J. R. FINLEY.

Railroad-Wrench.

No. 165,319. Patented July 6, 1875.

Fig. 1.

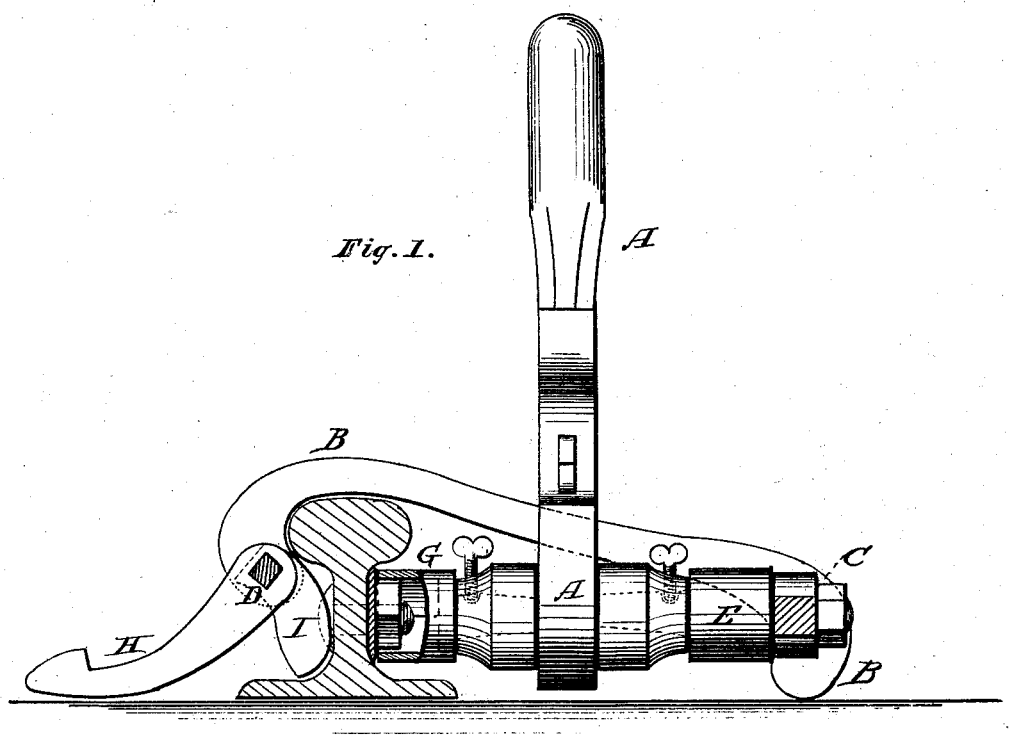


Fig. 2.

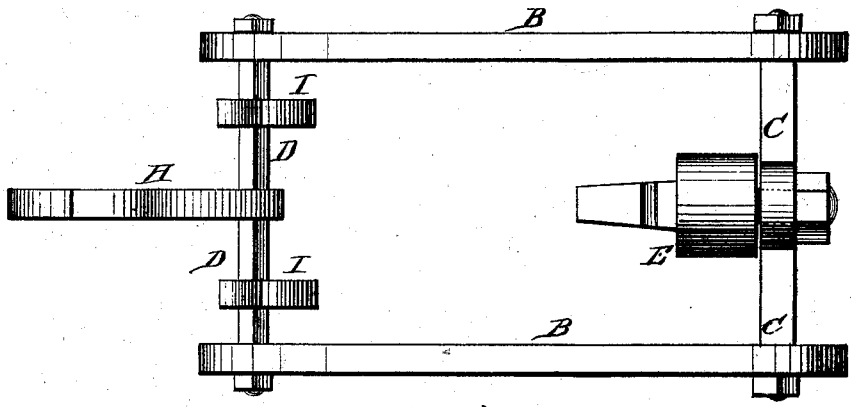
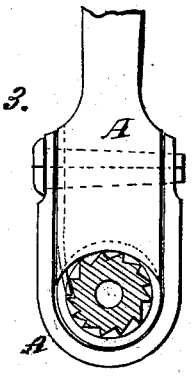


Fig. 3.



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UNITED STATES PATENT OFFICE.

JAMES R. FINLEY, OF DELPHI, ASSIGNOR TO HIMSELF, M. SIMPSON AND J. H. CABLE, OF LAFAYETTE, INDIANA.

IMPROVEMENT IN RAILROAD-WRENCHES.

Specification forming part of Letters Patent No. **165,319**, dated July 6, 1875; application filed March 24, 1875.

To all whom it may concern:

Be it known that I, J. R. FINLEY, of Delphi, in the county of Carroll and State of Indiana, have invented certain new and useful Improvements in Fish-Plate-Nut Wrenches; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

The nature of my invention consists in the construction and arrangement of a device for screwing on or off the nuts on the bolts that fasten on the fish-plates where railroad-rails join in laying the track, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a central vertical section. Fig. 2 is a plan view of clamps, and Fig. 3 is a detail view of wrench.

A represents an ordinary ratchet-wrench, constructed in any suitable manner, and connected to a clamp. The clamp consists of two curved side bars, B B, connected at their ends by means of two pivoted cross-bars, C and D. In the center of the cross-bar C is a revolving chuck, E, to which one side of the ratchet-wrench A is united. To the other end of the wrench is attached a short chuck, G, which receives head of the nut. The wrench works inside of the frame of the clamp. The cross-bar D is provided with two eccentrics, I I, and a center hook, H, forming the foot-piece of the machine when the wrench is in use.

In the operation of this device the curved side bars B B of the clamp are placed over the rail, with the wrench on one side of the rail in position for fastening the nut on the bolt. On the other side of the rail the eccentrics I are placed against the side of the rail, and held there by the operator putting his foot on the foot-piece H. By now working the ratchet-wrench back and forth the nut is screwed up on the bolt, and as the nut moves inward the clamp follows in the same direction by the pressure on the foot-piece causing the eccentrics to turn sufficiently for that purpose, and still hold the clamp with requisite degree of firmness. To unscrew the nut it is only necessary to change the opposite side to the rail.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination of clamp-frame B C D, revolving chuck E, and short chuck G with the eccentrics I I and foot-piece H, all constructed and arranged to operate substantially as and for the purposes set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

JAMES R. FINLEY.

Witnesses:
WM. JACKSON,
CHAS. B. LYON.