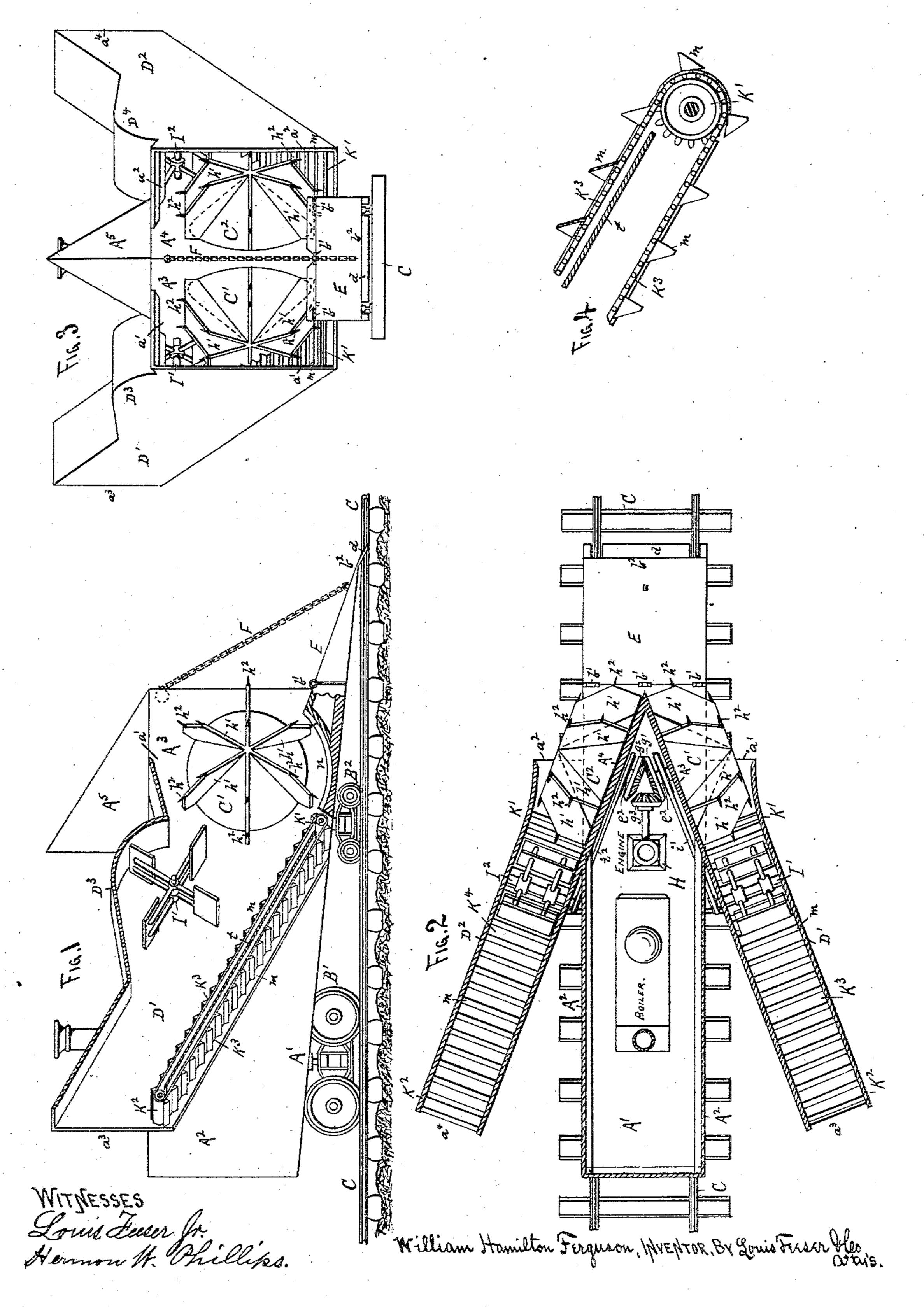
W. H. FERGUSON.

RAILROAD TRACK CLEANER.

No. 305,911.

Patented Sept. 30, 1884.



United States Patent Office.

WILLIAM HAMILTON FERGUSON, OF NORTHERN PACIFIC JUNCTION, MINN.

RAILROAD-TRACK CLEANER.

SPECIFICATION forming part of Letters Patent No. 305,911, dated September 30, 1884.

Application filed February 4, 1884. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HAMILTON FERGUSON, a citizen of the United States, and a resident of Northern Pacific Junction, county 5 of Carleton, and State of Minnesota, have invented certain new and useful Improvements in Railroad-Track Clearers, of which the following specification is a full, clear, and exact description, reference being also had to the 10 accompanying drawings, in which—

Figure 1 is a sectional side elevation. Fig. 2 is a sectional plan view, and Fig. 3 is a front elevation, and Fig. 4 is an enlarged detail, of a section of the endless conveyer-belt.

15 A' is a frame or platform mounted upon trucks B' B2, adapted to run upon the railroad-track C. Upon this platform A' is arranged a "cab," A2, having a pointed forward end. $A^3 A^4$.

20 D' D' are two spouts or conduits attached to the side of the pointed ends A³ A⁴, and leading backward, upward, and outward, and with the forward ends, $a'a^2$, open and flaring, and their rear ends, a^3 a^4 , open.

E is a "nose" or "plow" hinged at b' to the forward end of the platform A', and adapted to be raised and lowered by a chain or cable, F, so that it may be lowered down until the point b^2 is close to the track when in use, or 30 raised up against the ends A³ A⁴ when not in use. Scrapers dd will be attached to the point b^2 to project down between and outside the rails of the tracks to scrape the snow entirely from between the rails and for a short distance 35 away from the outside.

Above the pointed ends A³ A⁴ is a conicalshaped backwardly-slanting hood or dome, A5, which will cut through drifts that are deeper than the height of the cab A².

C' C2 are two cone-shaped drums mounted upon shafts $e'e^2$ upon the outside of the point. ed ends A3 A4, the shafts e'e2 passing through the pointed ends and connected by gearing g' $g^2 g^3$ to an engine, H, inside the cab A². By 45 this means the cones may both be revolved in the same direction. Attached to these cones C' C2 are outwardly-extending wings or blades h', armed upon their outer ends with fingers h^2 . The spouts D' D² are provided with en-50 larged parts D³ D⁴, in which fans I' I² are

mounted, the wings or blades of the fans ex-

tending down into the spouts a short distance, as shown. The fans are shown connected by belts and pulleys i' i^2 to the shafts e' e^2 , by which they are driven; but any other suitable 55 means may be employed to operate them.

In the bottoms of the spouts D' D2, at their upper and lower ends, chain pulleys or drums K' K' are mounted and adapted to carry endless chains or belts K³ K⁴. These pulleys or 60 drums will be revolved by belts or other means leading from the engine H. The belts K³ K⁴ will be armed at suitable intervals with buckets or slats m, (see Fig. 4,) and will have floors or partitions t between the sides of the 65 belt to prevent the snow dropping through. The lower parts of the spouts D' D2, beneath the cones C'C2, will be hollowed out, as shown at n in Fig. 1, so as to form recesses in which the outer ends of the wings b' will run, and in 70 these depressions will be formed long gratelike slots, in which the fingers h^2 run, so that the wings h' may come close to the bed of the depressions. When the cones and fans are set in motion and the plow run into a snow-75 drift, the snow will be carried upward by the nose E, and divided by the angular ends A³ A4, and guided upon each side, and caught by the wings h' and teeth h^2 , and thrown back into the spouts D' D2, where the blast created 80 by the fans I' I2 will take it and force it outward through the spouts and throw it off upon either side of the track. The wings h', being revolved very fast, will also aid in producing an air-current to assist in carrying off the 85 snow, while the teeth h^2 break it up and tear it loose, so that the fans can readily act upon it. The endless belts K³ K⁴, being revolved at the same time with the cones and fans, will catch all the snow that is too heavy for the 90 fans to act upon and carry it up and deliver it from the spouts. The spouts outside the lines of the flaring mouths $a' a^2$ will act as mold-boards or wings to crowd the snow not caught by the wings h' off upon either side. 95

The conical form of the drums C' C2 is an important part of my invention, as by this form the snow will be thrown off and not clog the wings h'.

Having described my invention and set forth 100 its merits, what I claim is-1. The combination of the inclined platform

A', having the cab A², with wedge shaped forward end, A³ A⁴, nose E, outwardly-inclining spouts D' D², having endless bucket-belts K³ K⁴ running therein, and the revolving cones 5 C' C², armed with wings h' and fingers h², substantially as and for the purpose set forth.

2. The combination of the inclined platform A', having the cab A², with wedge-shaped forward end, A³ A⁴, nose E, outwardly-inclining 10 spouts D' D², having endless bucket-belts K³

 K^4 running therein, fans I' I², and the revolving cones C' C², armed with wings h' and fingers h^2 , substantially as and for the purpose specified.

In testimony whereof I have hereunto set my 15 hand in presence of two subscribing witnesses.

WILLIAM HAMILTON FERGUSON.

Witnesses:

F. A. WATKINS, M. D. McDonald.