J. S. LANE.

Rail-Drilling Devices.

No. 153,261. Patented July 21, 1874.

Fig: 1.

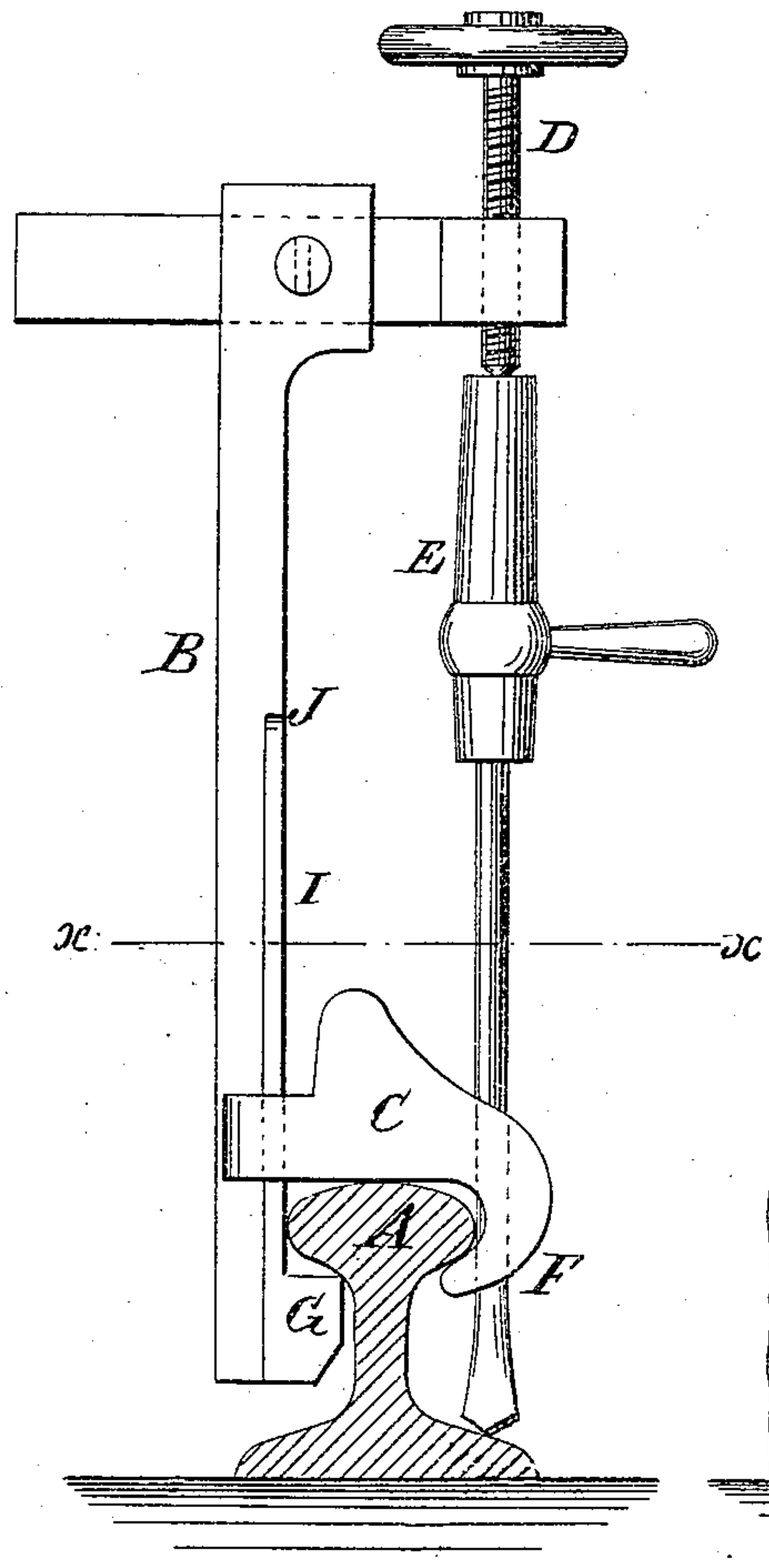


Fig: 2.

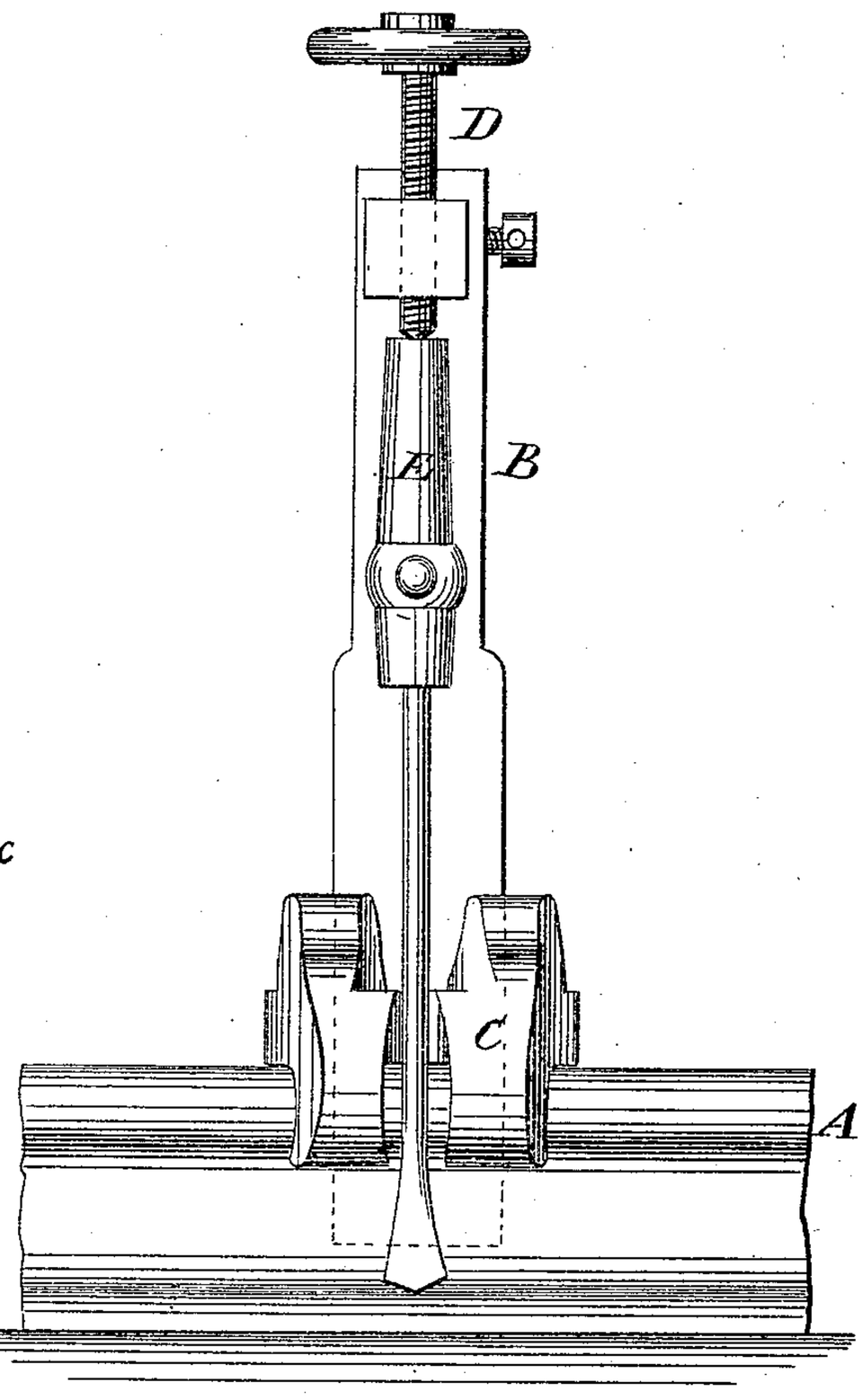


Fig: 3.

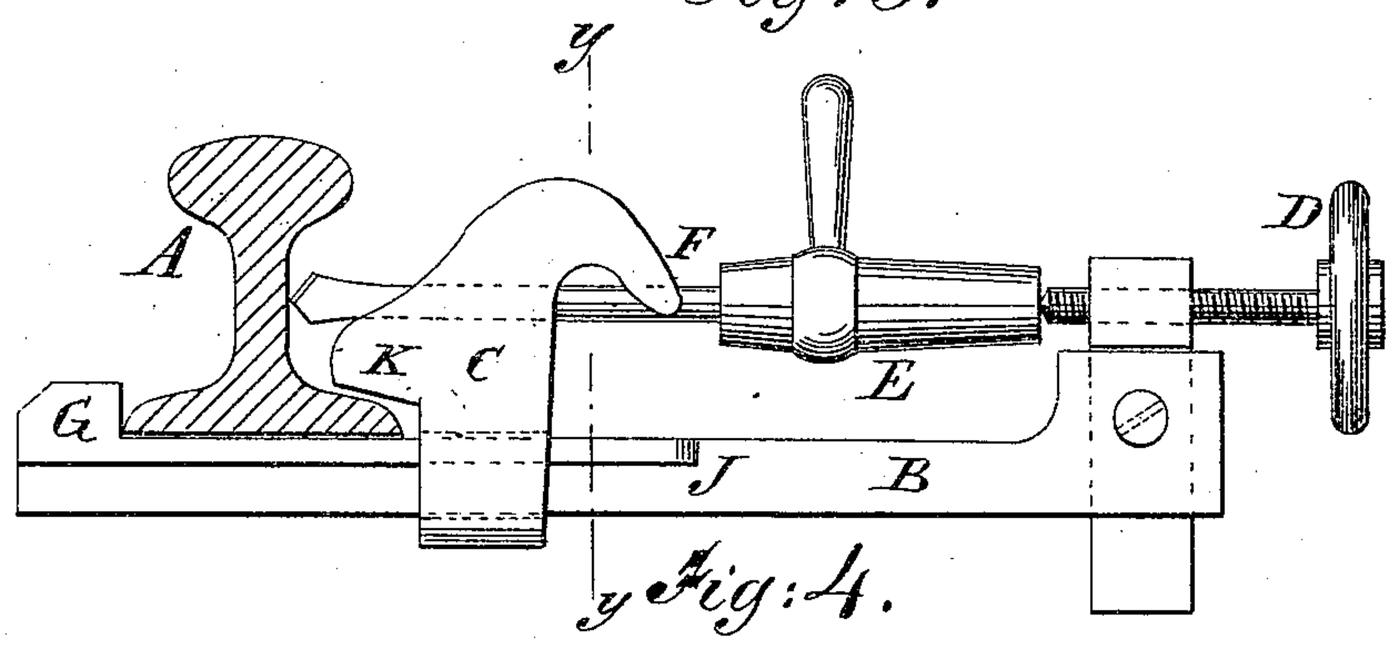
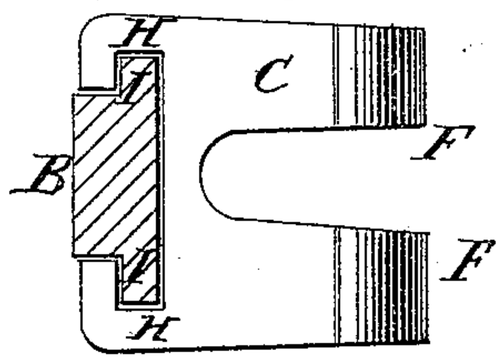


Fig: 4.



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UNITED STATES PATENT OFFICE.

JOHN S. LANE, OF FALLS VILLAGE, CONNECTICUT.

IMPROVEMENT IN RAIL-DRILLING DEVICES.

Specification forming part of Letters Patent No. **153,261**, dated July 21, 1874; application filed June 6, 1874.

To all whom it may concern:

Be it known that I, JOHN S. LANE, of Falls Village, in the county of Litchfield and State of Connecticut, have invented a new and useful Improvement in Drill-Clamps, of which the following is a specification:

The invention consists in constructing the sliding head of a drill-clamp for railroads so that by reversing its position the clamp may be applied to either the head or flange of the rail.

Figure 1 is a side view, showing the clamp attached to the rail for drilling through the flange of the rail, as for spiking down a broken rail, or attaching a switch, or for any other purpose. Fig. 2 is a front view of the same. Fig. 3 represents the clamp applied to the rail for drilling "fish-plate" holes, where the drill operates horizontally. Fig. 4 is a cross-section of Fig. 3, on the lines *x x* and *y y*.

Similar letters of reference indicate corresponding parts.

A is the rail to be drilled. B is the stock of the clamp. C is the reversible sliding head. D is the feed-screw. E represents the "ratchet-drill."

In Fig. 1 the clamp is seen applied to the rail for operating the drill vertically, for drilling through the bed-flange. In this case the hooks F F of the head C clutch the under side of the tread of the rail, while the head itself rests on the top of the rail. G is a shoulder on the end of the stock, which hooks under the other side of the tread, and the head is held to the stock by means of the grooves H H of the head and the flanges I I of the stock, as seen in Fig. 4. The flanges I I terminate at the point J, so that the head may be detached from the stock and be turned round, or reversed, to bring the shoulder K onto the bed-flange, as seen in Fig. 3, for drilling fish-plate holes. In this case the stock is passed under the rail, and the shoulder G engages with the opposite edge of the flange, as represented in Fig. 3. The feed-screw D may be made adjustable as to height, as seen in Fig. 3, or in any other suitable manner, to allow of variations in the position of the drill.

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

The described combination with stock B, having shoulders G and flanges I I, of the sliding reversible head C, having ways H H, hooks F F, and shoulder K, to form a clamp applicable in the manner specified.

JOHN S. LANE.

Witnesses:
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M. A. BROWN.