UNITED STATES PATENT OFFICE.

LEWIS JOHN BERGENDAHL, OF PENDLETON, OREGON.

TRACK-CLEARER.

SPECIFICATION forming part of Letters Patent No. 342,566, dated May 25, 1886.

Application filed January 27, 1886. Serial No. 189,934. (No model.)

To all whom it may concern:

Be it known that I, LEWIS JOHN BERGENDAHL, of Pendleton, in the county of Umatilla and State of Oregon, have invented a new and useful Improvement in Track-Clearers, of which the following is a specification, reference being had to the annexed drawings, forming a part thereof, in which—

Figure 1 is a plan view of my improved track-clearer. Fig. 2 is a side elevation, partly in section. Fig. 3 is a front elevation. Fig. 4 is a detail view of the reversible cutter. Fig. 5 is a detail sectional view of one of the cutters *f*.

Similar letters of reference indicate corresponding parts in the different figures of the drawings.

The object of my invention is to provide simple and effective mechanism for clearing railway-tracks of snow.

My invention consists of a wheel carrying radial plates provided on the ends and forward edges with reversible cutters, to admit of revolving the wheel in either direction. The wheel is made of sufficient diameter to clear the entire track, and is journaled in supports carried on a flat car and driven by connection with a suitable motor.

Upon the shaft A is mounted a disk, B, and the spider C, having radial arms *a*. The disk B and the arms *a* are grooved radially to receive the plates D, which fill the space between the arms *a* and the disk, forming compartments *b*. At the outer end of each plate D is pivoted a two-edged cutter, *c*, which is bent along its median line to give the cutting-edges the proper inclination for engagement with the snow. The cutters *c* may be turned so as to bring one or the other of the edges *d* into position for use by turning the lever *e* secured to the pivot of the cutter, which is journaled in the disk B. To the front surface of each arm *a* is pivoted a two-edged cutter, *f*, which is bent along its median line, so as to bring either of its cutting-edges into position for use when the opposite edge lies in the plane of rotation of the spider C.

The shaft A is journaled in bearings E, carried by the flat car F, and to the rear end of the shaft A is secured a spur-wheel, G, which takes motion from a pinion, H, on the shaft I of the engine J carried by the flat car.

The car F is propelled forward by a locomotive, and the track-clearing wheel is at the same time revolved by the engine J.

The knives *c* are set according to the direction in which the wheel is rotated, so that they will engage the snow as they are brought into contact with it by the continuous rotary motion of the wheel. The knives *f* are automatically turned on their pivots by the engagement of their advancing edges with the snow. The snow taken up by the knives *c f* is received in the compartments *b* and thrown outward by centrifugal force.

The snow receives sufficient impetus from the wheel to be carried out of the vicinity of the track, where the track is level, and where the track is built on a mountain side the wheel will be made to rotate so as to project the snow from the open side of the track.

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

1. A wheel formed of a disk, B, a spider, C, and radial plates D, the forward edges and ends of the plates being provided with adjustable cutters, substantially as herein shown and described.

2. The combination, in a track-clearer, of the shaft A, the disk B, and spider C, secured to the shaft, the radial plates D, received between the spider and the disk, and the adjustable knives *c f*, pivoted at the ends and edges of the plates, substantially as herein shown and described.

3. In a track-clearer, the combination of the shaft A, the disk B, and spider C, secured thereto, the radial plates D, received between the spider and the disk, and knives at the ends and forward edges of the plates, inclined in the direction of the rotation of the wheel, substantially as herein shown and described.

LEWIS JOHN BERGENDAHL.

Witnesses:
SAMUEL REYNOLDS,
FRANKLIN HALL.