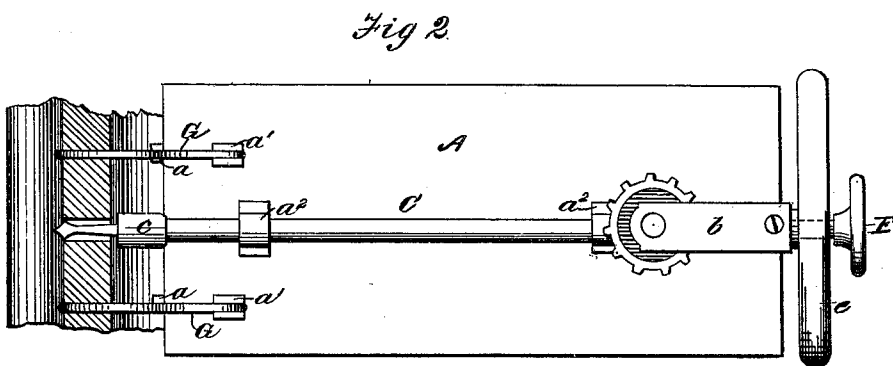
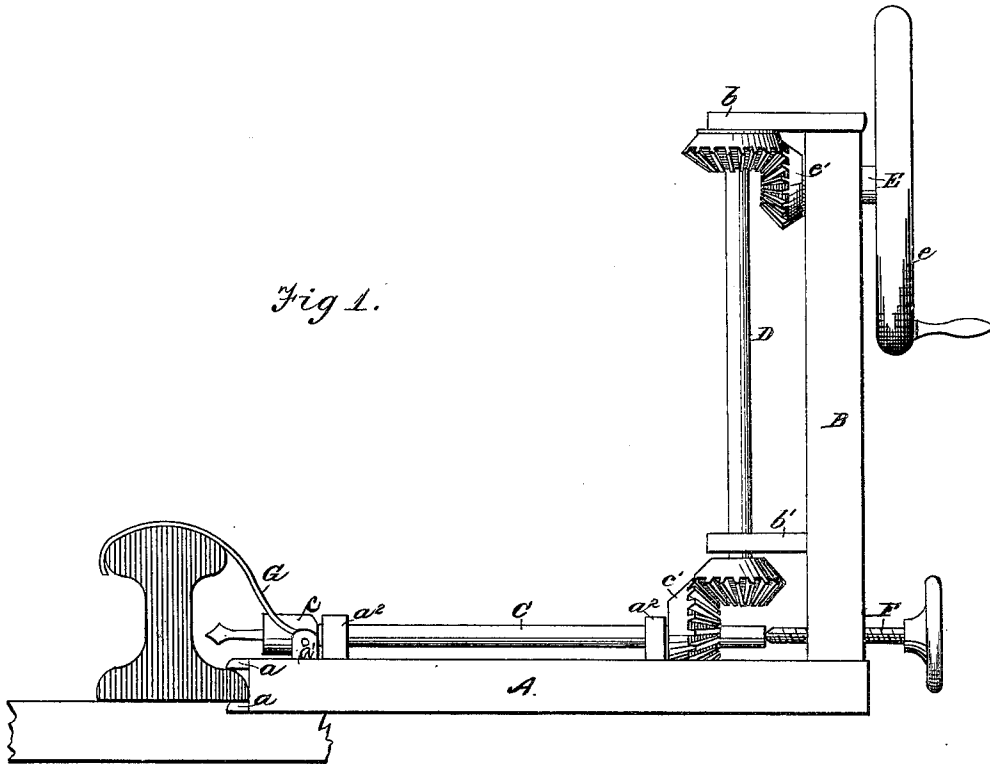


C. D. HOLCOMB.

MACHINES FOR DRILLING RAILROAD RAILS.

No. 175,285.

Patented March 28, 1876.



Witnesses
 Harry C. Clark
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UNITED STATES PATENT OFFICE.

COLLINS D. HOLCOMB, OF WOLCOTTVILLE, CONNECTICUT.

IMPROVEMENT IN MACHINES FOR DRILLING RAILROAD-RAILS.

Specification forming part of Letters Patent No. **175,285**, dated March 23, 1876; application filed August 16, 1875.

To all whom it may concern:

Be it known that I, COLLINS D. HOLCOMB, of Wolcottville, in the county of Litchfield and State of Connecticut, have invented a new and useful Machine for Drilling Railroad-Rails in the Tracks; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

This invention is a machine which is specially adapted for drilling railroad-rails, as they lie in position in the track, for the purpose of fitting them for receiving the securing-bolts of fish plates; and its novelty consists, mainly, first, in the combination of a bed-plate and vertical standard with a drill and its actuating mechanism, and certain pivoted securing-hooks; and, second, in the combination of a bed-plate of peculiar construction with certain overhanging hooks.

In the drawings, Figure 1 represents a side elevation of my improved machine, and Fig. 2 a plan view of the same.

To enable others skilled in the art to make and use my invention, I will now proceed to describe fully its construction and manner of operation.

A represents a horizontal bed-plate, of any suitable size and material, which is provided at its front edge with the bearing-points *a a a*, adapted to project above and below the foot of the rail, and prevent vertical movement, and also with the ears *a¹ a¹* and bearings *a² a²*, as shown. B represents a vertical standard, rising from the rear end of the bed-plate A, which is provided with the projecting arms *b b'*, as shown. C represents the drill-shaft, supported in bearings *a² a²* upon the bed-plate, which is provided at its front end with a suitable drill-socket, *c*, and near its rear end with a bevel-wheel, *c'*, as shown, which latter is attached by means of a spline, so that its revolution is communicated to the shaft without interfering with the longitudinal movement of the latter. D represents a shaft, supported in suitable bearings in the arms of the vertical standard, which is provided at each end with bevel-wheels, the lower of which engages with the corresponding wheel upon the drill-shaft, and the upper with the corresponding wheel upon the main shaft. E rep-

resents the main shaft, supported in suitable bearings in the standard, and provided with the crank-wheel *e* and bevel-wheel *e'*, as shown. F represents a feeding-screw, adapted to turn in a suitable socket in the standard, which is located in the rear of the drill-shaft, and by means of which the latter may be fed forward to its work. G G represent hooks, of suitable conformation, pivoted between the ears *a¹ a¹* of the bed-plate, which are adapted in size, shape, and location to be caught over the rail which is to be drilled.

From the foregoing description, the operation will be readily understood.

The mechanism having been properly adjusted to the rail, with the bearing-points *a a* above and below the foot of the same, and the hooks G G caught over its head, motion may be given to the crank-wheel of the main shaft, in consequence of which the drill will be given its proper rotary motion. As the hole is bored, the drill-shaft is advanced, to keep the drill up to its work, by turning the feeding-screw in the manner well understood.

The hooks being adapted to overhang the top of the rail, hold the latter, in connection with the securing-spikes of the rail, with great firmness, so that the operation of drilling may be readily performed.

This machine is exceedingly simple in its construction, yet well adapted for the purpose for which it is designed.

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

1. The combination of the bed-plate, the drill and its actuating mechanism, with the overhanging and pivoted hooks G G, as described.

2. The bed-plate provided with the projections *a a*, as described.

3. The combination of the bed-plate, with the projections for preventing vertical movement, with the hooks for preventing lateral movement, as described.

This specification signed and witnessed this 14th day of August, 1875.

COLLINS D. HOLCOMB.

Witnesses:

GEORGE L. FINNEY,
DAVID C. MONSON.