

INVENTOR
Edwin C. Van Nohuys
BY
Ward & Cameron
his ATTORNEYS.

UNITED STATES PATENT OFFICE.

EDWIN C. VAN NOUHUYS, OF RENSSELAER, NEW YORK, ASSIGNOR OF
ONE-HALF TO EMANUEL B. TOEDT, OF ALBANY, NEW YORK.

COAL-CONVEYER.

No. 833,141.

Specification of Letters Patent.

Patented Oct. 9, 1906.

Application filed March 23, 1906. Serial No. 307,582.

To all whom it may concern:

Be it known that I, EDWIN C. VAN NOU-
HUYS, a citizen of the United States, residing
at the city of Rensselaer, in the county of
Rensselaer and State of New York, have in-
vented certain new and useful Improvements
in Coal-Conveyers, of which the following is a
specification.

My invention relates to means for convey-
ing coal from the cars to sheds, bins, and
pockets; and the object of my invention is to
construct a device by which coal may be con-
veyed directly from the cars to the coal pock-
ets, sheds, and bins or piled up, as may be de-
sired, rapidly and economically. I accom-
plish this object by means of the mechanism
illustrated in the accompanying drawings, in
which—

Figure 1 is an elevation, partly in section,
of my coal-conveyer set up ready for opera-
tion. Fig. 2 is an elevation of one of the
sheaves. Fig. 3 is a cross-section of the same
at X X, Fig. 2. Fig. 4 is a plan view of the
driving-gear. Fig. 5 is a plan view of one of
the conveyer-disks. Fig. 6 is a cross-section
of the same at Y Y, Fig. 5.

Similar letters refer to similar parts through-
out the several views.

A represents the top of the trestle, from
which the coal in the cars is dumped.

B is the hopper into which the coal is
dumped from the cars.

b b are the converging sides of the hopper,
by which the coal is fed into the conveyer.

C is a tube, which may be of iron, through
which the coal is conveyed where desired.

D is an endless cable extending around the
sheaves at each end of the tube C.

E E are conveyer-disks attached at fre-
quent intervals to the cable D and which fit
the interior of the tube C, so as to force the
material between them along through the
tube, through which they move. The power
is applied by any means desired to the pulley
F, mounted fixedly upon the shaft G, upon
which is also mounted fixedly the sprocket-
wheel H.

H' is another sprocket-wheel mounted
fixedly upon the shaft at the farther end of
the tube. There is a sheave I also mounted
fixedly upon the same shaft as the sprocket-
wheel H'.

When the power is applied to the pulley-
wheel F and turns said pulley-wheel, it also

turns the shaft G, carrying the sprocket-
wheel H. The sprocket-wheel H and the
sprocket-wheel H' are connected by a proper
iron belt, so that the sprocket-wheel H turns
the sprocket-wheel H', which drives the
sheave I. The sheave I is constructed, as
shown in Figs. 2 and 3, having portions of the
sides cut away, so as to leave arms i i, as
shown, arranged and adapted for each arm to
strike against one of the conveyer-disks as
the sheave revolves. The conveyer-disks are
constructed as shown in Figs. 5 and 6, hav-
ing elongated hubs to fit upon the cable D
and be attached securely to the cable D and
at the same time leave a strong and solid sur-
face for the arms of the sheaves to strike
against in operating the conveyer. The con-
veyer-disks are attached to the cable at such
a distance apart that an arm of the sheave
will strike each disk as the sheave revolves
and move the cable D, with the disks attached
to it, along through the tube as the sheave re-
volves, keeping the cable in constant motion.

It is apparent that the power moving the
cable carrying the loaded conveyer-disks be-
ing located at the farther end of the tube
the part of the cable within the tube and
sustaining the load will be kept tight and
the strain will be constant and the move-
ment uniform. I so adjust the disks upon
the cable that four arms of the sheave will
each act upon a disk at the same time when
moving a loaded conveyer. Between the
surface plates of the conveyer-disks, against
which the arms of the sheave act, and the
hub of the disks I place the spring S, as shown
in Fig. 6. The collar which forms the back-
ing of the spring S is a movable backing or
collar to permit the arms of the sheave I to
compress the spring to relieve any slight in-
equalities or slack of the cable D between the
arms of the sheave. There is an idle sheave
at the bottom of the tube arranged for the
cable D and the disks to run over in entering
the tube.

J J are doors located at any desired points
in the length of the tube hinged to the tube
by pivots J' and held in place by the catch or
bolt J'. These doors are constructed so as
to form a part of the tube itself, so that the
interior of the tube when the doors are closed
will be perfectly smooth, leaving no points or
projections for the coal or the conveyers to
catch upon. These doors may be located

over the various bins or pockets or at any place where it is desired that the coal shall be dropped. The lower end of the tube extends a sufficient distance below the hopper so that there will always be two conveyer-disks between the hopper and the lower end of the tube. The upper end may be raised to any elevation desired and the tube mounted upon timbers and sustained in any position desired.

The operation of my coal-conveyer is obvious from the foregoing description. The coal is dumped from the cars upon the trestle A into the hopper. The tube C has an opening under the hopper, so that the coal may pass from the hopper into the tube. The power being applied to the pulley F will turn the sprockets H and H', which will drive the cable D, with the conveyer-disks mounted thereon, through the tube C and carry the coal along through the tube until it reaches an opening either at one of the doors J J or at the end of the tube. The coal will then drop down into one of the bins or into a coal-pocket.

Constructed in this way my conveyer will carry coal rapidly without loss or waste, and the conveyer is simple in construction and easily operated.

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

1. A coal-conveyer consisting of a tube, an endless cable adapted to pass through said tube in one direction, disks mounted on said cable at frequent intervals, said disks having projecting hubs adapted to be acted upon by the arms of a sheave and thereby pushed along through said tube; springs between

the surface plates of the disks and the hubs thereof; a sheave mounted upon the farther end of said tube having arms adapted to strike against the hub of each disk mounted upon said endless cable; means for revolving said sheave and means for feeding the coal into the lower end of said tube, substantially, as described.

2. In a coal-conveyer, a tube suitable for coal to pass through; a hopper arranged and adapted to feed the coal into said tube; an endless cable adapted to pass through said tube in one direction and return on the outside of the tube; disks mounted upon said endless cable at frequent intervals; projections upon said disks adapted to be acted upon by the arms of a sheave, each of said projections provided with a spring between the surfaces thereof and the disks; a sheave mounted at the extreme end of said tube having arms adapted to act upon the projection of each disk, whereby said endless cable and disks may be kept in continuous uniform motion by said sheave; a door in the under side of said tube formed partly by the side of the tube itself and hinged to the sides of the tube whereby coal passing through the tube would drop out through the door when opened and pass along over the door when closed; means for turning said sheave to operate said cable, substantially as described and for the purposes set forth.

In testimony whereof I have affixed my signature in presence of two witnesses.

EDWIN C. VAN NOUHUYS.

Witnesses:

WALTER E. WARD,
LOTTIE PRIOR.