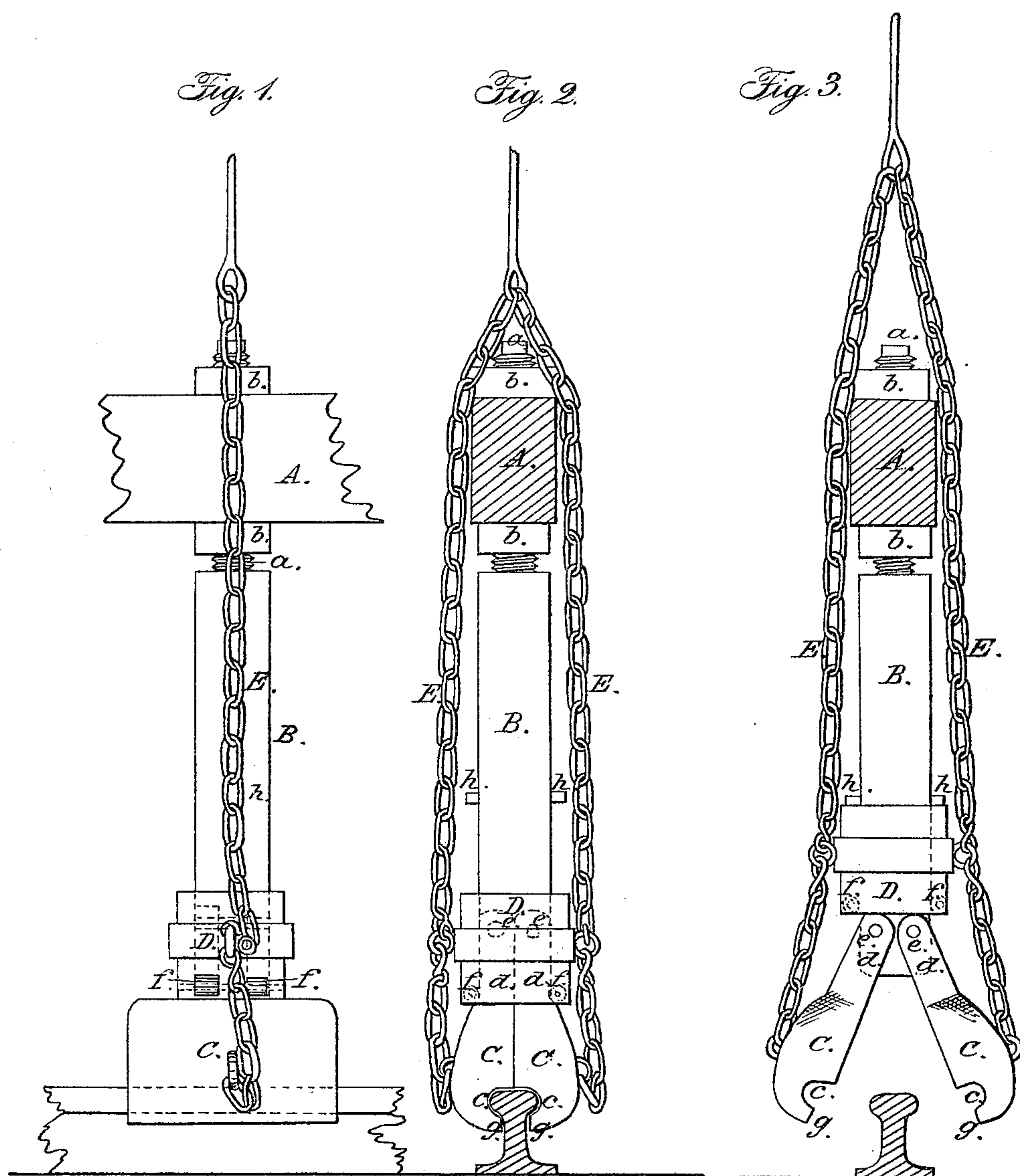


S. MINKLER.
Car-Track Clearer.

No. 9,153.

Patented July 27, 1852.



UNITED STATES PATENT OFFICE.

SIMEON MINKLER, OF CHAZY, NEW YORK.

RAILROAD-TRACK CLEARER.

Specification of Letters Patent No. 9,153, dated July 27, 1852.

To all whom it may concern:

Be it known that I, SIMEON MINKLER, of Chazy, in the county of Clinton and State of New York, have invented a new and useful Apparatus for Removing Obstructions From and Preventing Engines and Cars being Thrown Off Railroad-Tracks, which I denominate "Minkler's Track-Clearer;" and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side view of the apparatus, and Figs. 2 and 3 are front views of the same in different positions.

Similar letters of reference indicate corresponding parts in each of the several figures.

This invention is intended to be attached to each side of a locomotive engine, car or any carriage employed on railroads.

It consists in a pair of irons which may be termed a grapple, and which, when the two jaws of which it is formed are closed, embraces the top flanges of the rail as closely as is possible without producing friction. The two jaws of the grapple are jointed to a strong limb of iron which descends from the frame of the engine or truck of the car, or other carriage and will always close by their own weight, being kept close by a loose collar which drops over their joints; they are made of such form as is best calculated to throw aside any obstruction and are always intended to be closed upon the rail while the train is in motion, but are furnished with chains which are within the control of the brakeman or other person on the engine or car which they can be freed from the rail when desired.

A, represents part of the framing of an engine or of a truck.

B, is the limb or suspending rod to which the jaws of the grapple are jointed, which must be of great strength and may be stayed in any suitable manner at its back side to give it extra stiffness; it is secured to the frame A, by a screw *a*, at its upper end passing through the framing, with a nut *b*, above and below, which admits of its being raised or lowered to adjust the grapple.

C, C, are the two jaws of the grapple, which are shown closed upon the rail in

Figs. 1, and 2; their form is such as to give great strength but they are rounded off toward the edges so as to be better able to throw off any obstruction; each has a recess *c*, in its inner face sufficiently wide and deep to allow the upper flange of the rail to pass through it, and the lower edge *g*, fits under the flanges; they are each furnished with a strong knuckle *d*, which is jointed by a pin *e*, to the lower end of B.

D, is the collar, which fits over the knuckles *d*, *d*. When the jaws are closed, it is capable of sliding up the rod B, to release the jaws, but when it is over the knuckles, where it will fall by its weight when not held up, it prevents the jaws being opened; it is furnished with friction rollers *f*, *f*, at its lower edge to reduce its friction on the knuckles of the grapple.

E, E, are two chains each attached to one of the jaws C, C, and to the collar D; both these chains are united at their upper ends and connected to a lever or any other lifting apparatus, in a convenient position to be operated upon by some person on the car or engine.

When the apparatus is intended to be used the chains E, E, are left slack as shown in Figs. 1, and 2; the weight of the jaws then closes them and the collar prevents their being opened. Should any obstruction present itself upon or near the sides of the rail it will be either carried along in front of the grapples or thrown aside; the engine or car will be prevented rising or being thrown sidewise off the rail by any shock, as the grapple tends to hold it and confine it on the rail. When it is desired to release the grapple, which it will at times be necessary to do, the chains E, E, are drawn up; the length of chain between the collar and jaws is sufficient to allow the collar to be drawn up as high as the turning points or joints of the knuckles free the jaws before the chain acts upon them; the jaws are opened wide enough to free them from the rail by a very slight movement of the chain. Stop pins *h*, *h*, are inserted in the rod B, to prevent the collar being raised higher than necessary.

The apparatus is more particularly required at the front end of the engine, but may be used at both ends, and at either or both ends of any car or carriage.

I do not claim the grapples C, C, which are attached to the engine car, or carriage and embrace the top flange of the rail, but

What I do claim and desire to secure by
5 Letters Patent, is—

Keeping the said grapples C, C, closed upon the flange of the rail, by the collar G, which drops over their joints, and opening the same by chains or their equivalents at-
10 tached to the said collar and to the grapples,

under the control of a person on the engine car or carriage. Said chains or equivalents lifting the collar so as to leave the grapples free, and then opening them substantially as herein set forth.

SIMEON MINKLER.

Witnesses:

JAMES AVERILL,
B. W. MERRITT.