J. Hood.

Track Clearer.

No. 37,797. Patented Feb. 24, 1863.

Fig. 3.

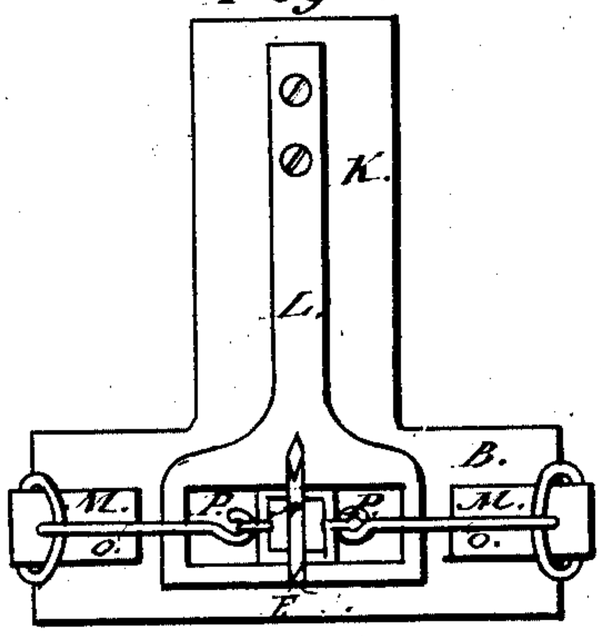
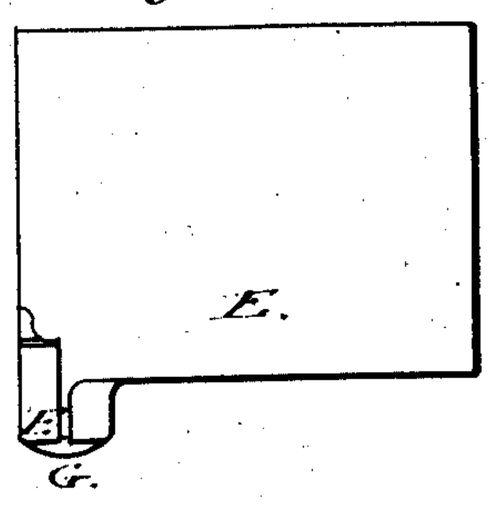


Fig. 4.



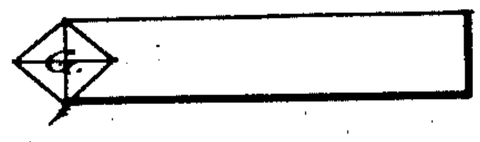


Fig. 2.

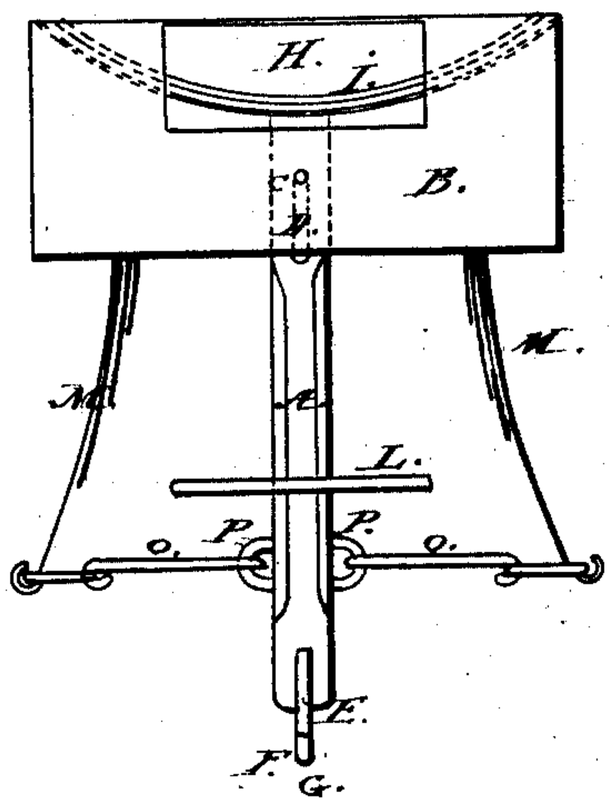
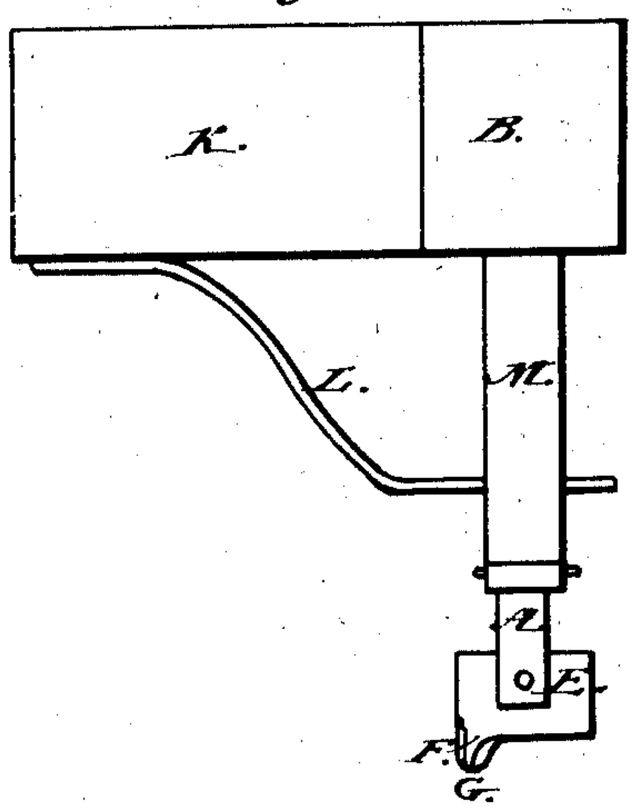


Fig. 1.



Witnesses;

Richd. Radons
Edmund Mile

Inventor;

Joel Hood

UNITED STATES PATENT OFFICE.

JOEL HOOD, OF MILWAUKEE, WISCONSIN.

IMPROVEMENT IN SNOW-SCRAPERS.

Specification forming part of Letters Patent No. **37,797**, dated February 24, 1863.

To all whom it may concern:

Be it known that I, JOEL HOOD, of Milwaukee, in the county of Milwaukee, in the State of Wisconsin, have invented a new and useful machine, called a "Scraper," for the purpose of removing snow, ice, earth, or other obstructions from the track of railroads and other roads having iron rails, both from the top of the rails and from along the inside of the rails, so as to allow wheels and their flanges to pass along and on the rails freely; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure I is a side view; Fig. II, an end view; Fig. III, a view of under side of scraper, and Fig. IV an enlarged view of scraper.

The following is a description of the construction of my machine, to wit:

A standard, A, of iron, of suitable size, the upper end of which passes through a frame, B, and is fastened to the frame B by a pin, C, passing through the standard A, which has at C a slot, D, so as to enable the standard A to rise and fall, as may be required, extends downward perpendicularly toward and over the rails of the track. On the lower end of the standard A is attached a scraper, E, of steel or other hard metal, of suitable size, resting upon and across the rail, a little wider than the rail of the track, having a projecting lip, F, of suitable size, extending from the lower side of the said scraper E, and on the inside of the rail, below the top of the rail. This projecting lip F is a little longer than the depth of the flange of the wheels used upon the rails, and is made in diamond shape, or in such form as to present an acute angle in front and behind, so as to make an edge before and behind, and has the bottom of it, G, angular, so as to present an edge on the bottom of it.

In the cavity H of the frame-work B, and on the top of the standard A, is a transverse parallel elliptical spring, I, made of steel, or or a rubber spring of the common forms in use, which spring holds the scraper E to the rails and allows the standard A to accommodate itself to inequalities in the rails.

To a transverse beam or rod, K, connecting the frame-work B, above mentioned, to a similar frame-work on the other side, similarly adjusted, is attached an iron stirrup, L, through which the standard A passes, having an opening in length about three times the width of the standard A, so as to allow of a forward and reverse motion of the standard A, and in width of from one-half of an inch to one inch greater than the size of the standard A, so as to allow of a lateral motion of the standard A.

Two forward and reverse springs, M M, are attached to the frame-work B—one on each side of the standard A—extending below the point at which the standard A passes through the stirrup L, and are attached to the standard A below the stirrup L by connecting-rods O O at P. These springs M M are made of steel or other proper material, and are elliptical in shape, or in any shape to accomplish the end proposed. The object of these springs M M is to hold the standard A in its proper place, and to allow a forward or backward motion of the standard A and scraper E, and to relieve the strain upon them.

This machine is constructed with the standard A, the scraper E, the stirrup L, the transverse and parallel spring I, the forward and reverse springs M M, and the connecting-rods O O, combined and arranged as above set forth, and is to be attached on each side of a locomotive, between the pilot and the forward trucks, or in such other part as shall accomplish the purpose intended, or to any other propelling or motive power that may be used on a road having an iron track.

The action of this machine is as foilows: The scraper E is held upon the rails by the standard A and the transverse and parallel spring I, and, together with the projecting lip F, extending down on the inside of the rail, removes, when moved along the rails, snow, ice, earth, or other simlar obstructions which may be on the top of the rail or on the inside of them, or between the rails and guard-rails, or in the way of the flange of the wheels used upon the rails. By means of the stirrup L the standard A is held in place, and by the additional width of the opening in the stirrup L exceeding the size of the standard A, the lateral motion of the locomotive or other propelling-power to which the machine may be attached is allowed without strain to the standard A. The forward and reverse springs M M, to which the standard A is attached by the connecting-rods O O, allow a forward or back,

ward motion of the standard A in the stirrup L, thus allowing the machine to be moved upon the rails forward or backward, said springs M M relieving the standard A of any strain that might be caused by a change of motion. The slot D in the standard A allows it to move up or down, as may become necessary, owing to inequalities in the rails of the track.

What I claim as my invention is—

1. The combination of the scraper E, having a tongüe or projection, F, with the standard A, attached to a frame, B, by a pin, C, and springs M M and I, and connecting-rods O O, as and for the purposes herein set forth.

2. The stirrup L, in combination with the devices or means recited in the above first claim, as herein described.

JOEL HOOD.

Witnesses:

A. G. MILLER,

RICHD. K. ADAMS.