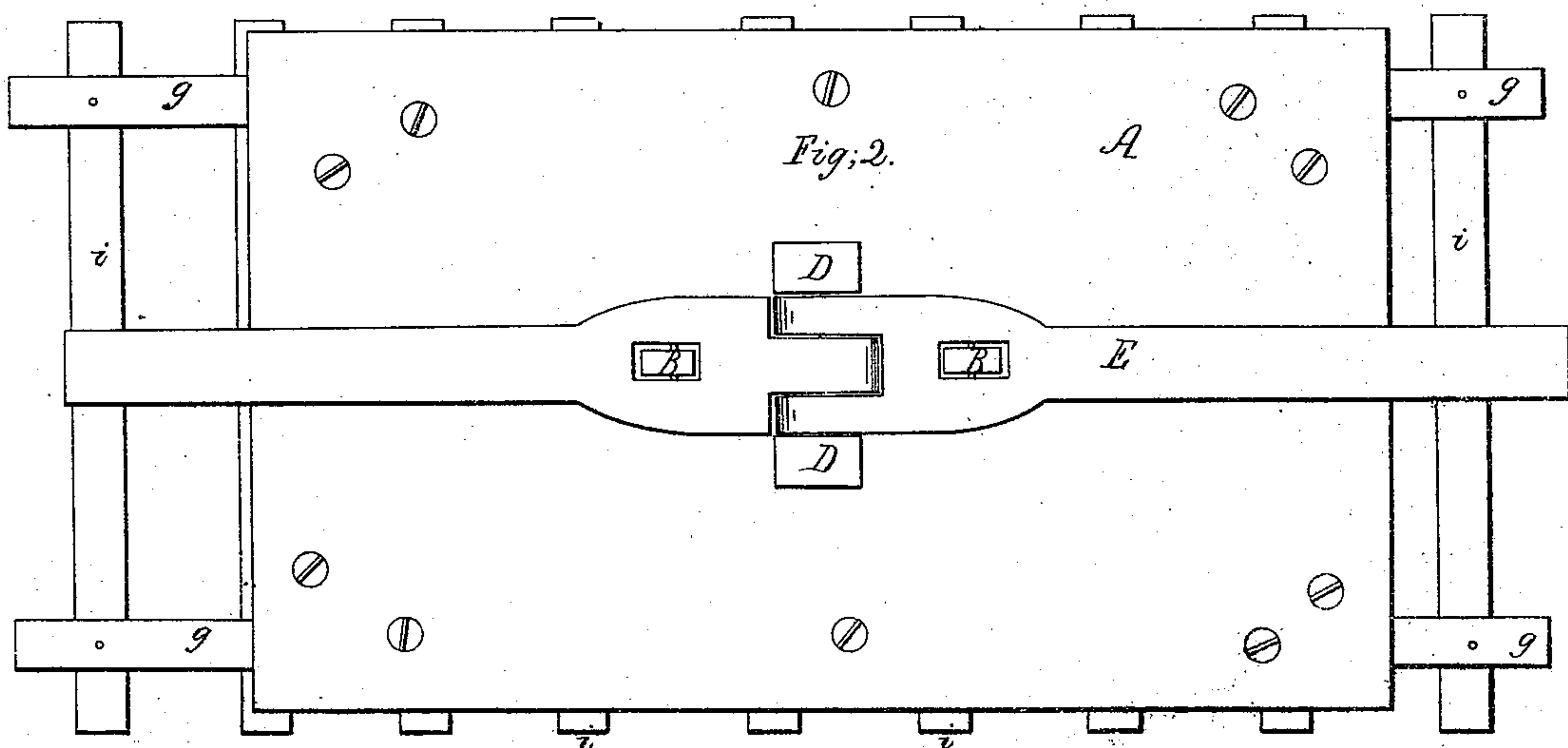
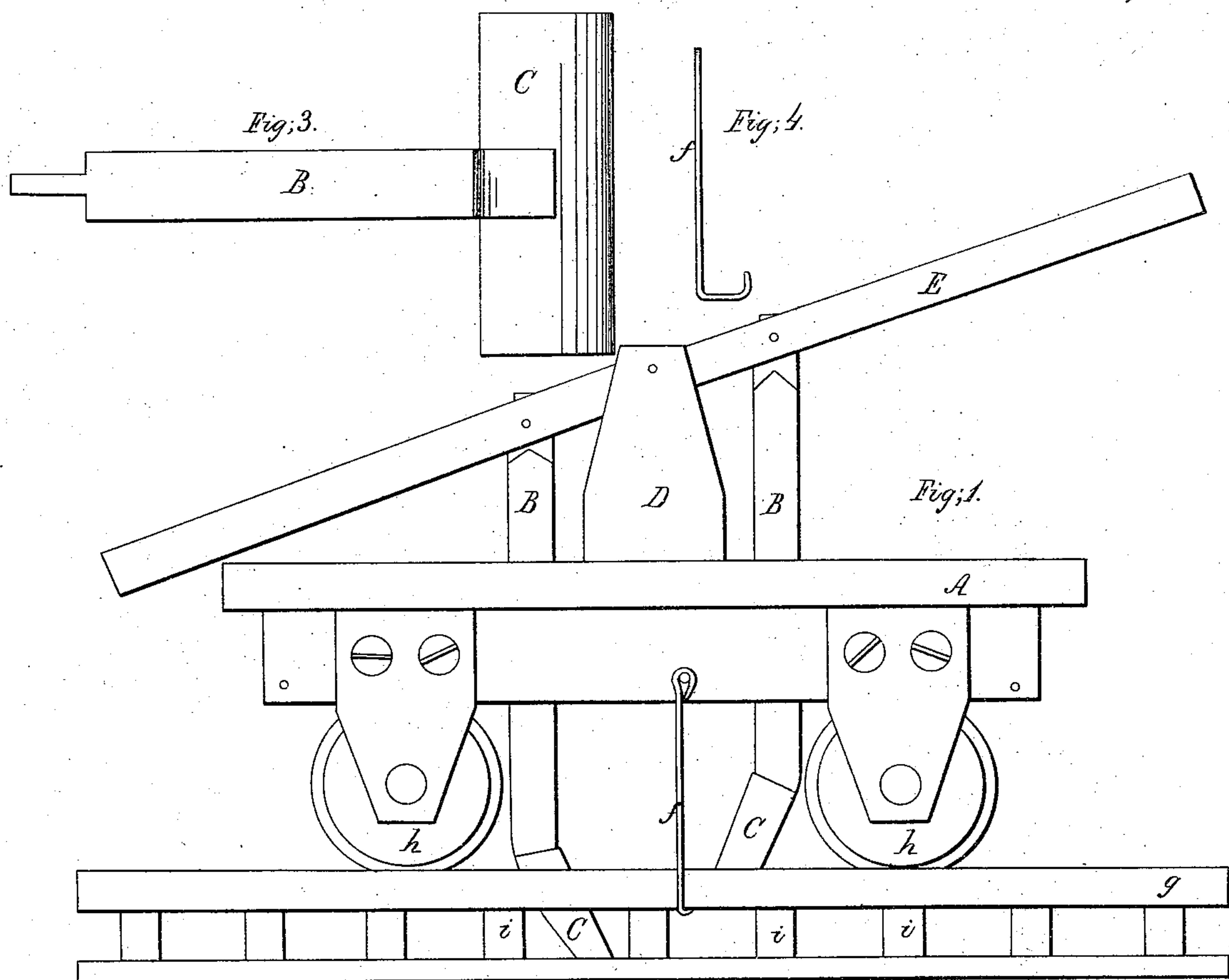


R. B. Harrison.

Track-Layer.

N^o 18,144.

Patented Sept. 8, 1857.



UNITED STATES PATENT OFFICE.

RICHARD B. HARRISON, OF VICKSBURG, MISSISSIPPI.

MACHINE FOR RAMMING UNDER THE CROSS-TIES OF RAILROADS.

Specification of Letters Patent No. 18,144, dated September 8, 1857.

To all whom it may concern:

Be it known that I, RICHARD B. HARRISON, of Vicksburg, in the county of Warren and State of Mississippi, have invented a Movable Machine for Ramming Earthy Matter Under the Cross-Ties of Railroads; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, Figure 1 being a side view of said machine standing upon the section of a railroad; Fig. 2, a top view of the same, and Figs. 3 and 4 are portions of the machine detached.

Similar letters indicate like parts in each drawing.

My movable machine for ramming earthy matter under the cross-ties of rail-roads, is composed in part, of a platform car whose axles are of such a length that its wheels *h, h*, will run upon the rails of the rail-road whose cross-ties are to be leveled up by means of the employment of said machine.

The rams *C, C*, should be of such a length that they can be freely reciprocated up and down on each side of the cross-ties *i, i*, without coming in contact with the rails *g, g*. The said rams are securely fastened to the vertical handles *B, B*, which pass through oblong apertures near the center of the platform *A*, of the car, and their upper ends are jointed to the actuating levers *E, E*. At their inner ends, the levers *E, E*, are received between the standards *D, D*, and work upon a connecting fulcrum pin which passes through the said standards.

The rams *C, C*, may be so guided in their movements, by means of adjustable springs,

or their equivalents, that the said movements will force the earthy matter from both sides under the cross-ties, in the most thorough and efficient manner.

The machine may be retained in a proper position for operating upon any given cross-tie, by means of hooks *f, f*, which descend from the sides of the machine and embrace the rails, as shown in Fig. 1; or any other suitable device may be employed for securing the machine in a stationary position.

In operating the machine, one or two men may be stationed upon the platform *A*, to operate each of the rams, and another man may be employed for moving the machine forward from one cross-tie to another at proper intervals, and securing the machine in a stationary position while the men upon the platform may be operating the rams.

What I claim as my invention and desire to secure by Letters Patent, is—

My movable machine for ramming earthy matter under the cross-ties of rail-roads; said machine being composed of reciprocating rams and suitable actuating levers combined with a platform-car, substantially as herein set forth.

The above specification of my new and improved machine for ramming earthy matter under the cross-ties of railroads signed and witnessed this 16th day of March, 1857.

RICHARD B. HARRISON.

Witnesses:

P. M. MALLOY,
I. F. BAUM,
L. S. HOUGHTON.