C. H. Eisenbrandt.

Track Clearer.

No. 24,383. Patented Jun. 14, 1859.

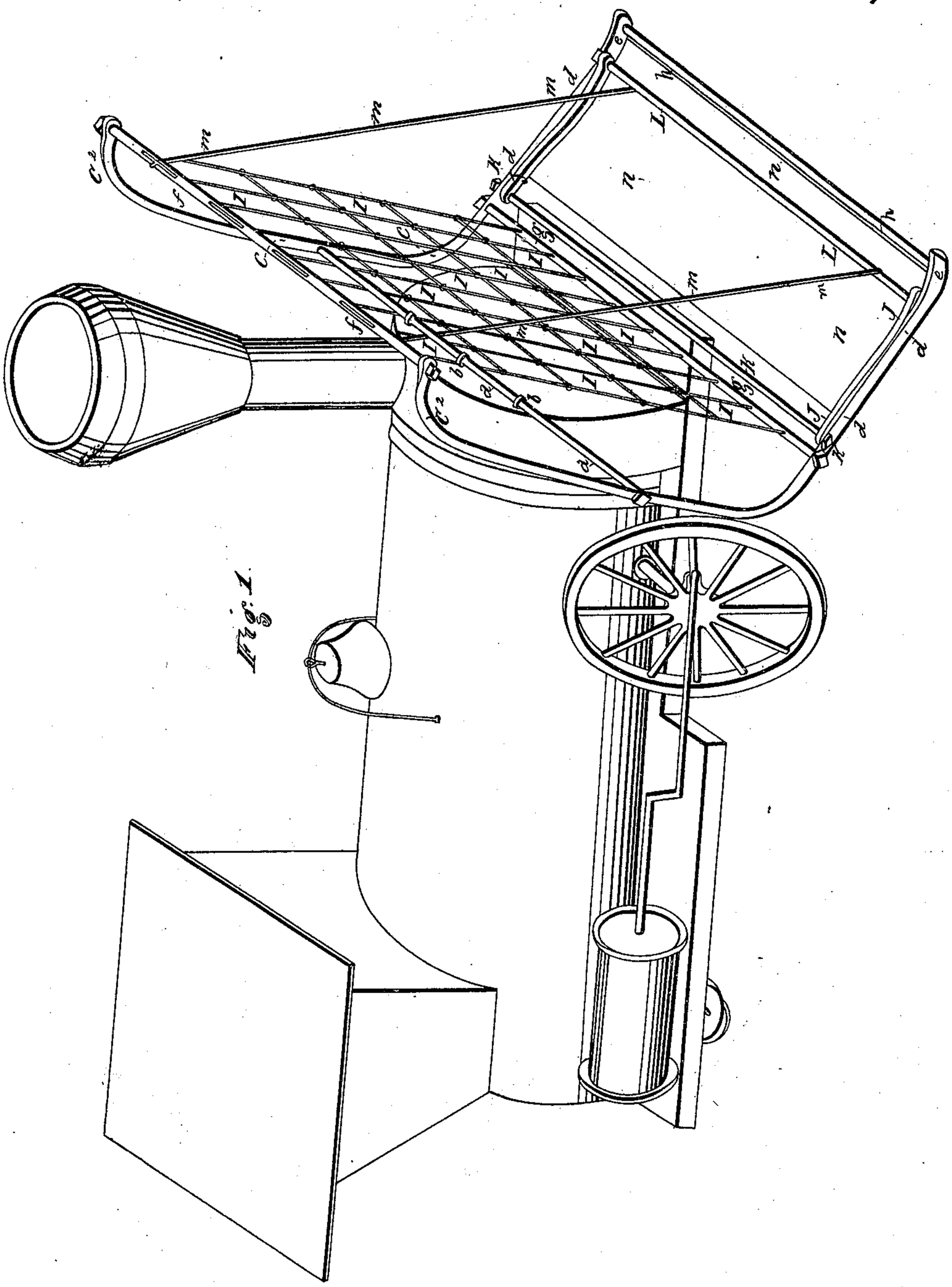

Fig. 1.

Witnesses:

Max Lensberg

W. Thompson.

Inventor:

Christian H. Eisenbrandt.

UNITED STATES PATENT OFFICE.

CHRISTIAN H. EISENBRANDT, OF BALTIMORE, MARYLAND.

ATTACHMENT TO LOCOMOTIVE-ENGINES FOR REMOVING OBJECTS FROM THE TRACK.

Specification of Letters Patent No. 24,383, dated June 14, 1859.

To all whom it may concern:

Be it known that I, CHRISTIAN H. EISENBRANDT, of the city of Baltimore, in the State of Maryland, have invented and made certain new and useful Improvements in Attachments for Locomotive-Engines for the Safety and Preservation More Especially of Human Life; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, making a part of this specification, in which—

Figure 1, is a representation of a miniature locomotive, with the attachment connected to the front of the engine.

The nature of my improvements consists in attaching to the front of a locomotive engine, a suspension, net-work fender, connected with a lifting platform, provided with a hinged part, or frame, forming a compound device, and having a stuffed cushion, or inflated sack deposited thereon, by which means it is designed more especially to preserve human life, and to remove obstructions from the track of the road.

In Fig. 1, *a*, *a*, *a*, is a horizontal rod, of sufficient length, attached across the front of the engine or locomotive, in any substantial suitable manner, by staples *b*, *b*, *b*, *b*, or by hinges, or joints, which will admit of the rods *c*, *c*—c^2, c^2—*d*, *d*—*e*, *e*, reaching downwardly sufficiently within a short distance of the track of the road, so as to merely keep clear of it, and not to rest, or drag thereon. The ends of the rod are formed with journals, or axis ends, upon which are fitted with confining nuts or taps, and suspended therefrom, are substantial rods *c*, *c*, *c*, *c*, curved with a short turn at the top ends c^2—c^2 and the lower part extending out, forward, as at *d*, *d*, with the ends thereof, slightly turned upward as at *e*, *e*. These rods are also confined and held together by connecting cross bars *f f*—*g*, *g*—*h*, *h*, and connected with the upper rod *f f*, and lower rod *g*, *g*, is a kind of yielding net-work or cross cords *i*, *i*, *i*, *i*, *i*, *i*, *i*. Between the rods *d d*—*e*, *e*, are fitted two arms J, J, J, J, attached by pivot pins, or by an axle rod K, K, K, K, and a stay or brace rod L L, thus forming a secondary, hinged lifting frame, connected with which are suspension cords *m*, *m*, *m*. To the underside of the ends *d*, *d*—*e*, *e*, of the curved rods *c*, *c*, *c*, is bolted or attached a platform or hinged apron *n*, *n*, *n*, *n*, on which (though not represented in the drawing) is designed to be deposited or held, an inflated sack or cushion (or its equivalent) of suitable material.

In the operation of my improvements; as the platform *n*, *n*, *n*, is hinged or hung pendently to the front of the locomotive by the rod *a*, *a*, *a*, *a*, it will therefore give or yield up and down and will thereby admit of passing over any small obstacles without endangerment to the cars, and in the event of an object getting on the track, of the road, and endangered thereby the platform *n*, *n*, *n*, and the front rod *h*, *h*, extending downwardly (close enough to escape contact with the road;) in moving forward, the object if prostrate will be lifted up, and if a human being should be on the track, the front part or rod *h*, *h*, will strike near, or against the feet, thereby tripping up, and canting the being over, onto the sack, or receptacle placed on the platform *n*, *n*, *n*, and as the object strikes, or comes in contact, with the suspension cords *m*, *m*, *m*, *m*, they give, causing the rod L, L, and arm J, J, to lift or turn up, as indicated by the dots J^2 J^2, L^2 L^2, Fig. 1. This turning upward preventing the object on the sack from sliding off. The concussion incidental to the momentum of the locomotive, in its rapid movement over the road and which would otherwise endanger life; will be entirely destroyed or overcome, through the yielding or flexible tendency of the net work, *i*, *i*, *i*, which acts as a guard or fender, to prevent the object striking, against the locomotive.

Though not shown in the drawing, it is contemplated, nevertheless to enwrap the rod or front part *h*, *h*, with a spiral wire and also to cover the same with a soft, or elastic substance or padding. Thus preserving human life and preventing many serious accidents. Hence my improvements possess advantages, not pertaining to any apparatus, or attachment heretofore combined and used with locomotive engines or cars.

It is deemed unnecessary to enter more minutely in describing the utility of my improvements, and being fully aware that numerous devices have been employed in the form of snow plows, and cow-catchers, for removing obstructions from rail road tracks, and also being aware that a patent was granted to J. Mitchell, October 6th 1857, for a combination of a hinged, or lifting, angularly shaped cow-catcher, composed of a cleaver A, and a grating C, therefore, such

devices, combinations, and arrangements, I disclaim. But—

What I do claim, however and desire to have secured by Letters Patent of the United States, is—

The double, suspension, lifting platform, composed of the parts *c*, *c*—*c*²—*d*, *d*—*e*, *e*,—*f*, *f*—*g*, *g*—*h*, *h*—J, J— K K—L, L—*m*, *m*—the yielding net-work, or flexible fender, guard, (or its equivalent) *i*, *i*, *i*, *i*, when constructed, combined, and arranged, substantially in the manner as herein set forth and described.

CHRISTIAN H. EISENBRANDT. [L. S.]

Witnesses:
I. MUCKENHEIMER,
WM. H. HAYWARD.