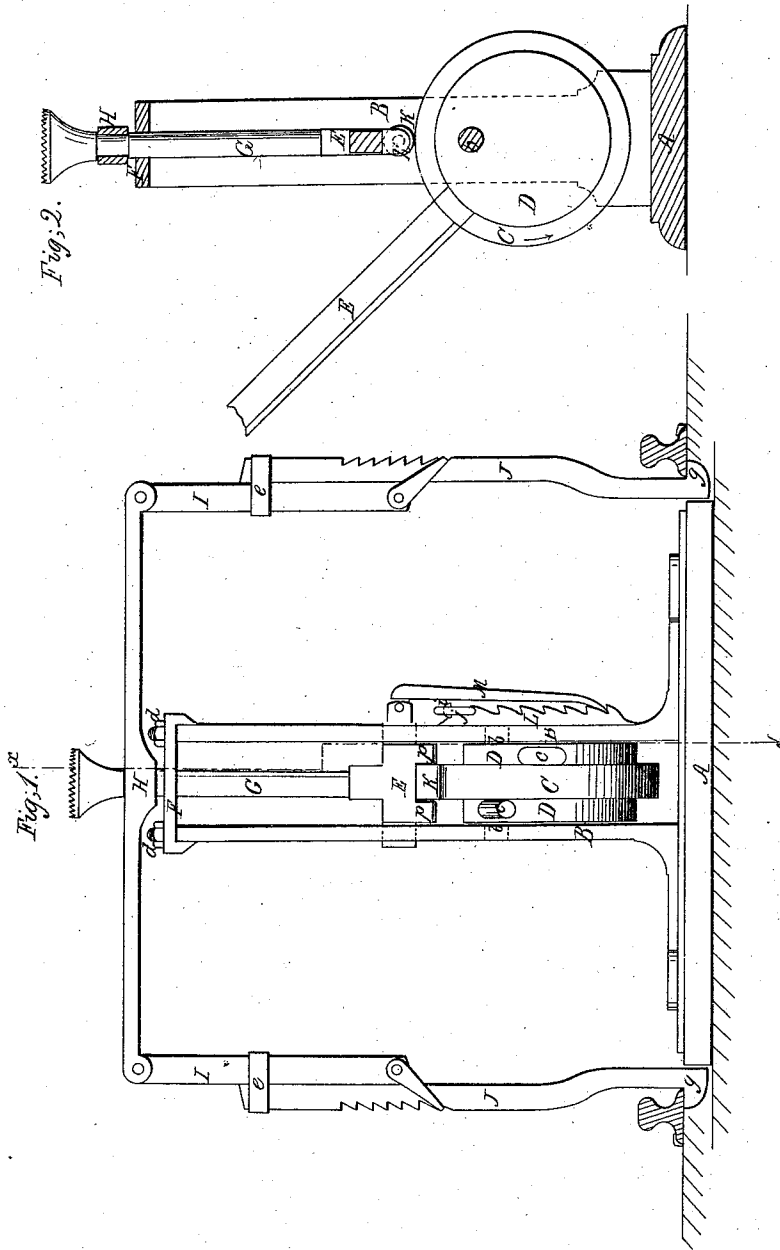


W. Henney

Railroad Track Layer.

N^o 24,121.

Patented May 24, 1859.



Witnesses.
James S. Cochran.
N. B. Koontz.

Inventor.
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UNITED STATES PATENT OFFICE.

WILLIAM HENNEY, OF WAPELLO, ILLINOIS.

MACHINE FOR RAISING RAILROAD-TRACKS.

Specification of Letters Patent No. 24,121, dated May 24, 1859.

To all whom it may concern:

Be it known that I, WILLIAM HENNEY, of Wapello, in the county of Dewitt and State of Illinois, have invented a new and Improved Machine for Raising Railroad-Tracks, &c.; 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, making part of this specification, in which—

Figure 1, represents a front elevation of a machine for raising R. R. tracks &c., constructed according to my invention and, Fig. 2, is a transverse vertical section of the same, the line x, x , Fig. 1, indicating the plane of section.

Similar letters of reference indicate corresponding parts in the two figures.

This invention consists in arranging an extension balance on the top of a piston which is operated on by means of an eccentric disk which acts against a roller in the lower end of the piston, in connection with a serrated bar attached to the side of the frame in which the piston operates, which bar serves to retain the piston by means of a pawl attached to the side of the latter so that the same as it is raised step for step is retained by the action of the pawl against the serrated bar, and the vertical arms of the extension balance are provided with hooks which serve to catch under and to raise railroad track or other heavy articles.

To enable those skilled in the art to fully understand, use and construct my machine I will proceed to describe its construction and operation.

A suitable platform A, serves for a bed to two upright standards B, which are firmly secured to the same by means of screws passing through the flanges a , which support the standards B. The bed may be made of wood, but the standards ought to be made of metal and for large machines, they will be cast-iron as this is the cheapest and most convenient material in this case. These standards form the bearings for the eccentric disk C, which turns on pivots b , and this disk is turned down on each side so as to form the rims D, which are provided with oblong holes or cavities e , which are made to receive the lower end of the bar E, which serves to operate the disk C. The standards B, are slotted so as to form guides for a cross head or piston E, and the upper ends of the standards are connected by a cross bar

F, which is secured to the same by means of screws d , and which forms a guide for the piston rod G, the upper end of which is turned down a little so as to form a shoulder for the balance H, to rest upon. This balance rotates freely on the upper part of the piston rod and pivoted to its ends are the arms I, each of which is provided with a stationary loop e , and with a stirrup f , the former ones of which serve as guides for serrated bars J, which can be drawn in or out and which are retained in the required position by the stirrups f , catching in the serrated edge of the bars. The lower ends of the bars J, are provided with hooks g , which serve to catch under the articles to be raised.

The cross head or piston E, is cut out at its under side so as to form the ears h , which form the bearings for a friction roller K, against which the eccentric disk C, acts, and attached to one of the standards B, is a serrated bar L, into which a pawl M, operates which is pivoted to that part of the piston E, which projects beyond the standard, and a cam i , which is pivoted to the upper end of the bar L, serves to throw the pawl M, out of gear. This cam is operated by means of a handle j , and when it is turned up as represented in Fig. 1, the pawl is left free to engage with the serrated edge of the bar L, but if the cam is turned out so as to be at right angles with the position represented in Fig. 1, the pawl M, is thrown out of gear.

The operation is as follows: The machine is drawn to the spot on which the track of a railroad or some other heavy article is to be lifted and the bars J, are drawn out until the hooks g , catch under the rail as clearly represented in Fig. 1, and power is now applied to the lever E, so as to turn the disk C, in the direction of the arrow. By the action of the disk the piston together with the balance H, is forced up and whenever the lever E, is released, the piston is sustained in its position by the action of the pawl M, on the serrated edge of the bar L, and if it should be necessary to raise the articles higher than it is possible by depressing the lever E, once, the piston will be sustained by the pawl M, until the lever E, can be inserted in another one of the cavities e , so that the disk C, can be turned to any desired degree and that articles attached to the hooks g , can be raised as high as the eccentricity of the disk C, will allow.

This machine is particularly adapted to

raising rail road track and in this case the
balance H, is made long enough so that the
rails on both sides may be raised together by
the action of the hooks g, but it may be
5 used with advantage in many other cases,
where heavy articles are to be raised.

What I claim as new and desire to se-
cure by Letters Patent, is—

The balance H, arranged with the arms I,

and with the extensions J, to operate in 10
combination with the piston E, the serrated
bar L, the pawl M, and with the eccentric
disk C, substantially in the manner and for
the purpose herein described.

WILLIAM HENNEY.

Witnesses:

N. B. KOONTZ,

JAMES S. COCHRAN.